

New Jersey's Clean Energy Program

LGEA Exit Meeting for:
Brick Township Board of Education

March 9, 2017

Introductions



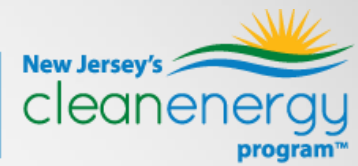
Brick Township Board of Education

- Business Administrator: Jim Edwards
- Executive Director of Facilities: Will Kolibas
- Assistant Facilities Manger: Roger Readel

NJ Clean Energy Program Team

- Auditor: Moussa Traore
- Program Manager: Brian DeLuca
- Case Manager: Ashley Miller

Agenda



- Brief 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 reports
- Overview of NJCEP equipment incentives
- Energy Savings Improvement Program (ESIP)
- Next steps for Brick Township Board of Education

Process to Draft Report



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

All Sites Audited



Elementary Schools

- Herbertsville Elementary School
- Lanes Mill Elementary School
- Osbornville Elementary School
- Warren H. Wolf Elementary School
- Drum Point Elementary School
- Emma Havens Young Elementary School
- Midstreams Elementary School
- Veterans Memorial Elementary School

Middle Schools

- Veterans Memorial Middle School
- Lake Riviera Middle School

High Schools

- Brick Township Memorial High School
- Brick Township High School

Support Buildings

- Board of Education Business Office
- Central Administration Building
- Herbertsville Elementary School Annex
- Brick Township BOE Warehouse
- Brick Township HS Field House
- Brick Township HS Transportation Building

ECM Summary (All Sites) - All Measures



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	1,829,159	432.0	0.0	\$210,687.33	\$1,218,832.73	\$166,225.00	\$1,052,607.73	5.0	1,841,949
Install LED Fixtures	320,822	56.1	0.0	\$38,336.23	\$188,384.44	\$25,590.00	\$162,794.44	4.2	323,066
Retrofit Fluorescent Fixtures with LED Lamps and Drivers	309,533	77.1	0.0	\$33,857.29	\$278,094.16	\$10,050.00	\$268,044.16	7.9	311,698
Retrofit Fixtures with LED Lamps	1,194,188	298.5	0.0	\$137,944.96	\$745,685.70	\$130,585.00	\$615,100.70	4.5	1,202,538
Install LED Exit Signs	4,615	0.3	0.0	\$548.85	\$6,668.43	\$0.00	\$6,668.43	12.1	4,647
Lighting Control Measures	266,418	67.6	0.0	\$30,338.34	\$231,080.00	\$30,615.00	\$200,465.00	6.6	268,280
Install Occupancy Sensor Lighting Controls	248,923	63.6	0.0	\$28,258.33	\$225,948.00	\$30,615.00	\$195,333.00	6.9	250,663
Install High/Low Lighting Controls	17,495	4.0	0.0	\$2,080.01	\$5,132.00	\$0.00	\$5,132.00	2.5	17,617
Motor Upgrades	23,604	5.9	0.0	\$2,635.74	\$43,277.01	\$0.00	\$43,277.01	16.4	23,769
Premium Efficiency Motors	23,604	5.9	0.0	\$2,635.74	\$43,277.01	\$0.00	\$43,277.01	16.4	23,769
Variable Frequency Drive (VFD) Measures	260,185	30.3	74.6	\$28,877.13	\$119,741.32	\$4,200.00	\$115,541.32	4.0	270,740
Install VFDs on Constant Volume (CV) HVAC	14,784	3.9	0.0	\$1,462.83	\$10,388.90	\$2,400.00	\$7,988.90	5.5	14,887
Install VFDs on Chilled Water Pumps	35,497	3.6	0.0	\$3,512.38	\$10,388.90	\$0.00	\$10,388.90	3.0	35,745
Install VFDs on Hot Water Pumps	183,285	22.7	0.0	\$20,374.21	\$90,761.42	\$0.00	\$90,761.42	4.5	184,566
Install VFDs on Cooling Tower Fans	18,139	0.0	0.0	\$1,794.79	\$5,194.45	\$900.00	\$4,294.45	2.4	18,266
Install VFDs on Single-Speed Kitchen Hoods	8,481	0.0	74.6	\$1,732.92	\$3,007.65	\$900.00	\$2,107.65	1.2	17,276
Electric Unitary HVAC Measures	158,952	112.1	0.0	\$18,510.23	\$488,212.42	\$14,161.00	\$474,051.42	25.6	160,063
Install High Efficiency Electric AC	148,330	97.9	0.0	\$17,311.75	\$441,568.79	\$11,890.00	\$429,678.79	24.8	149,367
Install High Efficiency Heat Pumps	10,622	14.2	0.0	\$1,198.48	\$46,643.63	\$2,271.00	\$44,372.63	37.0	10,696
Gas Heating (HVAC/Process) Replacement	0	0.0	5,053.4	\$49,021.29	\$1,002,358.96	\$55,325.30	\$947,033.66	19.3	591,691
Install High Efficiency Hot Water Boilers	0	0.0	4,972.4	\$48,189.27	\$978,583.46	\$50,925.30	\$927,658.16	19.3	582,206
Install High Efficiency Furnaces	0	0.0	57.8	\$586.09	\$19,100.13	\$4,400.00	\$14,700.13	25.1	6,762
Install High Efficiency Unit Heaters	0	0.0	23.3	\$245.93	\$4,675.37	\$0.00	\$4,675.37	19.0	2,723
HVAC System Improvements	35,076	7.9	0.0	\$3,857.23	\$9,750.00	\$3,750.00	\$6,000.00	1.6	35,321
Install Dual Enthalpy Outside Economizer Control	35,076	7.9	0.0	\$3,857.23	\$9,750.00	\$3,750.00	\$6,000.00	1.6	35,321
Domestic Water Heating Upgrade	5,865	1.8	168.4	\$2,490.85	\$15,320.44	\$998.00	\$14,322.44	5.8	25,629
Install High Efficiency Gas Water Heater	0	0.0	53.0	\$524.74	\$11,500.21	\$398.00	\$11,102.21	21.2	6,211
Install Tankless Water Heater	5,067	1.8	-17.3	\$447.27	\$3,064.92	\$600.00	\$2,464.92	5.5	3,078
Install Low-Flow Domestic Hot Water Devices	798	0.0	132.7	\$1,518.84	\$755.31	\$0.00	\$755.31	0.5	16,340
Plug Load Equipment Control - Vending Machine	23,694	0.0	0.0	\$2,806.87	\$5,060.00	\$0.00	\$5,060.00	1.8	23,860
Vending Machine Control	23,694	0.0	0.0	\$2,806.87	\$5,060.00	\$0.00	\$5,060.00	1.8	23,860
TOTALS	2,602,953	657.7	5,296.5	\$349,225.01	\$3,133,632.88	\$275,274.30	\$2,858,358.58	8.2	3,241,302

* - 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).

