



# Energy Efficiency for Municipalities, Residents, and Businesses

NJLM Conference 2019



# Speakers

Moderator: Mayor Vernon Marino, Woolwich Township

In order of presentation:

Matthew Blake, Director of Community Development, Woolwich Township

Mark Niederman, Wycoff Green Team

Janice Piccolo, Directory Community Services, Borough of Chatham

Amanda Neshiewat, Environmental Director, Town of Secaucus

Arif Welcher, Government and Business Manager, NJ Board of Public Utilities



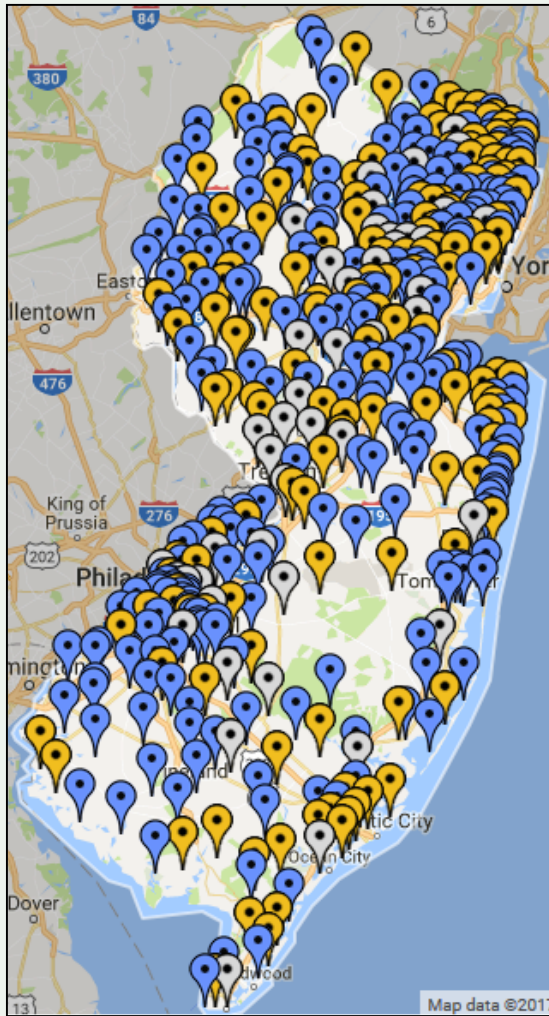
# What is Sustainable Jersey?

- Certification program for municipalities and schools
  - **Tools, resources, and guidance** to help municipalities and schools become more sustainable
  - **Grants and funding** for municipalities and schools
  - **Regional Hubs**





# Program Participants



**Municipal Program**



**Schools Program**

## **Municipal Program**

445 (79%) participating  
200 Certified

- 152 Bronze
- 48 Silver

## **Schools Program**

290 Districts (49%)  
732 Schools  
194 Schools Certified

- 181 Bronze
- 13 Silver



# Municipal Program Energy Actions

	Climate Planning and Energy Efficiency	Renewable Energy	Alternative Fuel Vehicles
Municipal Operations	<ul style="list-style-type: none"> <li>• Energy Tracking and Management</li> <li>• Energy Efficiency for Municipal Facilities</li> <li>• Municipal Carbon Footprint</li> </ul>	<ul style="list-style-type: none"> <li>• On-Site Solar Energy</li> <li>• On-Site Geothermal</li> <li>• On-Site Wind Energy</li> <li>• Purchase Renewable Energy</li> </ul>	<ul style="list-style-type: none"> <li>• Fleet Inventory</li> <li>• Purchase Alternative Fuel Vehicles (AFV)</li> </ul>
Community Energy Use	<ul style="list-style-type: none"> <li>• Residential Energy Efficiency Outreach</li> <li>• Commercial Energy Efficiency Outreach</li> <li>• Community Carbon Footprint</li> <li>• Climate Action Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Community Choice Aggregation (R-GEA)</li> <li>• Make Your Town Solar Friendly</li> <li>• Community-Led Solar Initiatives</li> <li>• Wind Ordinance</li> </ul>	<ul style="list-style-type: none"> <li>• Make Your Town EV Friendly</li> <li>• Public EV Chargers</li> </ul>

# Energy Efficiency for Municipal Facilities



- **5 points** - Audit on at least one building
- **10 points** - Local Government Energy Audit (LGEA) that covers all buildings
- **15 points** - Significant upgrade work (at least 10% cost savings demonstrated)
- **20 points** - LGEA that covers all buildings PLUS significant upgrade work
- **30 points** - Efficiency upgrades with 10%-19% decrease in energy consumption
- **40 points** - Efficiency upgrades with 20%-29% decrease in energy consumption
- **50 points** - Efficiency upgrades with at least 30% decrease in energy consumption





# Energy Efficiency




Nora Radest  
Summit Mayor

See You Around Town- Summit Home Energy Insight Program

A Series of Forums for the Wyckoff Community  
 ENERGY 05.24.2016, WATER 05.31.2016, ENERGY for BUSINESS Fall 2016

**Home Energy Efficiency Workshop**

*"Does your home feel drafty in the winter time or too hot in the summer?"*



Wyckoff Public Library,  
Shotmeyer Room


**Tuesday  
May 24, 2016  
7:30- 8:30pm**

The Wyckoff Environmental Commission and The Wyckoff Green Team are pleased to host an evening with representatives from the New Jersey's Clean Energy Program (NJCEP) to discuss generous incentives, up to \$14,000, to New Jersey home owners for improving the efficiency of their homes.

**Reduce your ENERGY spending and increase your comfort...**  
 Does your home feel drafty in the winter time or too hot in the summer? If so, the likely culprits are lack of proper insulation and air leaks – two common issues that increase your energy bills and reduce comfort of occupants.

**SEVERAL INCENTIVES AVAILABLE:**  
 Incentives are available for projects including insulation, air-sealing, and installation of high efficiency heating and cooling equipment. Energy efficiency upgrades to your home can save you up to 30% on energy costs, while improving the comfort, safety, and durability of your home.

Experts from the NJCEP will explain how New Jersey residents can make their homes more energy efficient. You'll learn how to get started with the program, and hear from a Wyckoff home owner who successfully upgraded his 100-year old home utilizing NJCEP incentives.




# Commercial Energy Efficiency Outreach

Green team partners with municipal officials to complete targeted outreach program to local businesses for the Direct Install program.

**WEST WINDSOR TOWNSHIP**  
OFFICE OF THE MAYOR

April 4, 2013

Re: Energy Savings

Dear West Windsor Township Commercial Building Owner/Operator:

Building owners and operators play a critical role in West Windsor Township's efforts to save energy and achieve associated economic and environmental benefits for those that work and reside in town. The Township of West Windsor has participated in NJ's Clean Energy Programs and the cost savings associated with decreased energy use are being passed on to our taxpayers. At this time, we are asking you to join us and to consider whether this state's energy efficiency incentive programs can benefit you directly. To this end, we are circulating with this letter a brochure about these programs as presented by Tri-State Light & Energy, the designated provider of these programs in a territory encompassing West Windsor.

On a related note, you may remember receiving an energy efficiency survey from the Rutgers Center for Green Building about two months ago. Thank you to those who have already completed it. If you have not completed the survey please consider filling it out and sending it in. If you need another copy of the survey and consent form, please contact Rutgers Center for Green Building as indicated below. All the information you provide in this survey will be treated confidentially by Rutgers who is using it to compile a commercial building inventory of West Windsor based on actual data. Aggregated outputs of this data will be shared with the NJ Clean Energy office and program provider(s). Note that if you specifically request that the Center for Green Building provide you with details about what incentives may apply to your buildings and/or link you to the area's energy program provider, the Center will do so. It is my understanding that several such requests have been made and executed in recent weeks. In addition, the Township is exploring a program to recognize and honor participants as a means of promoting their energy efficiency actions.

This program is entirely voluntary and fully funded by a grant from the US Department of Energy to the Rutgers Center for Green Building. No West Windsor Township property taxes are being expended for this program.

