

New Jersey's Clean Energy Program

LGEA Exit Meeting for:
Deptford Township Board of Education

Smruti Srinivasan, TRC

May 8, 2018

Meeting Setup



1) Dial the following:

1-877-304-9323

2) When prompted, enter the code below:

1901033#

Introductions



Deptford Township BOE

- Todd Reitzel – Business Administrator
- Debbie Green – Assistant to Business Administrator
- Nick Sheairs – Facilities Director

Schneider-Electric

- Sam Ringelberg – Consultant

Clean Energy Program – TRC

- Brian DeLuca - Program Manager
- Smruti Srinivasan – Auditor
- Sarah Walters – LGEA Account 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 Deptford Township Board of Education

Process to Draft Report



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

Deptford Township BOE – All Evaluated ECMS



Energy Conservation Measure	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	876,799	207.6	0.0	\$137,345.52	\$668,067.95	\$113,160.00	\$554,907.95	4.0	882,930
Install LED Fixtures	74,870	11.7	0.0	\$12,976.71	\$155,055.73	\$22,725.00	\$132,330.73	10.2	75,393
Retrofit Fluorescent Fixtures with LED Lamps and Drivers	1,018	0.1	0.0	\$144.74	\$250.29	\$0.00	\$250.29	1.7	1,025
Retrofit Fixtures with LED Lamps	800,811	195.8	0.0	\$124,209.74	\$512,546.82	\$90,435.00	\$422,111.82	3.4	806,410
Install LED Exit Signs	101	0.0	0.0	\$14.33	\$215.11	\$0.00	\$215.11	15.0	101
Lighting Control Measures	163,198	38.9	0.0	\$24,918.87	\$144,890.00	\$22,690.00	\$122,200.00	4.9	164,340
Install Occupancy Sensor Lighting Controls	143,946	35.4	0.0	\$22,154.09	\$125,890.00	\$15,940.00	\$109,950.00	5.0	144,953
Install High/Low Lighting Controls	19,252	3.5	0.0	\$2,764.78	\$19,000.00	\$6,750.00	\$12,250.00	4.4	19,387
Motor Upgrades	6,029	2.0	0.0	\$890.04	\$12,830.54	\$0.00	\$12,830.54	14.4	6,072
Premium Efficiency Motors	6,029	2.0	0.0	\$890.04	\$12,830.54	\$0.00	\$12,830.54	14.4	6,072
Variable Frequency Drive (VFD) Measures	97,166	21.9	0.0	\$15,397.38	\$91,874.49	\$4,800.00	\$87,074.49	5.7	97,845
Install VFDs on Constant Volume (CV) HVAC	45,903	13.4	0.0	\$7,286.47	\$36,419.45	\$4,800.00	\$31,619.45	4.3	46,224
Install VFDs on Hot Water Pumps	51,263	8.6	0.0	\$8,110.91	\$55,455.04	\$0.00	\$55,455.04	6.8	51,621
Electric Unitary HVAC Measures	43,767	34.6	0.0	\$6,868.90	\$423,997.95	\$16,373.53	\$407,624.42	59.3	44,073
Install High Efficiency Electric AC	38,987	31.1	0.0	\$6,181.68	\$370,383.27	\$14,553.53	\$355,829.74	57.6	39,260
Install High Efficiency Packaged Terminal AC/HP	4,780	3.5	0.0	\$687.22	\$53,614.68	\$1,820.00	\$51,794.68	75.4	4,814
HVAC System Improvements	6,381	1.4	0.0	\$907.42	\$1,100.00	\$250.00	\$850.00	0.9	6,425
Install Dual Enthalpy Outside Economizer Control	6,381	1.4	0.0	\$907.42	\$1,100.00	\$250.00	\$850.00	0.9	6,425
Domestic Water Heating Upgrade	13,651	0.0	316.2	\$4,750.40	\$68,936.65	\$2,345.00	\$66,591.65	14.0	50,774
Install Low-Flow Domestic Hot Water Devices	13,651	0.0	97.3	\$2,925.11	\$1,789.25	\$0.00	\$1,789.25	0.6	25,138
Plug Load Equipment Control - Vending Machine	30,625	0.0	0.0	\$4,756.68	\$4,370.00	\$0.00	\$4,370.00	0.9	30,839
Vending Machine Control	30,625	0.0	0.0	\$4,756.68	\$4,370.00	\$0.00	\$4,370.00	0.9	30,839
TOTALS	1,237,616	306.4	2,029.3	\$210,988.20	\$1,774,936.91	\$198,098.53	\$1,576,838.38	7.5	1,483,873

* - 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).

