

New Jersey's Clean Energy Program

LGEA Exit Meeting for:
Middletown Township

TRC Energy Services

December 18, 2018

Introductions



Middletown Township

- Anthony Mercantante – Township Administrator
- Amy Sarrinikolaou – Director of Community Development
- Ted Maloney – Township Engineer
- Doug Ward – Supervisor of DPW

NJ Clean Energy Program

- Brian DeLuca, CEM – TRC Program Manager
- Alex Klieverik, CEM – TRC Auditor
- Elizabeth Ebinger – TRC Account Manager
- Tony O'Donnell – TRC Outreach Account Manager
- Arif Welcher – BPU Ombudsman
- Mike Thulen – ESIP Coordinator
- Nancy Quirk – Sustainable Jersey (via phone)

Agenda

- The audit process overview
- Energy use & existing conditions
- Review of **E**nergy **C**onservation **M**asures (ECMs) identified
- Questions or concerns regarding the draft audit report
- Overview of NJCEP equipment incentives
- Next steps for Middletown Township

LGEA Process



- Application Approval
- Scheduling Call
- Audit
- Benchmarking & Analysis
- Draft Report
- Exit Meeting Presentation
- Final Report

Site Visit and Utility Analysis



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

Site Visit and Utility Analysis



Sites Visited/Analyzed

- Administration and Office Building
- Bayshore Annex - Health Building
- Cultural Art Center
- Department of Public Works
- Municipal Garages
- Police Garage (Gym inside)
- Department of Planning and Community Development
- Crossroads Drug Treatment (former Lincroft Branch Library)
- Public Library-Main Branch
- GYM, Croydon Hall (Bryant Ave.)
- Senior Center
- Tonya Keller Bayshore Recreation Center
- Field House Building
- Poricy Park Nature Center
- EMS
- Former Parks and Rec Building
- Annex building at Poricy Park
- Johnson Gill Annex
- CNG Fueling Station
- Bodman Park Maintenance Building
- MYAA Field and Bodman Park
- Compost Site
- McMahan Park
- Normandy Park, Lighting
- Normandy Park, Baseball Field
- Nick Trezza Field

Benchmarking





LEARN MORE AT
energystar.gov

ENERGY STAR® Statement of Energy Performance

45
ENERGY STAR®
Score¹

Crossroads Drug Treatment

Primary Property Type: Office
Gross Floor Area (ft²): 3,328
Built: 1908

For Year Ending: May 31, 2017
Date Generated: November 01, 2018

1. The ENERGY STAR score is a 1-100 assessment of a building's energy efficiency as compared with similar buildings nationwide, adjusting for climate and business activity.

Property & Contact Information		
Property Address Crossroads Drug Treatment 730 Newman Springs Road Middletown, New Jersey 07738	Property Owner Middletown Township 1 King's Highway Middletown, NJ 07748 732-615-2000	Primary Contact Anthony Mercantante 1 King's Highway Middletown, NJ 07748 732-615-2000 x 2013 amercant@middletownnj.org
Property ID: 6414806		

Energy Consumption and Energy Use Intensity (EUI)			
Site EUI 89.1 kBtu/ft²	Annual Energy by Fuel	National Median Comparison	
	Fuel Oil (No. 2) (kBtu) 242,673 (82%)	National Median Site EUI (kBtu/ft²)	85.3
	Electric - Grid (kBtu) 53,957 (18%)	National Median Source EUI (kBtu/ft²)	113.9
Source EUI 119 kBtu/ft²		% Diff from National Median Source EUI	4%
		Annual Emissions	
		Greenhouse Gas Emissions (Metric Tons CO2e/year)	24

Signature & Stamp of Verifying Professional

I _____ (Name) verify that the above information is true and correct to the best of my knowledge.

Signature: _____ Date: _____

Licensed Professional

() _____



Professional Engineer Stamp
(if applicable)

Benchmarking



Building Name	ENERGY STAR Score
Administration and Office Building	N/A
Bayshore Annex - Health Building	39
Cultural Art Center	N/A
Dept. of Public Works, Garage, & CNG Fueling Station	N/A
Police Garage (Gym inside)	N/A
Department of Planning and Community Development	26
Crossroads Drug Treatment (former Lincroft Branch Library)	45
Public Library-Main Branch	N/A
Croydon Hall, Gym	N/A
Senior Center	N/A
Tonya Keller Bayshore Recreation Center	N/A
Field House Building	N/A

Building Name	ENERGY STAR Score
Poricy Park Nature Center	N/A
EMS	N/A
Former Parks and Rec Building	N/A
Annex building at Poricy Park	N/A
Johnson Gill Annex	85
Bodman Park, Maint. Building, McMahan Park, Nick Trezza Field, & MYAA Park	N/A
Compost Site	N/A
Normandy Park	N/A

ENERGY STAR Scores are percentile ranking from 1 (least efficient) to 100 (most efficient). It compares your building's energy performance to similar buildings nationwide.

