



# Sustainable Jersey

## Success Stories in Residential Energy Efficiency

May 2, 2018

Tony O'Donnell  
Economist/Project Specialist  
Sustainable Jersey

# Speakers for Today's Webinar

**Tony O'Donnell**

**Economist  
Sustainable Jersey**

**Kim Hoff**

**Market Outreach Manager  
New Jersey's Clean Energy Program**

**Bruce Grossman**

**Comfort Partners Senior Program Manager  
NJ Comfort Partners Program Working Group**

**Beth Lovejoy**

**Chairperson  
Summit Environmental Commission**

**Christine Symington**

**Program Director  
Sustainable Princeton**



# SJ Action: Residential Energy Efficiency Outreach

- Motivation for Action
- Point Levels/Gold Star in Energy
- Time & Costs
- Effectiveness of Past Efforts
- Resources Available



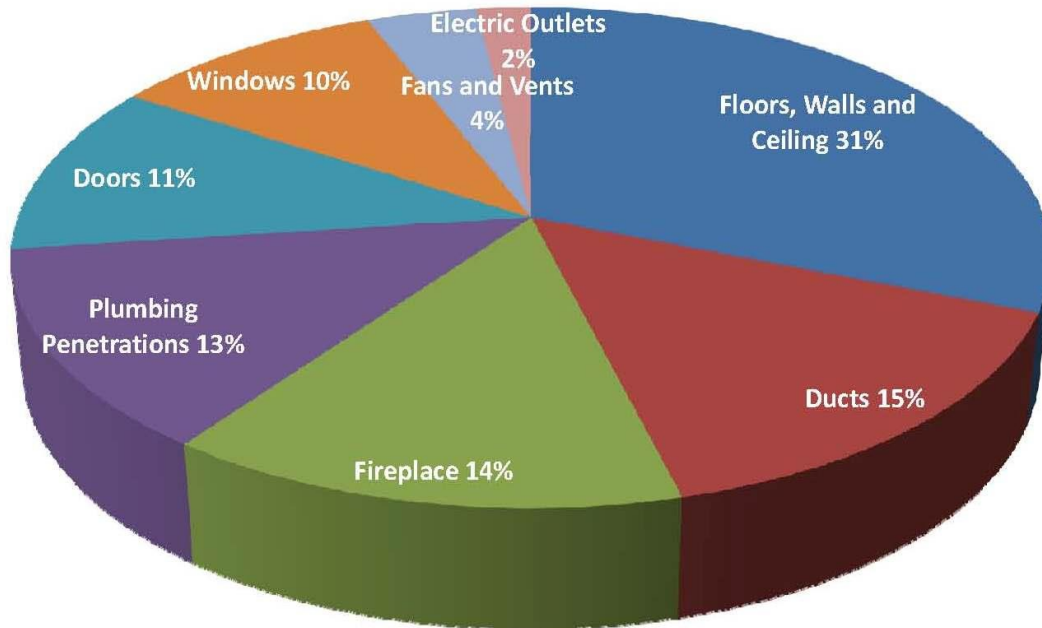
[www.sustainablejersey.com](http://www.sustainablejersey.com)



# Why is Energy Outreach to Residents a Good Idea?

- Residential sector - 24% of energy usage in NJ (2014)
- Conserves energy & reduces CO<sub>2</sub> emissions
- Saves homeowners money & improves comfort and health of the home

**Residential Energy Loss**



- Many resources available for Green Team
- Very positive outcomes from previous campaigns through Sustainable Jersey

# Action Point Levels & Going for Gold!

- Base action = 10 points
- Expanded action = 20 points
- Counts toward achieving Sustainable Jersey Gold Star in Energy

## Gold Star Standards

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

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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.

