

Sustainable Jersey

Success Stories in Commercial Energy Efficiency

April 4, 2018

Tony O'Donnell Economist/Project Specialist Sustainable Jersey

Speakers for Today's Webinar

Tony O'Donnell Economist

Sustainable Jersey

Anthony Cancro Township Administrator

Township of Plainsboro

Jim Friedl Outreach Account Manager

TRC Solutions

Christine Symington Program Director

Sustainable Princeton



SJ Action: Commercial Energy Efficiency Outreach

- Where can I find this action on the Sustainable Jersey website?
- Why should we consider doing this action? What are the main steps involved in completing the action?
- How many Green Teams/Municipalities have completed this action? Were they successful?
- How long will it take? What costs are involved?
- What resources are available to help the GreenTeam/Municipality complete this action?
- What is the difference in point levels awarded for the action? How does completing this action help toward achieving a Gold Star in Energy?

Why is Energy Outreach to Businesses a Good Idea?

- Commercial sector accounts for 26% of energy usage in NJ (2014).
- Strengthens local economy
- Focus on small & mid-sized buildings supports small businesses

Small businesses comprise what share of the U.S. economy?

Small businesses make up:

- 99.7 percent of U.S. employer firms,
- 64 percent of net new private-sector jobs,
- 49.2 percent of private-sector employment,
- 42.9 percent of private-sector payroll,
- 46 percent of private-sector output,
- 43 percent of high-tech employment,
- 98 percent of firms exporting goods, and
- 33 percent of exporting value.

Source: U.S. Census Bureau, SUSB, CPS; International Trade Administration; Bureau of Labor Statistics, BED; Advocacy-funded research, Small Business GDP: Update 2002-2010, www.sba.gov/advocacy/7540/42371.



www.sustainablejersey.com

- Lots of resources available for action
- Very positive outcomes from pilot program and from municipalities who have completed the action to date
- Positive effects on costs and carbon emissions profile for community



Commercial Energy Efficiency Outreach Statistics

 Average annual participation rates in Direct Install for the 23 municipalities who have completed this action show a 300% increase in business participation during the outreach campaign

Municipality	County	Action Approved	DI Projects	Estimate of DI Eligible	Lifetime DI** Penetration Rate
Harrington Park Borough	Bergen	2014	6	27	22.2%
Pennington Borough	Mercer	2016	10	55	18.2%
Wharton Borough	Morris	2015	15	86	17.4%
Berkeley Heights Township	Union	2014	12	111	10.8%
Springfield Township	Union	2015	26	243	10.7%
West Windsor Township	Mercer	2016	24	253	9.5%
Highland Park Borough	Middlesex	2013	17	187	9.1%
Madison Borough	Morris	2016	20	222	9.0%
Moorestown Township	Burlington	2014	26	311	8.4%
Princeton	Mercer	2014	31	389	8.0%
New Brunswick City	Middlesex	2015	48	607	7.9%
Woodbury City	Gloucester	2014	22	289	7.6%
Woodbridge Township	Middlesex	2017	84	1,112	7.6%

^{**} The median lifetime penetration rate for Direct Install for all NJ municipalities is 5.82%



Timeframe & Costs

- Effective planning takes from two to six months depending on situation
- Campaigns generally run for a year, although some have gone longer
- Upgrades to businesses are generally completed "start to finish" in three to four months
- Only significant costs to municipality are involved in mailing to businesses (range of \$500 - \$3,000 depending on size of business community). Coordination with the local DI contractor can significantly reduce these costs

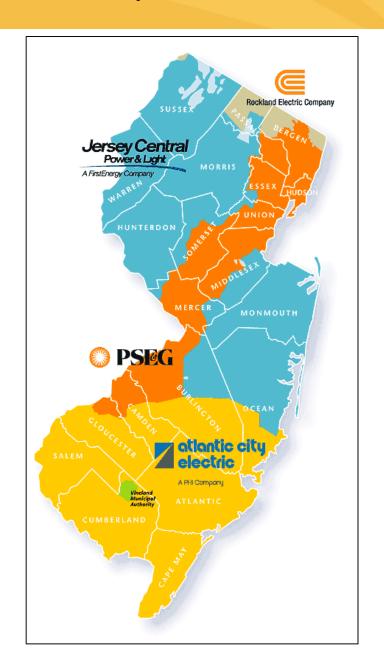


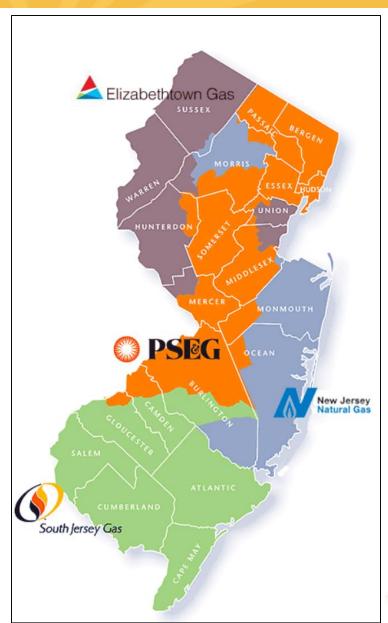
Resources Available to Help Complete Action