Deptford Township BOE – Recommended ECMS



Energy Conservation Measure		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		876,799	207.6	0.0	\$137,345.52	\$668,067.95	\$113,160.00	\$554,907.95	4.0	882,930
ECM 1	Install LED Fixtures	74,870	11.7	0.0	\$12,976.71	\$155,055.73	\$22,725.00	\$132,330.73	10.2	75,393
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	1,018	0.1	0.0	\$144.74	\$250.29	\$0.00	\$250.29	1.7	1,025
ECM 3	Retrofit Fixtures with LED Lamps	800,811	195.8	0.0	\$124,209.74	\$512,546.82	\$90,435.00	\$422,111.82	3.4	806,410
ECM 4	Install LED Exit Signs	101	0.0	0.0	\$14.33	\$215.11	\$0.00	\$215.11	15.0	101
Lighting Control Measures		163,198	38.9	0.0	\$24,918.87	\$144,890.00	\$22,690.00	\$122,200.00	4.9	164,340
ECM 5	Install Occupancy Sensor Lighting Controls	143,946	35.4	0.0	\$22,154.09	\$125,890.00	\$15,940.00	\$109,950.00	5.0	144,953
ECM 6	Install High/Low Lighting Controls	19,252	3.5	0.0	\$2,764.78	\$19,000.00	\$6,750.00	\$12,250.00	4.4	19,387
Motor Upgrades		5,887	1.9	0.0	\$867.56	\$11,335.15	\$0.00	\$11,335.15	13.1	5,928
ECM 7	Premium Efficiency Motors	5,887	1.9	0.0	\$867.56	\$11,335.15	\$0.00	\$11,335.15	13.1	5,928
Variable Frequency Drive (VFD) Measures		97,166	21.9	0.0	\$15,397.38	\$91,874.49	\$4,800.00	\$87,074.49	5.7	97,845
ECM 8	Install VFDs on Constant Volume (CV) HVAC	45,903	13.4	0.0	\$7,286.47	\$36,419.45	\$4,800.00	\$31,619.45	4.3	46,224
ECM 9	Install VFDs on Hot Water Pumps	51,263	8.6	0.0	\$8,110.91	\$55,455.04	\$0.00	\$55,455.04	6.8	51,621
Gas Heating (HVAC/Process) Replacement		0	0.0	1,713.0	\$15,152.99	\$358,869.33	\$38,480.00	\$320,389.33	21.1	200,576
ECM 10	Install High Efficiency Hot Water Boilers	0	0.0	1,713.0	\$15,152.99	\$358,869.33	\$38,480.00	\$320,389.33	21.1	200,576
HVAC System Improvements		6,381	1.4	0.0	\$907.42	\$1,100.00	\$250.00	\$850.00	0.9	6,425
ECM 11	Install Dual Enthalpy Outside Economizer Control	6,381	1.4	0.0	\$907.42	\$1,100.00	\$250.00	\$850.00	0.9	6,425
Domestic Water Heating Upgrade		13,651	0.0	97.3	\$2,925.11	\$1,789.25	\$0.00	\$1,789.25	0.6	25,138
ECM 12	Install Low-Flow Domestic Hot Water Devices	13,651	0.0	97.3	\$2,925.11	\$1,789.25	\$0.00	\$1,789.25	0.6	25,138
Plug Load Equipment Control - Vending Machine		30,625	0.0	0.0	\$4,756.68	\$4,370.00	\$0.00	\$4,370.00	0.9	30,839
ECM 13	Vending Machine Control	30,625	0.0	0.0	\$4,756.68	\$4,370.00	\$0.00	\$4,370.00	0.9	30,839
TOTALS		1,193,706	271.8	1,810.3	\$202,271.53	\$1,282,296.17	\$179,380.00	\$1,102,916.17	5.5	1,414,020

* - 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).

Deptford Township BOE – Non-Recommended ECMS



Energy Conservation Measure	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)
Motor Upgrades	143	0.0	0.0	\$22.48	\$1,495.39	\$0.00	\$1,495.39	66.5	144
Premium Efficiency Motors	143	0.0	0.0	\$22.48	\$1,495.39	\$0.00	\$1,495.39	66.5	144
Electric Unitary HVAC Measures	43,767	34.6	0.0	\$6,868.90	\$423,997.95	\$16,373.53	\$407,624.42	59.3	44,073
Install High Efficiency Electric AC	38,987	31.1	0.0	\$6,181.68	\$370,383.27	\$14,553.53	\$355,829.74	57.6	39,260
Install High Efficiency Packaged Terminal AC/HP	4,780	3.5	0.0	\$687.22	\$53,614.68	\$1,820.00	\$51,794.68	75.4	4,814
Domestic Water Heating Upgrade	0	0.0	218.9	\$1,825.29	\$67,147.40	\$2,345.00	\$64,802.40	35.5	25,636
Install High Efficiency Gas Water Heater	0	0.0	218.9	\$1,825.29	\$67,147.40	\$2,345.00	\$64,802.40	35.5	25,636
TOTALS	43,910	34.6	218.9	\$8,716.67	\$492,640.74	\$18,718.53	\$473,922.21	54.4	69,853

