

New Jersey's Clean Energy Program

LGEA Exit Meeting for:
Sea Girt Elementary School District

Moussa Traore, TRC

April 24, 2018

Introductions

- *Sea Girt Elementary School*
 - Rick Papera – Superintendent
 - Michael Bardsley – Business Administrator
 - Carly Fanslau – Supervisor of Student Services
- *NJ Clean Energy Program – TRC*
 - Moussa Traore - Auditor
 - Jim Friedl – Outreach Manager

Agenda



- Overview of LGEA process (application to deliverable)
- Energy use & existing conditions
- Review of **E**nergy **C**onservation **M**easures (ECMs) identified
- Questions or concerns regarding the draft audit report
- Overview of NJCEP equipment incentives
- Next steps for Sea Girt Elementary School

Process to Draft Report



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

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

Sea Girt Elementary School



Energy Conservation Measure		Recommend?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			71,045	17.6	\$10,744.83	\$58,327.51	\$9,735.00	\$48,592.51	4.5	71,542
ECM 1	Install LED Fixtures	Yes	20,989	3.6	\$3,174.45	\$25,027.08	\$4,705.00	\$20,322.08	6.4	21,136
ECM 2	Retrofit Fixtures with LED Lamps	Yes	48,967	13.9	\$7,405.83	\$31,364.44	\$5,030.00	\$26,334.44	3.6	49,310
ECM 3	Install LED Exit Signs	Yes	1,088	0.1	\$164.55	\$1,935.99	\$0.00	\$1,935.99	11.8	1,096
Variable Frequency Drive (VFD) Measures			5,523	3.1	\$835.36	\$13,765.30	\$0.00	\$13,765.30	16.5	5,562
	Install VFDs on Chilled Water Pumps	No	3,185	1.8	\$481.69	\$7,213.60	\$0.00	\$7,213.60	15.0	3,207
	Install VFDs on Hot Water Pumps	No	2,338	1.2	\$353.67	\$6,551.70	\$0.00	\$6,551.70	18.5	2,355
Domestic Water Heating Upgrade			2,297	0.0	\$347.46	\$43.02	\$0.00	\$43.02	0.1	2,313
ECM 4	Install Low-Flow Domestic Hot Water Devices	Yes	2,297	0.0	\$347.46	\$43.02	\$0.00	\$43.02	0.1	2,313
Plug Load Equipment Control - Vending Machine			1,612	0.0	\$243.78	\$230.00	\$0.00	\$230.00	0.9	1,623
ECM 5	Vending Machine Control	Yes	1,612	0.0	\$243.78	\$230.00	\$0.00	\$230.00	0.9	1,623
TOTALS FOR ALL RECOMMENDED MEASURES			74,954	17.6	\$11,336.07	\$58,600.53	\$9,735.00	\$48,865.53	4.3	75,478
TOTALS FOR ALL EVALUATED MEASURES			80,477	20.7	\$12,171.43	\$72,365.83	\$9,735.00	\$62,630.83	5.1	81,040

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

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

Some Energy Efficient Practices

- Perform Proper Lighting Maintenance
- Develop a Lighting Maintenance Schedule
- Ensure Lighting Controls Are Operating Properly
- Perform Routine Motor Maintenance
- Assess Chillers & Request Tune-Ups
- Clean Evaporator/Condenser Coils on AC Systems
- Clean and/or Replace HVAC Filters
- Perform Proper Boiler Maintenance
- Perform Proper Water Heater Maintenance
- Install Plug Load Controls
- Water Conservation

See individual reports for specific EE practices by building

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

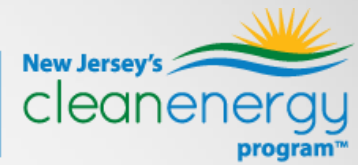
Whole Buildings:

- 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

Hutchinson Mechanical Services

Ed Hutchinson

856-429-5828 x215

edhutchinson@hutchbiz.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!

Direct Install – Financing Option



- Eligible NJNG customers can finance the remaining 30 percent balance at 0% APR through the “SAVEGREEN Project® On-Bill Repayment Program” (OBRP) for 36 months.
- For measures that may not qualify for Direct Install, NJNG also offers financing options for SmartStart that will cover up to \$130,000 per year.



Direct Install – Financing Option



- Questions? Contact Jerry at the following:

Jerry Ryan

Energy Efficiency Operations Manager

New Jersey Natural Gas

732-433-4362 (cell)

732 378 4920 (office)

jryan@njng.com



South Jersey Gas Financing

Direct Install

The State of NJ pays:

- ❑ 70% of all qualified upgrades
- ❑ Up to \$125,000

South Jersey Gas will finance:

- ❑ Remaining 30%
- ❑ 0% financing
- ❑ For 3 years
- ❑ Up to \$53,571

Questions

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FOR MORE INFORMATION

Visit NJCleanEnergy.com

Call (866) NJSMART

Jim Friedl

Outreach Manager

732-855-6543

jfriedl@trcsolutions.com