Thank you in advance for your participation. I encourage you to take this step towards energy efficiency. According to the Center for Green Building, NJ's Clean Energy Programs can help to save money and energy, improve buildings, and make it more comfortable for building occupants. If you have any questions please do not hesitate to contact the Rutgers Center for Green Building ([jsenick@rutgers.edu](mailto:jsenick@rutgers.edu)), or the West Windsor Township Department of Community Development.

Sincerely,

Mayor, Shing-Fu Hsueh

cc. Rutgers Center for Green Building

271 CLARKSVILLE ROAD · P.O. BOX 38 · WEST WINDSOR, NEW JERSEY 08550 · (609) 799-9396 · FAX (609) 275-4850  
WEBSITE: [WWW.WESTWINDSORNJ.ORG](http://WWW.WESTWINDSORNJ.ORG) E-MAIL: [WWT@WESTWINDSORNJ.ORG](mailto:WWT@WESTWINDSORNJ.ORG)

NEW JERSEY'S CLEAN ENERGY  
**DIRECT INSTALL**  
PARTICIPATING CONTRACTOR

**Become Energy Efficient At Minimal Cost**

**SAVE 70%**

Replace your old furnaces, boilers, central air conditioners and outdated lighting systems with efficient technology. Let the New Jersey Office of Energy PAY 70% of the TOTAL COST. **Not A Rebate!**

- **YOUR COSTS ARE MINIMAL.** No rebates or excess paperwork! Your building's energy assessment is FREE. New Jersey's Clean Energy Program pays 70% of the project cost.
- **THE INCENTIVES ARE DRAMATIC!** Your upgrade can easily pay for itself in one to two years.
- **REWARDS ARE LONG-TERM.** Your new energy-efficient equipment will provide savings for years to come through reduced utility bills. Replacement units are top of the line, high quality and energy efficient. Brands include Trane, Carrier and York.
- **THE PROCESS IS COMPLETELY TURNKEY.** Once you decide to implement the recommended equipment, the assigned Participating Contractor for Mercer, Middlesex and Union Counties will take care of everything from permits, labor and ordering to installing the equipment and providing the final work.

**FUNDING IS FIRST-COME, FIRST-SERVED.**

Do not miss your opportunity.

Tri-State Light & Energy, Inc. is the Participating Contractor for Mercer, Middlesex and Union Counties. Call Sandra Torres at 610.789.1900 or email [Sandra@tsle.com](mailto:Sandra@tsle.com) to schedule your Energy Assessment.

**Started to Go Green & Save Green - Start Saving NOW.**

At the New Jersey Office of Energy Efficiency and the Clean Energy Program designed to help businesses and homeowners measure the energy efficiency of their buildings and reduce the amount of energy consumed, you will receive 70% of project costs when installed by the designated Participating Contractor for your county.

2230 Mary V Avenue  
Upper Merion, PA 19082

T 810 789-1900  
F 610-789-8504

tsle.com  
[www.tsle.com](http://www.tsle.com)

**THE BOROUGH OF PENNINGTON**

Dear Pennington Borough Business Owner,

We are writing today to alert you to two programs that we encourage you to participate in.

The first is the "New Jersey Direct Install" (NJD) program that provides extensive funding for local businesses to improve and/or update their facilities for greater energy efficiency. The process is completely turnkey, and can result in dramatic improvements in your physical plant, with minimal cost to you.

The second opportunity is the "Hopewell Valley Green Business Recognition Program" which has been established to recognize and highlight the efforts of local businesses to help the environment by participating in this environmental awareness program. Participants in this program will be recognized throughout the Valley in various ways.

The enclosed flyer explains NJDI in greater detail. We urge you to seriously consider taking advantage of this amazing program. Join us for a presentation by an NJDI representative at the June 11<sup>th</sup> meeting of the Hopewell Valley Green Team at the Hopewell Township Municipal Building.

Also at this meeting, the Hopewell Valley Green Team will launch our Valley-wide Green Business Recognition Program. The program is designed to highlight the good work that so many of you are doing to reduce your company's impact on the environment and to provide you with the information and resources to do more. Read more about Green Business Recognition on the reverse side of this page, and then come to the meeting to find out how to participate.

Sincerely,

*Anthony Persichilli*  
Anthony Persichilli  
Mayor of Pennington

*Joann Held*  
Joann Held  
Co-chair, HV Green Team

**SAVE THE DATE FOR A MEETING TO LEARN ABOUT BOTH PROGRAMS**

JUNE 11 at 7:30 pm  
Hopewell Township Municipal Building  
201 Washington Crossing - Pennington Rd, Titusville  
Open to all Property Owners and Tenants

30 North Main Street - Pennington, New Jersey 08914  
609-771-0266 • fax: 609-771-0780  
[www.penningtonnj.org](http://www.penningtonnj.org)





# 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, 3<sup>rd</sup> Floor  
2000 Pennington Rd.  
Ewing, NJ 08628-0718

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



# Sustainable Jersey Supporters & Sponsors

## Program Underwriters



## Grants Program



## Corporate Sponsors

\* 10<sup>th</sup> Anniversary Sponsors

### PLATINUM



### GOLD



### SILVER



### BRONZE



# Woolwich Township, Gloucester County, New Jersey



**Matt Blake, PP, AICP**  
**Director of Community Development:**  
**(856) 467-2666 x 3134**



- Woolwich Green Team determines to launch a Home Energy Audit Program
- Initially conceptualized as a municipal-wide campaign to promote energy efficiency and help residents reduce energy use and associated costs
- Established as way to promote awareness of practical resources available while increasing overall community sustainability





# HOME PERFORMANCE WITH ENERGY STAR

## ABOUT HOME PERFORMANCE WITH ENERGY STAR

It's amazing how comfortable and energy efficient your home could be with our "whole-house" solution.

Home Performance with ENERGY STAR, brought to you by the New Jersey Board of Public Utilities and its Clean Energy Program,<sup>SM</sup> is an efficient approach to home improvements:

- Reduces energy costs by up to 30%
- Increases comfort and durability
- Helps reduce your carbon footprint
- Provides you greater peace of mind and confidence – only contractors who have the BPI GoldStar designation can be a part of Home Performance with ENERGY STAR

This nationally acclaimed home improvement program uses the best of home testing techniques and upgrades to increase your home's energy performance, comfort, health and safety. Using a "whole-house" approach, specially trained and certified technicians assess your home from top to bottom, looking at the following components:

- Air sealing opportunities
- Insulation levels
- Heating/cooling equipment

Following your assessment you will receive a list of recommended measures to improve the energy efficiency of your home. All the work is done for you by BPI GoldStar contractors who "test in and test out" to make sure your home is operating efficiently, safely and comfortably.



Did you know that up to 60%\* of energy used to heat and cool homes is wasted due to leaky ducts, inefficient equipment, poor insulation and air leaks?

### ▶ High Quality Air Sealing

Homes can lose as much as 25% of their heating and cooling dollars due to inadequate sealing. Contractors can eliminate this problem by sealing joints and spaces in attics, ductwork, electrical outlets and other areas.

### ▶ Sealing up Ducts

Insulating and sealing cracked or disconnected ducts helps distribute air more evenly and efficiently and keeps your home more comfortable. Sealing and insulating ducts can improve the efficiency of your heating and cooling system by as much as 20 percent — and sometimes much more.

### ▶ Equipment Replacement for Heating Systems and Central Air Conditioning

If your home's heating and cooling equipment is more than 10 years old, it may be time for a high efficiency replacement. ENERGY STAR qualified heating equipment can be up to 15% more efficient than standard models.

\*Source: U.S. Environmental Protection Agency

*Don't miss out on these great incentives!*

- ▶ Low-interest financing and rebate options are available to pay for the improvement work.
- ▶ Incentives are also available for multi-family buildings.
- ▶ Check [NJCleanEnergy.com/HP](http://NJCleanEnergy.com/HP) for funding that may be available for municipal electric, oil or propane customers.



"Every homeowner should participate in this program. It saves energy and money, and provides peace of mind. Each homeowner who participates is helping New Jersey and the United States become energy self-sufficient. We are helping save the environment. That's a great lesson and legacy to pass along."