All Opportunities



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	654,575	219.4	-88.9	\$98,114.92	\$453,082.69	\$57,967.00	\$395,115.69	4.0	648,679
Install LED Fixtures	281,759	128.8	-12.5	\$46,251.10	\$323,962.16	\$36,460.00	\$287,502.16	6.2	282,260
Retrofit Fluorescent Fixtures with LED Lamps and Drivers	29,135	10.1	-6.3	\$4,291.30	\$13,559.14	\$1,493.00	\$12,066.14	2.8	28,598
Retrofit Fixtures with LED Lamps	343,656	80.5	-70.1	\$47,569.33	\$115,488.97	\$20,014.00	\$95,474.97	2.0	337,797
Install LED Exit Signs	25	0.0	0.0	\$3.19	\$72.42	\$0.00	\$72.42	22.7	24
Lighting Control Measures	86,631	18.7	-17.6	\$12,086.75	\$55,356.00	\$5,285.00	\$50,071.00	4.1	85,174
Install Occupancy Sensor Lighting Controls	76,138	16.9	-15.5	\$10,695.86	\$45,686.00	\$5,285.00	\$40,401.00	3.8	74,853
Install High/Low Lighting Controls	10,492	1.8	-2.1	\$1,390.89	\$9,670.00	\$0.00	\$9,670.00	7.0	10,321
Electric Unitary HVAC Measures	39,961	19.7	0.0	\$5,839.02	\$513,567.42	\$8,623.50	\$504,943.92	86.5	40,240
Install High Efficiency Air Conditioning Units	39,961	19.7	0.0	\$5,839.02	\$513,567.42	\$8,623.50	\$504,943.92	86.5	40,240
Gas Heating (HVAC/Process) Replacement	0	0.0	586.4	\$6,786.94	\$130,087.11	\$11,067.25	\$119,019.86	17.5	70,739
Install High Efficiency Hot Water Boilers	0	0.0	42.0	\$508.32	\$23,938.40	\$1,867.25	\$22,071.15	43.4	4,914
Install High Efficiency Furnaces	0	0.0	544.4	\$6,278.62	\$106,148.71	\$9,200.00	\$96,948.71	15.4	65,824
HVAC System Improvements	8,308	0.0	12.4	\$1,234.78	\$8,156.52	\$0.00	\$8,156.52	6.6	9,820
Implement Demand Control Ventilation (DCV)	8,308	0.0	12.4	\$1,234.78	\$8,156.52	\$0.00	\$8,156.52	6.6	9,820
Plug Load Equipment Control - Vending Machine	16,803	1.9	0.0	\$2,535.08	\$2,760.00	\$0.00	\$2,760.00	1.1	16,921
Vending Machine Control	16,803	1.9	0.0	\$2,535.08	\$2,760.00	\$0.00	\$2,760.00	1.1	16,921
TOTALS	806,278	259.7	492.3	\$126,597.49	\$1,163,009.74	\$82,942.75	\$1,080,066.99	8.5	871,573

* - 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).

Cost Effective Opportunities*



* Opportunities considered cost effective have a payback period less than 2/3rds of the useful life of the measure

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		654,550	219.4	-88.9	\$98,111.73	\$453,010.27	\$57,967.00	\$395,043.27	4.0	648,655
ECM 1	Install LED Fixtures	281,759	128.8	-12.5	\$46,251.10	\$323,962.16	\$36,460.00	\$287,502.16	6.2	282,260
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	29,135	10.1	-6.3	\$4,291.30	\$13,559.14	\$1,493.00	\$12,066.14	2.8	28,598
ECM 3	Retrofit Fixtures with LED Lamps	343,656	80.5	-70.1	\$47,569.33	\$115,488.97	\$20,014.00	\$95,474.97	2.0	337,797
Lighting Control Measures		86,604	18.7	-17.6	\$12,083.27	\$55,086.00	\$5,285.00	\$49,801.00	4.1	85,147
ECM 4	Install Occupancy Sensor Lighting Controls	76,138	16.9	-15.5	\$10,695.86	\$45,686.00	\$5,285.00	\$40,401.00	3.8	74,853
ECM 5	Install High/Low Lighting Controls	10,466	1.8	-2.1	\$1,387.41	\$9,400.00	\$0.00	\$9,400.00	6.8	10,295
Electric Unitary HVAC Measures		6,227	2.0	0.0	\$941.66	\$10,656.65	\$460.00	\$10,196.65	10.8	6,271
ECM 6	Install High Efficiency Air Conditioning Units	6,227	2.0	0.0	\$941.66	\$10,656.65	\$460.00	\$10,196.65	10.8	6,271
Gas Heating (HVAC/Process) Replacement		0	0.0	353.0	\$4,087.94	\$44,126.52	\$4,400.00	\$39,726.52	9.7	43,415
ECM 7	Install High Efficiency Furnaces	0	0.0	353.0	\$4,087.94	\$44,126.52	\$4,400.00	\$39,726.52	9.7	43,415
HVAC System Improvements		8,308	0.0	12.4	\$1,234.78	\$8,156.52	\$0.00	\$8,156.52	6.6	9,820
ECM 8	Implement Demand Control Ventilation (DCV)	8,308	0.0	12.4	\$1,234.78	\$8,156.52	\$0.00	\$8,156.52	6.6	9,820
Plug Load Equipment Control - Vending Machine		16,803	1.9	0.0	\$2,535.08	\$2,760.00	\$0.00	\$2,760.00	1.1	16,921
ECM 9	Vending Machine Control	16,803	1.9	0.0	\$2,535.08	\$2,760.00	\$0.00	\$2,760.00	1.1	16,921
TOTALS		772,493	242.0	258.9	\$118,994.46	\$573,795.96	\$68,112.00	\$505,683.96	4.2	810,229

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Administration & Office Building