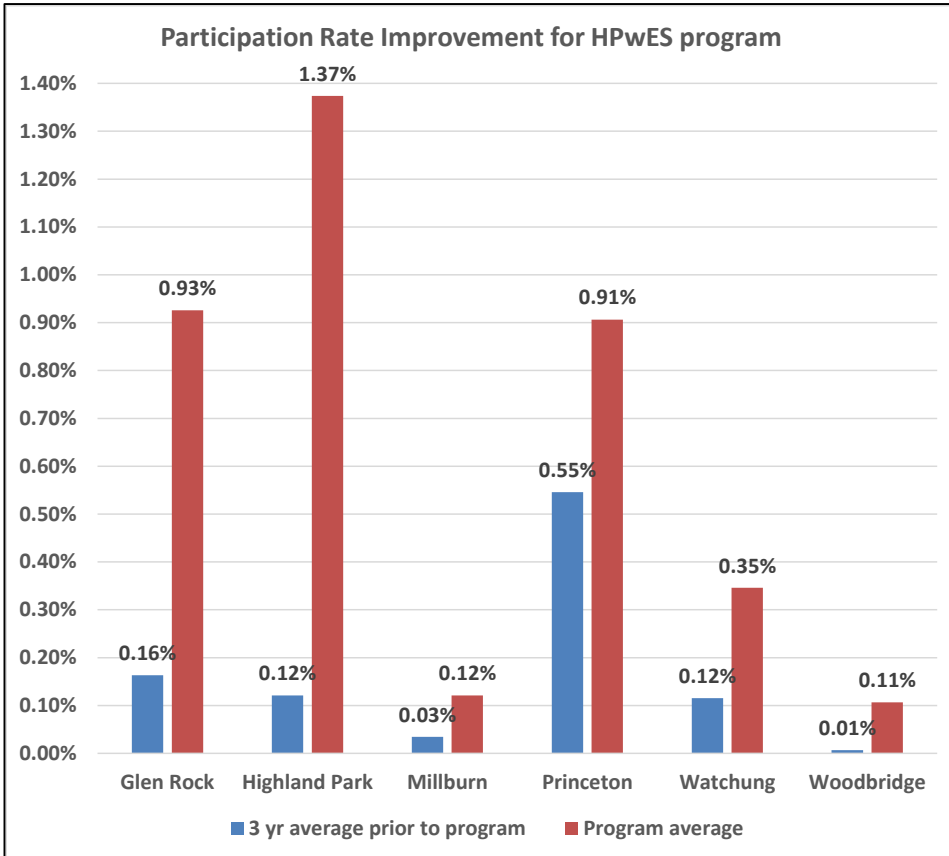


# Timeframe & Costs

- Planning – 4 to 6 months
- Attorney review for RFP
- Outreach to residents – at least 6 months.
- Some promotional costs, but the home audit provider will often be willing to assume a portion of these costs

# Residential Energy Efficiency Outreach Statistics

The average participation rate improvement for the six HPwES efforts completed through 2016 is a “6.8-fold” increase (range low of 1.7 to a high of 15.6)



Municipality	Households	Participation Rates					Total Completions