ECM Summary (All Sites) – Recommended Measures



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		1,829,159	432.0	0.0	\$210,687.33	\$1,218,832.73	\$166,225.00	\$1,052,607.73	5.0	1,841,949
ECM 1	Install LED Fixtures	320,822	56.1	0.0	\$38,336.23	\$188,384.44	\$25,590.00	\$162,794.44	4.2	323,066
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	309,533	77.1	0.0	\$33,857.29	\$278,094.16	\$10,050.00	\$268,044.16	7.9	311,698
ECM 3	Retrofit Fixtures with LED Lamps	1,194,188	298.5	0.0	\$137,944.96	\$745,685.70	\$130,585.00	\$615,100.70	4.5	1,202,538
ECM 4	Install LED Exit Signs	4,615	0.3	0.0	\$548.85	\$6,668.43	\$0.00	\$6,668.43	12.1	4,647
Lighting Control Measures		266,418	67.6	0.0	\$30,338.34	\$231,080.00	\$30,615.00	\$200,465.00	6.6	268,280
ECM 5	Install Occupancy Sensor Lighting Controls	248,923	63.6	0.0	\$28,258.33	\$225,948.00	\$30,615.00	\$195,333.00	6.9	250,663
ECM 6	Install High/Low Lighting Controls	17,495	4.0	0.0	\$2,080.01	\$5,132.00	\$0.00	\$5,132.00	2.5	17,617
Motor Upgrades		20,842	5.2	0.0	\$2,306.01	\$36,691.65	\$0.00	\$36,691.65	15.9	20,988
ECM 7	Premium Efficiency Motors	20,842	5.2	0.0	\$2,306.01	\$36,691.65	\$0.00	\$36,691.65	15.9	20,988
Variable Frequency Drive (VFD) Measures		256,066	29.8	74.6	\$28,364.01	\$114,283.61	\$4,200.00	\$110,083.61	3.9	266,592
ECM 8	Install VFDs on Constant Volume (CV) HVAC	14,784	3.9	0.0	\$1,462.83	\$10,388.90	\$2,400.00	\$7,988.90	5.5	14,887
ECM 9	Install VFDs on Chilled Water Pumps	35,497	3.6	0.0	\$3,512.38	\$10,388.90	\$0.00	\$10,388.90	3.0	35,745
ECM 10	Install VFDs on Hot Water Pumps	179,165	22.2	0.0	\$19,861.09	\$85,303.71	\$0.00	\$85,303.71	4.3	180,418
ECM 11	Install VFDs on Cooling Tower Fans	18,139	0.0	0.0	\$1,794.79	\$5,194.45	\$900.00	\$4,294.45	2.4	18,266
ECM 12	Install VFDs on Single-Speed Kitchen Hoods	8,481	0.0	74.6	\$1,732.92	\$3,007.65	\$900.00	\$2,107.65	1.2	17,276
Electric Unitary HVAC Measures		60,577	32.8	0.0	\$6,839.55	\$168,853.23	\$6,722.00	\$162,131.23	23.7	61,000
ECM 13	Install High Efficiency Electric AC	60,577	32.8	0.0	\$6,839.55	\$168,853.23	\$6,722.00	\$162,131.23	23.7	61,000
Gas Heating (HVAC/Process) Replacement		0	0.0	4,495.6	\$43,242.50	\$847,623.02	\$38,248.90	\$809,374.12	18.7	526,379
ECM 14	Install High Efficiency Hot Water Boilers	0	0.0	4,462.3	\$42,897.34	\$835,659.95	\$36,248.90	\$799,411.05	18.6	522,475
ECM 15	Install High Efficiency Furnaces	0	0.0	33.3	\$345.16	\$11,963.07	\$2,000.00	\$9,963.07	28.9	3,905
HVAC System Improvements		35,076	7.9	0.0	\$3,857.23	\$9,750.00	\$3,750.00	\$6,000.00	1.6	35,321
ECM 16	Install Dual Enthalpy Outside Economizer Control	35,076	7.9	0.0	\$3,857.23	\$9,750.00	\$3,750.00	\$6,000.00	1.6	35,321
Domestic Water Heating Upgrade		3,834	1.4	175.4	\$2,295.23	\$14,346.72	\$698.00	\$13,648.72	5.9	24,395
ECM 17	Install High Efficiency Gas Water Heater	0	0.0	53.0	\$524.74	\$11,500.21	\$398.00	\$11,102.21	21.2	6,211
ECM 18	Install Tankless Water Heater	3,036	1.4	-10.4	\$251.65	\$2,091.20	\$300.00	\$1,791.20	7.1	1,845
ECM 19	Install Low-Flow Domestic Hot Water Devices	798	0.0	132.7	\$1,518.84	\$755.31	\$0.00	\$755.31	0.5	16,340
Plug Load Equipment Control - Vending Machine		23,694	0.0	0.0	\$2,806.87	\$5,060.00	\$0.00	\$5,060.00	1.8	23,860
ECM 20	Vending Machine Control	23,694	0.0	0.0	\$2,806.87	\$5,060.00	\$0.00	\$5,060.00	1.8	23,860
TOTALS		2,495,666	576.6	4,745.6	\$330,737.07	\$2,646,520.96	\$250,458.90	\$2,396,062.06	7.2	3,068,765

* - 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).



ECM Summary (All Sites) – Non-Recommended Measures

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	2,762	0.7	0.0	\$329.73	\$6,585.36	\$0.00	\$6,585.36	20.0	2,781
Premium Efficiency Motors	2,762	0.7	0.0	\$329.73	\$6,585.36	\$0.00	\$6,585.36	20.0	2,781
Variable Frequency Drive (VFD) Measures	4,119	0.5	0.0	\$513.12	\$5,457.71	\$0.00	\$5,457.71	10.6	4,148
Install VFDs on Hot Water Pumps	4,119	0.5	0.0	\$513.12	\$5,457.71	\$0.00	\$5,457.71	10.6	4,148
Electric Unitary HVAC Measures	98,375	79.3	0.0	\$11,670.68	\$319,359.19	\$7,439.00	\$311,920.19	26.7	99,063
Install High Efficiency Electric AC	87,753	65.1	0.0	\$10,472.20	\$272,715.56	\$5,168.00	\$267,547.56	25.5	88,367
Install High Efficiency Heat Pumps	10,622	14.2	0.0	\$1,198.48	\$46,643.63	\$2,271.00	\$44,372.63	37.0	10,696
Gas Heating (HVAC/Process) Replacement	0	0.0	557.8	\$5,778.79	\$154,735.94	\$17,076.40	\$137,659.54	23.8	65,312
Install High Efficiency Hot Water Boilers	0	0.0	510.1	\$5,291.93	\$142,923.51	\$14,676.40	\$128,247.11	24.2	59,731
Install High Efficiency Furnaces	0	0.0	24.4	\$240.93	\$7,137.06	\$2,400.00	\$4,737.06	19.7	2,857
Install High Efficiency Unit Heaters	0	0.0	23.3	\$245.93	\$4,675.37	\$0.00	\$4,675.37	19.0	2,723
Domestic Water Heating Upgrade	2,031	0.5	-6.9	\$195.62	\$973.72	\$300.00	\$673.72	3.4	1,234
Install High Efficiency Gas Water Heater	0	0.0	0.0	\$0.00	\$0.00	\$0.00	\$0.00	0.0	0
Install Tankless Water Heater	2,031	0.5	-6.9	\$195.62	\$973.72	\$300.00	\$673.72	3.4	1,234
TOTALS	107,287	81.0	550.9	\$18,487.94	\$487,111.92	\$24,815.40	\$462,296.52	25.0	172,538

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

Elementary Schools (8)



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

Herbertsville Elementary 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			52,762	9.9	0.0	\$6,485.77	\$26,325.58	\$4,830.00	\$21,495.58	3.3	53,131
ECM 1	Install LED Fixtures	Yes	15,715	2.0	0.0	\$1,931.81	\$5,078.80	\$1,300.00	\$3,778.80	2.0	15,825
ECM 2	Retrofit Fixtures with LED Lamps	Yes	36,080	7.8	0.0	\$4,435.08	\$19,956.12	\$3,530.00	\$16,426.12	3.7	36,332
ECM 3	Install LED Exit Signs	Yes	967	0.1	0.0	\$118.88	\$1,290.66	\$0.00	\$1,290.66	10.9	974
Lighting Control Measures			8,030	1.7	0.0	\$987.03	\$3,956.00	\$550.00	\$3,406.00	3.5	8,086
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	7,290	1.6	0.0	\$896.12	\$3,556.00	\$550.00	\$3,006.00	3.4	7,341
ECM 5	Install High/Low Lighting Controls	Yes	740	0.2	0.0	\$90.91	\$400.00	\$0.00	\$400.00	4.4	745
Motor Upgrades			528	0.3	0.0	\$64.89	\$532.17	\$0.00	\$532.17	8.2	532
ECM 6	Premium Efficiency Motors	Yes	528	0.3	0.0	\$64.89	\$532.17	\$0.00	\$532.17	8.2	532
Electric Unitary HVAC Measures			5,706	3.8	0.0	\$701.43	\$19,784.82	\$736.00	\$19,048.82	27.2	5,746
	Install High Efficiency Electric AC	No	5,706	3.8	0.0	\$701.43	\$19,784.82	\$736.00	\$19,048.82	27.2	5,746
Gas Heating (HVAC/Process) Replacement			0	0.0	91.1	\$906.69	\$26,124.68	\$2,912.00	\$23,212.68	25.6	10,663
	Install High Efficiency Hot Water Boilers	No	0	0.0	77.7	\$773.47	\$23,043.29	\$2,112.00	\$20,931.29	27.1	9,097
	Install High Efficiency Furnaces	No	0	0.0	13.4	\$133.22	\$3,081.40	\$800.00	\$2,281.40	17.1	1,567
Domestic Water Heating Upgrade			0	0.0	16.4	\$163.46	\$107.55	\$0.00	\$107.55	0.7	1,922
ECM 7	Install Low-Flow Domestic Hot Water Devices	Yes	0	0.0	16.4	\$163.46	\$107.55	\$0.00	\$107.55	0.7	1,922
TOTALS FOR ALL PROPOSED MEASURES			61,320	11.9	16.4	\$7,701.16	\$30,921.30	\$5,380.00	\$25,541.30	3.3	63,671
TOTALS FOR ALL MEASURES			67,026	15.7	107.5	\$9,309.28	\$76,830.80	\$9,028.00	\$67,802.80	7.3	80,081