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



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

Deptford Township High School



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			318,163	59.1	0.0	\$45,246.52	\$182,373.49	\$33,030.00	\$149,343.49	3.3	320,388
ECM 1	Install LED Fixtures	Yes	14,154	1.8	0.0	\$2,012.86	\$24,636.47	\$5,000.00	\$19,636.47	9.8	14,253
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	1,018	0.1	0.0	\$144.74	\$250.29	\$0.00	\$250.29	1.7	1,025
ECM 3	Retrofit Fixtures with LED Lamps	Yes	302,891	57.1	0.0	\$43,074.60	\$157,271.63	\$28,030.00	\$129,241.63	3.0	305,009
ECM 4	Install LED Exit Signs	Yes	101	0.0	0.0	\$14.33	\$215.11	\$0.00	\$215.11	15.0	101
Lighting Control Measures			65,545	12.3	0.0	\$9,321.31	\$36,420.00	\$9,830.00	\$26,590.00	2.9	66,004
ECM 5	Install Occupancy Sensor Lighting Controls	Yes	50,282	9.7	0.0	\$7,150.63	\$22,420.00	\$3,080.00	\$19,340.00	2.7	50,633
ECM 6	Install High/Low Lighting Controls	Yes	15,264	2.7	0.0	\$2,170.68	\$14,000.00	\$6,750.00	\$7,250.00	3.3	15,370
Motor Upgrades			3,626	1.1	0.0	\$515.66	\$6,787.38	\$0.00	\$6,787.38	13.2	3,651
ECM 7	Premium Efficiency Motors	Yes	3,626	1.1	0.0	\$515.66	\$6,787.38	\$0.00	\$6,787.38	13.2	3,651
Variable Frequency Drive (VFD) Measures			38,628	7.9	0.0	\$5,493.41	\$32,079.40	\$1,200.00	\$30,879.40	5.6	38,898
ECM 8	Install VFDs on Constant Volume (CV) HVAC	Yes	14,742	4.1	0.0	\$2,096.42	\$7,213.60	\$1,200.00	\$6,013.60	2.9	14,845
ECM 9	Install VFDs on Hot Water Pumps	Yes	23,887	3.8	0.0	\$3,396.99	\$24,865.80	\$0.00	\$24,865.80	7.3	24,054
Electric Unitary HVAC Measures			6,496	4.7	0.0	\$923.80	\$78,186.15	\$2,937.00	\$75,249.15	81.5	6,541
	Install High Efficiency Electric AC	No	2,636	1.9	0.0	\$374.84	\$30,315.90	\$1,312.00	\$29,003.90	77.4	2,654
	Install High Efficiency Packaged Terminal AC/HP	No	3,860	2.8	0.0	\$548.96	\$47,870.25	\$1,625.00	\$46,245.25	84.2	3,887
Gas Heating (HVAC/Process) Replacement			0	0.0	861.6	\$7,182.73	\$167,480.21	\$18,000.00	\$149,480.21	20.8	100,880
ECM 10	Install High Efficiency Hot Water Boilers	Yes	0	0.0	861.6	\$7,182.73	\$167,480.21	\$18,000.00	\$149,480.21	20.8	100,880
HVAC System Improvements			6,381	1.4	0.0	\$907.42	\$1,100.00	\$250.00	\$850.00	0.9	6,425
ECM 11	Install Dual Enthalpy Outside Economizer Control	Yes	6,381	1.4	0.0	\$907.42	\$1,100.00	\$250.00	\$850.00	0.9	6,425
Domestic Water Heating Upgrade			0	0.0	258.3	\$2,153.75	\$67,326.65	\$2,345.00	\$64,981.65	30.2	30,249
	Install High Efficiency Gas Water Heater	No	0	0.0	218.9	\$1,825.29	\$67,147.40	\$2,345.00	\$64,802.40	35.5	25,636
ECM 12	Install Low-Flow Domestic Hot Water Devices	Yes	0	0.0	39.4	\$328.45	\$179.25	\$0.00	\$179.25	0.5	4,613
Plug Load Equipment Control - Vending Machine			12,895	0.0	0.0	\$1,833.78	\$1,840.00	\$0.00	\$1,840.00	1.0	12,985
ECM 13	Vending Machine Control	Yes	12,895	0.0	0.0	\$1,833.78	\$1,840.00	\$0.00	\$1,840.00	1.0	12,985
TOTAL OF ALL EVALUATED ECMS			451,735	86.6	1,119.9	\$73,578.36	\$573,593.29	\$67,592.00	\$506,001.29	6.9	586,022
TOTAL OF ALL RECOMMENDED ECMS			445,239	82	901	\$70,829.27	\$428,259.74	\$62,310.00	\$365,949.74	5.2	553,845
TOTAL OF ALL NON-RECOMMENDED ECMS			6,496	5	219	\$2,749.09	\$145,333.55	\$5,282.00	\$140,051.55	50.9	32,177

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



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

Monongahela Middle School



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			104,603	29.0	0.0	\$16,322.39	\$77,623.16	\$15,420.00	\$62,203.16	3.8	105,335
ECM 1	Install LED Fixtures	Yes	2,698	0.7	0.0	\$421.03	\$4,574.21	\$1,200.00	\$3,374.21	8.0	2,717
ECM 2	Retrofit Fixtures with LED Lamps	Yes	101,905	28.2	0.0	\$15,901.36	\$73,048.95	\$14,220.00	\$58,828.95	3.7	102,618
Lighting Control Measures			25,212	6.9	0.0	\$3,934.07	\$19,090.00	\$2,265.00	\$16,825.00	4.3	25,388
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	24,213	6.6	0.0	\$3,778.20	\$17,090.00	\$2,265.00	\$14,825.00	3.9	24,382
ECM 4	Install High/Low Lighting Controls	Yes	999	0.3	0.0	\$155.87	\$2,000.00	\$0.00	\$2,000.00	12.8	1,006
Motor Upgrades			1,783	0.7	0.0	\$278.24	\$3,801.04	\$0.00	\$3,801.04	13.7	1,796
ECM 5	Premium Efficiency Motors	Yes	1,783	0.7	0.0	\$278.24	\$3,801.04	\$0.00	\$3,801.04	13.7	1,796
Variable Frequency Drive (VFD) Measures			11,471	2.6	0.0	\$1,789.97	\$13,228.90	\$480.00	\$12,748.90	7.1	11,551
ECM 6	Install VFDs on Constant Volume (CV) HVAC	Yes	2,471	0.8	0.0	\$385.59	\$6,015.30	\$480.00	\$5,535.30	14.4	2,488
ECM 7	Install VFDs on Hot Water Pumps	Yes	9,000	1.8	0.0	\$1,404.38	\$7,213.60	\$0.00	\$7,213.60	5.1	9,063
Electric Unitary HVAC Measures			4,733	4.1	0.0	\$738.54	\$32,646.30	\$1,840.00	\$30,806.30	41.7	4,766
	Install High Efficiency Electric AC	No	4,733	4.1	0.0	\$738.54	\$32,646.30	\$1,840.00	\$30,806.30	41.7	4,766
Gas Heating (HVAC/Process) Replacement			0	0.0	733.7	\$6,719.10	\$171,946.35	\$18,480.00	\$153,466.35	22.8	85,907
ECM 8	Install High Efficiency Hot Water Boilers	Yes	0	0.0	733.7	\$6,719.10	\$171,946.35	\$18,480.00	\$153,466.35	22.8	85,907
Domestic Water Heating Upgrade			0	0.0	57.9	\$530.19	\$1,115.27	\$0.00	\$1,115.27	2.1	6,779
ECM 9	Install Low-Flow Domestic Hot Water Devices	Yes	0	0.0	57.9	\$530.19	\$1,115.27	\$0.00	\$1,115.27	2.1	6,779
Plug Load Equipment Control - Vending Machine			3,224	0.0	0.0	\$503.03	\$460.00	\$0.00	\$460.00	0.9	3,246
ECM 10	Vending Machine Control	Yes	3,224	0.0	0.0	\$503.03	\$460.00	\$0.00	\$460.00	0.9	3,246
TOTAL OF ALL EVALUATED ECMS			151,026	43.4	791.6	\$30,815.53	\$319,911.02	\$38,485.00	\$281,426.02	9.1	244,767
TOTAL OF ALL RECOMMENDED ECMS			146,293	39	792	30,077	287,265	36,645	250,620	8.3	240,001
TOTAL OF ALL NON-RECOMMENDED ECMS			4,733	4	0	739	32,646	1,840	30,806	41.7	4,766