		2011	2012	2013	2014	2015	
Glen Rock	3,672	0.16%	0.05%	0.27%	0.63%	1.23%	69
Highland Park	2,475	0.12%	0.93%	1.82%	0.53%	0.48%	114
Millburn	5,777	0.12%	0.02%	0.07%	0.02%	0.12%	24
Princeton	5,739	0.63%	0.51%	0.51%	1.10%	0.71%	301
Watchung	1,735	0.23%	0.06%	0.23%	0.06%	0.35%	19
Woodbridge	24,406	0.00%	0.00%	0.02%	0.19%	1.72%	509
Statewide	2,102,465	0.13%	0.18%	0.23%	0.26%	0.30%	30,060



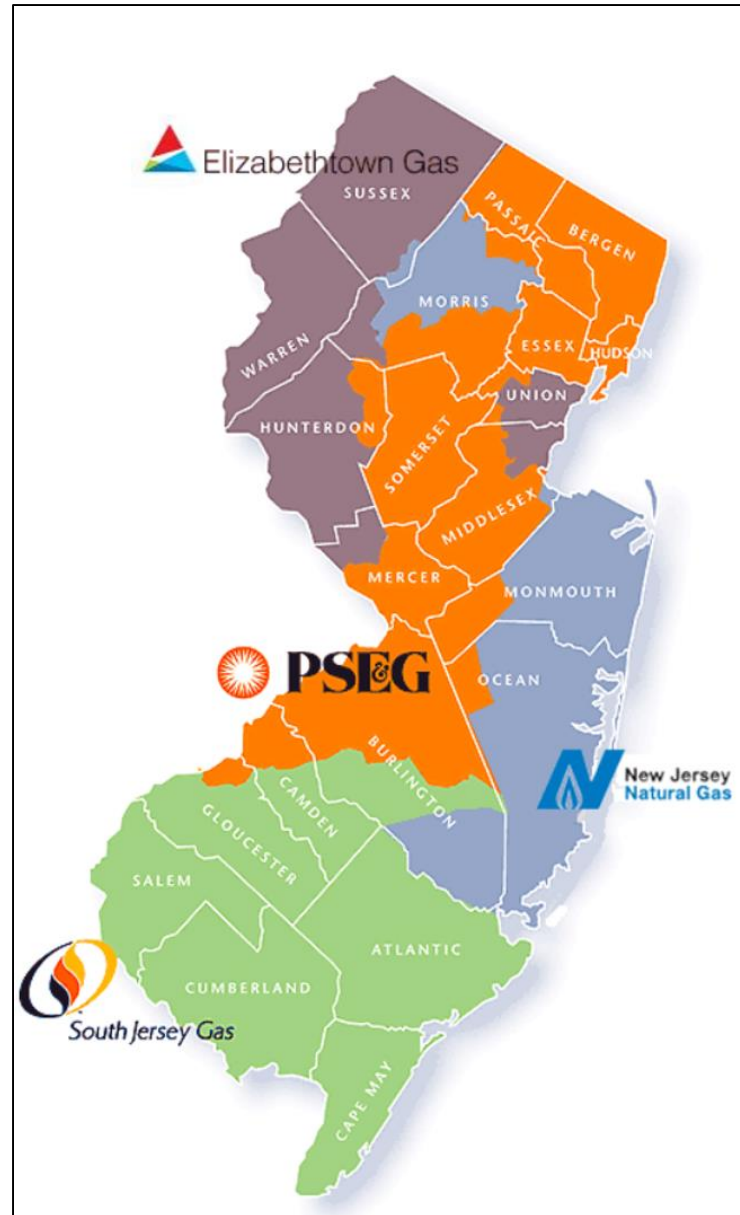
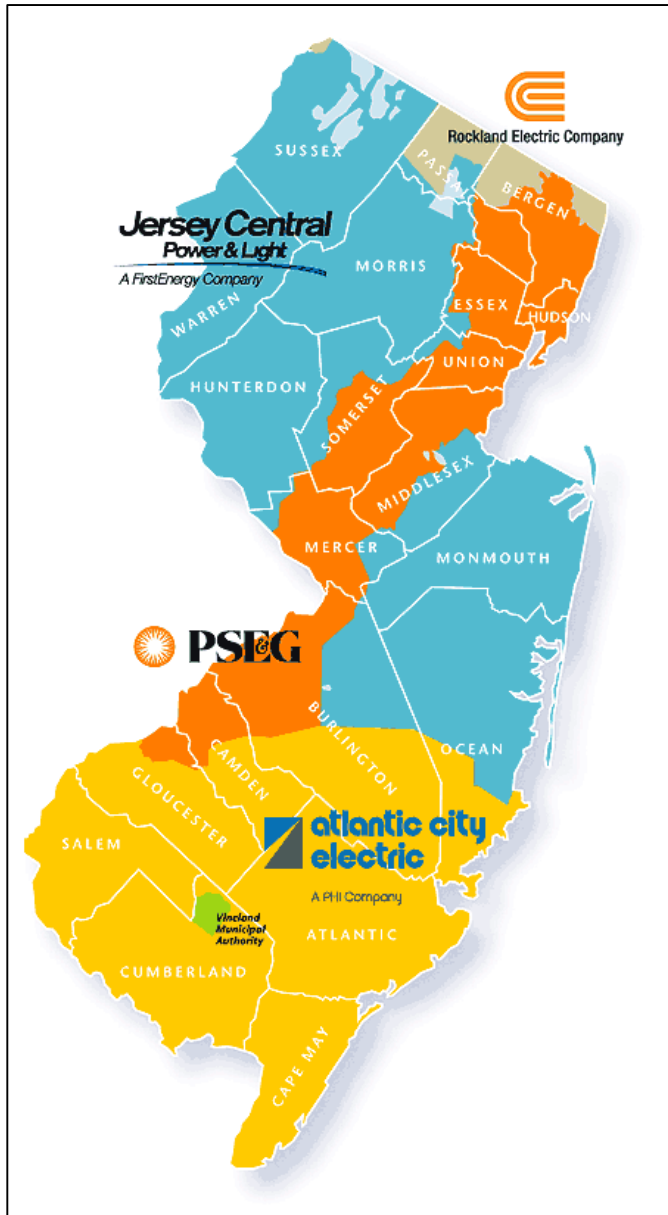
# Resources Available to Help Complete Action