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Lanes Mill Elementary 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			46,488	14.6	0.0	\$5,038.80	\$63,414.66	\$7,695.00	\$55,719.66	11.1	46,813
ECM 1	Install LED Fixtures	Yes	9,447	4.5	0.0	\$1,024.00	\$30,921.65	\$2,300.00	\$28,621.65	28.0	9,514
ECM 2	Retrofit Fixtures with LED Lamps	Yes	37,041	10.1	0.0	\$4,014.80	\$32,493.01	\$5,395.00	\$27,098.01	6.7	37,300
Lighting Control Measures			928	0.2	0.0	\$100.59	\$1,160.00	\$120.00	\$1,040.00	10.3	935
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	928	0.2	0.0	\$100.59	\$1,160.00	\$120.00	\$1,040.00	10.3	935
Motor Upgrades			2,206	0.9	0.0	\$239.13	\$2,647.73	\$0.00	\$2,647.73	11.1	2,222
ECM 4	Premium Efficiency Motors	Yes	2,206	0.9	0.0	\$239.13	\$2,647.73	\$0.00	\$2,647.73	11.1	2,222
Variable Frequency Drive (VFD) Measures			9,709	1.9	0.0	\$1,052.34	\$7,213.60	\$0.00	\$7,213.60	6.9	9,777
ECM 5	Install VFDs on Hot Water Pumps	Yes	9,709	1.9	0.0	\$1,052.34	\$7,213.60	\$0.00	\$7,213.60	6.9	9,777
Gas Heating (HVAC/Process) Replacement			0	0.0	342.8	\$3,642.29	\$99,669.34	\$10,712.00	\$88,957.34	24.4	40,136
	Install High Efficiency Hot Water Boilers	No	0	0.0	342.8	\$3,642.29	\$99,669.34	\$10,712.00	\$88,957.34	24.4	40,136
Domestic Water Heating Upgrade			0	0.0	1.7	\$18.32	\$14.34	\$0.00	\$14.34	0.8	202
ECM 6	Install Low-Flow Domestic Hot Water Devices	Yes	0	0.0	1.7	\$18.32	\$14.34	\$0.00	\$14.34	0.8	202
TOTAL FOR PROPOSED MEASURES			59,332	17.6	1.7	\$6,449.19	\$74,450.33	\$7,815.00	\$66,635.33	10.3	59,948
TOTAL FOR ALL MEASURES			59,332	17.6	344.5	\$10,091.48	\$174,119.66	\$18,527.00	\$155,592.66	15.4	100,084

* - 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.

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Osbornville Elementary 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			71,422	15.4	0.0	\$9,838.15	\$38,592.86	\$6,460.00	\$32,132.86	3.3	71,921
ECM 1	Install LED Fixtures	Yes	2,799	1.1	0.0	\$385.62	\$1,626.36	\$400.00	\$1,226.36	3.2	2,819
ECM 2	Retrofit Fixtures with LED Lamps	Yes	68,058	14.2	0.0	\$9,374.83	\$36,213.62	\$6,060.00	\$30,153.62	3.2	68,534
ECM 3	Install LED Exit Signs	Yes	564	0.0	0.0	\$77.71	\$752.89	\$0.00	\$752.89	9.7	568
Lighting Control Measures			15,626	3.3	0.0	\$2,152.44	\$5,568.00	\$760.00	\$4,808.00	2.2	15,735
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	13,516	2.8	0.0	\$1,861.78	\$4,988.00	\$760.00	\$4,228.00	2.3	13,611
ECM 5	Install High/Low Lighting Controls	Yes	2,110	0.5	0.0	\$290.66	\$580.00	\$0.00	\$580.00	2.0	2,125
Electric Unitary HVAC Measures			5,084	3.8	0.0	\$700.24	\$8,162.40	\$368.00	\$7,794.40	11.1	5,119
ECM 6	Install High Efficiency Electric AC	Yes	5,084	3.8	0.0	\$700.24	\$8,162.40	\$368.00	\$7,794.40	11.1	5,119
Domestic Water Heating Upgrade			0	0.0	18.9	\$209.97	\$100.38	\$0.00	\$100.38	0.5	2,212
ECM 7	Install Low-Flow Domestic Hot Water Devices	Yes	0	0.0	18.9	\$209.97	\$100.38	\$0.00	\$100.38	0.5	2,212
TOTALS			92,132	22.4	18.9	\$12,900.80	\$52,423.64	\$7,588.00	\$44,835.64	3.5	94,988

* - 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).

Warren H. Wolf Elementary 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			99,611	29.8	0.0	\$11,985.82	\$65,404.69	\$11,750.00	\$53,654.69	4.5	100,307
ECM 1	Retrofit Fixtures with LED Lamps	Yes	99,550	29.8	0.0	\$11,978.55	\$65,297.13	\$11,750.00	\$53,547.13	4.5	100,246
ECM 2	Install LED Exit Signs	Yes	60	0.0	0.0	\$7.27	\$107.56	\$0.00	\$107.56	14.8	61
Lighting Control Measures			21,680	6.5	0.0	\$2,608.64	\$6,264.00	\$820.00	\$5,444.00	2.1	21,831
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	17,515	5.2	0.0	\$2,107.46	\$5,336.00	\$820.00	\$4,516.00	2.1	17,637
ECM 4	Install High/Low Lighting Controls	Yes	4,165	1.2	0.0	\$501.18	\$928.00	\$0.00	\$928.00	1.9	4,194
Variable Frequency Drive (VFD) Measures			2,455	0.9	0.0	\$295.45	\$3,606.80	\$0.00	\$3,606.80	12.2	2,473
ECM 5	Install VFDs on Hot Water Pumps	Yes	2,455	0.9	0.0	\$295.45	\$3,606.80	\$0.00	\$3,606.80	12.2	2,473
Electric Unitary HVAC Measures			13,502	9.9	0.0	\$1,624.63	\$33,935.88	\$1,564.00	\$32,371.88	19.9	13,596
	Install High Efficiency Electric AC	No	13,502	9.9	0.0	\$1,624.63	\$33,935.88	\$1,564.00	\$32,371.88	19.9	13,596
Gas Heating (HVAC/Process) Replacement			0	0.0	100.7	\$983.88	\$24,266.54	\$3,452.40	\$20,814.14	21.2	11,789
	Install High Efficiency Hot Water Boilers	No	0	0.0	89.7	\$876.17	\$20,210.88	\$1,852.40	\$18,358.48	21.0	10,499
	Install High Efficiency Furnaces	No	0	0.0	11.0	\$107.71	\$4,055.66	\$1,600.00	\$2,455.66	22.8	1,291
Domestic Water Heating Upgrade			0	0.0	2.7	\$26.37	\$21.51	\$0.00	\$21.51	0.8	316
ECM 6	Install Low-Flow Domestic Hot Water Devices	Yes	0	0.0	2.7	\$26.37	\$21.51	\$0.00	\$21.51	0.8	316
TOTALS (RECOMMENDED MEASURES)			123,746	37.2	2.7	\$14,916.29	\$75,297.00	\$12,570.00	\$62,727.00	4.2	124,927
TOTALS (ALL EVALUATED MEASURES)			137,248	47.1	103.4	\$17,524.80	\$133,499.42	\$17,586.40	\$115,913.02	6.6	150,313

* - 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).