— Bob Hoffmann, homeowner



[NJCleanEnergy.com/HP](http://NJCleanEnergy.com/HP)

- Program is based on a model designed by Sustainable Jersey to encourage participation in the NJ Home Performance with Energy Star (HPwES) Program.
- Enables qualifying homeowners to receive up to \$4,000 in cash rebates and up to \$10,000 in zero-interest financing for home energy improvements.



- Woolwich initiative modeled after a program successfully used by the City of Summit as showcased on Sustainable Jersey website
- Process included soliciting RFPs as part of a competitive selection process
- SPS Mechanical submitted a comprehensive proposal offering a \$49 home energy assessment/audit
- SPS is also a local business !

Schedule your Home Performance assessment and find out where the money is escaping from your home.



**AIR SEALING**

Your contractor checks for air sealing opportunities. Sealing air leaks will reduce energy loss and make your home more comfortable.



**CO TEST**

Your contractor checks for carbon monoxide. Health and safety is a critical component. A carbon monoxide (CO) analyzer is used to check combustion appliances (stoves, furnaces and water heaters) for carbon monoxide levels.



◀ Watch the Home Energy Assessment video at [NJCleanEnergy.com/visa](http://NJCleanEnergy.com/visa)



Call 866-NJSMART or visit [NJCleanEnergy.com/HP](http://NJCleanEnergy.com/HP)



For information on increased incentives for damage caused by Hurricane Sandy, visit [NJCleanEnergy.com/SANDY](http://NJCleanEnergy.com/SANDY).



The Building Performance Institute (BPI) is a national building performance excellence, quality assurance and standards setting organization. All contractors in New Jersey participating in Home Performance with ENERGY STAR are required to be BPI-Registered Contractors.

For additional information:  
Visit [NJCleanEnergy.com](http://NJCleanEnergy.com)  
Call 866-NJSMART



The New Jersey Clean Energy Program is a public-private partnership of the New Jersey Board of Public Utilities, the New Jersey Office of Energy Independence and Security, and the New Jersey Office of Energy Independence and Security. For more information, visit [www.nj.gov/energy](http://www.nj.gov/energy).  
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**HOME PERFORMANCE WITH ENERGY STAR®**



**Save up to 30% on your energy costs.**

Home Performance with ENERGY STAR is your "whole-house" solution for a more energy efficient, comfortable home.





- SPS audit is a comprehensive evaluation of the home that includes a review of energy usage, identification of health and safety issues, testing for carbon monoxide, gas leaks, mold/moisture issues, a blower door test, duct leakage test, thermal imaging and inspection of all existing insulation values

- SPS provides the homeowner with a detailed report outlining their findings with prioritized recommendations, costs, including assistance with necessary paperwork for qualifying for rebates and financing



## Program promotion included:

- Letters from the Mayor
- Municipal Newsletter
- Municipal Facebook Page
- Earned media
- Email blasts
- Postcards
- Handouts at front desk



Township of Woolwich  
120 Village Green Drive  
Woolwich Township, New Jersey 08095  
856-467-2666 fax: 856-467-3545

January 16, 2019

Dear Woolwich resident:

The Township of Woolwich has recently launched a municipal wide campaign to promote energy efficiency and help residents of Woolwich reduce home energy use and associated costs through an energy audit program. The Woolwich Home Energy Awareness Program was established as a way to promote awareness of practical resources available to residents to help save energy and money while increasing greater overall community sustainability.

This program is based on a model designed by Sustainable Jersey to encourage participation in the NJ Home Performance with Energy Star (HPwES) Program, which can help homeowners qualify for up to \$4,000 in cash rebates and up to \$10,000 in zero-interest financing for home energy improvements that could reduce energy use by up to 30 percent. To encourage residents to participate in the HPwES Program, the Woolwich Home Energy Awareness Program is offering a \$45 home energy assessment. The Township of Woolwich has selected SPS Mechanical to perform these assessments. After performing a home energy audit, SPS Mechanical will recommend possible home improvements to reduce energy use, and homeowners may qualify for the HPwES Program incentives.

The energy audit is a comprehensive evaluation of the home that includes review of energy usage, identification of health and safety issues, testing for carbon monoxide, gas leaks, mold/moisture issues, a blower door test, duct leakage test, thermal imaging and inspection of all existing insulation values. SPS will provide the homeowner with a detailed report outlining our findings with prioritized recommendations. SPS will also assist on all necessary paperwork for qualifying for rebates and financing.

To sign up for an energy audit with SPS Mechanical through the Woolwich Township Green Team, please contact SPS Mechanical to schedule your audit. Please consider participating in this Township wide effort to create a more energy efficient community.

If you wish to learn more about the energy audit from SPS Mechanical staff, the Township will be hosting an informational session at the Municipal Complex located 120 Village Green Drive on Wed., February 13 at 7:00 p.m. South Jersey Gas will also be on hand to provide information on their financing & rebates, as well as available rebates through the NJ Clean Energy Program. Light snacks will be provided. If you have any questions, please contact Matt Biske, Director of Community Development, at (856) 467-2666, ext. 3134.

Vernon Marino, Mayor



- Direct mailings proved costly. However, a generous grant from SJ Gas covered postcard printing and postage
- Additional savings realized from utilizing USPS Every Door Direct Mail (EDDM), which allows one to select mail carrier routes thus avoiding costs and time involved with using individual addresses

## Woolwich Home Energy Awareness Program

"Woolwich Home Energy Awareness Program" is a municipal wide initiative established to promote awareness of practical resources available to residents to help save energy and money while increasing greater overall community sustainability.

Through a partnership with Woolwich Township, SPS Mechanical is offering a \$49 Home Energy Assessment to residents. Take the first step towards preserving and protecting the environment and lowering your utility bills by logging onto [www.spsmechanical.com](http://www.spsmechanical.com) and scheduling your home energy assessment today.

### Simple Steps to Savings

**Step 1**  
Schedule Your  
Energy Audit.

The Home Energy Audit is a comprehensive evaluation of the home that includes a review of energy usage, identification of health and safety issues, testing for carbon monoxide, gas leaks, mold/moisture issues, a blower door test, duct leakage test, thermal imaging and inspection of all existing insulation values.

**Step 2**  
Review & Install  
Upgrades!

SPS will provide you with a detailed report outlining their findings with prioritized recommendations including, which energy-saving measures will have the biggest return on investment for your home and how much money is available to you in incentives and financing. You decide which measures to pursue. You can use SPS Mechanical or another Home Performance with Energy Star-certified contractor as provided at [www.njcleanenergy.com/hp](http://www.njcleanenergy.com/hp)

**Step 3**  
Get Your Rebate!

The contractor will handle all of the paperwork and processing so you don't have to! SPS Mechanical will ensure that your financing is handled properly and your rebate is delivered within 120 days of the date the improvements were installed in your home.





- For the postcard mailing, the program was expanded to include the Borough of Swedesboro
- Mailings reached 4,761 households in both Woolwich, Swedesboro
- Woolwich largely comprised of newer homes in comparison to Swedesboro, which is characterized by older homes

The Woolwich Home Energy Awareness Program is encouraging participation in the NJ Home Performance with ENERGY STAR® program, which is offering up to \$4,000 in rebates and up to \$10,000 of interest-free financing to replace outdated furnaces, boilers, hot water heaters, and insulation with new energy-efficient products that that could reduce energy use by up to 30%.

Through a competitive process, the Township selected SPS Mechanical to perform these assessments. SPS will also assist on all necessary paperwork for qualifying for rebates and financing.

Contact SPS Mechanical today to schedule your Home Energy Audit at 856-461-0527 or [www.spsmechanical.com](http://www.spsmechanical.com)



The Woolwich Home Energy Awareness Program was established to promote practical resources available to help residents within both Woolwich Township and the Borough of Swedesboro save energy and money while increasing greater overall community sustainability.

Mayor Vernon Marino and Tom Fromm - Working together for both communities.