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



Central Early Childhood Center

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

Central Early Childhood Center



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			108,248	34.0	0.0	\$22,484.77	\$99,550.93	\$19,060.00	\$80,490.93	3.6	109,005
ECM 1	Install LED Fixtures	Yes	27,547	3.6	0.0	\$5,722.03	\$29,300.78	\$7,500.00	\$21,800.78	3.8	27,740
ECM 2	Retrofit Fixtures with LED Lamps	Yes	80,700	30.5	0.0	\$16,762.75	\$70,250.15	\$11,560.00	\$58,690.15	3.5	81,265
Lighting Control Measures			10,026	3.8	0.0	\$2,082.50	\$10,222.00	\$1,335.00	\$8,887.00	4.3	10,096
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	10,026	3.8	0.0	\$2,082.50	\$10,222.00	\$1,335.00	\$8,887.00	4.3	10,096
Variable Frequency Drive (VFD) Measures			9,268	1.2	0.0	\$1,925.16	\$9,022.95	\$0.00	\$9,022.95	4.7	9,333
ECM 4	Install VFDs on Hot Water Pumps	Yes	9,268	1.2	0.0	\$1,925.16	\$9,022.95	\$0.00	\$9,022.95	4.7	9,333
Electric Unitary HVAC Measures			1,545	1.5	0.0	\$320.99	\$159,042.38	\$4,103.27	\$154,939.11	482.7	1,556
	Install High Efficiency Electric AC	No	1,545	1.5	0.0	\$320.99	\$159,042.38	\$4,103.27	\$154,939.11	482.7	1,556
Plug Load Equipment Control - Vending Machine			3,224	0.0	0.0	\$669.61	\$460.00	\$0.00	\$460.00	0.7	3,246
ECM 5	Vending Machine Control	Yes	3,224	0.0	0.0	\$669.61	\$460.00	\$0.00	\$460.00	0.7	3,246
TOTAL OF ALL EVALUATED ECMS			132,311	40.5	0.0	\$27,483.03	\$278,298.26	\$24,498.27	\$253,799.99	9.2	133,236
TOTAL OF ALL RECOMMENDED ECMS			130,765	39	0	\$ 27,162.04	\$119,255.88	\$ 20,395.00	\$ 98,860.88	3.6	131,680
TOTAL OF ALL NON-RECOMMENDED ECMS			1,545	1	0	\$ 320.99	\$159,042.38	\$ 4,103.27	\$ 154,939.11	482.7	1,556

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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

Good Intent School



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			65,062	14.9	0.0	\$9,777.49	\$40,241.95	\$7,530.00	\$32,711.95	3.3	65,517
ECM 1	Install LED Fixtures	Yes	6,347	0.8	0.0	\$953.76	\$5,469.48	\$1,400.00	\$4,069.48	4.3	6,391
ECM 2	Retrofit Fixtures with LED Lamps	Yes	58,716	14.1	0.0	\$8,823.73	\$34,772.48	\$6,130.00	\$28,642.48	3.2	59,126
Lighting Control Measures			8,013	1.9	0.0	\$1,204.12	\$6,752.00	\$910.00	\$5,842.00	4.9	8,069
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	8,013	1.9	0.0	\$1,204.12	\$6,752.00	\$910.00	\$5,842.00	4.9	8,069
Electric Unitary HVAC Measures			2,837	2.5	0.0	\$426.36	\$13,973.64	\$701.00	\$13,272.64	31.1	2,857
	Install High Efficiency Electric AC	No	1,917	1.9	0.0	\$288.10	\$8,229.21	\$506.00	\$7,723.21	26.8	1,931
	Install High Efficiency Packaged Terminal AC/HP	No	920	0.7	0.0	\$138.26	\$5,744.43	\$195.00	\$5,549.43	40.1	926
Domestic Water Heating Upgrade			10,155	0.0	0.0	\$1,526.12	\$272.46	\$0.00	\$272.46	0.2	10,226
ECM 4	Install Low-Flow Domestic Hot Water Devices	Yes	10,155	0.0	0.0	\$1,526.12	\$272.46	\$0.00	\$272.46	0.2	10,226
Plug Load Equipment Control - Vending Machine			1,612	0.0	0.0	\$242.23	\$230.00	\$0.00	\$230.00	0.9	1,623
ECM 5	Vending Machine Control	Yes	1,612	0.0	0.0	\$242.23	\$230.00	\$0.00	\$230.00	0.9	1,623
TOTAL OF ALL EVALUATED ECMS			87,679	19.3	0.0	\$13,176.31	\$61,470.05	\$9,141.00	\$52,329.05	4.0	88,292
TOTAL OF ALL RECOMMENDED ECMS			84,842	17	0	12,750	47,496	8,440	39,056	3.1	85,435
TOTAL OF ALL NON_RECOMMENDED ECMS			2,837	3	0	426	13,974	701	13,273	31.1	2,857

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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