Drum Point Elementary 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			90,468	21.2	0.0	\$10,692.32	\$61,941.23	\$8,140.00	\$53,801.23	5.0	91,101
ECM 1	Install LED Fixtures	Yes	7,074	3.0	0.0	\$836.05	\$7,707.36	\$1,515.00	\$6,192.36	7.4	7,123
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	37,671	8.1	0.0	\$4,452.25	\$27,390.17	\$2,040.00	\$25,350.17	5.7	37,934
ECM 3	Retrofit Fixtures with LED Lamps	Yes	45,724	10.0	0.0	\$5,404.02	\$26,843.71	\$4,585.00	\$22,258.71	4.1	46,043
Lighting Control Measures			12,666	2.7	0.0	\$1,497.04	\$8,494.00	\$1,170.00	\$7,324.00	4.9	12,755
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	11,267	2.4	0.0	\$1,331.58	\$7,914.00	\$1,170.00	\$6,744.00	5.1	11,345
ECM 5	Install High/Low Lighting Controls	Yes	1,400	0.3	0.0	\$165.45	\$580.00	\$0.00	\$580.00	3.5	1,410
Motor Upgrades			2,243	0.6	0.0	\$265.04	\$5,521.02	\$0.00	\$5,521.02	20.8	2,258
	Premium Efficiency Motors	No	2,243	0.6	0.0	\$265.04	\$5,521.02	\$0.00	\$5,521.02	20.8	2,258
Variable Frequency Drive (VFD) Measures			7,878	1.0	0.0	\$931.09	\$8,368.96	\$0.00	\$8,368.96	9.0	7,933
ECM 6	Install VFDs on Hot Water Pumps	Yes	7,878	1.0	0.0	\$931.09	\$8,368.96	\$0.00	\$8,368.96	9.0	7,933
Electric Unitary HVAC Measures			2,871	1.7	0.0	\$339.32	\$3,266.28	\$0.00	\$3,266.28	9.6	2,891
ECM 7	Install High Efficiency Electric AC	Yes	2,871	1.7	0.0	\$339.32	\$3,266.28	\$0.00	\$3,266.28	9.6	2,891
Gas Heating (HVAC/Process) Replacement			0	0.0	656.3	\$6,072.78	\$106,383.23	\$12,254.00	\$94,129.23	15.5	76,843
ECM 8	Install High Efficiency Hot Water Boilers	Yes	0	0.0	656.3	\$6,072.78	\$106,383.23	\$12,254.00	\$94,129.23	15.5	76,843
Domestic Water Heating Upgrade			0	0.0	16.9	\$156.09	\$107.55	\$0.00	\$107.55	0.7	1,975
ECM 9	Install Low-Flow Domestic Hot Water Devices	Yes	0	0.0	16.9	\$156.09	\$107.55	\$0.00	\$107.55	0.7	1,975
TOTALS FOR PROPOSED MEASURES			113,884	26.6	626.4	\$19,688.62	\$188,561.25	\$21,564.00	\$166,997.25	6.0	193,498
TOTALS FOR ALL MEASURES			116,126	27.2	673.2	\$19,953.66	\$194,082.27	\$21,564.00	\$172,518.27	8.6	195,756

* - 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).

Emma Havens Young Elementary 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			116,099	27.4	0.0	\$15,464.98	\$67,347.85	\$12,400.00	\$54,947.85	3.6	116,911
ECM 1	Install LED Fixtures	Yes	44,079	5.7	0.0	\$5,871.51	\$15,348.63	\$3,500.00	\$11,848.63	2.0	44,387
ECM 2	Retrofit Fixtures with LED Lamps	Yes	72,020	21.7	0.0	\$9,593.47	\$51,999.22	\$8,900.00	\$43,099.22	4.5	72,524
Lighting Control Measures			6,474	1.7	0.0	\$862.38	\$9,378.00	\$1,365.00	\$8,013.00	9.3	6,519
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	6,474	1.7	0.0	\$862.38	\$9,378.00	\$1,365.00	\$8,013.00	9.3	6,519
Motor Upgrades			563	0.3	0.0	\$74.96	\$3,394.32	\$0.00	\$3,394.32	45.3	567
ECM 4	Premium Efficiency Motors	Yes	563	0.3	0.0	\$74.96	\$3,394.32	\$0.00	\$3,394.32	45.3	567
Variable Frequency Drive (VFD) Measures			12,838	2.8	0.0	\$1,710.05	\$10,820.40	\$0.00	\$10,820.40	6.3	12,928
ECM 5	Install VFDs on Hot Water Pumps	Yes	12,838	2.8	0.0	\$1,710.05	\$10,820.40	\$0.00	\$10,820.40	6.3	12,928
Electric Unitary HVAC Measures			19,636	21.9	0.0	\$2,615.66	\$136,974.67	\$0.00	\$136,974.67	52.4	19,774
	Install High Efficiency Electric AC	No	19,636	21.9	0.0	\$2,615.66	\$136,974.67	\$0.00	\$136,974.67	52.4	19,774
Gas Heating (HVAC/Process) Replacement			0	0.0	264.2	\$2,713.85	\$153,997.68	\$0.00	\$153,997.68	56.7	30,934
ECM 6	Install High Efficiency Hot Water Boilers	Yes	0	0.0	264.2	\$2,713.85	\$153,997.68	\$0.00	\$153,997.68	56.7	30,934
Plug Load Equipment Control - Vending Machine			1,954	0.0	0.0	\$260.33	\$460.00	\$0.00	\$460.00	1.8	1,968
ECM 7	Vending Machine Control	Yes	1,954	0.0	0.0	\$260.33	\$460.00	\$0.00	\$460.00	1.8	1,968
TOTALS FOR ALL PROPOSED MEASURES			137,928	32.2	264.2	\$21,086.55	\$245,398.24	\$13,765.00	\$231,633.24	11.0	169,826
TOTALS FOR ALL MEASURES			157,564	54.1	264.2	\$23,702.21	\$382,372.91	\$13,765.00	\$368,607.91	15.6	189,600

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

Midstreams Elementary 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			88,163	20.2	0.0	\$10,982.38	\$48,982.40	\$10,305.00	\$38,677.40	3.5	88,780
ECM 1	Install LED Fixtures	Yes	27,502	3.6	0.0	\$3,425.88	\$11,469.39	\$3,100.00	\$8,369.39	2.4	27,694
ECM 2	Retrofit Fixtures with LED Lamps	Yes	60,661	16.6	0.0	\$7,556.49	\$37,513.01	\$7,205.00	\$30,308.01	4.0	61,086
Lighting Control Measures			11,826	3.3	0.0	\$1,473.09	\$13,582.00	\$1,455.00	\$12,127.00	8.2	11,908
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	11,826	3.3	0.0	\$1,473.09	\$13,582.00	\$1,455.00	\$12,127.00	8.2	11,908
Motor Upgrades			519	0.1	0.0	\$64.69	\$1,064.34	\$0.00	\$1,064.34	16.5	523
	Premium Efficiency Motors	No	519	0.1	0.0	\$64.69	\$1,064.34	\$0.00	\$1,064.34	16.5	523
Variable Frequency Drive (VFD) Measures			4,119	0.5	0.0	\$513.12	\$5,457.71	\$0.00	\$5,457.71	10.6	4,148
	Install VFDs on Hot Water Pumps	No	4,119	0.5	0.0	\$513.12	\$5,457.71	\$0.00	\$5,457.71	10.6	4,148
Gas Heating (HVAC/Process) Replacement			0	0.0	424.7	\$4,416.97	\$62,616.41	\$6,478.50	\$56,137.91	12.7	49,730
ECM 4	Install High Efficiency Hot Water Boilers	Yes	0	0.0	424.7	\$4,416.97	\$62,616.41	\$6,478.50	\$56,137.91	12.7	49,730
Domestic Water Heating Upgrade			0	0.0	19.4	\$201.93	\$124.35	\$0.00	\$124.35	0.6	2,274
ECM 5	Install Low-Flow Domestic Hot Water Devices	Yes	0	0.0	19.4	\$201.93	\$124.35	\$0.00	\$124.35	0.6	2,274
TOTAL FOR PROPOSED MEASURES			99,989	23.5	444.1	\$17,074.37	\$125,305.16	\$18,238.50	\$107,066.66	6.3	152,692
TOTAL FOR ALL MEASURES			104,628	24.1	444.1	\$17,652.19	\$131,827.20	\$18,238.50	\$113,588.70	6.4	157,363

* - 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).