# What did we learn and how successful was the program ?

- 70 audits conducted ! Includes 10 signed contracts
- SPS believes they may have priced the evaluation too low, attracting less serious consumers
- With change in weather, they anticipate more contracts
- SPS also conducting audit of Municipal Complex

WOOLWICH TOWNSHIP HPE							
ADDRESS	Prospect Date	HPE		REVIEW		COMPL JOB	ENERGY SAVINGS
		SCH	COMPL	SCH	COMPL		
Hunters Run	2/1	2/8	2/8	2/18	2/18		
Mill Farm Way	2/4	2/13	2/13	2/21	2/21	6/26	21%
Wilshire Blvd	2/4	2/15	2/15	2/25	2/25		
Windsor Drive	2/4						
Licciardello Drive	2/4						
Juniper Lane	2/4	2/13	2/13	2/26	2/26		
Beech Ave	2/11	3/20	3/20				
Brattleboro Road	2/4	2/8	2/8	2/18	2/18		
Joseph Court	2/5	2/15	2/15	2/26	2/26		
Davison Road	2/6	2/22	2/22	3/15	3/15		
115 Minute Man Lane	2/7	3/2	CUSTOMER CANCELLED				
Cedar Court	2/11	2/21	2/21	3/6	3/6		
Hill Farm Way	2/12	3/20	3/20				
Springhill drive	2/13	2/28	2/28	3/15	3/15		
Eagle Court	2/14	2/25	2/25	3/9	3/9		
Brattleboro	2/18	2/20	2/20	3/18	3/18		
Windsor Drive	2/19	CUSTOMER CANCELLED					
Monroeville Road	2/22	3/4	3/4	3/13	3/13	5/24	18%
Tara Run Road	2/22	3/16	3/16	3/29	3/29		
Fox Chase Run	2/22	3/4	3/4	3/15	3/15		
Independence Court		2/22/2019 due to work already complete					
Ramona Lane	2/21/2019	already had work completed by another company					
Lexington Mews	2/21/2019	cancelled					
Russell Mill Road	2/25	3/6	3/6	3/25	3/25	SIGNED CONTRACT	39%
Windsor Drive	3/5						
Maple Hill Drive	3/5	3/8	3/8	3/18	3/18		
Gabriele Circle	3/5	3/13	3/13	3/22	3/22		
Concord Court	3/13	3/23	3/23	4/8	4/8	5/17	23%
Beech Lane	3/18	3/30	3/30	4/9	4/9		
Natalie Drive	3/21	3/27	3/27	4/9	4/9		
Messina Drive	3/25	4/5	4/5	4/18	4/18		
Washington Way	3/26	4/4	4/4	4/17	4/17		
Kings Court	4/3	5/4	5/4	5/16	5/16		
Yorktown Road	4/3	4/19	4/19	5/6	5/6		
Hylton Rd	4/8	4/15	4/15	5/3	5/3		




If I were emperor of the world, I would put  
the pedal to the floor on energy efficiency  
and conservation.  
Steven Chu



THANK YOU !



# Mark Niederman

- Wyckoff Green Team
- VP Buildings & Grounds,  
Temple Beth Rishon, Wyckoff, NJ
- Principal, ConservAction
- LEED, A.P.



## Commercial Energy Efficiency Outreach

10 Points

20 Points

New Action May 2017

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*Important note: This action replaces the Direct Install Outreach Campaign to Local Business Community action and the Achieving Target Increase in Local Business Participation action. This new action simply combines those two previous actions into a single variable point action.*

*Previously approved "Direct Install Outreach Campaign to Local Business Community" and "Achieving Target Increase in Local Business Participation" actions will remain in the municipality's application and count towards the certification requirements until they expire.*

**Questions regarding this action can be directed to Samantha McGraw at 609-771-2938 or by emailing [info@sustainablejersey.com](mailto:info@sustainablejersey.com).**

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This action encourages municipalities to promote the **Direct Install component of the New Jersey Clean Energy Program (NJCEP)**. The Direct Install incentive covers 70% of the cost of building energy efficiency upgrades for small businesses. The benefit to the municipality is strengthening the local economy by helping to reduce small business' operating expenses and reducing the community carbon footprint at no cost to local taxpayers. To earn points, a municipality must actively promote the Direct Install Program to local businesses in partnership with the NJCEP.

# The “Players”





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.**



OPEN TO ALL BUSINESSES IN NEW JERSEY

Join us: Wyckoff Chamber of Commerce, February Meeting  
Larkin House 380 Godwin Ave, Wyckoff, NJ 07481

**FEBRUARY 28<sup>TH</sup>, 2019**  
**8:00 AM**

Questions? Email: [wec@wyckoff-nj.com](mailto:wec@wyckoff-nj.com)



**Green Team Task Force #2**  
**Building & Energy**



**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 (NJBP) 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 NJBP) 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](mailto:fburke@lime-energy.com)

Bergen County Coordinator for NJDirect Install Program  
 Mr. Mike Mandzik at TRC Solutions  
[MMandzik@trcsolutions.com](mailto: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 NJBP Program for Energy Savings.

## ***A New Small Business Program to Help Save Money!***

The State of New Jersey "Direct Install" Program will PAY up to 70% of the TOTAL cost to replace your furnaces, boilers, central air conditioning units, and qualified lighting.....  
**RIGHT NOW!**

- Wyckoff's Municipal buildings have already taken advantage of this program's energy efficiency upgrades;
- Your building's energy assessment is included for FREE;
- No rebates or excess paperwork;
- Quality, energy-efficient units: Trane, Carrier, York;
- Completely, "turn-key" state facilitators take care of all permits, labor, materials and removal of existing units

CALL Lime Energy to schedule your FREE Energy Assessment. Get started now.....SAVE **GREEN** and Start Saving NOW!

❖ First Come, First Serve until funds are depleted.



Lime Energy  
 Fran Burke  
[fburke@lime-energy.com](mailto:fburke@lime-energy.com)

NJ Clean Energy Program  
 Mike Mandzik  
[MMandzik@trcsolutions.com](mailto:MMandzik@trcsolutions.com)

# Societal Benefit Charge (SBC)

## ELECTRIC RESIDENTIAL RE-DEL-PJM

### Meter Number:

Oct 22 reading (Actual)	1333
Sep 23 reading (Actual)	-1269
Meter reading difference	64
Meter multiplier	x 160
Total Usage KWH 29 Days	10240

Basic Service Charge \$4.53

### Distribution Charges

First	250 KWH @	4.393¢ each	10.98
Next	350 KWH @	4.393¢ each	15.38
Next	9640 KWH @	4.669¢ each	450.18
<b>SBC Chg</b>	<b>10240 KWH @</b>	<b>0.60470¢</b>	<b>61.92</b>
ZEC Recovery Charge	10240 KWH @	0.42650¢	43.67
Smart Grid Surcharge	10240 KWH @	0.00000¢	.00
RGGI Surcharge	10240 KWH @	0.20680¢	21.18
Transition Bond Chg	10240 KWH @	0.00000¢	.00
Transition Bond Tax	10240 KWH @	0.00000¢	.00
Temp Tax Act Cr	10240 KWH @	-0.23500¢	-24.06

**Total Supplier Charge** 989.18

**CURRENT ELECTRIC CHARGES** \$1,572.96

**BILLING DATE** 10/22/19

## BILLING SUMMARY

ACCOUNT NUMBER

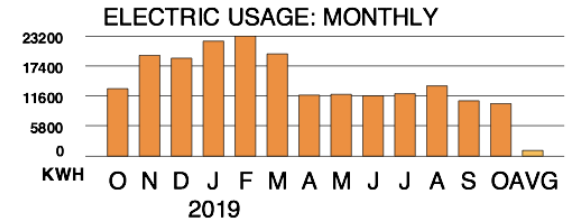
Last Bill \$1,734.35

Payment - Internet  
10/03/19 -1,734.35

Service Charges  
Electric 1,572.96

**TOTAL**  
**AMOUNT DUE** \$1,572.96

Avg. Temp This Period 61 °F  
Same Period Last Year 59 °F



■ ACTUAL 
 ■ ESTIMATED 
 ■ AVG. CUST PROFILE

For automatic enrollment in Budget Billing, pay \$2,436.00 instead of the current charges on your bill.