Lake Tract School



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			60,958	15.1	0.0	\$9,026.89	\$50,492.04	\$7,030.00	\$43,462.04	4.8	61,384
ECM 1	Install LED Fixtures	Yes	4,721	1.2	0.0	\$699.16	\$12,789.44	\$525.00	\$12,264.44	17.5	4,754
ECM 2	Retrofit Fixtures with LED Lamps	Yes	56,236	13.9	0.0	\$8,327.73	\$37,702.60	\$6,505.00	\$31,197.60	3.7	56,629
Lighting Control Measures			12,874	3.2	0.0	\$1,906.41	\$15,292.00	\$1,875.00	\$13,417.00	7.0	12,964
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	11,851	2.9	0.0	\$1,754.94	\$13,222.00	\$1,840.00	\$11,382.00	6.5	11,934
ECM 4	Install High/Low Lighting Controls	Yes	1,023	0.3	0.0	\$151.46	\$1,800.00	\$0.00	\$1,800.00	11.9	1,030
Variable Frequency Drive (VFD) Measures			9,507	2.7	0.0	\$1,407.80	\$15,842.85	\$880.00	\$14,962.85	10.6	9,573
ECM 5	Install VFDs on Constant Volume (CV) HVAC	Yes	4,530	1.5	0.0	\$670.86	\$9,291.15	\$880.00	\$8,411.15	12.5	4,562
ECM 6	Install VFDs on Hot Water Pumps	Yes	4,976	1.3	0.0	\$736.93	\$6,551.70	\$0.00	\$6,551.70	8.9	5,011
Electric Unitary HVAC Measures			4,300	2.5	0.0	\$636.81	\$16,458.42	\$1,012.00	\$15,446.42	24.3	4,330
	Install High Efficiency Electric AC	No	4,300	2.5	0.0	\$636.81	\$16,458.42	\$1,012.00	\$15,446.42	24.3	4,330
Plug Load Equipment Control - Vending Machine			1,612	0.0	0.0	\$238.69	\$230.00	\$0.00	\$230.00	1.0	1,623
ECM 7	Vending Machine Control	Yes	1,612	0.0	0.0	\$238.69	\$230.00	\$0.00	\$230.00	1.0	1,623
TOTAL OF ALL EVALUATED MEASURES			89,250	23.5	0.0	\$13,216.59	\$98,315.31	\$10,797.00	\$87,518.31	6.6	89,874
TOTAL OF ALL RECOMMENDED MEASURES			84,950	21	0	\$ 12,579.78	\$ 81,586.89	\$ 9,750.00	\$ 71,836.89	5.7	85,544
TOTAL OF ALL NON-RECOMMENDED MEASURES			4,300	3	0	\$ 636.81	\$ 16,458.42	\$ 1,012.00	\$ 15,446.42	24.3	4,330

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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

New Sharon School



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			3,475	1.7	0.0	\$570.38	\$3,891.55	\$705.00	\$3,186.55	5.6	3,500
ECM 1	Retrofit Fixtures with LED Lamps	Yes	3,475	1.7	0.0	\$570.38	\$3,891.55	\$705.00	\$3,186.55	5.6	3,500
Lighting Control Measures			442	0.2	0.0	\$72.51	\$1,080.00	\$140.00	\$940.00	13.0	445
ECM 2	Install Occupancy Sensor Lighting Controls	Yes	442	0.2	0.0	\$72.51	\$1,080.00	\$140.00	\$940.00	13.0	445
Electric Unitary HVAC Measures			2,036	1.5	0.0	\$334.10	\$8,710.08	\$0.00	\$8,710.08	26.1	2,050
	Install High Efficiency Electric AC	No	2,036	1.5	0.0	\$334.10	\$8,710.08	\$0.00	\$8,710.08	26.1	2,050
Gas Heating (HVAC/Process) Replacement			0	0.0	66.0	\$650.16	\$9,913.41	\$1,000.00	\$8,913.41	13.7	7,727
ECM 3	Install High Efficiency Hot Water Boilers	Yes	0	0.0	66.0	\$650.16	\$9,913.41	\$1,000.00	\$8,913.41	13.7	7,727
Domestic Water Heating Upgrade			1,675	0.0	0.0	\$274.93	\$35.85	\$0.00	\$35.85	0.1	1,687
ECM 4	Install Low-Flow Domestic Hot Water Devices	Yes	1,675	0.0	0.0	\$274.93	\$35.85	\$0.00	\$35.85	0.1	1,687
TOTAL OF ALL EVALUATED ECMS			7,628	3.3	66.0	\$1,902.07	\$23,630.89	\$1,845.00	\$21,785.89	11.5	15,409
TOTAL OF ALL RECOMMENDED ECMS			5,592	2	66	\$ 1,567.97	\$ 14,920.81	\$ 1,845.00	\$ 13,075.81	8.3	13,359
TOTAL OF ALL NON-RECOMMENDED ECMS			2,036	1	0	\$ 334.10	\$ 8,710.08	\$ -	\$ 8,710.08	26.1	2,050

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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

Oak Valley School



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			57,604	13.8	0.0	\$8,399.94	\$35,998.55	\$6,485.00	\$29,513.55	3.5	58,006
ECM 1	Install LED Fixtures	Yes	2,372	0.3	0.0	\$345.95	\$1,172.03	\$300.00	\$872.03	2.5	2,389
ECM 2	Retrofit Fixtures with LED Lamps	Yes	55,231	13.5	0.0	\$8,053.98	\$34,826.52	\$6,185.00	\$28,641.52	3.6	55,617
Lighting Control Measures			12,264	3.1	0.0	\$1,788.39	\$12,836.00	\$1,630.00	\$11,206.00	6.3	12,350
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	10,298	2.7	0.0	\$1,501.62	\$11,636.00	\$1,630.00	\$10,006.00	6.7	10,370
ECM 4	Install High/Low Lighting Controls	Yes	1,967	0.3	0.0	\$286.77	\$1,200.00	\$0.00	\$1,200.00	4.2	1,980
Domestic Water Heating Upgrade			1,820	0.0	0.0	\$265.42	\$186.42	\$0.00	\$186.42	0.7	1,833
ECM 5	Install Low-Flow Domestic Hot Water Devices	Yes	1,820	0.0	0.0	\$265.42	\$186.42	\$0.00	\$186.42	0.7	1,833
Plug Load Equipment Control - Vending Machine			1,612	0.0	0.0	\$235.04	\$230.00	\$0.00	\$230.00	1.0	1,623
ECM 6	Vending Machine Control	Yes	1,612	0.0	0.0	\$235.04	\$230.00	\$0.00	\$230.00	1.0	1,623
TOTALS			73,300	16.8	0.0	\$10,688.79	\$49,250.97	\$8,115.00	\$41,135.97	3.8	73,812