- NJ Clean Energy Program staff coordination with outreach team
- Local Direct Install contractor for marketing
- Chamber of Commerce
- Partnership with municipality highlighting DI experience in municipal facilities
- Utility incentives for businesses that complement incentives offered by the NJ Clean Energy Program
 - ➤ Low interest loans to finance portion of upgrade costs (30%) that are not covered by NJCEP
 - On bill repayment
 - Additional funding available in some service areas through utility financed Direct Install



Always Check with Your Local Utilities for Incentives







Links for Commercial –based Utility Program Incentives

Atlantic City Electric

https://www.atlanticcityelectric.com/Pages/default.aspx

Elizabethtown Gas

https://www.elizabethtowngas.com/business

JCP&L

https://www.firstenergycorp.com/save_energy/save_energy_new_jersey.html

New Jersey Natural Gas

http://www.savegreenproject.com/featured-pages/o-apr-on-bill-repayment-program#commercial

PSE&G https://www.pseg.com/business/small-large-business/save-energy/gov-efficiency.jsp
Rockland Flectric

https://www.oru.com/en/save-money/rebates-incentives-credits/incentives-for-business-owners

South Jersey Gas

https://southjerseygas.com/For-My-Business/Business-Incentives.aspx



Action Point Levels & Going for Gold!

- Completing the base action is worth 10 points (regardless of outcome)
- Achieving a 5% target goal of businesses completing Direct Install updates during the campaign earns you an additional 10 points
- This action is one of the six actions required to meet the Community performance standard for the Gold Star in Energy. To satisfy the gold standard you need to have completed this action AND be able to demonstrate that 15% of eligible businesses have completed upgrades through the Direct Install program

Gold Star Standards

A new level of recognition for Sustainable Jersey silver certified communities.

Silver certified municipalities are eligible to earn Gold Star recognition for achieving high levels of performance in key dimensions of sustainability. The levels of performance flow from our assessment of what we need to achieve as individual communities, and as a State, as defined in the Sustainable State of the State Report. Achieving these goals will rely on action at many scales and across boundaries, and the Gold Star Standards define the role that municipal governments must play to achieve success.





PROGRAM PORTFOLIO



ELIGIBLE SECTORS

Commercial, Industrial, Government, Schools, Non-Profit, Institutional and Multifamily

Audits:

- Energy Benchmarking
- Local Government Energy Audits

Comprehensive Projects:

- Direct Install
- Pay for Performance Existing Buildings
- Pay for Performance New Construction
- Large Energy Users Program

Equipment Rebates:

- Smart Start Existing Buildings
- Smart Start New Construction

Distributed Energy Resources (DER) – Energy Generation:

Combined Heat and Power

PROGRAMS

DIRECT INSTALL: OVERVIEW



- A turn-key retrofit program to replace outdated and inefficient equipment
- Open to Small to Mid-Sized Commercial and Industrial facilities with a peak electric demand ≤ 200 kW
- Lighting, HVAC, Refrigeration

DIRECT INSTALL: OVERVIEW



- Provides incentives of up to 70% of the installed cost
- Incentives are paid directly to the contractor
 - Customer only pays remaining 30% of installed cost
 - \$125,000 project cap
 - \$250,000 per entity cap
- Project must pass cost/benefit test

DIRECT INSTALL: BENEFITS



- Turn-key process: participating contractors provide support and process all paperwork
- Minimal cost: Low upfront cost with generous incentives
- Fast turnaround time: Average length of time for job completion, 4-6 months
- Ongoing savings: Projects provide energy savings year after year

Program changes effective July 1, 2017:

- \$500,000 entity cap for ESIP (eligible municipalities)
- Case-by-case approval for one month exceeding 200 kW
- See program web site for details and list of pre-selected contractors and territories