We offer convenient payment options such as pay by phone, pay online or in person at **Rockland Electric Co, 1 Lethbridge Plaza Suite 32, Mahwah**

You may receive future Termination Notices written in Spanish. Si le gustaría recibir avisos de terminación de servicio en español, llame gratis al 1-877-434-4100 de 8:00 a.m. a 7:00 p.m. lunes a viernes.

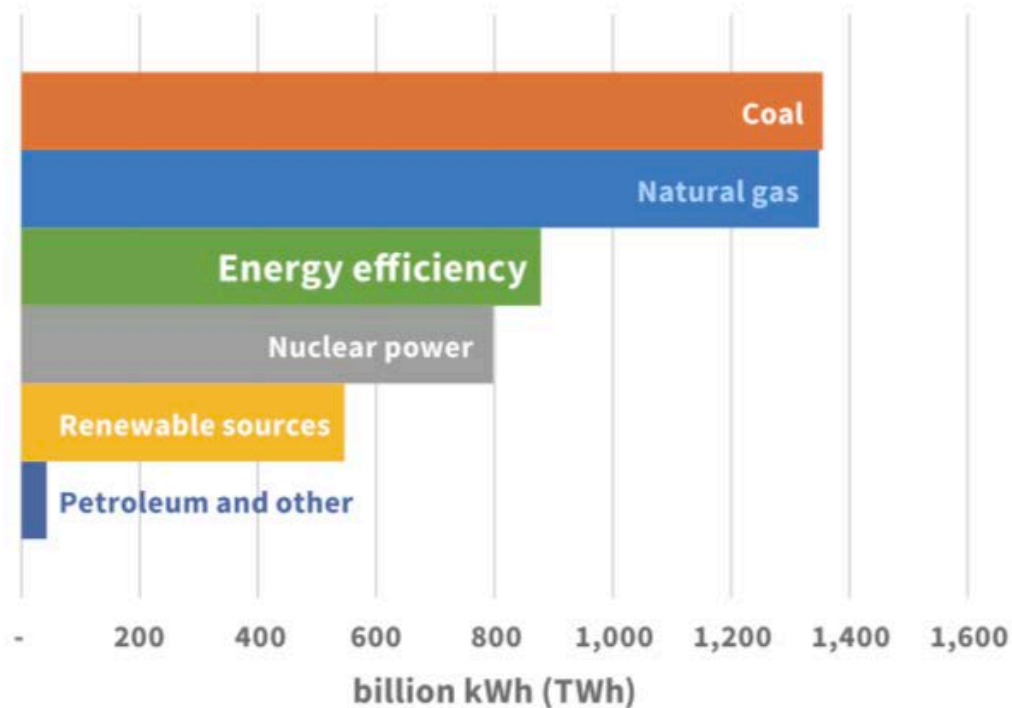




Energy savings from customer energy efficiency programs are typically 1/3 the cost of new generation resources.

Efficiency programs can also reduce the need to install, upgrade or replace transmission and distribution equipment.

Figure 5. US electricity generation and savings from energy efficiency in 2015



(Energy Efficiency through policies implemented since 1990)



Without the energy efficiency investments we have made since 1990, we would need the equivalent of 313 additional large power plants today to meet the country's energy needs.



# Between the Lines

The cost comparisons do NOT include:

- The value of Energy Independence – lesser reliance on foreign governments, less need to tailor foreign policy goals to ensure energy commodity flows
- Creation of jobs in weatherization, retrofits, etc.
- Environmental Benefits such as cleaner air, cleaner water and reduction of greenhouse gas emissions

# Projections from Direct Install Work at Town Hall, Wyckoff

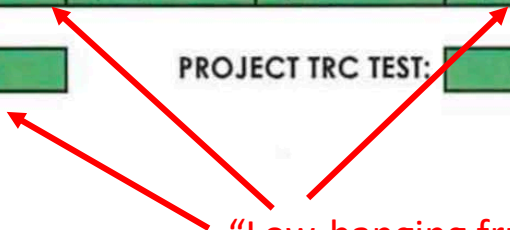
## Project Summary

	Annual Energy Savings	Energy Units	Annual Cost Savings	Total Measure Cost	Estimated Incentive Amount	Total Cost to Customer
Lighting Measures Total:	40,443	kWh	\$5,631.60	\$20,736.72	\$14,515.70	\$6,221.02
Motors & VFD Measures Total:	0	kWh	\$0.00	\$0.00	\$0.00	\$0.00
HVAC Electric Measures Total:	0	kWh	\$0.00	\$0.00	\$0.00	\$0.00
Refrigeration Measures Total:	0	kWh	\$0.00	\$0.00	\$0.00	\$0.00
<b>ELECTRIC MEASURES:</b>	<b>40,443</b>	<b>kWh</b>	<b>\$5,631.60</b>	<b>\$20,736.72</b>	<b>\$14,515.70</b>	<b>\$6,221.02</b>
<b>GAS MEASURES:</b>	<b>938</b>	<b>Therms</b>	<b>\$897.80</b>	<b>\$1,924.60</b>	<b>\$1,347.22</b>	<b>\$577.38</b>
<b>OIL MEASURES:</b>	<b>0</b>	<b>Gallons</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>TOTAL PROPANE MEASURES:</b>	<b>0</b>	<b>Gallons</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>CONVERSION MEASURES (OIL):</b>	<b>0</b>	<b>Gallons</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>CONVERSION MEASURES GAS:</b>	<b>0</b>	<b>Therms</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>COMBINED PROJECT TOTALS:</b>			<b>\$6,529.39</b>	<b>\$22,661.32</b>	<b>\$15,862.92</b>	<b>\$6,798.40</b>

SIMPLE PAYBACK (YEARS): **1.04**

PROJECT TRC TEST: **1.37**

“Low-hanging fruit”







# Projections from Direct Install Work at Temple Beth Rishon, Wyckoff

## Project Summary

	Annual Energy Savings	Energy Units	Annual Cost Savings	Total Measure Cost	Estimated Incentive Amount	Total Cost to Customer
<b>Lighting Measures Total:</b>	57,732	kWh	\$9,144.56	\$11,617.86	\$8,132.50	\$3,485.36
<b>Motors &amp; VFD Measures Total:</b>	0	kWh	\$0.00	\$0.00	\$0.00	\$0.00
<b>HVAC Electric Measures Total:</b>	3,520	kWh	\$557.61	\$21,155.00	\$14,808.50	\$6,346.50
<b>Refrigeration Measures Total:</b>	2,867	kWh	\$454.17	\$687.50	\$481.25	\$206.25
<b>ELECTRIC MEASURES:</b>	<b>64,120</b>	<b>kWh</b>	<b>\$10,156.34</b>	<b>\$33,460.36</b>	<b>\$23,422.25</b>	<b>\$10,038.11</b>
<b>GAS MEASURES:</b>	<b>1,766</b>	<b>Therms</b>	<b>\$1,717.57</b>	<b>\$21,522.59</b>	<b>\$15,065.81</b>	<b>\$6,456.78</b>
<b>OIL MEASURES:</b>	<b>0</b>	<b>Gallons</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>TOTAL PROPANE MEASURES:</b>	<b>0</b>	<b>Gallons</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>CONVERSION MEASURES (OIL):</b>	<b>0</b>	<b>Gallons</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>CONVERSION MEASURES GAS:</b>	<b>0</b>	<b>Therms</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>COMBINED PROJECT TOTALS:</b>			<b>\$11,873.91</b>	<b>\$54,982.95</b>	<b>\$38,488.07</b>	<b>\$16,494.89</b>

**SIMPLE PAYBACK (YEARS):**

**1.39**

**PROJECT TRC TEST:**

**2.27**

# Preliminary Results from Direct Install Work at Temple Beth Rishon, Wyckoff

DATE	KWH	COST	AVG TEMP	DATE	KWH	COST	AVG TEMP	DATE	KWH	COST	AVG TEMP	DATE	KWH	COST	AVG TEMP
2016				2017				2018				2019			
September	17,440	\$2,892.92	75	September	15,680	\$2,669.22	69	September	16,800	\$2,686.20	74	September	10,720	\$1,734.35	69
October	13,760	\$2,147.23	60	October	12,800	\$2,044.25	65	October	13,120	\$1,994.88	60	October	10,240	\$1,572.96	59

	3 Yr Avg: 2016-18		2019 (After Direct Install)		Δ
September	16,640	\$2,749.45	10,720	\$1,734.35	35.6%
October	13,227	\$2,062.12	10,240	\$1,572.96	22.6%
Avg 2 months	14,933	\$2,405.78	10,480	\$1,653.66	29.8%

Sample size is too small to extrapolate conclusions, but impact is positive



*A Better Tomorrow. One Community at a Time*

# Sustainable Jersey

*Energy Efficiency for Municipal Facilities*



Janice Piccolo  
Chatham Borough Community Services Director





# What do I need prior to completing action requirements?

- ❖ Supportive Council
- ❖ Supportive Engineer
- ❖ Facilities liaisons (Department of Public Works / Library / etc.)