Veterans Memorial Elementary 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			119,574	21.6	0.0	\$13,730.62	\$67,234.86	\$8,805.00	\$58,429.86	4.3	120,410
ECM 1	Install LED Fixtures	Yes	46,038	6.0	0.0	\$5,286.54	\$23,046.02	\$1,900.00	\$21,146.02	4.0	46,360
ECM 2	Retrofit Fixtures with LED Lamps	Yes	71,924	15.5	0.0	\$8,258.99	\$42,037.74	\$6,905.00	\$35,132.74	4.3	72,427
ECM 3	Install LED Exit Signs	Yes	1,612	0.1	0.0	\$185.09	\$2,151.10	\$0.00	\$2,151.10	11.6	1,623
Lighting Control Measures			16,634	3.6	0.0	\$1,910.07	\$10,448.00	\$1,095.00	\$9,353.00	4.9	16,750
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	12,987	2.8	0.0	\$1,491.25	\$8,848.00	\$1,095.00	\$7,753.00	5.2	13,077
ECM 5	Install High/Low Lighting Controls	Yes	3,647	0.8	0.0	\$418.82	\$1,600.00	\$0.00	\$1,600.00	3.8	3,673
Motor Upgrades			2,531	0.6	0.0	\$290.59	\$2,732.18	\$0.00	\$2,732.18	9.4	2,548
ECM 6	Premium Efficiency Motors	Yes	2,531	0.6	0.0	\$290.59	\$2,732.18	\$0.00	\$2,732.18	9.4	2,548
Variable Frequency Drive (VFD) Measures			4,976	0.6	0.0	\$571.44	\$3,275.85	\$0.00	\$3,275.85	5.7	5,011
ECM 7	Install VFDs on Hot Water Pumps	Yes	4,976	0.6	0.0	\$571.44	\$3,275.85	\$0.00	\$3,275.85	5.7	5,011
Electric Unitary HVAC Measures			5,961	4.0	0.0	\$684.47	\$21,915.95	\$0.00	\$21,915.95	32.0	6,002
	Install High Efficiency Electric AC	No	5,961	4.0	0.0	\$684.47	\$21,915.95	\$0.00	\$21,915.95	32.0	6,002
Gas Heating (HVAC/Process) Replacement			0	0.0	433.0	\$4,240.47	\$67,840.79	\$7,814.40	\$60,026.39	14.2	50,699
ECM 8	Install High Efficiency Hot Water Boilers	Yes	0	0.0	433.0	\$4,240.47	\$67,840.79	\$7,814.40	\$60,026.39	14.2	50,699
Plug Load Equipment Control - Vending Machine			1,954	0.0	0.0	\$224.42	\$460.00	\$0.00	\$460.00	2.0	1,968
ECM 9	Vending Machine Control	Yes	1,954	0.0	0.0	\$224.42	\$460.00	\$0.00	\$460.00	2.0	1,968
TOTALS FOR PROPOSED MEASURES			145,669	26.4	433.0	\$20,967.61	\$151,991.69	\$17,714.40	\$134,277.29	6.4	234,316
TOTALS FOR ALL MEASURES			151,630	30.4	433.0	\$21,652.09	\$173,907.63	\$17,714.40	\$156,193.23	7.2	203,390

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

Middle Schools (2)



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
- ?

Veterans Memorial 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			164,024	39.8	0.0	\$18,522.53	\$109,119.04	\$18,690.00	\$90,429.04	4.9	165,171
ECM 1	Install LED Fixtures	Yes	26,713	4.0	0.0	\$3,016.63	\$13,922.76	\$2,540.00	\$11,382.76	3.8	26,900
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	2,174	0.8	0.0	\$245.44	\$3,626.00	\$0.00	\$3,626.00	14.8	2,189
ECM 3	Retrofit Fixtures with LED Lamps	Yes	135,137	35.0	0.0	\$15,260.45	\$91,570.28	\$16,150.00	\$75,420.28	4.9	136,082
Lighting Control Measures			28,969	8.0	0.0	\$3,271.39	\$32,762.00	\$4,505.00	\$28,257.00	8.6	29,172
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	28,969	8.0	0.0	\$3,271.39	\$32,762.00	\$4,505.00	\$28,257.00	8.6	29,172
Motor Upgrades			1,211	0.3	0.0	\$136.71	\$3,693.44	\$0.00	\$3,693.44	27.0	1,219
ECM 5	Premium Efficiency Motors	Yes	1,211	0.3	0.0	\$136.71	\$3,693.44	\$0.00	\$3,693.44	27.0	1,219
Variable Frequency Drive (VFD) Measures			35,497	3.6	0.0	\$4,008.54	\$10,388.90	\$0.00	\$10,388.90	2.6	35,745
ECM 6	Install VFDs on Hot Water Pumps	Yes	35,497	3.6	0.0	\$4,008.54	\$10,388.90	\$0.00	\$10,388.90	2.6	35,745
Electric Unitary HVAC Measures			33,926	16.2	0.0	\$3,831.09	\$110,303.76	\$3,942.50	\$106,361.26	27.8	34,163
ECM 7	Install High Efficiency Electric AC	Yes	33,926	16.2	0.0	\$3,831.09	\$110,303.76	\$3,942.50	\$106,361.26	27.8	34,163
Gas Heating (HVAC/Process) Replacement			0	0.0	799.0	\$8,270.53	\$83,585.53	\$10,250.00	\$73,335.53	8.9	93,559
ECM 8	Install High Efficiency Hot Water Boilers	Yes	0	0.0	765.7	\$7,925.37	\$71,622.46	\$8,250.00	\$63,372.46	8.0	89,654
ECM 9	Install High Efficiency Furnaces	Yes	0	0.0	33.3	\$345.16	\$11,963.07	\$2,000.00	\$9,963.07	28.9	3,905
HVAC System Improvements			12,897	2.9	0.0	\$1,456.42	\$4,750.00	\$2,000.00	\$2,750.00	1.9	12,987
ECM 10	Install Dual Enthalpy Outside Economizer Control	Yes	12,897	2.9	0.0	\$1,456.42	\$4,750.00	\$2,000.00	\$2,750.00	1.9	12,987
Plug Load Equipment Control - Vending Machine			1,954	0.0	0.0	\$220.70	\$460.00	\$0.00	\$460.00	2.1	1,968
ECM 11	Vending Machine Control	Yes	1,954	0.0	0.0	\$220.70	\$460.00	\$0.00	\$460.00	2.1	1,968
TOTALS			278,479	70.8	799.0	\$39,717.90	\$355,062.67	\$39,387.50	\$315,675.17	7.9	373,985

* - 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).

Lake Riviera 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			147,036	38.5	0.0	\$17,051.79	\$109,358.97	\$19,810.00	\$89,548.97	5.3	148,064
ECM 1	Install LED Fixtures	Yes	20,911	3.4	0.0	\$2,424.99	\$10,930.67	\$3,900.00	\$7,030.67	2.9	21,057
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	10,703	3.0	0.0	\$1,241.21	\$16,171.00	\$940.00	\$15,231.00	12.3	10,778
ECM 3	Retrofit Fixtures with LED Lamps	Yes	115,423	32.1	0.0	\$13,385.59	\$82,257.31	\$14,970.00	\$67,287.31	5.0	116,230
Lighting Control Measures			29,759	8.2	0.0	\$3,451.19	\$28,790.00	\$4,005.00	\$24,785.00	7.2	29,967
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	29,759	8.2	0.0	\$3,451.19	\$28,790.00	\$4,005.00	\$24,785.00	7.2	29,967
Motor Upgrades			4,701	1.1	0.0	\$545.20	\$5,441.93	\$0.00	\$5,441.93	10.0	4,734
ECM 5	Premium Efficiency Motors	Yes	4,701	1.1	0.0	\$545.20	\$5,441.93	\$0.00	\$5,441.93	10.0	4,734
Variable Frequency Drive (VFD) Measures			42,557	4.5	0.0	\$4,935.38	\$16,393.60	\$0.00	\$16,393.60	3.3	42,855
ECM 6	Install VFDs on Hot Water Pumps	Yes	42,557	4.5	0.0	\$4,935.38	\$16,393.60	\$0.00	\$16,393.60	3.3	42,855
Gas Heating (HVAC/Process) Replacement			0	0.0	994.7	\$9,840.06	\$184,109.73	\$0.00	\$184,109.73	18.7	116,465
ECM 7	Install High Efficiency Hot Water Boilers	Yes	0	0.0	994.7	\$9,840.06	\$184,109.73	\$0.00	\$184,109.73	18.7	116,465
Domestic Water Heating Upgrade			0	0.0	53.0	\$524.74	\$11,500.21	\$398.00	\$11,102.21	21.2	6,211
ECM 8	Install High Efficiency Gas Water Heater	Yes	0	0.0	53.0	\$524.74	\$11,500.21	\$398.00	\$11,102.21	21.2	6,211
Plug Load Equipment Control - Vending Machine			3,909	0.0	0.0	\$453.29	\$920.00	\$0.00	\$920.00	2.0	3,936
ECM 9	Vending Machine Control	Yes	3,909	0.0	0.0	\$453.29	\$920.00	\$0.00	\$920.00	2.0	3,936
TOTALS			227,963	52.3	1,047.7	\$36,801.65	\$356,514.44	\$24,213.00	\$332,301.44	9.0	352,232

* - 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).

High Schools (2)



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
- ?