NJCleanEnergy.com/DI

DIRECT INSTALL: COVERAGE



County	DI Contractor		
Hunterdon & Somerset	CMC Energy Services 888-331-5891		
Warren & Morris	Donnelly Energy 845-401-6253		
Gloucester, Salem, & Cumberland	Facility Solutions Group 732-826-6100		
Monmouth, Ocean, Burlington, Camden, Atlantic & Cape May	Hutchinson Mechanical Services 856-429-5828		
Sussex, Passaic, Bergen, & Hudson	Lime Energy 855-600-5463		
Middlesex & Mercer	Tri-State Light & Energy, Inc. 610-789-1900		
Essex & Union	Willdan Energy Solutions 732-372-4014		

SMARTSTART: OVERVIEW



- Individual incentives for broad project categories:
 - Equipment Replacement
 - Renovation
 - Remodeling
 - New Construction
- Provides two types of financial incentives for high efficiency equipment installation: Prescriptive & Custom
- Incentives up to \$500,000 per electric account and \$500,000 per natural gas account per fiscal year.

SMARTSTART: INCENTIVES



Prescriptive Incentives

- Specific incentives and individual applications for:
 - Lighting & Lighting Controls
 - Packaged HVAC
 - Boilers & Water Heaters
 - Chillers
 - VFD's
 - Food Service
 - Refrigeration
- Project pre-approval required for <u>all</u> lighting measures

SMARTSTART: INCENTIVES



Custom Incentives

- Designed for new or innovative technologies proven to be cost-effective and not listed as prescriptive
- Incentives paid for approved projects at the lesser of three values*:
 - 50% of project cost
 - Buy down to one year payback, OR
 - \$0.16/kWh, \$1.60/ therm saved in first year
- Projects must have a minimum first year energy savings of 75,000 kWh or 1,500 therms to be eligible.
- Project pre and post inspection required.

^{*} For equipment replacement, gut-rehab/new construction, incentives caps based on incremental cost and energy savings where applicable.

CTEEP - PILOT: OVERVIEW



- Streamlined approach to projects involving multiple
 SmartStart Buildings measures/applications (prescriptive and custom)
- Offers direct on-site assistance
- No minimum energy savings requirements
- Technical assistance incentives available up to \$10,000



FOR MORE INFORMATION

Visit NJCleanEnergy.com

Call (866) NJSMART

Stay Informed NJCleanEnergy.com/Newsletter

To join the Energy Efficiency listserv

contact the NJCEP Webmaster.

Springfield Township (Union County) Direct Install Outreach

DIRECT INSTALL

Outreach Campaign to Local Business Community 10 Points

Program Summary:

The Township of Springfield worked with its Direct Install Participating Contractor, Patrick Lynch of Tri-State Light & Energy, Inc., to reach out to Springfield businesses in 2012 and again in 2015. Between 2012 and 2014, about a dozen businesses completed Direct Install projects. In the spring of 2015, outreach to Springfield businesses included an announcement in the March edition of the Patriot Times newsletter and direct mailing of a letter from the Township Administrator and a flyer from Tri-State to 1450 commercial entities in Springfield (see included documentation below). As of June 5, 2015, Tri-State has received dozens of inquiries as a result of this campaign and is working with ten potential Direct Install Opportunities.

- P Outreach Campaign to Local Business Community Letter from Township
- P Outreach Campaign to Local Business Community Letter Enclosure (Flyer)
- Properties of the Properties o



Springfield Outreach Letter



ESTABLISHED APRIL 14, 1794

ANTHONY CANCRO TOWNSHIP ADMINISTRATOR (973) 912-2285 FAX (973) 912-2277

MUNICIPAL BUILDING 100 MOUNTAIN AVENUE SPRINGFIELD, NEW JERSEY 07081

April 2015

Dear Springfield Business Owner:

The Township of Springfield and the Springfield Patriot Chamber of Commerce want to remind you of an important program that can reduce your energy consumption, reduce your utility costs, and thereby save you money.

The State of New Jersey Direct Install Program helps you replace your old equipment or lighting system with energy efficient technology and the Direct Install Programs <u>pays for 70% of the total project costs</u>. The program begins with an initial FREE, absolutely no-obligation energy assessment of your building. The process is completely turnkey and upgrades can be completed in as little as 90 days. Once complete, the payback period on your initial investment can be as short as one year while you enjoy both energy and cost savings for many years thereafter. The program was created specifically to help upgrade the energy efficiency of small to medium-sized buildings.

