

New Jersey's Clean Energy Program

LGEA Exit Meeting for:

Mystic Island Volunteer Fire Co.

Smruti Srinivasan, TRC

June 5^{th, 2018}

Meeting Setup



1) Dial the following:

1-877-304-9323

2) When prompted, enter the code below:

5391398#

Introductions



Mystic Island Volunteer Fire Co.

Jeff Petrauskus – Fire Company President

NJ Clean Energy Program - TRC

- Jim Friedl Outreach Manager
- Smruti Srinivasan Auditor

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 Mystic Island Volunteer Fire Co.





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

Mystic Island Volunteer Fire Co.



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
- Benchmarking





	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			12,666	7.3	0.0	\$2,461.42	\$15,869.29	\$1,165.00	\$14,704.29	6.0	12,755
ECM 1	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	6,371	3.7	0.0	\$1,238.18	\$8,837.83	\$510.00	\$8,327.83	6.7	6,416
ECM 2	Retrofit Fix tures with LED Lamps	Yes	6,295	3.6	0.0	\$1,223.24	\$7,031.45	\$655.00	\$6,376.45	5.2	6,339
	Lighting Control Measures		1,180	0.7	0.0	\$229.22	\$2,412.00	\$390.00	\$2,022.00	8.8	1,188
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	1,126	0.6	0.0	\$218.86	\$2,162.00	\$255.00	\$1,907.00	8.7	1,134
ECM 4	Install Daylight Dimming Controls	Yes	53	0.0	0.0	\$10.36	\$250.00	\$135.00	\$115.00	11.1	54
	Motor Upgrades		499	0.1	0.0	\$97.06	\$536.42	\$0.00	\$536.42	5.5	503
ECM 5	Premium Efficiency Motors	Yes	499	0.1	0.0	\$97.06	\$536.42	\$0.00	\$536.42	5.5	503
Electric Unitary HVAC Measures			1,600	1.5	0.0	\$310.93	\$13,465.98	\$828.00	\$12,637.98	40.6	1,611
	Install High Efficiency Electric AC	No	1,600	1.5	0.0	\$310.93	\$13,465.98	\$828.00	\$12,637.98	40.6	1,611
	Gas Heating (HVAC/Process) Replacement		0	0.0	36.6	\$371.98	\$13,578.88	\$2,200.00	\$11,378.88	30.6	4,281
	Install High Efficiency Hot Water Boilers	No	0	0.0	11.8	\$120.08	\$8,141.12	\$1,000.00	\$7,141.12	59.5	1,382
ECM 6	Install High Efficiency Furnaces	Yes	0	0.0	24.8	\$251.90	\$5,437.76	\$1,200.00	\$4,237.76	16.8	2,899
	Domestic Water Heating Upgrade		0	0.0	5.4	\$54.77	\$4,456.17	\$150.00	\$4,306.17	78.6	630
	Install High Efficiency Gas Water Heater	No	0	0.0	4.9	\$49.56	\$4,449.00	\$150.00	\$4,299.00	86.7	570
ECM 7	Install Low-Flow Domestic Hot Water Devices	Yes	0	0.0	0.5	\$5.21	\$7.17	\$0.00	\$7.17	1.4	60
	Food Service Equipment & Refrigeration Measures		554	0.1	91.4	\$1,037.71	\$19,407.01	\$975.00	\$18,432.01	17.8	11,261
ECM 8	Food Service Equipment Replacement	Yes	0	0.0	91.4	\$930.05	\$16,598.81	\$750.00	\$15,848.81	17.0	10,703
	Replace Refrigeration Equipment	No	554	0.1	0.0	\$107.66	\$2,808.20	\$225.00	\$2,583.20	24.0	558
TOTAL OF ALL EVALUATED ECMS			16,499	9.7	133.4	\$4,563.08	\$69,725.75	\$5,708.00	\$64,017.75	14.0	32,228
TOTAL OF ALL RECOMMENDED ECMS			14,345	8	117	\$ 3,974.85	\$ 40,861.45	\$ 3,505.00	\$ 37,356.45	9.4	28,107
TOTAL OF ALL NON-RECOMMENDED ECMS			2,154	2	17	\$ 588.23	\$ 28,864.30	\$ 2,203.00	\$ 26,661.30	45.3	4,121

^{* -} 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
- Practice Proper Use of Thermostat Schedules and Temperature Resets
- Clean Evaporator/Condenser Coils on AC Systems
- Perform Proper Furnace Maintenance
- Perform Proper Water Heater Maintenance
- Water Conservation

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 <u>finance</u>
 the <u>remaining 30 percent balance</u> 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

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Questions







FOR MORE INFORMATION

Visit NJCleanEnergy.com
Call (866) NJSMART

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