Brick Township Memorial 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			374,736	95.8	0.0	\$37,079.38	\$269,589.16	\$26,980.00	\$242,609.16	6.5	377,356
ECM 1	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	127,906	38.1	0.0	\$12,655.99	\$124,692.33	\$0.00	\$124,692.33	9.9	128,800
ECM 2	Retrofit Fixtures with LED Lamps	Yes	246,831	57.6	0.0	\$24,423.39	\$144,896.83	\$26,980.00	\$117,916.83	4.8	248,557
Lighting Control Measures			68,312	17.8	0.0	\$6,759.29	\$66,564.00	\$9,120.00	\$57,444.00	8.5	68,789
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	68,312	17.8	0.0	\$6,759.29	\$66,564.00	\$9,120.00	\$57,444.00	8.5	68,789
Motor Upgrades			5,307	1.2	0.0	\$525.16	\$15,835.36	\$0.00	\$15,835.36	30.2	5,345
ECM 4	Premium Efficiency Motors	Yes	5,307	1.2	0.0	\$525.16	\$15,835.36	\$0.00	\$15,835.36	30.2	5,345
Variable Frequency Drive (VFD) Measures			125,702	13.6	0.0	\$12,437.98	\$45,192.55	\$3,300.00	\$41,892.55	3.4	126,581
ECM 5	Install VFDs on Constant Volume (CV) HVAC	Yes	14,784	3.9	0.0	\$1,462.83	\$10,388.90	\$2,400.00	\$7,988.90	5.5	14,887
ECM 6	Install VFDs on Chilled Water Pumps	Yes	35,497	3.6	0.0	\$3,512.38	\$10,388.90	\$0.00	\$10,388.90	3.0	35,745
ECM 7	Install VFDs on Hot Water Pumps	Yes	57,282	6.1	0.0	\$5,667.98	\$19,220.30	\$0.00	\$19,220.30	3.4	57,683
ECM 8	Install VFDs on Cooling Tower Fans	Yes	18,139	0.0	0.0	\$1,794.79	\$5,194.45	\$900.00	\$4,294.45	2.4	18,266
Electric Unitary HVAC Measures			11,443	6.0	0.0	\$1,132.26	\$31,421.21	\$1,951.50	\$29,469.71	26.0	11,523
ECM 9	Install High Efficiency Electric AC	Yes	11,443	6.0	0.0	\$1,132.26	\$31,421.21	\$1,951.50	\$29,469.71	26.0	11,523
Gas Heating (HVAC/Process) Replacement			0	0.0	855.7	\$7,041.39	\$173,247.39	\$0.00	\$173,247.39	24.6	100,195
ECM 10	Install High Efficiency Hot Water Boilers	Yes	0	0.0	855.7	\$7,041.39	\$173,247.39	\$0.00	\$173,247.39	24.6	100,195
HVAC System Improvements			7,327	1.7	0.0	\$725.00	\$3,000.00	\$1,250.00	\$1,750.00	2.4	7,378
ECM 11	Install Dual Enthalpy Outside Economizer Control	Yes	7,327	1.7	0.0	\$725.00	\$3,000.00	\$1,250.00	\$1,750.00	2.4	7,378
Plug Load Equipment Control - Vending Machine			3,566	0.0	0.0	\$352.87	\$690.00	\$0.00	\$690.00	2.0	3,591
ECM 12	Vending Machine Control	Yes	3,566	0.0	0.0	\$352.87	\$690.00	\$0.00	\$690.00	2.0	3,591
TOTALS			596,394	136.0	855.7	\$66,053.32	\$605,539.66	\$42,601.50	\$562,938.16	8.5	700,759

* - 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).

Brick Township High School

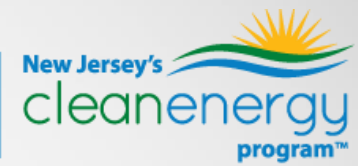


Energy Conservation Measure		Recommend?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			283,591	58.6	0.0	\$31,998.63	\$203,953.45	\$21,640.00	\$182,313.45	5.7	285,574
ECM 1	Install LED Fixtures	Yes	17,733	6.8	0.0	\$2,000.90	\$30,740.40	\$4,205.00	\$26,535.40	13.3	17,857
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	118,319	22.7	0.0	\$13,350.42	\$92,306.67	\$5,600.00	\$86,706.67	6.5	119,147
ECM 3	Retrofit Fixtures with LED Lamps	Yes	146,390	29.0	0.0	\$16,517.72	\$78,862.85	\$11,835.00	\$67,027.85	4.1	147,413
ECM 4	Install LED Exit Signs	Yes	1,148	0.1	0.0	\$129.58	\$2,043.55	\$0.00	\$2,043.55	15.8	1,156
Lighting Control Measures			32,417	6.2	0.0	\$3,657.76	\$29,328.00	\$3,800.00	\$25,528.00	7.0	32,644
ECM 5	Install Occupancy Sensor Lighting Controls	Yes	26,985	5.1	0.0	\$3,044.77	\$28,284.00	\$3,800.00	\$24,484.00	8.0	27,173
ECM 6	Install High/Low Lighting Controls	Yes	5,433	1.0	0.0	\$612.99	\$1,044.00	\$0.00	\$1,044.00	1.7	5,471
Motor Upgrades			3,362	0.5	0.0	\$379.36	\$804.84	\$0.00	\$804.84	2.1	3,386
ECM 7	Premium Efficiency Motors	Yes	3,362	0.5	0.0	\$379.36	\$804.84	\$0.00	\$804.84	2.1	3,386
Variable Frequency Drive (VFD) Measures			8,481	0.0	74.6	\$1,732.92	\$3,007.65	\$900.00	\$2,107.65	1.2	17,276
ECM 8	Install VFDs on Single-Speed Kitchen Hoods	Yes	8,481	0.0	74.6	\$1,732.92	\$3,007.65	\$900.00	\$2,107.65	1.2	17,276
Electric Unitary HVAC Measures			53,570	39.7	0.0	\$6,044.49	\$106,747.87	\$5,139.00	\$101,608.87	16.8	53,944
	Install High Efficiency Electric AC	No	42,948	25.4	0.0	\$4,846.01	\$60,104.24	\$2,868.00	\$57,236.24	11.8	43,248
	Install High Efficiency Heat Pumps	No	10,622	14.2	0.0	\$1,198.48	\$46,643.63	\$2,271.00	\$44,372.63	37.0	10,696
HVAC System Improvements			14,852	3.3	0.0	\$1,675.81	\$2,000.00	\$500.00	\$1,500.00	0.9	14,956
ECM 9	Install Dual Enthalpy Outside Economizer Control	Yes	14,852	3.3	0.0	\$1,675.81	\$2,000.00	\$500.00	\$1,500.00	0.9	14,956
Domestic Water Heating Upgrade			0	0.0	53.4	\$555.79	\$250.95	\$0.00	\$250.95	0.5	6,257
ECM 10	Install Low-Flow Domestic Hot Water Devices	Yes	0	0.0	53.4	\$555.79	\$250.95	\$0.00	\$250.95	0.5	6,257
Plug Load Equipment Control - Vending Machine			8,744	0.0	0.0	\$986.64	\$1,610.00	\$0.00	\$1,610.00	1.6	8,805
ECM 11	Vending Machine Control	Yes	8,744	0.0	0.0	\$986.64	\$1,610.00	\$0.00	\$1,610.00	1.6	8,805
TOTAL FOR PROPOSED MEASURES			351,447	68.5	128.0	\$40,986.91	\$240,954.89	\$26,840.00	\$214,114.89	5.2	368,897
TOTAL FOR ALL MEASURES			405,017	108.2	128.0	\$47,031.40	\$347,702.77	\$31,979.00	\$315,723.77	6.7	422,842

* - 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).