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		94,950	16.6	-14	\$12,280	\$184,200	\$28,469	\$4,495	\$23,974	2.0	94,026
ECM 1	Install LED Fixtures	37,976	6.1	-2	\$4,949	\$74,235	\$15,749	\$1,335	\$14,414	2.9	38,014
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	994	0.2	0	\$128	\$1,918	\$206	\$30	\$176	1.4	977
ECM 3	Retrofit Fixtures with LED Lamps	55,955	10.3	-11	\$7,200	\$108,000	\$12,441	\$3,130	\$9,311	1.3	55,011
	Install LED Exit Signs	25	0.0	0	\$3	\$48	\$72	\$0	\$72	22.7	24
Lighting Control Measures		11,351	1.9	-2	\$1,460	\$11,680	\$8,330	\$595	\$7,735	5.3	11,153
ECM 4	Install Occupancy Sensor Lighting Controls	8,304	1.4	-2	\$1,068	\$8,544	\$5,530	\$595	\$4,935	4.6	8,159
ECM 5	Install High/Low Lighting Controls	3,047	0.5	-1	\$392	\$3,136	\$2,800	\$0	\$2,800	7.1	2,994
Electric Unitary HVAC Measures		13,538	2.6	0	\$1,772	\$26,575	\$47,167	\$3,160	\$44,007	24.8	13,632
	Install High Efficiency Air Conditioning Units	13,538	2.6	0	\$1,772	\$26,575	\$47,167	\$3,160	\$44,007	24.8	13,632
Food Service & Refrigeration Measures		1,954	0.2	0	\$256	\$1,279	\$460	\$0	\$460	1.8	1,968
ECM 6	Vending Machine Control	1,954	0.2	0	\$256	\$1,279	\$460	\$0	\$460	1.8	1,968
TOTALS		121,793	21.3	-16	\$15,767	\$223,734	\$84,426	\$8,250	\$76,176	4.8	120,779

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Bayshore Annex – Health Building



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		5,393	1.4	-1	\$747	\$11,202	\$1,951	\$472	\$1,479	2.0	5,298
ECM 1	Retrofit Fixtures with LED Lamps	5,393	1.4	-1	\$747	\$11,202	\$1,951	\$472	\$1,479	2.0	5,298
Lighting Control Measures		1,163	0.3	0	\$161	\$1,289	\$772	\$70	\$702	4.4	1,143
ECM 2	Install Occupancy Sensor Lighting Controls	1,163	0.3	0	\$161	\$1,289	\$772	\$70	\$702	4.4	1,143
TOTALS		6,556	1.8	-1	\$908	\$12,491	\$2,723	\$542	\$2,181	2.4	6,441

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Cultural Arts Center



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		77,860	9.7	-16	\$10,318	\$154,763	\$17,115	\$2,631	\$14,484	1.4	76,528
ECM 1	Install LED Fixtures	11,709	1.5	-2	\$1,556	\$23,342	\$8,444	\$1,245	\$7,199	4.6	11,564
ECM 2	Retrofit Fixtures with LED Lamps	66,151	8.3	-14	\$8,761	\$131,421	\$8,672	\$1,386	\$7,286	0.8	64,964
Lighting Control Measures		12,959	1.5	-3	\$1,716	\$13,730	\$7,790	\$560	\$7,230	4.2	12,726
ECM 3	Install Occupancy Sensor Lighting Controls	8,543	1.0	-2	\$1,131	\$9,052	\$4,590	\$560	\$4,030	3.6	8,390
ECM 4	Install High/Low Lighting Controls	4,416	0.5	-1	\$585	\$4,679	\$3,200	\$0	\$3,200	5.5	4,336
HVAC System Improvements		8,308	0.0	12	\$1,235	\$18,522	\$8,157	\$0	\$8,157	6.6	9,820
ECM 5	Implement Demand Control Ventilation (DCV)	8,308	0.0	12	\$1,235	\$18,522	\$8,157	\$0	\$8,157	6.6	9,820
TOTALS		99,126	11.2	-6	\$13,269	\$187,015	\$33,062	\$3,191	\$29,871	2.3	99,074

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Public Works Building, Garage, & CNG Fueling Station



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		109,961	23.5	-18	\$17,025	\$255,377	\$49,359	\$5,782	\$43,577	2.6	108,569
ECM 1	Install LED Fixtures	52,913	9.9	-6	\$8,219	\$123,281	\$35,263	\$3,710	\$31,553	3.8	52,528
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	14,962	3.7	-3	\$2,309	\$34,637	\$3,375	\$0	\$3,375	1.5	14,693
ECM 3	Retrofit Fixtures with LED Lamps	42,087	9.9	-9	\$6,497	\$97,459	\$10,722	\$2,072	\$8,650	1.3	41,348
Lighting Control Measures		14,915	3.3	-3	\$2,302	\$18,416	\$5,556	\$750	\$4,806	2.1	14,647
ECM 4	Install Occupancy Sensor Lighting Controls	14,915	3.3	-3	\$2,302	\$18,416	\$5,556	\$750	\$4,806	2.1	14,647
Electric Unitary HVAC Measures		2,067	0.6	0	\$324	\$4,857	\$3,176	\$0	\$3,176	9.8	2,082
ECM 5	Install High Efficiency Air Conditioning Units	2,067	0.6	0	\$324	\$4,857	\$3,176	\$0	\$3,176	9.8	2,082
Gas Heating (HVAC/Process) Replacement		0	0.0	308	\$3,337	\$66,737	\$39,276	\$4,000	\$35,276	10.6	36,094
ECM 6	Install High Efficiency Furnaces	0	0.0	308	\$3,337	\$66,737	\$39,276	\$4,000	\$35,276	10.6	36,094
Food Service & Refrigeration Measures		1,954	0.2	0	\$306	\$1,531	\$460	\$0	\$460	1.5	1,968
ECM 7	Vending Machine Control	1,954	0.2	0	\$306	\$1,531	\$460	\$0	\$460	1.5	1,968
TOTALS		128,898	27.7	287	\$23,294	\$346,919	\$97,827	\$10,532	\$87,295	3.7	163,361