- NJ Clean Energy Program staff
- Selected auditor from RFP process
- Partnership with municipality
- Utility incentives
  - On bill repayment options
  - Utility financed loan offer programs





# Always Check with Your Local Utilities for Incentives



# Links for Residential-based Utility Program Incentives

Atlantic City Electric

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

Elizabethtown Gas

<https://www.elizabethtowngas.com/residential>

JCP&L

[https://www.firstenergycorp.com/save\\_energy/save\\_energy\\_new\\_jersey.html](https://www.firstenergycorp.com/save_energy/save_energy_new_jersey.html)

New Jersey Natural Gas

<http://www.savegreenproject.com/>

PSE&G

[https://www.pseg.com/home/save/manage\\_costs/tips\\_tools.jsp](https://www.pseg.com/home/save/manage_costs/tips_tools.jsp)

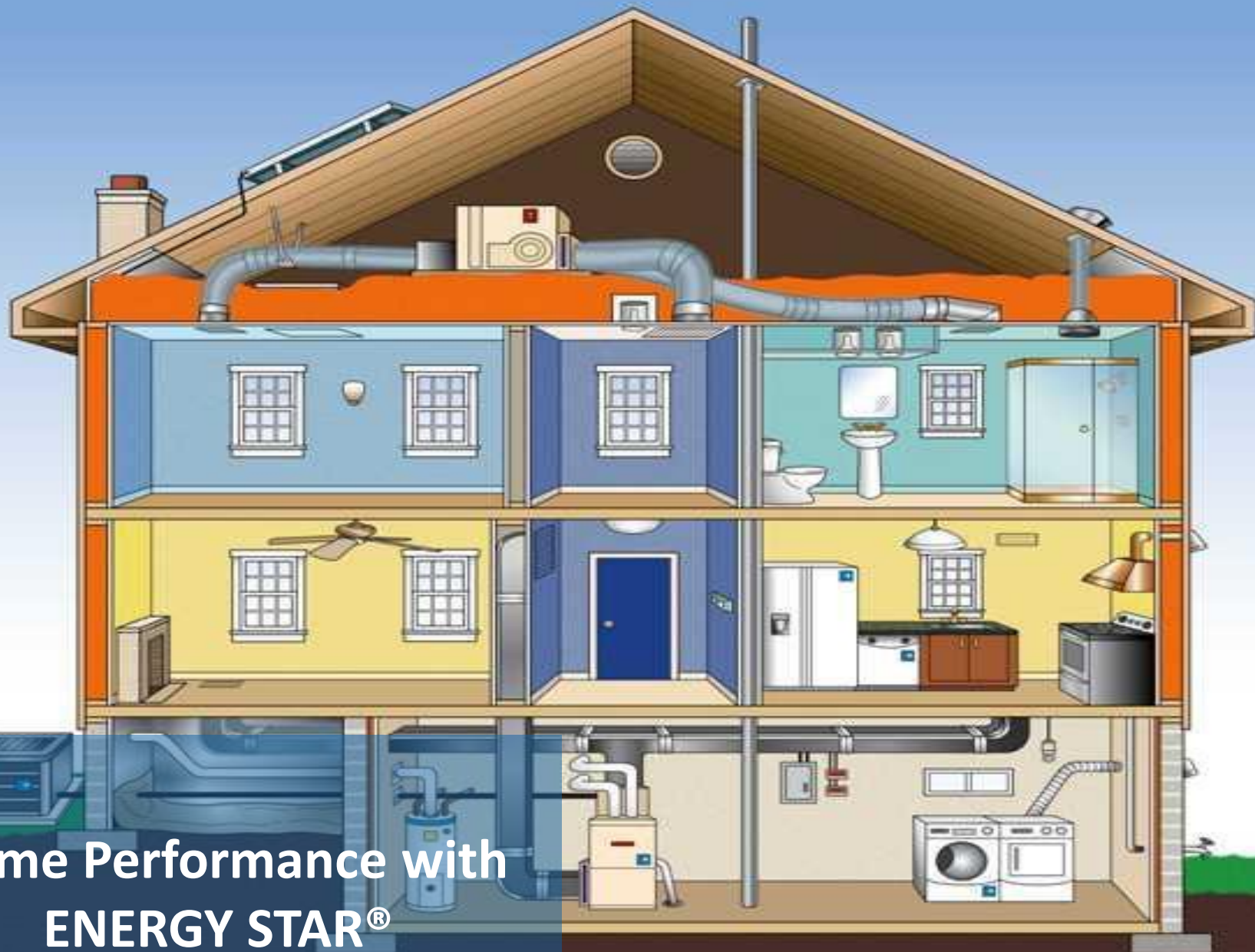
Rockland Electric

<https://www.oru.com/en/save-money/rebates-incentives-credits/rebates-incentives-tax-credits-for-residential-customers>

South Jersey Gas

<https://southjerseygas.com/For-My-Home/Residential-Incentives.aspx>





Home Performance with  
**ENERGY STAR®**

# What Is Home Performance?



- 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



# Eligibility

- NJ Residential Dwelling units 3-stories or less
- Single Family Homes
  - 1-4 Dwelling units
  - Townhouses
- Multi-family buildings
  - $\geq 5$  Units, must be addressed as whole-building
  - Individual HVAC, DHW per unit or building
  - Fuel metered per unit or building  
(Requires BPI Multi-Family contractor Certification & Project Pre-approval)





# Steps to Participation

- Select a participating NJ Program BPI GoldStar Contractor  
[NJCleanEnergy.com/HP](http://NJCleanEnergy.com/HP)
- Schedule a Home Assessment (fee for assessment may apply as per contractor)
- Helps the owner Identify possible Health & Safety Issues
- Review contractor recommendations and incentive level
- GoldStar contractor installs the recommendations & performs test-out

# The Home Assessment



## Process



### Combustion Appliance Testing

- Diagnostic equipment is used to test the conditions of your heating system, hot water heater and oven
- Testing results determine opportunities for upgrades

### Visual inspection of the house

- Air sealing opportunities
- Insulation opportunities
- Possible health and safety issues (moisture, asbestos, carbon monoxide, indoor air quality) : may resolve asthma, sinus issues

### Optional blower door test

# Drivers for Homeowners

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- Dust and Allergies
- Drafts and Comfort
- Asthma and Sinusitis
- Moisture and Mold
- High Utility Bills
- Climate Change
- Energy Independence





# Incentives

## Incentives based on Total Energy Savings

- Single-family homes (1-4 units) & Townhomes

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

Plus

- 0% Interest loans up to \$10,000 or
- Low interest loans up to \$15,000



- Multi-family buildings(5+ units and 3-stories or less)

- \$500 up to \$1,500 per unit

# Additional Incentives

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- NJ Natural Gas
  - 0% On-Bill Repayment Program
  - [SAVEGREENProject.com](http://SAVEGREENProject.com)
- South Jersey Gas
  - 0% financing through Energy Finance Solutions
  - [Southjerseygas.com](http://Southjerseygas.com) – Click on “For My Home”

# New Home Performance Pilots

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- Have the following installed during your Home Performance job. (up to 9 items total)
  - LED light bulbs
  - Low-flow faucet aerators
  - An EPA WaterSense Showerhead
- Air Sealing and Insulation - \$500 rebate for each

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

# Thank You

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Thank You for your time

Kimberly Hoff

732-218-3410

[Kimberly.hoff@NJCleanEnergy.com](mailto:Kimberly.hoff@NJCleanEnergy.com)

For the latest updates on program announcements or new incentives,  
subscribe to the NJ Clean Energy Program E-Newsletter at:  
[NJCleanEnergy.com/NEWSLETTER](http://NJCleanEnergy.com/NEWSLETTER)



New Jersey  
**Comfort  
Partners**

**A Success Story!**

*A New Jersey Clean Energy Program, Administered  
by the NJ Board of Public Utilities, Managed by the  
These Six Utilities*



# *Agenda*



## 1. Comfort Partners Background

## 2. How the Program Enrolls Participants

- Evolution of Comfort Partners Program
- Number of Participants
- Average Spend per Household
- Energy Saved

## 3. Development of New Marketing Channels



# Comfort Partners Background



- The Comfort Partners Program is a component of New Jersey's Clean Energy Program, which offers free energy-saving improvements and energy education for income-eligible families.
- Comfort Partners is a NJBPU program managed by six NJ based utilities.