Support Buildings (6)



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

BOE Business Office & Central Administration Building



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		146,462	30.3	0.0	\$16,893.89	\$64,444.45	\$5,930.00	\$58,514.45	3.5	147,486
ECM 1	Install LED Fixtures	98,046	14.2	0.0	\$11,309.32	\$32,273.18	\$120.00	\$32,153.18	2.8	98,732
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	2,522	0.9	0.0	\$290.95	\$1,934.33	\$190.00	\$1,744.33	6.0	2,540
ECM 3	Retrofit Fixtures with LED Lamps	45,630	15.2	0.0	\$5,263.31	\$29,914.27	\$5,620.00	\$24,294.27	4.6	45,949
ECM 4	Install LED Exit Signs	263	0.0	0.0	\$30.32	\$322.67	\$0.00	\$322.67	10.6	265
Lighting Control Measures		9,961	3.5	0.0	\$1,149.01	\$11,774.00	\$1,420.00	\$10,354.00	9.0	10,031
ECM 5	Install Occupancy Sensor Lighting Controls	9,961	3.5	0.0	\$1,149.01	\$11,774.00	\$1,420.00	\$10,354.00	9.0	10,031
Motor Upgrades		434	0.1	0.0	\$50.00	\$1,609.68	\$0.00	\$1,609.68	32.2	437
ECM 6	Premium Efficiency Motors	434	0.1	0.0	\$50.00	\$1,609.68	\$0.00	\$1,609.68	32.2	437
Variable Frequency Drive (VFD) Measures		5,972	0.8	0.0	\$688.82	\$6,015.30	\$0.00	\$6,015.30	8.7	6,013
ECM 7	Install VFDs on Hot Water Pumps	5,972	0.8	0.0	\$688.82	\$6,015.30	\$0.00	\$6,015.30	8.7	6,013
Electric Unitary HVAC Measures		7,253	5.1	0.0	\$836.64	\$15,699.58	\$460.00	\$15,239.58	18.2	7,304
ECM 8	Install High Efficiency Electric AC	7,253	5.1	0.0	\$836.64	\$15,699.58	\$460.00	\$15,239.58	18.2	7,304
Gas Heating (HVAC/Process) Replacement		0	0.0	67.9	\$646.45	\$15,842.26	\$1,452.00	\$14,390.26	22.3	7,954
ECM 9	Install High Efficiency Hot Water Boilers	0	0.0	67.9	\$646.45	\$15,842.26	\$1,452.00	\$14,390.26	22.3	7,954
Domestic Water Heating Upgrade		3,036	1.4	-10.4	\$251.65	\$2,091.20	\$300.00	\$1,791.20	7.1	1,845
ECM 10	Install Tankless Water Heater	3,036	1.4	-10.4	\$251.65	\$2,091.20	\$300.00	\$1,791.20	7.1	1,845
TOTALS		173,118	41.1	57.6	\$20,516.46	\$117,476.46	\$9,562.00	\$107,914.46	5.3	181,069

* - 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).

Herbertsville Elementary School Annex



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			3,761	1.0	0.0	\$534.02	\$2,585.15	\$560.00	\$2,025.15	3.8	3,788
ECM 1	Install LED Fixtures	Yes	718	0.3	0.0	\$101.88	\$781.35	\$200.00	\$581.35	5.7	723
ECM 2	Retrofit Fixtures with LED Lamps	Yes	3,044	0.7	0.0	\$432.14	\$1,803.80	\$360.00	\$1,443.80	3.3	3,065
Lighting Control Measures			728	0.2	0.0	\$103.41	\$116.00	\$20.00	\$96.00	0.9	733
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	728	0.2	0.0	\$103.41	\$116.00	\$20.00	\$96.00	0.9	733
TOTALS			4,490	1.1	0.0	\$637.43	\$2,701.15	\$580.00	\$2,121.15	3.3	4,521

* - 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).

Brick Township BOE Warehouse



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			6,489	2.2	0.0	\$833.07	\$9,239.97	\$990.00	\$8,249.97	9.9	6,534
ECM 1	Install LED Fixtures	Yes	975	0.1	0.0	\$125.15	\$976.64	\$0.00	\$976.64	7.8	982
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	5,514	2.1	0.0	\$707.92	\$8,263.33	\$990.00	\$7,273.33	10.3	5,553
Lighting Control Measures			1,697	0.6	0.0	\$217.85	\$1,968.00	\$270.00	\$1,698.00	7.8	1,709
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	1,697	0.6	0.0	\$217.85	\$1,968.00	\$270.00	\$1,698.00	7.8	1,709
***	<i>Install Tankless Water Heater</i>	<i>No</i>	<i>2,031</i>	<i>0.5</i>	<i>-6.9</i>	<i>\$195.62</i>	<i>\$973.72</i>	<i>\$300.00</i>	<i>\$673.72</i>	<i>3.4</i>	<i>1,234</i>
TOTALS			8,186	2.8	0.0	\$1,050.91	\$11,207.97	\$1,260.00	\$9,947.97	9.5	8,243

* - 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).

*** Measures highlighted in *red* were evaluated, but are not recommended for implementation. Values estimated for these measures are not included in ECM totals.

Brick Township HS Field House



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			564	0.3	0.0	\$126.61	\$683.18	\$130.00	\$553.18	4.4	568
ECM 1	Install LED Fixtures	Yes	238	0.2	0.0	\$53.36	\$390.68	\$100.00	\$290.68	5.4	239
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	255	0.1	0.0	\$57.24	\$234.00	\$20.00	\$214.00	3.7	257
ECM 3	Retrofit Fixtures with LED Lamps	Yes	71	0.0	0.0	\$16.01	\$58.50	\$10.00	\$48.50	3.0	72
Lighting Control Measures			38	0.0	0.0	\$8.44	\$116.00	\$20.00	\$96.00	11.4	38
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	38	0.0	0.0	\$8.44	\$116.00	\$20.00	\$96.00	11.4	38
TOTALS			601	0.3	0.0	\$135.05	\$799.18	\$150.00	\$649.18	4.8	606

* - 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).

Brick Township HS Transportation 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			17,907	5.6	0.0	\$3,428.58	\$10,615.18	\$1,110.00	\$9,505.18	2.8	18,033
ECM 1	Install LED Fixtures	Yes	2,834	1.1	0.0	\$542.59	\$3,170.55	\$510.00	\$2,660.55	4.9	2,854
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	4,470	1.3	0.0	\$855.87	\$3,476.33	\$270.00	\$3,206.33	3.7	4,501
ECM 3	Retrofit Fixtures with LED Lamps	Yes	10,603	3.2	0.0	\$2,030.12	\$3,968.30	\$330.00	\$3,638.30	1.8	10,677
Lighting Control Measures			672	0.2	0.0	\$128.73	\$812.00	\$120.00	\$692.00	5.4	677
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	672	0.2	0.0	\$128.73	\$812.00	\$120.00	\$692.00	5.4	677
Gas Heating (HVAC/Process) Replacement			0	0.0	23.3	\$245.93	\$4,675.37	\$0.00	\$4,675.37	19.0	2,723
	Install High Efficiency Unit Heaters	No	0	0.0	23.3	\$245.93	\$4,675.37	\$0.00	\$4,675.37	19.0	2,723
Domestic Water Heating Upgrade			798	0.0	3.2	\$186.91	\$28.68	\$0.00	\$28.68	0.2	1,182
ECM 5	Install Low-Flow Domestic Hot Water Devices	Yes	798	0.0	3.2	\$186.91	\$28.68	\$0.00	\$28.68	0.2	1,182
Plug Load Equipment Control - Vending Machine			1,612	0.0	0.0	\$308.61	\$460.00	\$0.00	\$460.00	1.5	1,623
ECM 6	Vending Machine Control	Yes	1,612	0.0	0.0	\$308.61	\$460.00	\$0.00	\$460.00	1.5	1,623
TOTAL FOR RECOMMENDED MEASURES			20,989	6	3	\$4,052.82	\$11,915.86	\$1,230.00	\$10,685.86	2.6	21,515
TOTALS FOR ALL EVALUATED MEASURES			20,989	5.8	26.5	\$4,298.75	\$16,591.22	\$1,230.00	\$15,361.22	3.6	24,238

* - 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 Best 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
- Plug Load Controls
- Water Conservation

See individual reports for specific EE best practices by building

ENERGY STAR Portfolio Manager®



Facility Name	EnergyStar SEP Score	CO2e Emissions Reduction (lbs)*
Herbertsville Elementary School	28	63,671
Herbertsville Elementary School Annex	28	4,521
Lanes Mill Elementary School	70	59,948
Brick Township Board of Education Warehouse	48	7,009
Osbornville Elementary School	21	94,988
Warren H. Wolf Elementary School	74	124,927
Drum Point Elementary School	16	193,498
Emma Havens Young Elementary School	86	169,826
Midstreams Elementary School	47	152,692
Board of Education Business Office	17	181,069
Central Administration Building	17	181,069
Veterans Memorial Middle School	24	306,585
Lake Riviera Middle School	30	363,248
Brick Township Memorial High School	83	669,975
Brick Township High School	60	368,897
Veterans Memorial Elementary School	14	234,316
Brick Township High School Field House	14	606
Brick Township High School Transportation Building	tbd	tbd

* This data represents if all recommended measures were implemented.