The Township of Springfield implemented this program in various municipal buildings reducing its energy consumption and saving on utility costs, and several Springfield businesses have taken advantage of this program in recent years. For more information about the NJ Direct Install Program, please visit:

http://njcleanenergy.com/di

The contractor authorized to work in Union County is:

Tri-State Light & Energy, Inc. Att: Patrick Lynch Phone: 610.789.1900

Email: NJDirectInstall@TSLE.com

Thank you for your interest in this important effort.

Sincerely,

Anthony Cancro

Scott Seidel & Patrick Paolella

Anthony Cancro Township Administrator Scott Seidel & Patrick Paolella Chamber Co-Chairman

Enclosure

Identifies program & establishes credibility

Outline incentives & savings

Vouches for savings with 1st hand experience

Loops in Direct Install Contractor info

Personal touch – local officials



Springfield Township Outreach Materials





Join Springfield in Becoming Energy Efficient at Minimal Cost.

DIRECT INSTALL

New Jersey's Clean Energy Program pays up to 70% to replace lighting, furnaces, boilers, rooftop units, central air and more with energy efficient technology. NOT A REBATE!

SAVE

- · Includes No Cost Energy Assessment
- Program Now Includes LEDs And Outdoor Site Lighting
- . Funding Pays for up to 70% of Total Project Costs
- . We Take Care of Everything From Permits to Recycling
- . Top of the Line Lighting Options
- . Lower Utility Bills for Years to Come
- . Call 610.789.1900 to Schedule Your FREE Energy Audit
- · For more info http://www.njcleanenergy.com/di

Top Reasons You Need To Upgrade With NJDI:

- 1. REDUCE YOUR ENERGY COSTS significant savings on your monthly utility bill!
- 2. REDUCE YOUR MAINTENANCE COSTS long life, brand name products replace your aging lighting, heating & air conditioning. This means years without having to worry about replacing or upgrading!
- 3. REDUCE YOUR PROJECT COSTS NJDI is the most economical opportunity for your upgrade. Use NJDI funding to replace your lighting and equipment it before it breaks down!

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 County. Call 610.789.1900 or email NJDirectInstall@TSLE.com to schedule your Energy Assessment.

Get Started to Go Green & Save Green - \$tart \$aving NOW.

Direct Install is an offering of the New Jersey Board of Public Utilities and the Clean Energy Program designed for small commercial, institutional and municipal buildings. It identifies proven measures for reducing utility costs and replaces inefficient equipment with energy efficient alternatives. Direct Install will cover 70% of project costs when installed by the exclusive Participating Contractor for your county.



2233 Manor Avenue Upper Darby, PA 19082

T: 610-789-1900 F: 610-789-9504 NJDirectInstall@tsle.com

The PATRIOT TIMES · Page 14 · March 2015

WANT TO SAVE MONEY AND REDUCE YOUR ENERGY CONSUMPTION? It's Good For The Environment And Good For Your Wallet.

The New Jersey's Clean Energy Direct Install Program pays up yo 70% to replace lighting, furnaces, boilers, rooftop units, central air and more with energy efficient technology. Learn more by reading the letter below and flyer on right.



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TRI-STATE Roper Darley, PA 19082



www.springfieldhope.com

Anyone seeking help or assistance from Springfield H.O.P.E. may call 973-467-3388

Springfield Patriot Chamber Of Commerce



HAMMER

Irwin J. Hammer, DDS Seth A. Hammer, DDS 7 So. Springfield Ave., Springfield NJ

973-376-7718 • Fax: 973-376-7503

www.hammerdds.com hammerdental@aol.com

www.JMK AUTO GROUP.com





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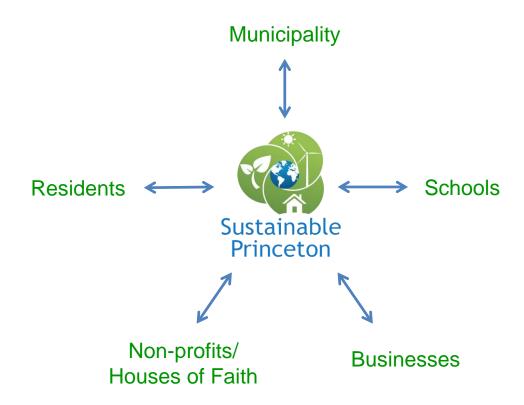
Change a habit, change the world