# General Requirements

<b>Overview</b>	<ul style="list-style-type: none"><li>• Making municipal buildings more energy efficient saves taxpayer money while also contributing to solutions for some of our most pressing environmental sustainability issues</li></ul>
<b>Why is it important?</b>	<ul style="list-style-type: none"><li>• Buildings are the biggest source of emissions and energy consumption<ul style="list-style-type: none"><li>○ The EPA estimates that if the energy efficiency of commercial and industrial buildings improved by just 10 percent, Americans would save about \$20 billion annually and reduce greenhouse gas emissions</li></ul></li></ul>
<b>Who should lead and be involved with this action?</b>	<ul style="list-style-type: none"><li>• The municipal green team will initiate and advocate for the implementation of this action</li><li>• It is also important to involve municipal leadership, staff at the municipal level who are involved in energy and purchasing, finance and business administration staff, and other volunteers who can advocate for the program</li></ul>



# General Requirements

<b>Timeframe</b>	<ul style="list-style-type: none"><li>• Typical audit timeframes can range from a couple of weeks to 6 months</li><li>• Project schedules can range from several months to several years</li></ul>
<b>Project Costs and Resources Needed</b>	<ul style="list-style-type: none"><li>• <u>Costs</u> - typically little to no initial costs because incentives offered by utility companies can offset audit costs<ul style="list-style-type: none"><li>○ The costs for implementing building efficiency projects can vary widely, depending on the scope and scale of the project, from tens of thousands to millions of dollars</li></ul></li><li>• <u>Resources</u> - financing programs are available, either through state-sponsored programs or from commercial project developers<ul style="list-style-type: none"><li>○ In most cases, actual “out of pocket” expenses can be minimized or eliminated through careful use of state incentives and project finance solutions</li></ul></li></ul>
<b>How to</b>	<ul style="list-style-type: none"><li>• Municipalities should begin the process by getting an energy audit done on all of their buildings</li><li>• Once the audits are complete, proceed to upgrading the facilities based on the audit recommendations</li></ul>



# General Requirements

## What to Submit

- Description of Implementation - describing what has been accomplished and the impact it has had on municipality
- Documentation for Scale of Points:
  - 5 points - Upload a copy of the audit
  - 10 points - Upload copies of audits for every building in portfolio
  - 15 points - Provide documentation of energy efficiency upgrades completed for one building, along with evidence that these have (or will) result in at least a 10% annual energy savings
  - 20 points - Provide a copy of the Local Government Energy Audit report for all buildings, and provide documentation of energy efficiency upgrades completed for one building, along with evidence that these have (or will) result in at least a 10% annual energy savings
  - 30/40/50 points - Upload a completed copy of the [Sustainable Jersey Energy Use Intensity Spreadsheet](#) or equivalent documentation from Energy Star Portfolio Manager showing energy consumption for all buildings in the municipal portfolio for two separate years, one before upgrades and one after.
    - 10% savings = 30 points
    - 20% savings = 40 points
    - 30% or greater savings = 50 points





# Points Scale

<b>5 points</b>	Completion of an audit on at least one building, but not covering all buildings
<b>10 points</b>	Completion of a Local Government Energy Audit that covers all buildings under municipal control
<b>15 points</b>	Significant upgrade work performed on one building (at least 10% cost savings demonstrated)
<b>20 points</b>	Completion of a Local Government Energy Audit that covers all buildings under municipal control as well as significant upgrade work performed that shows at least a 10% demonstrated cost savings for one building
<b>30 points</b>	Energy efficiency upgrades that show between a 10% to 19% decrease in energy consumption for the entire building portfolio
<b>40 points</b>	Energy efficiency upgrades that show between a 20% to 29% decrease in energy consumption for the entire building portfolio
<b>50 points</b>	Energy efficiency upgrades that show at least a 30% decrease in energy consumption for the entire building portfolio



# Chatham Borough's Application Overview

Energy-efficient upgrades since 2015 have significantly reduced Site and Source EUI.

Actions	Results
<p>2010 Energy Audit - Recommendations under LGEA Program</p> <ul style="list-style-type: none"><li>- Relacing all original windows (used to be single-glazed) to low-E double-glazed in November 2015</li><li>- Automatic Temperature Control System installation</li><li>- Incandescent light fixtures to CFLs</li></ul> <p>By tracking energy usage, we were able to secure upgrades to the Municipal Buildings that have resulted in tangible reductions in energy usage</p>	<p>Study Period: November 2015 - December 2017</p> <ul style="list-style-type: none"><li>- Source EUI declined 12.5%</li><li>- Site EUI declined 12.6%</li></ul> <p>Requested: 20 points</p> <ul style="list-style-type: none"><li>- Completing a LGEA</li><li>- 10% reduction in energy usage</li></ul>



# Audit Recommendations

## Municipal Building and Police Department

- ~ Original single-glazed windows replaced with a low-E double-glazed type
- ~ Install 13 occupancy sensors
- ~ 9 incandescent Exit signs replaced with LED type
- ~ Upgraded 301 T12 fixtures to T8
- ~ Upgrade 32 T12 fixtures to T8 fixtures
- ~ Replace ductwork, zone dampers, and automatic temperature control system
- ~ Install one motion sensor to turn on lights and make dark areas safe
- ~ Water-efficient lavatory fixtures
- ~ Replace boiler with two 93% AFUE high-efficiency condensing boilers
- ~ Replace domestic water heater with 95% efficient unit

## Public Works and Water Plant

- ~ Upgrade 8 Metal Halide fixtures to 15
- ~ Upgrade 63 T12 fixtures to T8 fixtures

# Total Project Cost with Grant Benefits



## Project: Chatham Borough - 2 Buildings

The total cost of the proposed project is:	\$151,478.48	
The NJ Clean Energy Incentive covers:	\$84,353.78	(56%)
The cost to your municipality is:	\$67,124.70	(44%)
The EECBG Rebate (not shown in the project details) covers:	\$20,000.00	(13%)
<b>The total cost to your municipality, including the EECBG Rebate, is:</b>	<b>\$47,124.70</b>	<b>(31%)</b>
<hr/>		
The estimated annual energy savings associated with this project is:	\$17,329.47	
Therefore, the estimated payback period for these measures is:	2.7 years	



# Costs for Individual Buildings

## Project: Chatham Borough - Municipal Building

The total cost of the proposed project is:	\$57,256.30	
The NJ Clean Energy Incentive covers:	\$34,353.78	(60%)
The cost to your municipality is:	\$22,902.52	(40%)
The EECBG Rebate (not shown in the project details) covers:	\$7,500.00	(13%)
<b>The total cost to your municipality, including the EECBG Rebate, is:</b>	<b>\$15,402.52</b>	<b>(27%)</b>
The estimated annual energy savings associated with this project is:	\$8,040.08	
Therefore, the estimated payback period for these measures is:	1.9 years	