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Police Garage



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		6,399	2.6	-1	\$730	\$10,956	\$4,368	\$743	\$3,625	5.0	6,275
ECM 1	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	5,444	2.1	-1	\$621	\$9,320	\$3,732	\$580	\$3,152	5.1	5,338
ECM 2	Retrofit Fixtures with LED Lamps	956	0.4	0	\$109	\$1,636	\$636	\$163	\$473	4.3	937
Lighting Control Measures		1,142	0.5	0	\$130	\$1,043	\$1,350	\$140	\$1,210	9.3	1,120
ECM 3	Install Occupancy Sensor Lighting Controls	1,142	0.5	0	\$130	\$1,043	\$1,350	\$140	\$1,210	9.3	1,120
TOTALS		7,542	3.0	-2	\$861	\$11,999	\$5,718	\$883	\$4,835	5.6	7,395

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Dept. of Planning & Community Development



#	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		2,176	0.9	0	\$318	\$1,116	\$252	\$864	2.7	2,138
ECM 1	Retrofit Fixtures with LED Lamps	2,176	0.9	0	\$318	\$1,116	\$252	\$864	2.7	2,138
Lighting Control Measures		252	0.1	0	\$37	\$386	\$55	\$331	9.0	248
ECM 2	Install Occupancy Sensor Lighting Controls	252	0.1	0	\$37	\$386	\$55	\$331	9.0	248
TOTALS		2,428	1.0	-1	\$355	\$1,502	\$307	\$1,195	3.4	2,387

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Crossroads Drug Treatment



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		4,651	1.7	-1	\$726	\$10,884	\$5,038	\$679	\$4,359	6.0	4,489
ECM 1	Install LED Fixtures	1,807	0.3	0	\$290	\$4,345	\$3,302	\$305	\$2,997	10.3	1,819
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	228	0.1	0	\$35	\$525	\$138	\$20	\$118	3.4	214
ECM 3	Retrofit Fixtures with LED Lamps	2,616	1.3	-1	\$401	\$6,014	\$1,599	\$354	\$1,245	3.1	2,455
Lighting Control Measures		400	0.2	0	\$61	\$491	\$656	\$70	\$586	9.5	376
ECM 4	Install Occupancy Sensor Lighting Controls	400	0.2	0	\$61	\$491	\$656	\$70	\$586	9.5	376
Electric Unitary HVAC Measures		345	0.2	0	\$55	\$830	\$4,518	\$0	\$4,518	81.6	348
	Install High Efficiency Air Conditioning Units	345	0.2	0	\$55	\$830	\$4,518	\$0	\$4,518	81.6	348
Oil Heating (HVAC) Replacement		0	0.0	45	\$751	\$15,021	\$4,850	\$400	\$4,450	5.9	7,321
ECM 5	Install High Efficiency Furnace	0	0.0	45	\$751	\$15,021	\$4,850	\$400	\$4,450	5.9	7,321
TOTALS		5,396	2.1	43	\$1,593	\$27,226	\$15,062	\$1,149	\$13,913	8.7	12,533

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Public Library – Main Branch



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$) *	Estimated Net Cost (\$)	Simple Payback Period (yrs) **	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		127,674	27.3	-22	\$17,398	\$260,965	\$60,597	\$5,480	\$55,117	3.2	125,945
ECM 1	Install LED Fixtures	22,281	3.4	0	\$3,078	\$46,171	\$14,828	\$1,445	\$13,383	4.3	22,436
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	730	0.2	0	\$99	\$1,489	\$679	\$42	\$637	6.4	717
ECM 3	Retrofit Fixtures with LED Lamps	104,663	23.8	-22	\$14,220	\$213,306	\$45,090	\$3,993	\$41,097	2.9	102,791
Lighting Control Measures		29,008	5.6	-6	\$3,941	\$31,529	\$8,946	\$1,015	\$7,931	2.0	28,487
ECM 4	Install Occupancy Sensor Lighting Controls	27,651	5.3	-6	\$3,757	\$30,054	\$7,946	\$1,015	\$6,931	1.8	27,155
ECM 5	Install High/Low Lighting Controls	1,356	0.3	0	\$184	\$1,474	\$1,000	\$0	\$1,000	5.4	1,332
Electric Unitary HVAC Measures		11,023	8.7	0	\$1,523	\$22,843	\$363,583	\$1,278	\$362,305	237.9	11,100
	Install High Efficiency Air Conditioning Units	11,023	8.7	0	\$1,523	\$22,843	\$363,583	\$1,278	\$362,305	237.9	11,100
Gas Heating (HVAC/Process) Replacement		0	0.0	115	\$1,240	\$24,799	\$42,197	\$2,000	\$40,197	32.4	13,512
	Install High Efficiency Furnaces	0	0.0	115	\$1,240	\$24,799	\$42,197	\$2,000	\$40,197	32.4	13,512
Food Service & Refrigeration Measures		1,612	0.2	0	\$223	\$1,113	\$230	\$0	\$230	1.0	1,623
ECM 6	Vending Machine Control	1,612	0.2	0	\$223	\$1,113	\$230	\$0	\$230	1.0	1,623
TOTALS		169,317	41.9	87	\$24,324	\$341,250	\$475,553	\$9,773	\$465,780	19.1	180,668

* - All incentives presented in this table are based on NJ SmartStart 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).