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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

Pine Acres Early Childhood Center



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			38,149	14.2	0.0	\$6,575.13	\$103,404.68	\$10,295.00	\$93,109.68	14.2	38,416
ECM 1	Install LED Fixtures	Yes	9,373	2.2	0.0	\$1,615.55	\$69,690.46	\$4,900.00	\$64,790.46	40.1	9,439
ECM 2	Retrofit Fixtures with LED Lamps	Yes	28,776	12.0	0.0	\$4,959.58	\$33,714.21	\$5,395.00	\$28,319.21	5.7	28,977
Lighting Control Measures			5,507	2.3	0.0	\$949.22	\$14,996.00	\$1,965.00	\$13,031.00	13.7	5,546
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	5,507	2.3	0.0	\$949.22	\$14,996.00	\$1,965.00	\$13,031.00	13.7	5,546
Variable Frequency Drive (VFD) Measures			22,101	6.3	0.0	\$3,809.14	\$10,623.55	\$1,840.00	\$8,783.55	2.3	22,255
ECM 4	Install VFDs on Constant Volume (CV) HVAC	Yes	22,101	6.3	0.0	\$3,809.14	\$10,623.55	\$1,840.00	\$8,783.55	2.3	22,255
Electric Unitary HVAC Measures			4,889	5.2	0.0	\$842.63	\$48,462.51	\$2,391.50	\$46,071.01	54.7	4,923
	Install High Efficiency Electric AC	No	4,889	5.2	0.0	\$842.63	\$48,462.51	\$2,391.50	\$46,071.01	54.7	4,923
Plug Load Equipment Control - Vending Machine			1,612	0.0	0.0	\$277.81	\$230.00	\$0.00	\$230.00	0.8	1,623
ECM 5	Vending Machine Control	Yes	1,612	0.0	0.0	\$277.81	\$230.00	\$0.00	\$230.00	0.8	1,623
TOTAL OF ALL EVALUATED ECMS			72,258	28.0	0.0	\$12,453.93	\$177,716.74	\$16,491.50	\$161,225.24	12.9	72,763
TOTAL OF ALL RECOMMENDED ECMS			67,369	23	0	\$ 11,611.30	\$ 129,254.23	\$ 14,100.00	\$ 115,154.23	9.9	67,840
TOTAL OF ALL NON_RECOMMENDED ECMS			4,889	5	0	\$ 842.63	\$ 48,462.51	\$ 2,391.50	\$ 46,071.01	54.7	4,923

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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

Shady Lane School



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			102,772	21.6	0.0	\$16,193.40	\$63,827.16	\$11,705.00	\$52,122.16	3.2	103,491
ECM 1	Install LED Fixtures	Yes	7,656	1.0	0.0	\$1,206.37	\$7,422.86	\$1,900.00	\$5,522.86	4.6	7,710
ECM 2	Retrofit Fixtures with LED Lamps	Yes	95,116	20.6	0.0	\$14,987.04	\$56,404.30	\$9,805.00	\$46,599.30	3.1	95,781
Lighting Control Measures			19,312	4.3	0.0	\$3,042.85	\$25,462.00	\$2,380.00	\$23,082.00	7.6	19,447
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	19,312	4.3	0.0	\$3,042.85	\$25,462.00	\$2,380.00	\$23,082.00	7.6	19,447
Motor Upgrades			143	0.0	0.0	\$22.48	\$1,495.39	\$0.00	\$1,495.39	66.5	144
	Premium Efficiency Motors	No	143	0.0	0.0	\$22.48	\$1,495.39	\$0.00	\$1,495.39	66.5	144
Variable Frequency Drive (VFD) Measures			5,149	1.1	0.0	\$811.25	\$8,540.77	\$400.00	\$8,140.77	10.0	5,185
ECM 4	Install VFDs on Constant Volume (CV) HVAC	Yes	2,059	0.7	0.0	\$324.46	\$3,275.85	\$400.00	\$2,875.85	8.9	2,074
ECM 5	Install VFDs on Hot Water Pumps	Yes	3,089	0.4	0.0	\$486.79	\$5,264.92	\$0.00	\$5,264.92	10.8	3,111
Electric Unitary HVAC Measures			10,367	6.1	0.0	\$1,633.50	\$38,838.40	\$1,686.76	\$37,151.64	22.7	10,440
	Install High Efficiency Electric AC	No	10,367	6.1	0.0	\$1,633.50	\$38,838.40	\$1,686.76	\$37,151.64	22.7	10,440
Plug Load Equipment Control - Vending Machine			3,224	0.0	0.0	\$507.94	\$460.00	\$0.00	\$460.00	0.9	3,246
ECM 6	Vending Machine Control	Yes	3,224	0.0	0.0	\$507.94	\$460.00	\$0.00	\$460.00	0.9	3,246
TOTALS			140,966	33.1	0.0	\$22,211.43	\$138,623.72	\$16,171.76	\$122,451.96	5.5	141,951
TOTAL OF ALL RECOMMENDED MEASURES			130,456	27	0	\$ 20,555.44	\$ 98,289.93	\$ 14,485.00	\$ 83,804.93	4.1	131,368
TOTAL OF ALL NON-RECOMMENDED MEASURES			10,510	6	0	\$ 1,655.98	\$ 40,333.78	\$ 1,686.76	\$ 38,647.02	23.3	10,583