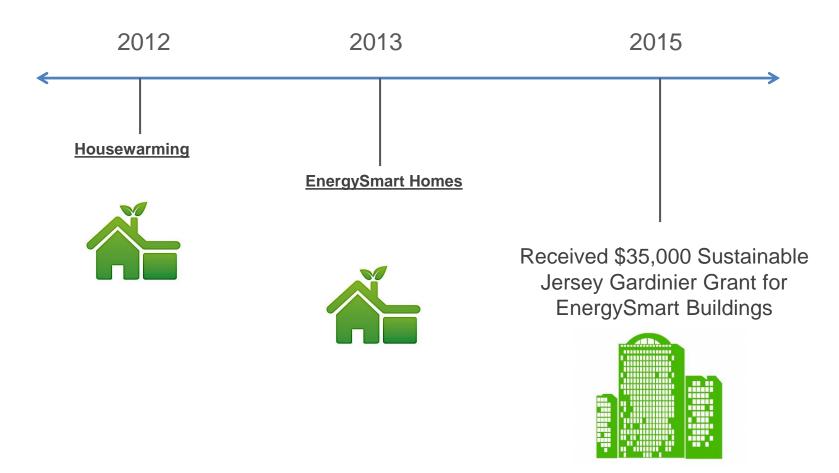
Sustainable Jersey Panel: Success Stories in Commercial Energy Efficiency April 4th, 2018

Christine Symington - Program Director, Sustainable Princeton

Our mission is to inspire our community to develop and implement solutions that positively impact our environment.









EnergySmart Buildings

- 27 Commercial Properties
- Utilizing over \$350,000 in incentives
- 3 properties with real-time electricity monitors







Building Inventory

Objectives

- Understand stock of commercial properties in Princeton through use of survey
- Prioritize energy efficiency opportunities

Outcomes

- ~300 commercial properties
- Mostly small businesses & mixed commercial
- Many non-profits

<u>Learnings</u>

- Building facility managers are busy
- Labor intensive so plan accordingly



NJ Clean Energy Commercial Programs

Objectives

Promote Direct Install to small commercial properties

Outcomes

- 7 completed DI
- 6 audited but not complete
- 6 inquired but no audit completed

Learnings

- Small business owners are busy
- Events about energy efficiency are hard to sell
- Program uncertainty affects adoption
- Letter from Mayor most effective
- Utility bills are hard to get
- Energy efficiency upgrade needs of owners not met by program (i.e. oil heat)



3 Case Studies

Objectives

- Understand unique challenges for different types of commercial properties
 - Non-profit
 - Retail business
 - Local Gov't

<u>Outcomes</u>

- Witherspoon Jackson Presbyterian Church
- Labyrinth Bookstore
- Princeton Municipal Building

Learnings

- Layers of decision making exist
- All buildings are not the same
- Technical assistance is necessary



Overall Learnings

- Relationships matter
- Timing
- Important to understand the NJ Clean Energy Programs
- Crawl, walk, run
- NJ Clean Energy Programs are key for Princeton's climate action planning, greenhouse gas reduction goals







Thank You!

Molly Jones, Executive Director Christine Symington, Program Director Jenny Ludmer, Community Outreach Manager

Sustainableprinceton.org info@sustainableprinceton.org







Upcoming Events

Success Stories in Residential Energy Efficiency Sustainable Jersey Webinar Weds. May 2, 2018 1PM – 2PM

Sharing Positive Energy

REGISTER

Atlantic-Cape May Counties Cape May Convention Center Mon. May 7 6PM-8PM



Sustainability Summit Thurs. June 21, 2018 9AM-3PM TCNJ, Ewing, NJ





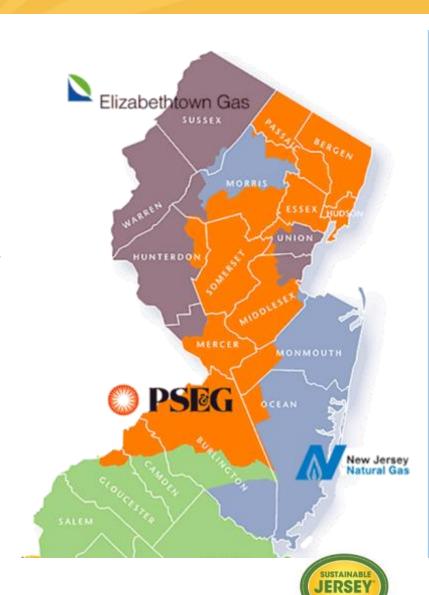
FREE Technical Assistance

Energy Initiative Technical Assistance

Environmental Defense Fund Fellows in partnership with New Jersey Natural Gas

Check out our video on the 2017 EDF program!

Application Deadline: Friday, April 13



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Grants Program Underwriters





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Gold



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Bronze



















Thank you!

Tony O'Donnell Economist/Project Specialist Sustainable Jersey 609.771.2921 odonnela@tcnj.edu