Croyden Hall



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		16,834	3.9	-2	\$2,956	\$44,339	\$11,779	\$1,742	\$10,037	3.4	16,727
ECM 1	Install LED Fixtures	7,812	1.2	0	\$1,383	\$20,743	\$8,517	\$900	\$7,617	5.5	7,867
ECM 2	Retrofit Fixtures with LED Lamps	9,022	2.7	-2	\$1,573	\$23,596	\$3,262	\$842	\$2,420	1.5	8,860
Lighting Control Measures		3,393	0.5	-1	\$592	\$4,732	\$270	\$35	\$235	0.4	3,332
ECM 3	Install Occupancy Sensor Lighting Controls	3,393	0.5	-1	\$592	\$4,732	\$270	\$35	\$235	0.4	3,332
Electric Unitary HVAC Measures		8,328	5.9	0	\$1,474	\$22,112	\$83,902	\$3,496	\$80,406	54.5	8,386
	Install High Efficiency Air Conditioning Units	8,328	5.9	0	\$1,474	\$22,112	\$83,902	\$3,496	\$80,406	54.5	8,386
Gas Heating (HVAC/Process) Replacement		0	0.0	86	\$1,078	\$21,569	\$27,610	\$3,407	\$24,203	22.4	10,092
	Install High Efficiency Hot Water Boilers	0	0.0	10	\$128	\$2,554	\$7,785	\$607	\$7,178	56.2	1,195
	Install High Efficiency Furnaces	0	0.0	76	\$951	\$19,015	\$19,825	\$2,800	\$17,025	17.9	8,897
TOTALS		28,555	10.4	84	\$6,100	\$92,752	\$123,562	\$8,680	\$114,881	18.8	38,537

* - All incentives presented in this table are based on NJ SmartStart 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).

Senior Center



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		23,634	7.2	-2	\$3,183	\$47,749	\$23,984	\$3,037	\$20,947	6.6	23,518
ECM 1	Install LED Fixtures	12,336	2.5	0	\$1,676	\$25,136	\$17,728	\$1,480	\$16,248	9.7	12,423
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	577	0.2	0	\$77	\$1,155	\$484	\$46	\$438	5.7	567
ECM 3	Retrofit Fixtures with LED Lamps	10,720	4.5	-2	\$1,430	\$21,457	\$5,773	\$1,511	\$4,262	3.0	10,529
Lighting Control Measures		2,442	0.9	0	\$327	\$2,615	\$4,640	\$420	\$4,220	12.9	2,410
ECM 4	Install Occupancy Sensor Lighting Controls	1,515	0.6	0	\$202	\$1,617	\$3,240	\$420	\$2,820	14.0	1,487
ECM 5	Install High/Low Lighting Controls	927	0.3	0	\$125	\$999	\$1,400	\$0	\$1,400	11.2	922
TOTALS		26,076	8.1	-3	\$3,510	\$50,364	\$28,624	\$3,457	\$25,167	7.2	25,928

* - All incentives presented in this table are based on NJ SmartStart 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).

Tonya Keller Bayshore Recreation Center



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		14,851	4.1	-2	\$2,277	\$34,150	\$14,631	\$2,796	\$11,835	5.2	14,696
ECM 1	Install LED Fixtures	10,625	2.7	-1	\$1,631	\$24,469	\$12,546	\$2,350	\$10,196	6.3	10,546
ECM 2	Retrofit Fixtures with LED Lamps	4,226	1.4	-1	\$645	\$9,681	\$2,085	\$446	\$1,639	2.5	4,150
Lighting Control Measures		1,718	0.6	0	\$262	\$2,099	\$1,350	\$175	\$1,175	4.5	1,687
ECM 3	Install Occupancy Sensor Lighting Controls	1,718	0.6	0	\$262	\$2,099	\$1,350	\$175	\$1,175	4.5	1,687
TOTALS		16,569	4.7	-3	\$2,539	\$36,249	\$15,981	\$2,971	\$13,010	5.1	16,384

* - All incentives presented in this table are based on NJ SmartStart 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).

Field House Building



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		12,724	4.0	-2	\$1,737	\$26,051	\$21,455	\$3,533	\$17,922	10.3	12,614
ECM 1	Install LED Fixtures	8,907	2.4	-1	\$1,219	\$18,282	\$19,351	\$3,050	\$16,301	13.4	8,862
ECM 2	Retrofit Fixtures with LED Lamps	3,817	1.5	-1	\$518	\$7,769	\$2,104	\$483	\$1,621	3.1	3,751
Lighting Control Measures		450	0.2	0	\$61	\$488	\$1,010	\$105	\$905	14.8	442
ECM 3	Install Occupancy Sensor Lighting Controls	333	0.1	0	\$45	\$361	\$810	\$105	\$705	15.6	327
ECM 4	Install High/Low Lighting Controls	117	0.0	0	\$16	\$127	\$200	\$0	\$200	12.6	115
Food Service & Refrigeration Measures		4,836	0.6	0	\$667	\$3,336	\$690	\$0	\$690	1.0	4,869
ECM 5	Vending Machine Control	4,836	0.6	0	\$667	\$3,336	\$690	\$0	\$690	1.0	4,869
TOTALS		18,010	4.7	-2	\$2,465	\$29,876	\$23,155	\$3,638	\$19,517	7.9	17,925

* - All incentives presented in this table are based on NJ SmartStart 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).

