



New Jersey's Clean Energy Program

LGEA Exit Meeting for:
Delaware River Basin Commission
(SGDRBC)

Moussa Traore, TRC

January 17, 2017

Meeting Setup



1) Dial the following:

1-877-304-9323

2) When prompted, enter the code below:

9330749#

Introductions



1) Delaware River Basin Commission Headquarters

- Richard C. Gore
- Denise McHugh
- Patrick Rago
- Ken Najjar

2) NJ Clean Energy Program – TRC

- Auditors: Moussa Traore
Brian Dattellas
- Case Manager: Ashley Miller
- Outreach Manager: Jim Friedl

3) Energy Savings Improvement Program (ESIP) - BPU

- Mike Thulen
- Gary Finger

Agenda



- Overview of LGEA process (application to deliverable)
- Energy use & existing conditions
- Review of **E**nergy **C**onservation **M**easures (ECMs) identified
- Review of comments, questions and/or concerns regarding draft audit report
- Overview of NJCEP equipment incentives
- Next steps for *Delaware River Basin Commission*

Process to Draft Report



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



Overview of Systems, Baseline & Existing Conditions (pages 11-15):

- Building Envelope
- Lighting System
- HVAC and Mechanical Systems

Utility Consumption (pages 16-20):

- Electric Consumption and Costs
- Gas Consumption and Costs

DRBC Headquarters



See Pages 21-28

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)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			35,241	15.1	0.0	\$4,488.00	\$39,382.29	\$5,095.00	\$34,287.29	7.64	35,487
ECM 1	Install LED Fixtures	Yes	2,867	1.8	0.0	\$365.09	\$1,831.10	\$5.00	\$1,826.10	5.00	2,887
ECM 2	Retrofit Fixtures with LED Lamps	Yes	32,374	13.3	0.0	\$4,122.91	\$37,551.19	\$5,090.00	\$32,461.19	7.87	32,601
Motor Upgrades			25,666	9.6	0.0	\$3,268.57	\$11,262.78	\$0.00	\$11,262.78	3.45	25,845
ECM 3	Premium Efficiency Motors	Yes	25,666	9.6	0.0	\$3,268.57	\$11,262.78	\$0.00	\$11,262.78	3.45	25,845
Variable Frequency Drive (VFD) Measures			76,851	19.7	0.0	\$9,787.07	\$22,252.05	\$4,400.00	\$17,852.05	1.82	77,388
ECM 4	Install VFDs on Constant Volume (CV) HVAC	Yes	52,414	14.6	0.0	\$6,675.07	\$9,366.05	\$3,200.00	\$6,166.05	0.92	52,781
ECM 5	Install VFDs on Chilled Water Pumps	Yes	9,437	3.3	0.0	\$1,201.80	\$6,334.30	\$1,200.00	\$5,134.30	4.27	9,503
ECM 6	Install VFDs on Hot Water Pumps	Yes	14,999	1.9	0.0	\$1,910.20	\$6,551.70	\$0.00	\$6,551.70	3.43	15,104
Electric Chiller Replacement			59,072	33.0	0.0	\$7,522.92	\$68,254.74	\$7,200.00	\$61,054.74	8.12	59,485
ECM 7	Install High Efficiency Chillers	Yes	59,072	33.0	0.0	\$7,522.92	\$68,254.74	\$7,200.00	\$61,054.74	8.12	59,485
Gas Heating (HVAC/Process) Replacement			0	0.0	93.0	\$668.55	\$34,988.99	\$2,940.00	\$32,048.99	47.94	10,886
ECM 8	Install High Efficiency Hot Water Boilers	Yes	0	0.0	93.0	\$668.55	\$34,988.99	\$2,940.00	\$32,048.99	47.94	10,886
Domestic Water Heating Upgrade			0	0.0	14.8	\$106.58	\$57.36	\$0.00	\$57.36	0.54	1,735
ECM 9	Install Low-Flow Domestic Hot Water Devices	Yes	0	0.0	14.8	\$106.58	\$57.36	\$0.00	\$57.36	0.54	1,735
Plug Load Equipment Control - Vending Machine			1,551	0.0	0.0	\$197.57	\$1,437.60	\$0.00	\$1,437.60	7.28	1,562
ECM 10	Vending Machine Control	Yes	1,551	0.0	0.0	\$197.57	\$1,437.60	\$0.00	\$1,437.60	7.28	1,562
TOTALS			198,381	77.4	107.8	\$26,039.27	\$177,635.81	\$19,635.00	\$158,000.81	6.07	212,389

* - 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

- Reduce Air Leakage
- Close Doors and Windows
- Use Window Treatments/Covering
- Perform Proper Lighting Maintenance
- Ensure Lighting Controls Are Operating Properly
- Perform Routine Motor Maintenance
- Use Fans to Reduce Cooling Load
- Practice Proper Use of Thermostat Schedules and Temperature resets
- Assess Chillers & Request Tune-Ups
- Clean Evaporator/Condenser Coils on AC Systems
- Clean and/or Replace HVAC filters
- Perform Proper Boiler Maintenance

See pages 29-32 of the audit report for more information on these and other practices recommended for this 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

Tri-State Light & Energy, Inc.

Alan Rhode

610-789-1900 x226

asr@tsle.com

➤ SmartStart Buildings (i.e Retrofit – Existing Buildings)

Questions



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FOR MORE INFORMATION

Visit NJCleanEnergy.com

Call (866) NJSMART

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