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

- Pay for Performance (P4P)

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

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

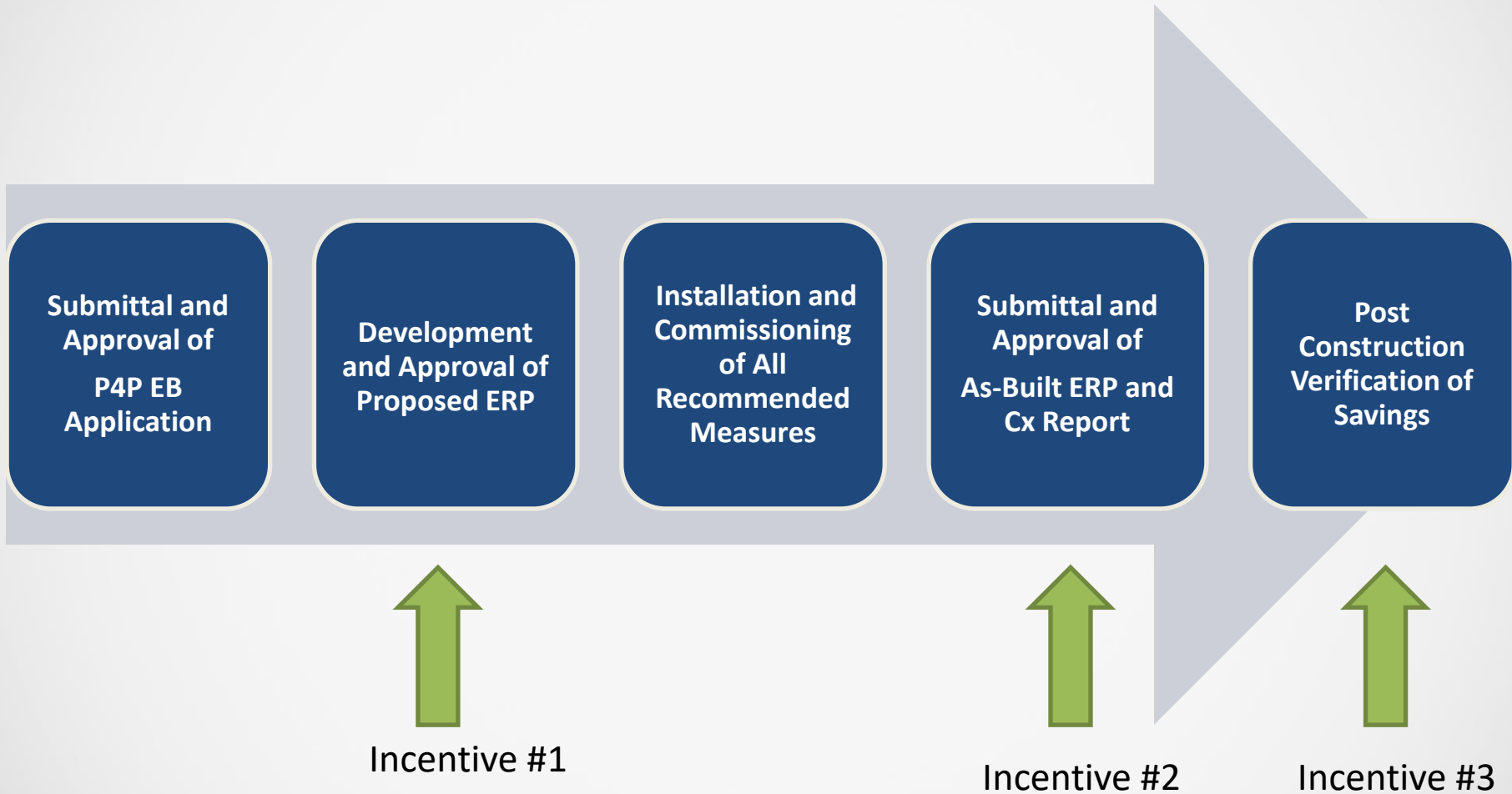
732-433-4362 (cell)

732 378 4920 (office)

jryan@njng.com



P4P EB: PROCESS

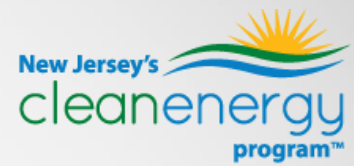


P4P EB: INCENTIVES

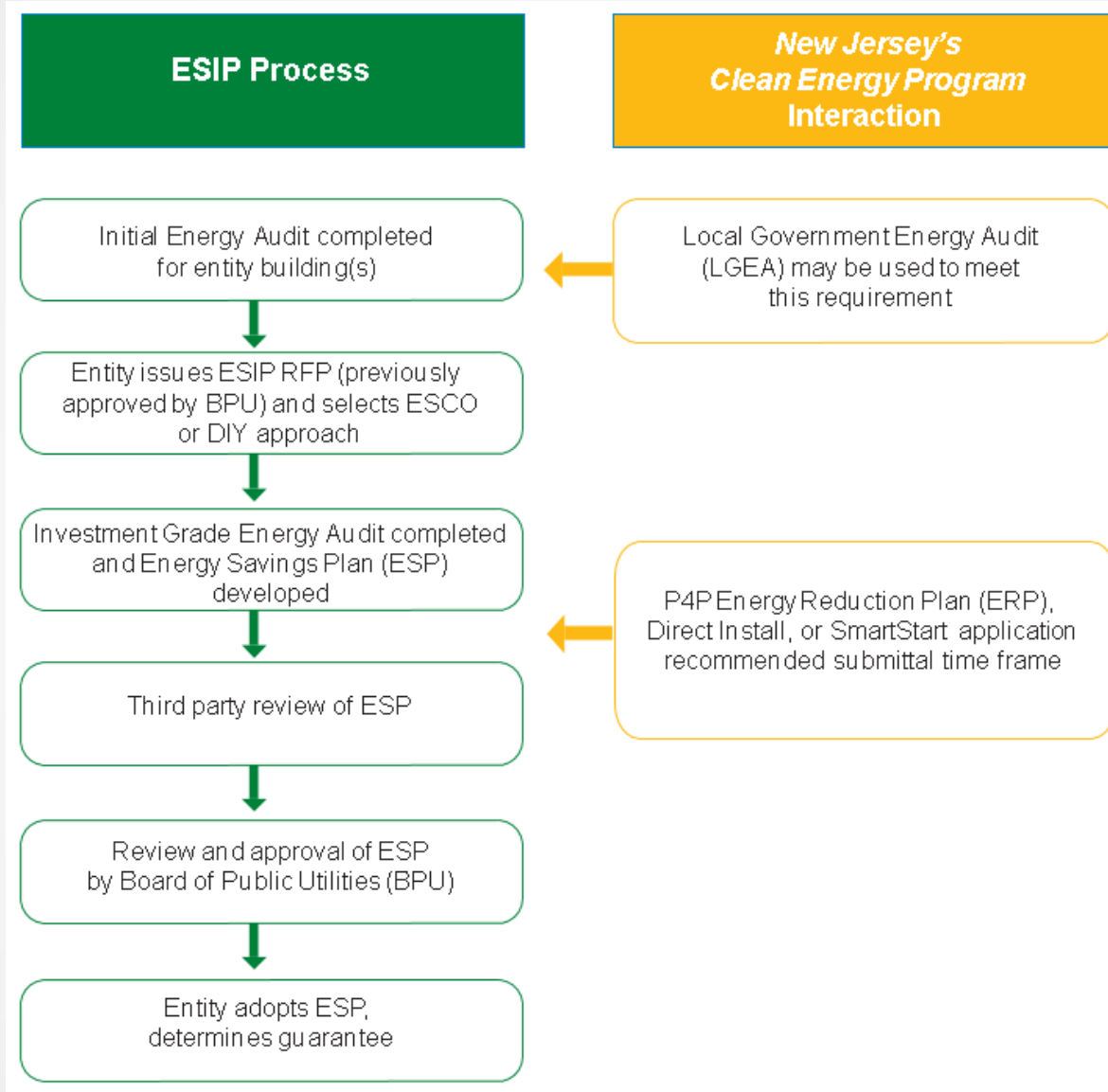


Incentive #1: Energy Reduction Plan			
Incentive Amount:		\$0.15	per sq ft
Minimum Incentive:		\$7,500	
Maximum Incentive:		\$50,000	or 50% of facility annual energy cost
Incentive #2: Installation of Recommended Measures			
Minimum Performance Target:		15%	
Electric Incentives	Base Incentive based on 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)



- Program administered directly by BPU
- 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 or require voter approval.
- Requires an audit as 1st step (LGEA satisfied this requirement)





FOR MORE INFORMATION

ESIP

Mike Thulen

ESIP Coordinator

Office: 609-330-2419

Cell: 732-330-2419

ESIP@bpu.nj.gov

Questions



?



FOR MORE INFORMATION

Visit NJCleanEnergy.com

Call (866) NJSMART

Jim Friedl

Outreach Manager

732-855-6543

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