Since 2001, Comfort Partners has improved energy affordability for over 109,300 New Jersey low-income households who, by definition, spend a high percentage of their income on energy.





# *Enrollment Requirements*



1. Available to any New Jersey household with significant energy use.
2. Income Qualification: Below 225% of the 2018 Federal Poverty Household Income Poverty level
3. Households that receive Universal Services Funds, PAAD, and/or Lifeline.



# *Outreach Engagement*



1. Reach-out to those who are on assistance
  - Universal Services Fund (USF)
  - Lifeline
  - Pharmaceutical Assistance to the Aged and Disabled (PAAD)

2. Utility messaging through bill stuffers, and Community fairs and Outreach functions

3. NJBPU Web-site



# *Savings and Cost*



Electric : Over 124,452 Mwh Saved

Natural Gas : Over 1,000,304 Dekatherms

**Health and Safety: Over \$65.2M**

Totaling over \$382M, or about \$3,500 per home. In recent times, that number has increased to over \$5,400 per home!



# *Greater Marketing Opportunities*



## Sounds Easy, Has Challenges:

1. Program requirement that USF customers with high usage participate in the Program. (Would take regulatory approval, from NJBPU and perhaps others)
2. Introduce the Program through Faith Based organizations.
3. Increase Marketing Budgets (dependent upon the budget approved by the NJBPU)





*Even Greater Marketing  
Opportunity*

Partnering with  
Sustainable Jersey, and  
their Green Teams!



*For More Information*

Go To:

[www.njcleanenergy.com/residential/  
home/home](http://www.njcleanenergy.com/residential/home/home)





# Summit Home

*Energy Insight Program*

Beth Lovejoy

Summit Environmental Commission Chairperson



# Summit Home

## *Energy Insight Program*

### Engaging City officials and staff

- Talk to officials in other municipalities about their experiences and get contact information from them.
- Find one City official who will promote the program.
- Suggest a meeting with a BPU representative or a BPU-certified contractor to answer questions that City officials may have.





# Summit Home

## *Energy Insight Program*

### Engaging City officials and staff

#### ***Highlight the benefits to the officials of the municipality:***

- Program is voluntary and is offered as a service to homeowners
- No cost to the City to implement the program
- After the RFP is in place, all interactions take place between the residents and the contractor; the municipality is not involved in oversight and has no liability.



# Summit Home

## *Energy Insight Program*

### Engaging City officials and staff

#### ***Highlight the benefits to homeowners:***

- Saves homeowners the hassle of having to select a reputable BPU-certified contractor
- Highly discounted rate for the energy audits
- No obligation beyond the \$49 for the audit
- Audit includes a check for gas and carbon monoxide leaks
- More comfortable home and energy cost savings if work is done
- BPU incentives – rebates and no- or low-interest financing



# Summit Home

## *Energy Insight Program*

### City Process

- Use Sustainable Jersey template.
- Choose goal for number of houses to be audited and time frame for the program.
- Present draft RFP to committees and Council for approval.
- Issue and publicize RFP; select vendor from responders.
- Choose a name for the program.
- Ask mayor to write introductory letter for mailings.



# Summit Home

## *Energy Insight Program*

## Community Outreach for Summit Program

Ciel set up a separate landing page on its website for Summit.  
<http://www.cielpower.com/summit/>



Give your home the upgrades it needs.

Discover cash-back and financing incentives to improve the comfort and energy-efficiency of your home with the City of Summit Home Energy Audit program.

Start by scheduling a \$49 Home Energy Audit

[SCHEDULE A \\$49 HOME ENERGY AUDIT](#)



# Summit Home

## *Energy Insight Program*

### Community Outreach for Summit Program

- Video of Mayor Radest's home energy audit shown on Hometowne TV, YouTube and Summit's page on Ciel website
- Ciel mailing to all Summit homeowners
- Information on City's website, including push notifications
- Discussed by mayor at televised Common Council meetings
- Press releases to local news outlets
- Social media posts – Facebook, Twitter, Nextdoor
- Brochures and flyers distributed at community events: Farmers Market, Community Night, National Night Out
- Scott Fischer on a panel at a local forum about energy



# Summit Home

## *Energy Insight Program*

### Community Outreach for Summit Program







# Summit Home

## *Energy Insight Program*

### Community Outreach for Summit Program





# Summit Home

## *Energy Insight Program*

## Community Outreach for Summit Program

### Social Media posts:



City of Summit NJ @CityofSummitNJ · 5 Oct 2016

Celebrate National "Energy Efficiency Day" by scheduling a home energy audit with @CielPower. Visit [cielpower.com/summit](http://cielpower.com/summit). #EEDay2016

CELEBRATE  
NATIONAL  
ENERGY  
EFFICIENCY  
DAY

10/5

CELEBRATE THE  
INAUGURAL NATIONAL  
ENERGY EFFICIENCY DAY  
BY SCHEDULING A \$49  
HOME ENERGY  
ASSESSMENT

UP TO \$19,000 WORTH OF  
CASH AND FINANCING  
INCENTIVES IS AVAILABLE  
TO IMPROVE YOUR HOME'S  
COMFORT AND ENERGY  
EFFICIENCY



SUMMIT MAYOR NORA RADEST'S HOME UNDERGOES AN ENERGY AUDIT



[WWW.CIELPOWER.COM/SUMMIT](http://WWW.CIELPOWER.COM/SUMMIT) 201-632-3463



2



Beth Taylor Lovejoy shared City of Summit's post.