Poricy Park Nature Center



#	Energy Conservation Measure	Recommend?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			13,843	3.5	-1	\$2,014	\$30,217	\$12,012	\$1,548	\$10,464	5.2	13,797
ECM 1	Install LED Fixtures	Yes	8,140	1.2	0	\$1,193	\$17,899	\$8,694	\$900	\$7,794	6.5	8,197
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	239	0.1	0	\$34	\$517	\$152	\$15	\$137	4.0	235
ECM 3	Retrofit Fixtures with LED Lamps	Yes	5,463	2.2	-1	\$787	\$11,801	\$3,167	\$633	\$2,534	3.2	5,365
Lighting Control Measures			1,157	0.5	0	\$167	\$1,333	\$2,970	\$350	\$2,620	15.7	1,136
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	1,157	0.5	0	\$167	\$1,333	\$2,970	\$350	\$2,620	15.7	1,136
Electric Unitary HVAC Measures			500	0.2	0	\$73	\$1,099	\$3,741	\$230	\$3,511	47.9	503
	Install High Efficiency Air Conditioning Units	No	500	0.2	0	\$73	\$1,099	\$3,741	\$230	\$3,511	47.9	503
TOTALS			15,499	4.1	-1	\$2,254	\$32,650	\$18,722	\$2,128	\$16,594	7.4	15,437

* - All incentives presented in this table are based on NJ SmartStart 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).

#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		150	0.1	0	\$22	\$328	\$392	\$31	\$361	16.5	141
ECM 1	Retrofit Fixtures with LED Lamps	150	0.1	0	\$22	\$328	\$392	\$31	\$361	16.5	141
TOTALS		150	0.1	0	\$22	\$328	\$392	\$31	\$361	16.5	141

* - All incentives presented in this table are based on NJ SmartStart 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).

Former Parks & Recreation Building



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		13,557	4.3	-3	\$1,980	\$29,700	\$6,618	\$1,732	\$4,886	2.5	13,323
ECM 1	Retrofit Fixtures with LED Lamps	13,557	4.3	-3	\$1,980	\$29,700	\$6,618	\$1,732	\$4,886	2.5	13,323
Lighting Control Measures		963	0.2	0	\$141	\$1,125	\$1,410	\$70	\$1,340	9.5	946
ECM 2	Install Occupancy Sensor Lighting Controls	474	0.1	0	\$69	\$553	\$810	\$70	\$740	10.7	465
ECM 3	Install High/Low Lighting Controls	490	0.1	0	\$71	\$572	\$600	\$0	\$600	8.4	481
Electric Unitary HVAC Measures		4,160	1.4	0	\$618	\$9,267	\$7,481	\$460	\$7,021	11.4	4,189
ECM 4	Install High Efficiency Air Conditioning Units	4,160	1.4	0	\$618	\$9,267	\$7,481	\$460	\$7,021	11.4	4,189
Gas Heating (HVAC/Process) Replacement		0	0.0	32	\$381	\$7,613	\$16,153	\$1,260	\$14,893	39.1	3,719
	Install High Efficiency Hot Water Boilers	0	0.0	32	\$381	\$7,613	\$16,153	\$1,260	\$14,893	39.1	3,719
TOTALS		18,680	5.9	29	\$3,119	\$47,705	\$31,663	\$3,522	\$28,141	9.0	22,177

* - All incentives presented in this table are based on NJ SmartStart 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).

Annex Building at Poricy Park



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		13,843	3.5	-1	\$2,014	\$30,217	\$12,012	\$1,548	\$10,464	5.2	13,797
ECM 1	Install LED Fixtures	8,140	1.2	0	\$1,193	\$17,899	\$8,694	\$900	\$7,794	6.5	8,197
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	239	0.1	0	\$34	\$517	\$152	\$15	\$137	4.0	235
ECM 3	Retrofit Fixtures with LED Lamps	5,463	2.2	-1	\$787	\$11,801	\$3,167	\$633	\$2,534	3.2	5,365
Lighting Control Measures		1,157	0.5	0	\$167	\$1,333	\$2,970	\$350	\$2,620	15.7	1,136
ECM 4	Install Occupancy Sensor Lighting Controls	1,157	0.5	0	\$167	\$1,333	\$2,970	\$350	\$2,620	15.7	1,136
Electric Unitary HVAC Measures		500	0.2	0	\$73	\$1,099	\$3,741	\$230	\$3,511	47.9	503
	Install High Efficiency Air Conditioning Units	500	0.2	0	\$73	\$1,099	\$3,741	\$230	\$3,511	47.9	503
TOTALS		15,499	4.1	-1	\$2,254	\$32,650	\$18,722	\$2,128	\$16,594	7.4	15,437

* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that

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

Johnson Gill Annex



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		11,579	5.1	0	\$1,449	\$21,730	\$6,804	\$1,559	\$5,245	3.6	11,660
ECM 1	Install LED Fixtures	850	0.4	0	\$106	\$1,595	\$1,188	\$40	\$1,148	10.8	856
ECM 2	Retrofit Fixtures with LED Lamps	10,729	4.7	0	\$1,342	\$20,135	\$5,616	\$1,519	\$4,097	3.1	10,804
Lighting Control Measures		2,763	1.2	0	\$346	\$2,765	\$5,330	\$385	\$4,945	14.3	2,782
ECM 3	Install Occupancy Sensor Lighting Controls	2,650	1.1	0	\$332	\$2,652	\$5,130	\$385	\$4,745	14.3	2,668
ECM 4	Install High/Low Lighting Controls	113	0.0	0	\$14	\$113	\$200	\$0	\$200	14.2	114
TOTALS		14,341	6.3	0	\$1,794	\$24,495	\$12,134	\$1,944	\$10,190	5.7	14,442

* - All incentives presented in this table are based on NJ SmartStart 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).