## Project: Chatham Borough - Public Works and Water Plant

The total cost of the proposed project is:	\$94,222.18	
The NJ Clean Energy Incentive covers:	\$50,000.00	(53%)
The cost to your municipality is:	\$44,222.18	(47%)
The EECBG Rebate (not shown in the project details) covers:	\$12,500.00	(13%)
<b>The total cost to your municipality, including the EECBG Rebate, is:</b>	<b>\$31,722.18</b>	<b>(34%)</b>
The estimated annual energy savings associated with this project is:	\$9,289.39	
Therefore, the estimated payback period for these measures is:	3.4 years	





# Chatham Borough Energy Comparison

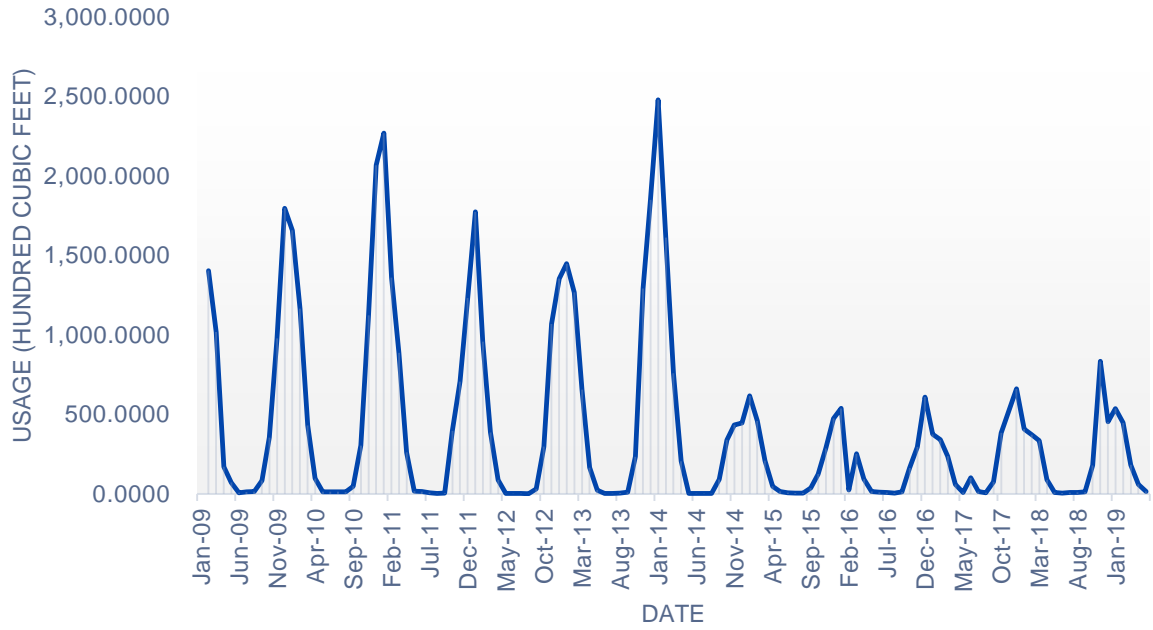
## Municipal Building and Police Department

	November 2015	December 2017
Source EUI (kBtu/ft <sup>2</sup> )	161	140.8
Site EUI (kBtu/ft <sup>2</sup> )	68.5	59.9
Energy Cost (\$)	51,087.08	44,633.60



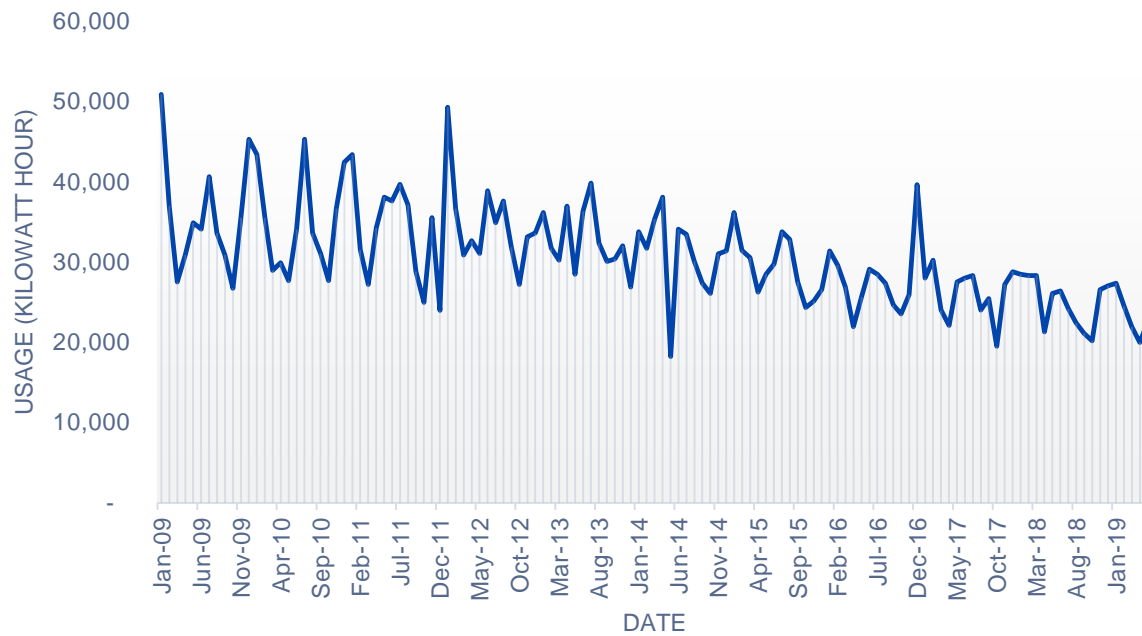


### Public Works and Water Plant - PSE&G Natural Gas Usage





Municipal Building and Police Department - JCP&L Electric Usage





# Town of Secaucus - ESIP

Amanda J Nesheiwat  
Environmental Director





# YEAR OF CLIMATE ACTION - 2018

Develop A Carbon Footprint

Increase EV Infrastructure

LGEA- Energy Upgrades/Schneider Electric

Direct Install- LED Buidling

Outreach to Business Community about BPU Energy Incentives

Energy Sage- Residential Access to Solar

Energy Aggregation (Municipal)

Hudson County Microgrid Project

Increase Recycling Rate

Climate Action Plan for 2019

# Energy Savings Improvement Program (ESIP)

- BPU Clean Energy Program- Under Chapter 4 of the Laws of 2009 (the law), the “Energy Savings Improvement Program” (ESIP), provides all government agencies in New Jersey with a flexible tool to improve and reduce energy usage with minimal expenditure of new financial resources.
- Started in 2017
- 21 Energy Audits
- Our Town Administrator, Project Manager, and Building and Grounds Staff, Finance and Purchasing Dept.

# ESIP- Next Steps

- 6 Buildings were chosen- Town Hall, Senior Center, Recreation Center, Old Recreation Center, Golden Ave Pump Station, DPW Garage
- RFP Process
  - Pre- conference
  - Interviews
  - Evaluations



# ESIP-Challenges

- It's a big decision- Be prepared to answer questions from Mayor, Town Council and Town Attorney!
  - BPU is VERY helpful!
- Be mindful of the guidelines- Get help if needed.
  - Hudson County
  - Greener by Design

## ESIP - Future

- We are awarding an ESCO later this month by Resolution
- We hope to start working with our ESCO and municipal staff on the design of this program in January 2020.
- We would like to help Secaucus School District do an ESIP.
- Maybe expand the program to do more buildings in the future.



Thank you!

Amanda J Nesheiwat

[anesheiwat@secaucus.net](mailto:anesheiwat@secaucus.net)

201-864-7336



# New Jersey's Clean Energy Program™

NJLM Session: Energy Efficiency for  
Municipalities, Residents, and Businesses

November 19, 2019





# NJCEP Background

## ADMINISTERED BY

New Jersey Board of Public Utilities' Office of Clean Energy

## FUNDING

Societal Benefits Charge (SBC) on utility bill

## PROGRAM GOALS

- Education
- Change behavior
- Provide opportunity for ALL NJ residents to reduce energy and lower operating cost
- Protect the environment and lower emissions
- Meet Governor's goal of 100% clean energy by 2050



# Business Ombudsman

The Office of the BPU Business Ombudsman is a legislatively-mandated office within the New Jersey Board of Public Utilities. The Ombudsman's mission is to assist the state's commercial and industrial energy users in managing their energy costs through a strategic approach to efficiency, renewable technologies and supply purchasing.