October 16, 2016

This is an excellent time to get an energy assessment to get ready for the winter. More than 100 homes in Summit have already taken advantage of this low-cost offer from Ciel Power. You can go directly to a special page for Summit residents on Ciel's website for more information: <http://www.cielpower.com/summit>



City of Summit

October 14, 2016

The City of Summit is encouraging Summit residents to sign up for a home energy audit from Ciel Power LLC and discover energy improvements to help save money an...

[See More](#)



## Summit Home

### *Energy Insight Program*

Summit, NJ

Residents Encouraged to Schedule Home Energy Audit as Cooler Weather Approaches

[CITYOFSUMMIT.ORG](http://CITYOFSUMMIT.ORG)





# Summit Home

## *Energy Insight Program*

## Community Outreach for Summit Program

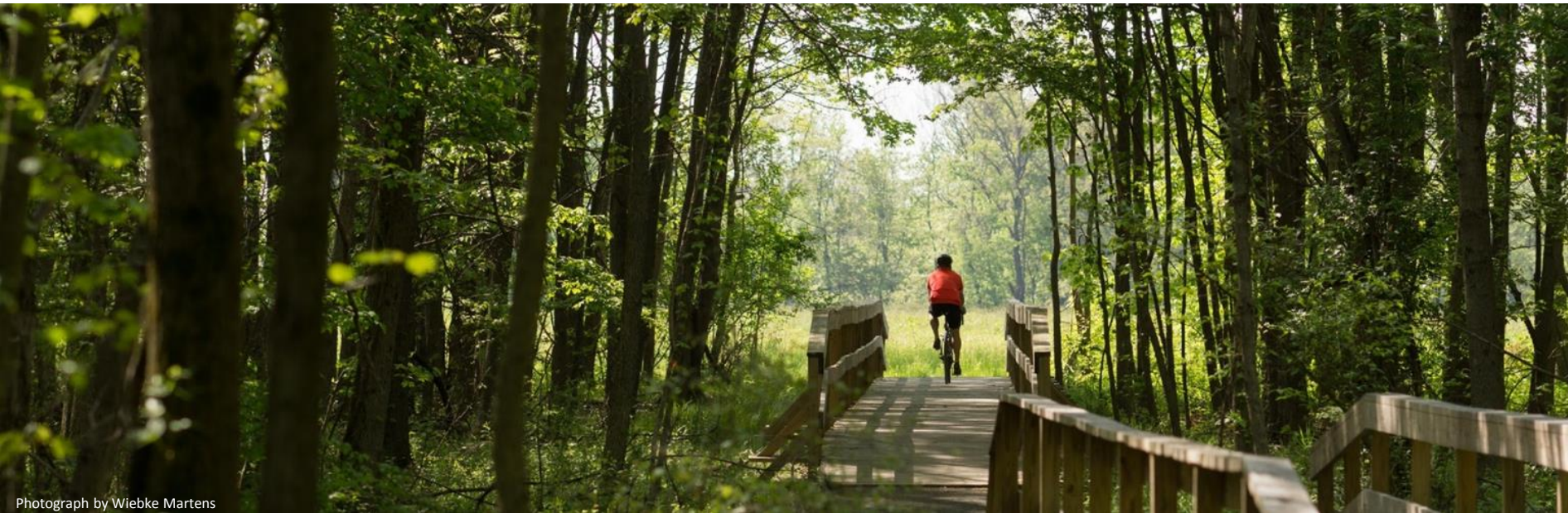
Information available at Community Events:





# Sustainable Princeton

Change a habit, change the world



Photograph by Wiebke Martens

## Success Stories in Residential Energy Efficiency

May 2, 2018

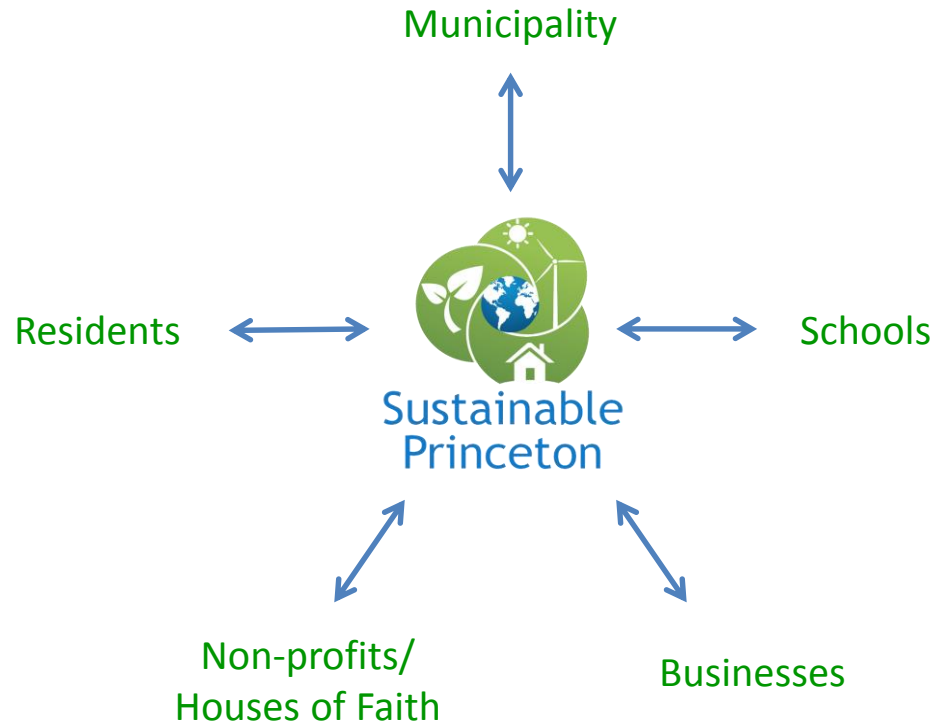
Christine Symington, Program Director



# Sustainable Princeton

Change a habit, change the world

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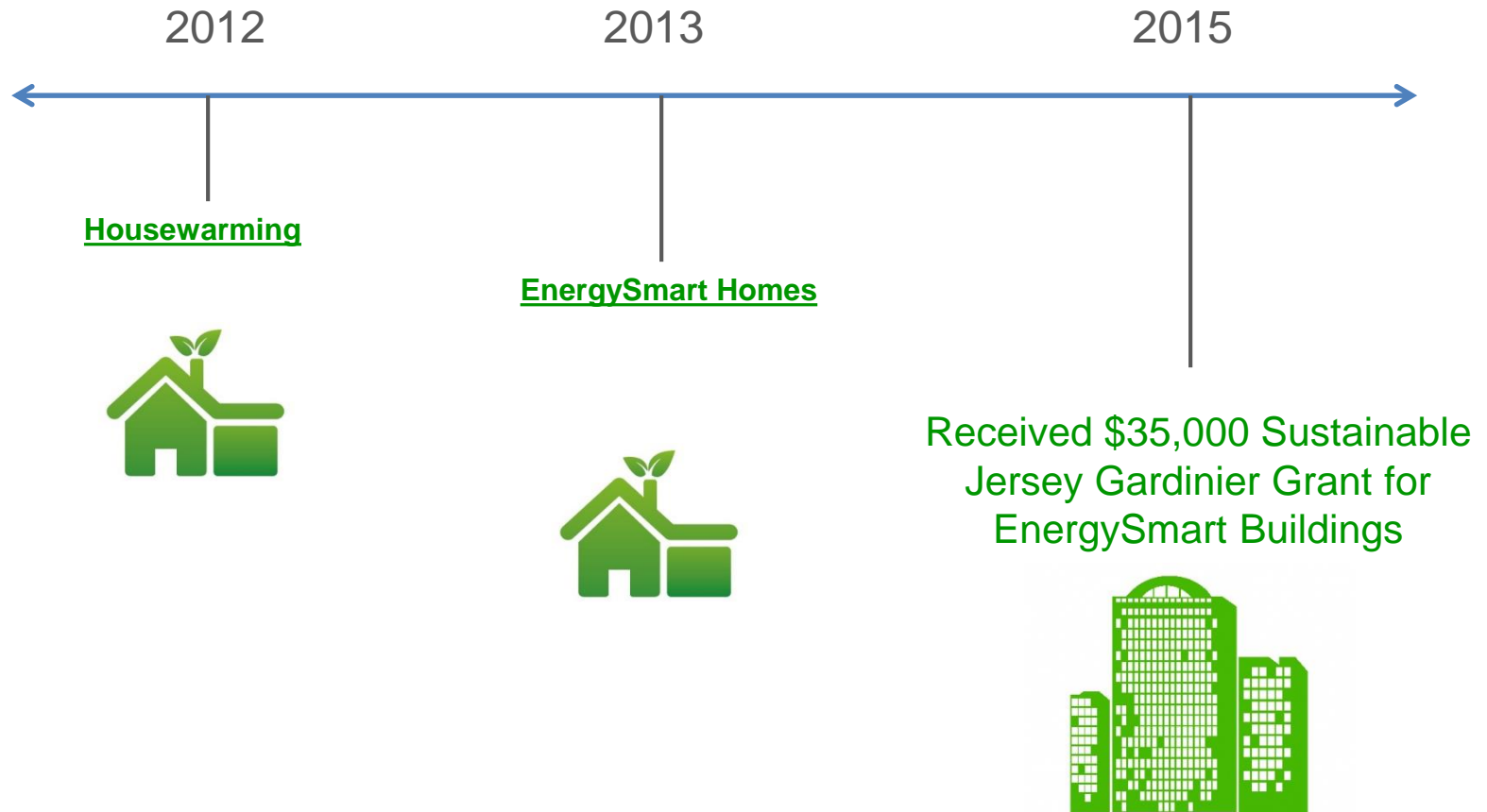
Our mission is to inspire our community to develop and implement solutions that positively impact our environment.