Bodman Park & Maintenance, McMahan Park, Nick Trezza Field, & MYAA Field



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		81,205	63.5	-2	\$13,622	\$204,323	\$120,601	\$13,733	\$106,868	7.8	81,540
ECM 1	Install LED Fixtures	69,473	57.3	0	\$11,673	\$175,097	\$111,668	\$12,000	\$99,668	8.5	69,959
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	5,961	3.4	-1	\$987	\$14,809	\$4,794	\$760	\$4,034	4.1	5,857
ECM 3	Retrofit Fixtures with LED Lamps	5,771	2.8	-1	\$961	\$14,417	\$4,139	\$973	\$3,166	3.3	5,724
Lighting Control Measures		1,375	0.9	0	\$228	\$1,821	\$4,050	\$455	\$3,595	15.8	1,350
ECM 4	Install Occupancy Sensor Lighting Controls	1,375	0.9	0	\$228	\$1,821	\$4,050	\$455	\$3,595	15.8	1,350
Food Service & Refrigeration Measures		6,447	0.7	0	\$1,083	\$5,417	\$920	\$0	\$920	0.8	6,492
ECM 5	Vending Machine Control	6,447	0.7	0	\$1,083	\$5,417	\$920	\$0	\$920	0.8	6,492
TOTALS		89,027	65.1	-2	\$14,932	\$211,560	\$125,571	\$14,188	\$111,383	7.5	89,382

* - All incentives presented in this table are based on NJ SmartStart 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).

Compost Site



#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$) *	Estimated Net Cost (\$)	Simple Payback Period (yrs) **	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		11,527	2.7	0	\$1,516	\$22,745	\$8,095	\$1,402	\$6,693	4.4	11,608
ECM 1	Install LED Fixtures	11,491	2.7	0	\$1,512	\$22,673	\$8,060	\$1,400	\$6,660	4.4	11,571
ECM 2	Retrofit Fixtures with LED Lamps	37	0.0	0	\$5	\$72	\$34	\$2	\$32	6.7	37
Lighting Control Measures		1,180	0.3	0	\$155	\$1,242	\$540	\$35	\$505	3.3	1,188
ECM 3	Install Occupancy Sensor Lighting Controls	1,154	0.3	0	\$152	\$1,214	\$270	\$35	\$235	1.5	1,162
	Install High/Low Lighting Controls	26	0.0	0	\$3	\$28	\$270	\$0	\$270	77.6	27
TOTALS		12,707	3.0	0	\$1,672	\$23,987	\$8,635	\$1,437	\$7,198	4.3	12,796

* - All incentives presented in this table are based on NJ SmartStart 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).

Normandy Park

#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated Install Cost (\$)	Estimated Incentive (\$)*	Estimated Net Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		25,608	37.4	0	\$7,818	\$117,270	\$58,699	\$6,320	\$52,379	6.7	25,787
ECM 1	Install LED Fixtures	25,439	37.3	0	\$7,767	\$116,498	\$58,626	\$6,300	\$52,326	6.7	25,617
ECM 2	Retrofit Fixtures with LED Lamps	169	0.1	0	\$51	\$772	\$73	\$20	\$53	1.0	170
TOTALS		25,608	37.4	0	\$7,818	\$117,270	\$58,699	\$6,320	\$52,379	6.7	25,787

* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that

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

Solar Energy Potential

Middletown Township	None or Low	Med.	High
Administration and Office Building		X	
Bayshore Annex - Health Building	X		
Cultural Art Center	X		
Department of Public Works, Garage, & CNG Fueling Station	X		
Police Garage (Gym inside)	X		
Department of Planning and Community Development	X		
Crossroads Drug Treatment (former Lincroft Branch Library)	X		
Public Library-Main Branch		X	
Croyden Hall, Gym		X	
Senior Center	X		
Tonya Keller Bayshore Recreation Center	X		
Field House Building	X		
Poricy Park Nature Center	X		
EMS	X		

Middletown Township	None or Low	Med.	High
Former Parks and Rec Building	X		
Annex building at Poricy Park	X		
Johnson Gill Annex	X		
Bodman Park, Maint. Building, McMahan Park, Nick Trezza Field, & MYAA Park	X		
Compost Site	X		
Normandy Park	X		

For more information on the SREC Registration Program (SRP) please visit:

<http://www.njcleanenergy.com/renewable-energy/programs/solar-renewable-energy-certificates-srec/new-jersey-solar-renewable-energy>

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
- Perform Proper Boiler Maintenance
- Perform Proper Water Heater Maintenance
- Plug Load Controls
- Water Conservation

See individual reports for specific EE practices by building

Clean Energy Program Portfolio



ELIGIBLE SECTORS

Commercial, Industrial, Government, Non-Profit,
Institutional and Multifamily

INCENTIVE PROGRAMS

Equipment Rebates:

- SmartStart
- CTEEP
(Customer Tailored Energy Efficiency Pilot)
- Direct Install
- Large Energy Users

Whole Buildings:

- Pay for Performance

Energy Generation:

- Combined Heat and Power (CHP)

OTHER PROGRAMS

Renewable Energy Generation:

- SREC Registration Program (SRP)