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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

Administration Building



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			18,860	4.6	0.0	\$2,908.33	\$10,664.43	\$1,900.00	\$8,764.43	3.0	18,992
ECM 1	Retrofit Fixtures with LED Lamps	Yes	18,860	4.6	0.0	\$2,908.33	\$10,664.43	\$1,900.00	\$8,764.43	3.0	18,992
Lighting Control Measures			4,004	1.0	0.0	\$617.50	\$3,010.00	\$395.00	\$2,615.00	4.2	4,032
ECM 2	Install Occupancy Sensor Lighting Controls	Yes	4,004	1.0	0.0	\$617.50	\$3,010.00	\$395.00	\$2,615.00	4.2	4,032
Motor Upgrades			478	0.1	0.0	\$73.66	\$746.73	\$0.00	\$746.73	10.1	481
ECM 3	Premium Efficiency Motors	Yes	478	0.1	0.0	\$73.66	\$746.73	\$0.00	\$746.73	10.1	481
Variable Frequency Drive (VFD) Measures			1,042	0.1	0.0	\$160.66	\$2,536.07	\$0.00	\$2,536.07	15.8	1,049
ECM 4	Install VFDs on Hot Water Pumps	Yes	1,042	0.1	0.0	\$160.66	\$2,536.07	\$0.00	\$2,536.07	15.8	1,049
Electric Unitary HVAC Measures			6,564	6.3	0.0	\$1,012.17	\$27,680.07	\$1,702.00	\$25,978.07	25.7	6,610
	Install High Efficiency Electric AC	No	6,564	6.3	0.0	\$1,012.17	\$27,680.07	\$1,702.00	\$25,978.07	25.7	6,610
Gas Heating (HVAC/Process) Replacement			0	0.0	51.8	\$601.00	\$9,529.36	\$1,000.00	\$8,529.36	14.2	6,062
ECM 5	Install High Efficiency Hot Water Boilers	Yes	0	0.0	51.8	\$601.00	\$9,529.36	\$1,000.00	\$8,529.36	14.2	6,062
Plug Load Equipment Control - Vending Machine			1,612	0.0	0.0	\$248.55	\$230.00	\$0.00	\$230.00	0.9	1,623
ECM 6	Vending Machine Control	Yes	1,612	0.0	0.0	\$248.55	\$230.00	\$0.00	\$230.00	0.9	1,623
TOTAL OF ALL EVALUATED ECMS			32,560	12.2	51.8	\$5,621.86	\$54,396.66	\$4,997.00	\$49,399.66	8.8	38,849
TOTAL OF ALL RECOMMENDED ECMS			25,996	6	52	\$ 4,609.69	\$ 26,716.59	\$ 3,295.00	\$ 23,421.59	5.1	32,239
TOTAL OF ALL NON-RECOMMENDED ECMS			6,564	6	0	\$ 1,012.17	\$ 27,680.07	\$ 1,702.00	\$ 25,978.07	25.7	6,610

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



Some Energy Efficient Practices

- Reduce Air Leakage
- Close Doors and Windows
- Develop a Lighting Maintenance Schedule
- Ensure Lighting Controls Are Operating Properly
- Use Fans to Reduce Cooling Load
- Use Window Treatments/Coverings
- Clean and/or Replace HVAC filters
- Check and Seal Duct Leakage
- Perform Proper Boiler Maintenance
- Perform Proper Water Heater Maintenance
- 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 per Building



Building Name	SmartStart Prescriptive	SmartStart Custom	Direct Install	Pay For Performance Existing Buildings
Deptford Township High School	X			X
Monongahela Middle School	X	X		X
Central Early Childhood Center	X	X		X
Good Intent School	X		X	
Lake Tract School	X	X	X	
New Sharon School	X		X	
Oak Valley School	X		X	
Pine Acres Early Childhood Center	X		X	
Shady Lane School	X	X	X	
Administration Building	X	X	X	

Recommended NJCEP Incentives



- Direct Install

Facility Solutions Group

Kyle Charzewski

732-826-6100 x 21137

kyle.charzewski@fsgi.com

- Pay for Performance (P4P)

- 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!

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



South Jersey Gas Financing



SmartStart Buildings & Pay for Performance Programs

- 0% Financing
- Up to \$100,000 for 5 years
- SJG can help guide you through the process