The office can assist businesses with requests regarding incentives, act as a liaison between businesses and the state if questions regarding energy use occur, and can provide informational sessions about our incentive programs.

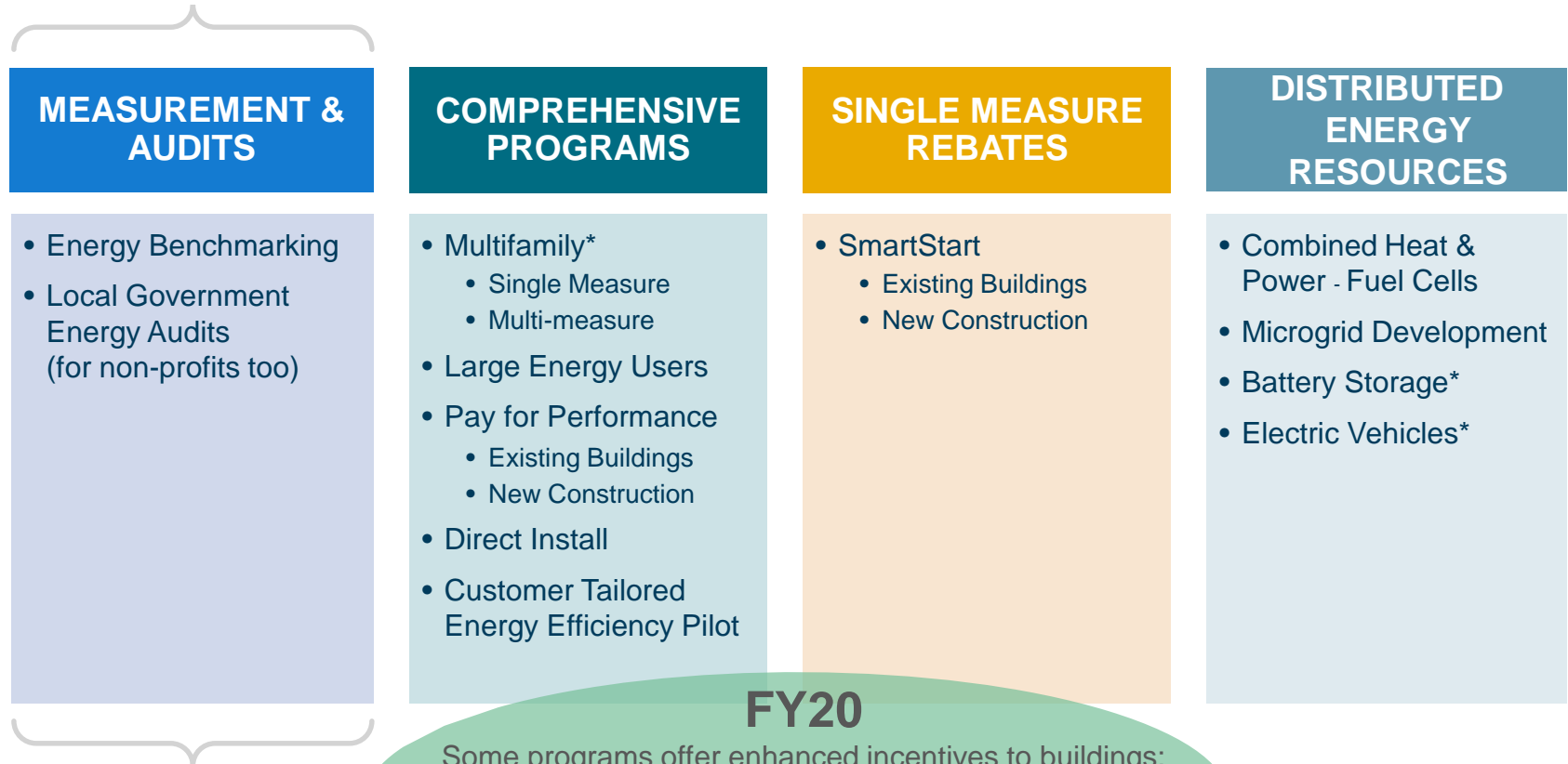
The office can be reached at [ombudsman@bpu.nj.gov](mailto:ombudsman@bpu.nj.gov)

# C&I PROGRAMS



# 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



# 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

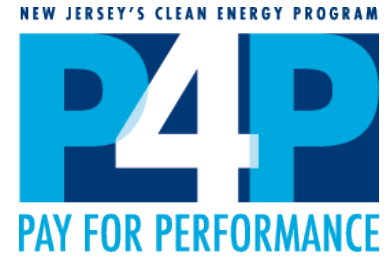
**CUSTOMER**

30% of installed cost

# 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 increased for UEZ/OZ/ MUNI/K-12 Public Schools

# Benchmarking

[NJCleanEnergy.com/BENCHMARKING](http://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.**



# 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  $\leq 200$  kW average



# FINANCING



# Financing Mechanism: ESIP

## ENERGY SAVINGS IMPROVEMENT PROGRAM (ESIP)

- Provides alternative financing for energy savings projects at public institutions
- Administered directly by the BPU
- Value of energy savings leveraged to pay for cost of EE projects over a 15 year contract
- Requires NO new bonding and is outside of capital budget
- Does not count as debt or require voter approval



# RESIDENTIAL PROGRAMS



# 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, Refrigerator/Freezer Recycling and Lighting Discounts



## 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**

**FY20**

Some programs offer enhanced incentives for homes located in an UEZ

# What is Home Performance?

NJCleanEnergy.com/HP

HOME PERFORMANCE  
WITH ENERGY STAR®

- Provides whole-house energy assessments and comprehensive energy efficient upgrades for existing homes
- Addresses comfort, indoor air quality, health & safety, and energy usage problems
- The program uses specially trained/certified Building Performance Institute (BPI) GoldStar contractors



# 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**





# Appliance Recycling

[NJCleanEnergy.com/RECYCLING](http://NJCleanEnergy.com/RECYCLING)

EE PRODUCT  
REBATES

- Recycling for old, inefficient refrigerators and freezers
- FREE pick-up and a \$50 rebate
- Room air conditioners and dehumidifiers can be recycled during the fridge/freezer pick-up appointment for an additional \$25 rebate each
- Approximately 95% of each appliance is recycled
- Schedule appointments online at [NJCleanEnergy.com/RECYCLING](http://NJCleanEnergy.com/RECYCLING)





# More Information

## ARIF WELCHER

Government/Business Manager

Arif.Welcher@bpu.nj.gov

609.292.0093

## VISIT

[NJCleanEnergy.com](http://NJCleanEnergy.com)

## NEWSLETTER

[NJCleanEnergy.com/NEWSLETTER](http://NJCleanEnergy.com/NEWSLETTER)

## LISTSERVS

[NJCleanEnergy.com/LISTSERVS](http://NJCleanEnergy.com/LISTSERVS)



@NJCleanEnergy

A photograph of a modern building with a glass facade. The building has multiple stories with large glass windows and balconies. The glass reflects the surrounding environment. In the foreground, there are several young, rounded trees with green foliage. A semi-transparent white banner is overlaid across the middle of the image, containing the text 'THANK YOU' and a yellow plus sign.

**THANK YOU**



# Speakers

Moderator: Mayor Vernon Marino, Woolwich Township

Matthew Blake, Director of Community Development, Woolwich Township

Mark Niederman, Wycoff Green Team

Janice Piccolo, Directory Community Services, Borough of Chatham

Amanda Neshiewat, Environmental Director, Town of Secaucus

Arif Welcher, Government and Business Manager, NJ Board of Public Utilities