* eligible programs are highlighted in yellow

Recommended NJCEP Incentives per Building



Middletown Township	Direct Install*	CTEEP	Smart Start
Administration and Office Building	X	X	X
Bayshore Annex - Health Building	X	X	X
Cultural Art Center	X	X	X
Department of Public Works, Garage, & CNG Fueling Station	X	X	X
Police Garage (Gym inside)	X	X	X
Department of Planning and Community Development	X	X	X
Crossroads Drug Treatment (former Lincroft Branch Library)	X	X	X
Public Library-Main Branch	X	X	X
Croyden Hall	X	X	X
Senior Center	X	X	X
Tonya Keller Bayshore Recreation Center	X	X	X
Field House Building	X	X	X
Poricy Park Nature Center	X	X	X
EMS	X	X	X

Middletown Township	Direct Install*	CTEEP	Smart Start
Former Parks and Rec Building	X	X	X
Annex Building at Poricy Park	X	X	X
Johnson Gill Annex	X	X	X
Bodman Park, Maint. Building, McMahan Park, Nick Trezza Field, & MYAA Park	X	X	X
Compost Site	X	X	X
Normandy Park	X	X	X

* Some sites with only lighting upgrades will need further assessment for DI eligibility. They are eligible for a full free assessment with the DI Participating Contractor to submit the waiver or to identify other measure/s to enable participation

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 an average 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/building cap
 - \$250,000 per entity cap (up to \$500,000 if using ESIP)
- Participating contractors provide support and process all paperwork
- Fast turnaround time: Average length of time for job completion (4-6 months)

Direct Install:



Participating Contractor

Hutchinson Mechanical Services

Ed Hutchinson

856-429-5828 x215

edhutchinson@hutchbiz.com

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.



SmartStart: Overview

- Two types of incentives for high efficiency equipment installation:
 - Prescriptive
 - Custom
- Project Categories:
 - New Construction
 - Renovation
 - Remodeling
 - Equipment Replacement
- Project pre-approval required for lighting and custom measures
- Incentives up to \$500,000 per electric account & \$500,000 per natural gas account
- Specific incentives and individual applications for Lighting, HVAC, VFDs, Refrigeration, Controls and more!

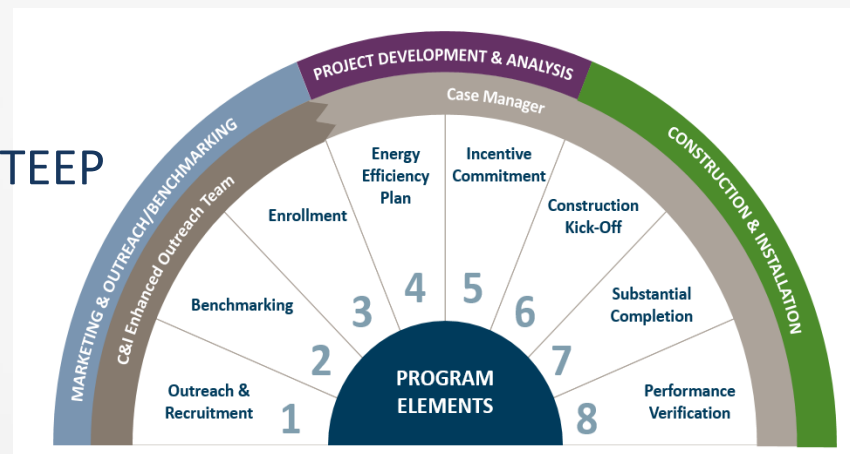
www.NJCleanEnergy/SSB

CTEEP: Overview

Customer Tailored Energy Efficiency Pilot (CTEEP)

- Provide customers with **on-site assistance** to discuss project opportunities and program incentives.
- A **single application** submission streamlines multiple prescriptive and custom measures.
- Provide **technical assistance incentives** to help offset soft costs associated with developing and planning an energy efficiency project.
- Incentives up to \$250,000 entity cap.

www.NJCleanEnergy/CTEEP



SmartStart & CTEEP:

Financing Option

- NJNG provides 0% financing options for SmartStart that will cover up to \$130,000 per year.
- 10 year term-repayments made on regular monthly gas bill
- Need to review project with NJNG to confirm project qualifies.
- The SAVEGREEN program can help with a consultation to discuss your Commercial Energy Efficiency Project.



Questions? Contact:

Jerry Ryan

Energy Efficiency Operations Manager

New Jersey Natural Gas

732-433-4362 (cell)

732 378 4920 (office)

jryan@njng.com



Recommended NJCEP Incentives per Building



Middletown Township	Direct Install*	CTEEP	Smart Start
Administration and Office Building	X	X	X
Bayshore Annex - Health Building	X	X	X
Cultural Art Center	X	X	X
Department of Public Works, Garage, & CNG Fueling Station	X	X	X
Police Garage (Gym inside)	X	X	X
Department of Planning and Community Development	X	X	X
Crossroads Drug Treatment (former Lincroft Branch Library)	X	X	X
Public Library-Main Branch	X	X	X
Croyden Hall	X	X	X
Senior Center	X	X	X
Tonya Keller Bayshore Recreation Center	X	X	X
Field House Building	X	X	X
Poricy Park Nature Center	X	X	X
EMS	X	X	X

Middletown Township	Direct Install*	CTEEP	Smart Start
Former Parks and Rec Building	X	X	X
Annex Building at Poricy Park	X	X	X
Johnson Gill Annex	X	X	X
Bodman Park, Maint. Building, McMahan Park, Nick Trezza Field, & MYAA Park	X	X	X
Compost Site	X	X	X
Normandy Park	X	X	X

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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

Mike Thulen

ESIP Coordinator

Office: 609-777-3338

Cell: 732-330-2419

ESIP@bpu.nj.gov

Questions



?

FOR MORE INFORMATION

Visit NJCleanEnergy.com

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