P4P Existing Buildings: Overview



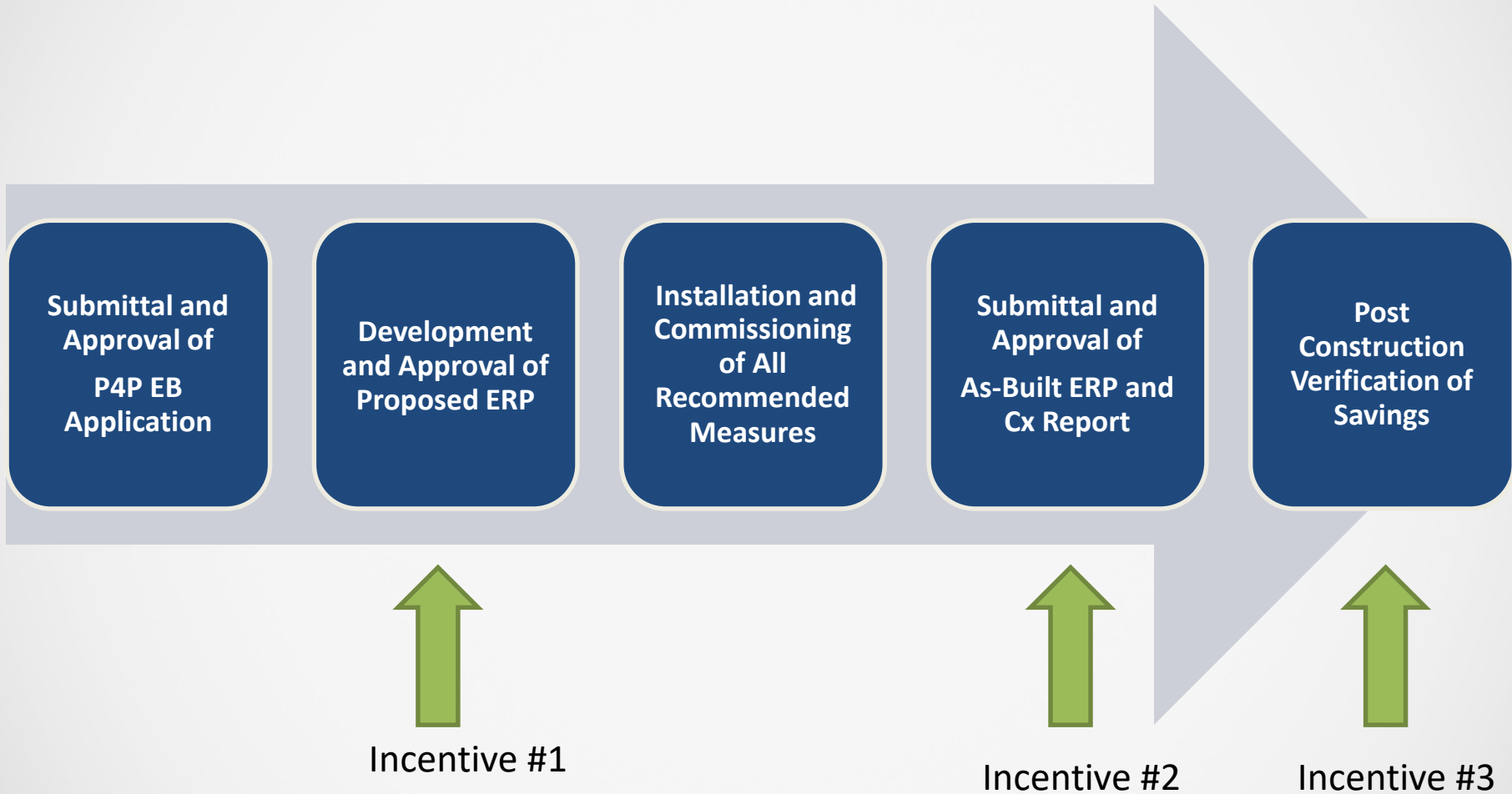
- Comprehensive, whole-building approach to saving energy in existing or new facilities
- Customer chooses from network of pre-approved participating Partners
- Incentives up to \$2 million per project
 - \$1 million for electric measures
 - \$1 million for gas measures
- \$4 million annual entity cap per fiscal year
- Incentives up to 50% of total project cost
- Incentives paid in three installments at milestones

P4P Existing Buildings: Overview



- Open to Commercial and Industrial facilities with annual peak demand of at least 200 kW in previous year
- Minimum savings 15% from existing energy use
- Must have at least two unique measures per project
- No more than 50% of total savings may come from lighting measures
 - Lighting savings up to 70% may be considered with minimum savings target increasing up to 35%

P4P EB: PROCESS



P4P EB: INCENTIVES



Incentive #1: Energy Reduction Plan			
Incentive Amount:		\$0.15	per sq ft
Minimum Incentive:		\$7,500	
Maximum Incentive:		\$50,000	or 50% of facility annual energy cost
Incentive #2: Installation of Recommended Measures			
Minimum Performance Target:		15%	
Electric Incentives	Base Incentive based on 15% savings:	\$0.09	per projected kWh saved
	For each % over 15% add:	\$0.005	
	Maximum Incentive:	\$0.11	
Gas Incentives	Base Incentive based on 15 % savings:	\$0.90	per projected Therm saved
	For each % over 15% add:	\$0.05	
	Maximum Incentive:	\$1.25	
Incentive Cap:		25%	of total project cost
Incentive #3: Post-Construction Benchmarking Report			
Minimum Performance Target:		15%	
Electric Incentives	Base Incentive based on 15% savings:	\$0.09	per projected kWh saved
	For each % over 15% add:	\$0.005	
	Maximum Incentive:	\$0.11	
Gas Incentives	Base Incentive based on 15% savings:	\$0.90	per projected Therm saved
	For each % over 15% add:	\$0.05	
	Maximum Incentive:	\$1.25	
Incentive Cap:		25%	of total project cost

Energy Savings Improvement Program (ESIP)

- Provides alternative financing for energy savings projects at public institutions. Value of energy savings leveraged to pay for cost of EE projects over a 15 year contract. Does not count as debt/require voter approval.
- Requires an audit as 1st step (LGEA satisfies requirement)
- ESIP participation question on LGEA application
- Program administered directly by BPU

ESIP Process

New Jersey's Clean Energy Program Interaction

Initial Energy Audit completed
for entity building(s)

Local Government Energy Audit
(LGEA) may be used to meet
this requirement

Entity issues ESIP RFP (previously
approved by BPU) and selects ESCO
or DIY approach

Investment Grade Energy Audit completed
and Energy Savings Plan (ESP)
developed

P4P Energy Reduction Plan (ERP),
Direct Install, or SmartStart application
recommended submittal time frame

Third party review of ESP

Review and approval of ESP
by Board of Public Utilities (BPU)

Entity adopts ESP,
determines guarantee



FOR MORE INFORMATION

ESIP

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Questions



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FOR MORE INFORMATION

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