# Sustainable Princeton

Change a habit, change the world





Sustainable Princeton

Change a habit, change the world

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## EnergySmart Buildings

**175+** Homes audited

**37+** completed energy efficiency upgrades

Utilizing over **\$80,000** in rebates and financing

Projected **25%** reduction in energy usage





Participation Reason	Participants	
	Number	Percent
Improve home comfort	26	41%
Reduce energy use	23	37%
Reduce energy bills	9	14%
Other	5	8%
<b>Total</b>	<b>63</b>	<b>100%</b>

## Primary Reason for Installing Measures

	Participants	
	Number	Percent
Increase home comfort	8	38%
Reduce energy use	8	38%
Reduce energy costs	4	19%
Other	1	5%
<b>Total</b>	<b>21</b>	<b>100%</b>



## Primary Reason for Not Installing All or Some Measures

	Participants	
	Number	Percent
Cost	15	36%
Time	5	12%
Projected benefits too low	4	10%
Waiting for other estimates/ working with other contractor	4	10%
Has not read report	3	7%
No recommended measures	3	7%
Uncertainty of energy savings	2	5%
Lack of knowledge	2	5%
Health and safety issues	2	5%
Issue with Ciel Power	2	5%
<b>Total</b>	<b>42</b>	<b>100%</b>



## **Program Marketing**

The survey provided information to help Sustainable Princeton consider future program marketing.

- **Information Source** – The most common source of information about the program was the letter from Ciel Power, followed closely by Sustainable Princeton. Several participants noted that they trusted the program because of the Mayor's endorsement. Additionally, participants heard about the program in many different ways, so a multi-pronged approach to marketing would be most successful.
- **Motivation for Participation** – Respondents were most likely to report that their reason for participation was to improve the comfort of their home, followed by a desire to reduce their energy usage. These points should be emphasized in program marketing materials.
- **Home Performance With Energy Star Rebates** – Most respondents said that these rebates were very or somewhat important in their decision to request the audit, indicating that the availability of these rebates is also important to include in marketing efforts.





## Overall Learnings

- Relationships matter
- Timing
- NJ Clean Energy Programs require in depth understanding
- Crawl, walk, run
- NJ Clean Energy Programs are key for Princeton's climate action plans and greenhouse gas reduction goals



# Thank You!



- Sign-up for our email list
- Join us on Facebook and on Twitter

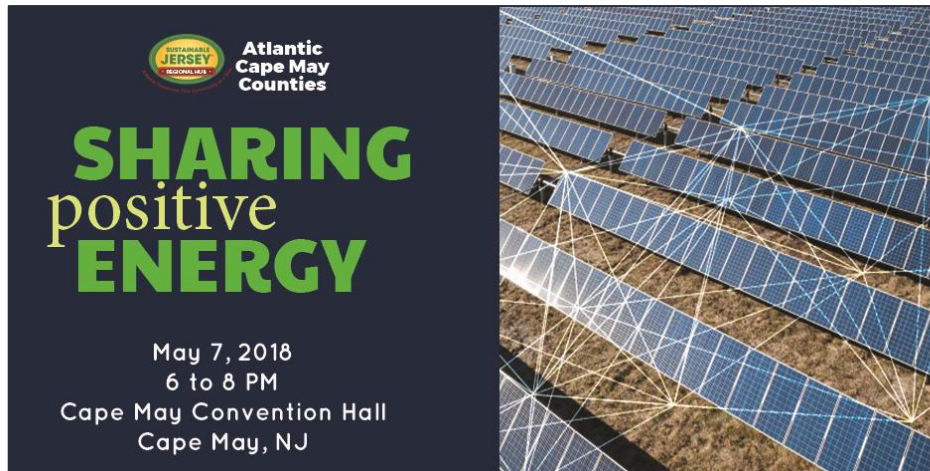
Christine Symington  
Program Director, Sustainable Princeton  
[Sustainableprinceton.org](http://Sustainableprinceton.org)  
[info@sustainableprinceton.org](mailto:info@sustainableprinceton.org)



# Upcoming Events

## Sharing Positive Energy

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



## Sustainability Summit

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



# Upcoming Webinars

## **Why Sustainable Procurement is Worth It...and Necessary Webinar,**

**Monday, May 7, 2018 2:00pm – 3:00 pm**

*Sustainable CT, Sustainable Pennsylvania, and Sustainable Jersey are collaborating to co-sponsor this free webinar, which will provide:*

- *an overview of sustainable procurement*
- *why it's important, and the benefits*
- *recommended first steps for a municipality to get started*
- *a case study of Portland's journey*



## **Countdown to Certification Webinar,**

**Wednesday , May 30, 2018 1:00 pm - 2:00pm**

*This webinar will be held to review what you need to know to insure that your application process is as smooth as possible. The webinar will review:*

- *2018 application cycle*
- *steps for submitting an application in June*
- *overview of uploading documentation and submitting the application*
- *your questions*



# Sustainable Jersey Sponsors

## Program Underwriters



## Grants Program Underwriters



## Corporate Sponsors

### *Platinum*



### *Gold*



### *Silver*



### *Bronze*



# Thank you!

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