

# New Jersey's Clean Energy Program

LGEA Exit Meeting for:

Jamesburg, Borough of

Smruti Srinivasan, TRC

May 24, 2018

## Introductions



### Jamesburg, Borough of

- Scott Frueh Business Administrator
- Paul Intravartola DPW Manager

### NJ Clean Energy Program – TRC

- Smruti Srinivasan Auditor
- Brian DeLuca Program Manager
- Sarah Walters LGEA Account Manager

# Agenda



- Overview of LGEA process (application to deliverable)
- Energy use & existing conditions
- Review of Energy Conservation Measures (ECMs) identified
- Questions or concerns regarding the draft audit report
- Overview of NJCEP equipment incentives
- Next steps for Jamesburg Borough

# Process to Draft Report



- Application submitted to NJCEP
- Site Visit Performed
- Utility Analysis
- Baseline Condition
- Analysis
- Recommendations
- Report

### Municipal Complex



### **Overview of Systems, Baseline & Existing Conditions:**

- Building Envelope
- Lighting System
- HVAC and Mechanical Systems

### **Utility Consumption:**

- Electric Consumption and Costs
- Natural Gas Consumption and Costs

# Municipal Complex



Energy Conservation Measure	Recommend?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO₂e Emissions Reduction (lbs)
Lighting Upgrades		41,834	6.6	0.0	\$5,053.62	\$29,504.22	\$1,155.00	\$28,349.22	5.6	42,127
ECM 1 Install LED Fixtures	Yes	13,878	2.3	0.0	\$1,676.50	\$13,280.67	\$1,000.00	\$12,280.67	7.3	13,975
ECM 2 Retrofit Fixtures with LED Lamps	Yes	27,956	4.3	0.0	\$3,377.12	\$16,223.55	\$155.00	\$16,068.55	4.8	28,151
Lighting Control Measures		3,343	0.4	0.0	\$403.81	\$2,446.00	\$215.00	\$2,231.00	5.5	3,366
ECM 3 Install Occupancy Sensor Lighting Controls	Yes	2,672	0.3	0.0	\$322.72	\$2,046.00	\$215.00	\$1,831.00	5.7	2,690
ECM 4 Install High/Low Lighting Controls	Yes	671	0.1	0.0	\$81.08	\$400.00	\$0.00	\$400.00	4.9	676
Electric Unitary HVAC Measures		3,424	2.0	0.0	\$413.59	\$28,327.99	\$1,467.50	\$26,860.49	64.9	3,448
Install High Efficiency Electric AC	No	3,424	2.0	0.0	\$413.59	\$28,327.99	\$1,467.50	\$26,860.49	64.9	3,448
Gas Heating (HVAC/Process) Replacement		0	0.0	0.4	\$4.70	\$2,718.88	\$400.00	\$2,318.88	493.2	53
Install High Efficiency Furnaces	No	0	0.0	0.4	\$4.70	\$2,718.88	\$400.00	\$2,318.88	493.2	53
HVAC System Improvements		2,164	0.5	0.0	\$261.40	\$750.00	\$250.00	\$500.00	1.9	2,179
ECM 5 Install Dual Enthalpy Outside Economizer Control	Yes	2,164	0.5	0.0	\$261.40	\$750.00	\$250.00	\$500.00	1.9	2,179
Domestic Water Heating Upgrade		0	0.0	7.0	\$73.26	\$522.80	\$300.00	\$222.80	3.0	819
ECM 6 Install Tankless Water Heater	Yes	0	0.0	7.0	\$73.26	\$522.80	\$300.00	\$222.80	3.0	819
TOTAL OF ALL EVALUATED ECMS		50,764	9.5	7.4	\$6,210.38	\$64,269.89	\$3,787.50	\$60,482.39	9.7	51,991
TOTAL OF ALL RECOMMENDED ECMS		47,341	8	7	\$ 5,792.08	\$ 33,223.02	\$ 1,920.00	\$ 31,303.02	5.4	48,491
TOTAL OF ALL NON-RECOMMENDED ECMS		3,424	2	0	\$ 418.29	\$ 31,046.87	\$ 1,867.50	\$ 29,179.37	69.8	3,500

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

<sup>\*\* -</sup> Simple Payback Period is based on net measure costs (i.e. after incentives).

### Some Energy Efficient Best Practices



- Use Window Treatments/Coverings
- Ensure Lighting Controls Are Operating Properly
- Practice Proper Use of Thermostat Schedules and Temperature Resets
- Install Plug Load Controls
- Water Conservation

See individual report for specific EE practices

# PROGRAM PORTFOLIO



#### **ELIGIBLE SECTORS**

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

#### **PROGRAMS**

#### **Equipment Rebates:**

- Retrofit Existing Buildings
- New Construction
- Direct Install Small Business
- Large Energy Users

#### Whole Buildings:

- Pay for Performance Existing Buildings
- Pay for Performance New Construction

#### **Energy Generation:**

Combined Heat and Power (CHP) and Fuel Cells

# Recommended NJCEP Incentives



Direct Install

Tri-State Light & Energy, Inc.

Alan Rhode 610-789-1900 x226

asr@tsle.com

SmartStart Buildings (i.e Retrofit – Existing Buildings)

# Direct Install: Overview



- Turn-key retrofit program to replace outdated and inefficient equipment, including lighting, HVAC, refrigeration, etc.
- Open to Small to Mid-Sized Commercial and Industrial facilities with a peak electric demand ≤ 200 kW
- 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
- Participating contractors provide support and process all paperwork
- Fast turnaround time: Average length of time for job completion (4-6 months)

# SmartStart Prescriptive: Overview (\*\*)



- Two types of incentives for high efficiency equipment installation:
  - Prescriptive
  - Custom
- Includes New Construction, Rehab and Retrofit projects
- Project pre-approval required for certain equipment
- Incentives up to \$500,000 per electric account & \$500,000 per natural gas account
- Project Categories:
  - New Construction
  - Renovation
  - Remodeling
  - Equipment Replacement
- Specific incentives and individual applications for Lighting, HVAC, VFDs, Refrigeration, Controls and more!

# Questions







### FOR MORE INFORMATION

Visit NJCleanEnergy.com
Call (866) NJSMART

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