

LGEA Presentation

City of Trenton

October 25, 2021



New Jersey's
Clean Energy Program

Lighting the way to New Jersey's Clean Energy Future

INTRODUCTIONS

City of Trenton

- Michael Kolber – Senior Planner
- C.Andre Daniel – Director of Housing & Economic Development
- Wahab Onitiri– Director of Public Works
- Jeffrey Wilkerson – Supervising Planner
- Kimberly Porter – Administrative Assistant Analyst
- Rick Klavin – Aide to the Mayor

New Jersey's Clean Energy Program

- Sarah Walters – LGEA Project Manager
- Moussa Traore – LGEA Lead Auditor
- Ryan Knippenberg – LGEA Project Auditor
- Ivelisse Perez – Outreach Account Manger
- Michelle Rossi – ESIP Coordinator (BPU)
- Arif Welcher – Government/Business Manager (BPU)

AGENDA

- The audit process overview
- Energy use & existing conditions
- Review of **E**nergy **C**onservation **M**easures (ECMs) identified & other recommendations
- Energy Savings Improvement Program (ESIP)
- C&I Transition of EE Programs
- Questions regarding the draft audit report
- Next steps for City of Trenton

LGEA PROCESS

- Application Approval
- Initial Call
- Facility Interviews
- Audit
- Benchmarking & Analysis
- Draft Reports
- LGEA Presentation
- Final Reports

SITE VISIT & UTILITY ANALYSIS

Overview of Systems, Baseline & Existing Conditions:

- Lighting System
- HVAC and Mechanical Systems
- Plug Load Equipment
- Refrigeration Equipment

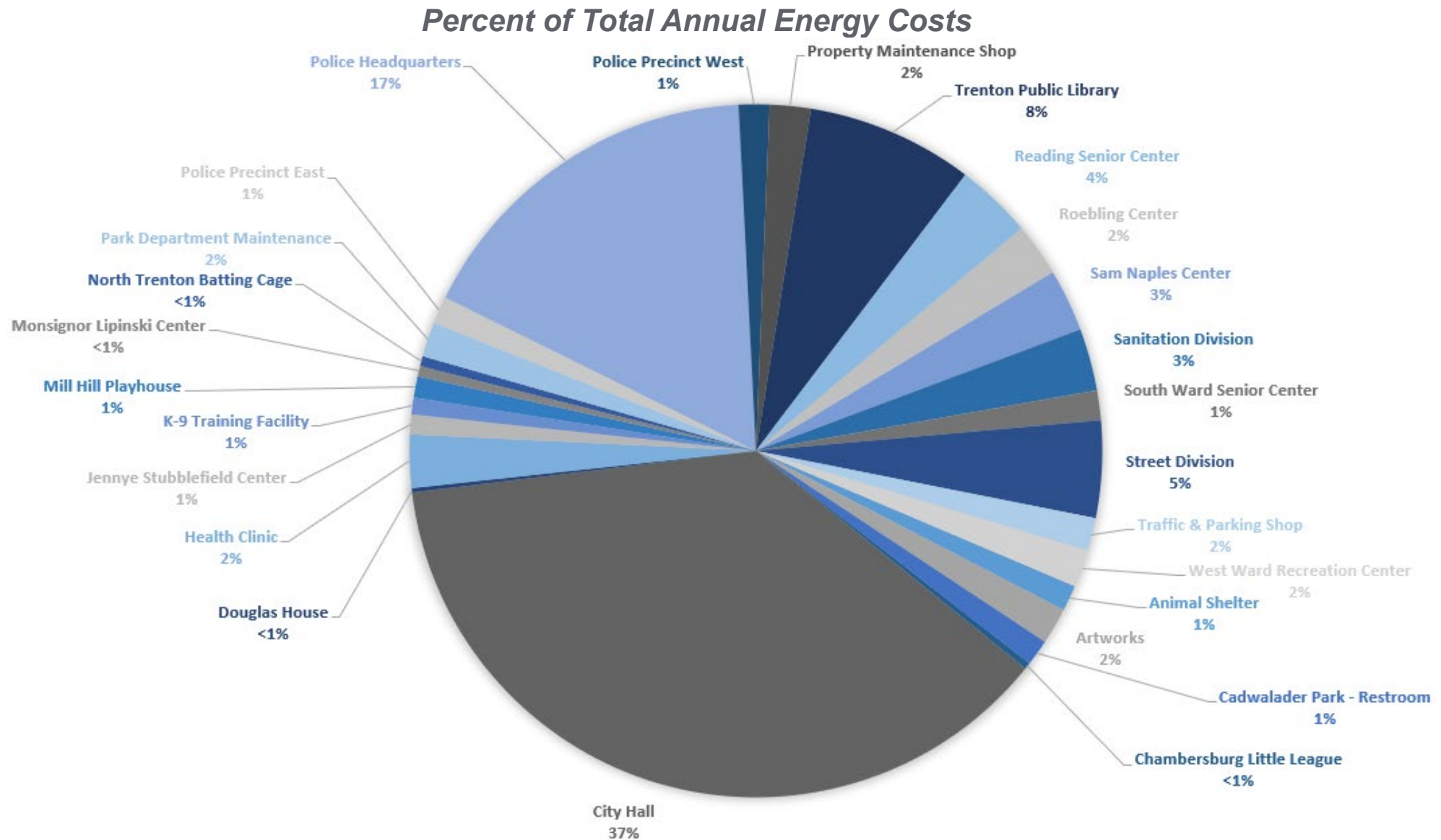
Utility Consumption:

- Electric Consumption and Costs
- Natural Gas Consumption and Costs

Sites Visited/Analyzed

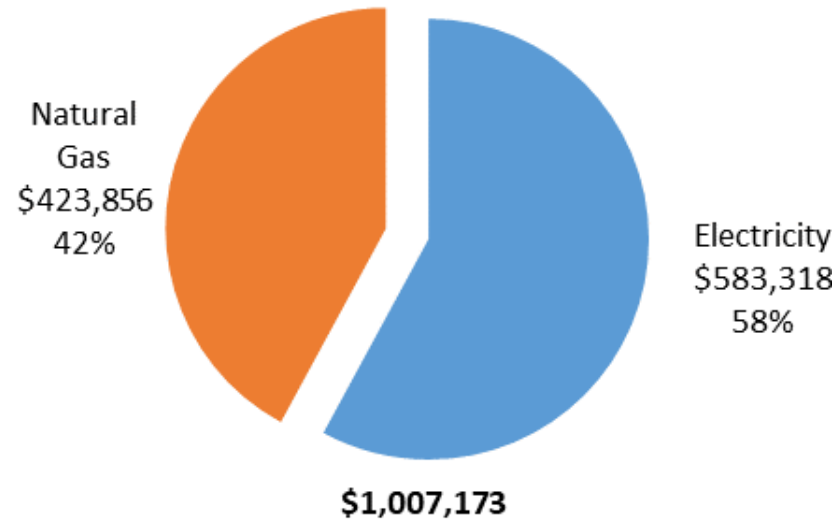
- Douglas House
- Sanitation Division
- Health Clinic
- Jennye Stubblefield Senior Center
- Sam Naples Center
- South Ward Senior Center
- Artworks
- Animal Shelter
- Monsignor Lipinski Center
- Roebling Center
- Trenton Public Library
- City Hall
- Reading Senior Center
- West Ward Recreation Center
- N. Trenton Batting Cage
- Chambersburg Little League
- Cadwalader Park
- Traffic & Parking Shop
- Street Division
- Property Maintenance Shop
- Park Dept Maintenance
- Police Precinct West
- Police Precinct East
- Police Headquarters
- K-9 Training Facility
- Mill Hill Playhouse

UTILITY BREAKOUT

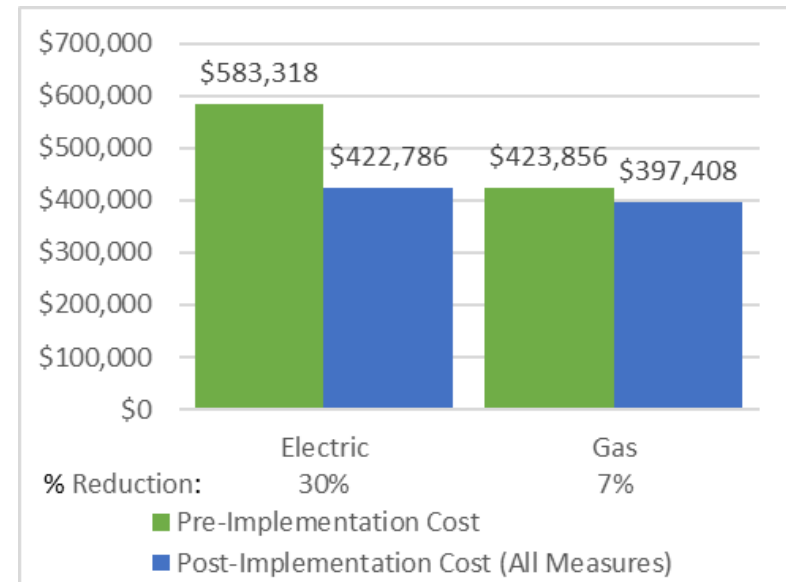


UTILITY BREAKOUT


Total Utility Costs



Pre & Post Implementation Cost



BENCHMARKING

 **ENERGY STAR® Statement of Energy Performance**
LEARN MORE AT energystar.gov

70
ENERGY STAR® Score¹

Trenton City Hall
Primary Property Type: Office
Gross Floor Area (ft²): 107,900
Built: 1907
For Year Ending: March 31, 2020
Date Generated: May 16, 2021

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	Property Owner	Primary Contact
Trenton City Hall 319 East State Street Trenton, New Jersey 08608	City of Trenton 319 East State Street Trenton, NJ 08618 (609) 969-3515	Hogarth Stephen 319 East State Street Trenton, NJ 08618 (609) 969-3515 hstephen@trentonnj.org

Property ID: 5002150

Energy Consumption and Energy Use Intensity (EUI)

Site EUI	Annual Energy by Fuel	National Median Comparison
86.8 kBtu/ft²	Electric - Grid (kBtu) 3,330,663 (36%) District Hot Water 4,099,300 (44%) (kBtu) District Chilled Water - 1,926,060 (21%) Other (kBtu)	National Median Site EUI (kBtu/ft²) 114.5 National Median Source EUI (kBtu/ft²) 196.1 % Diff from National Median Source EUI -24%
Source EUI 148.6 kBtu/ft²	Annual Emissions Greenhouse Gas Emissions (Metric Tons CO2e/year)	N/A

Signature & Stamp of Verifying Professional

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

LP Signature: _____ Date: _____

Licensed Professional



Professional Engineer or Registered Architect Stamp (if applicable)

Site EUI
86.8 kBtu/ft²

Source EUI
148.6 kBtu/ft²

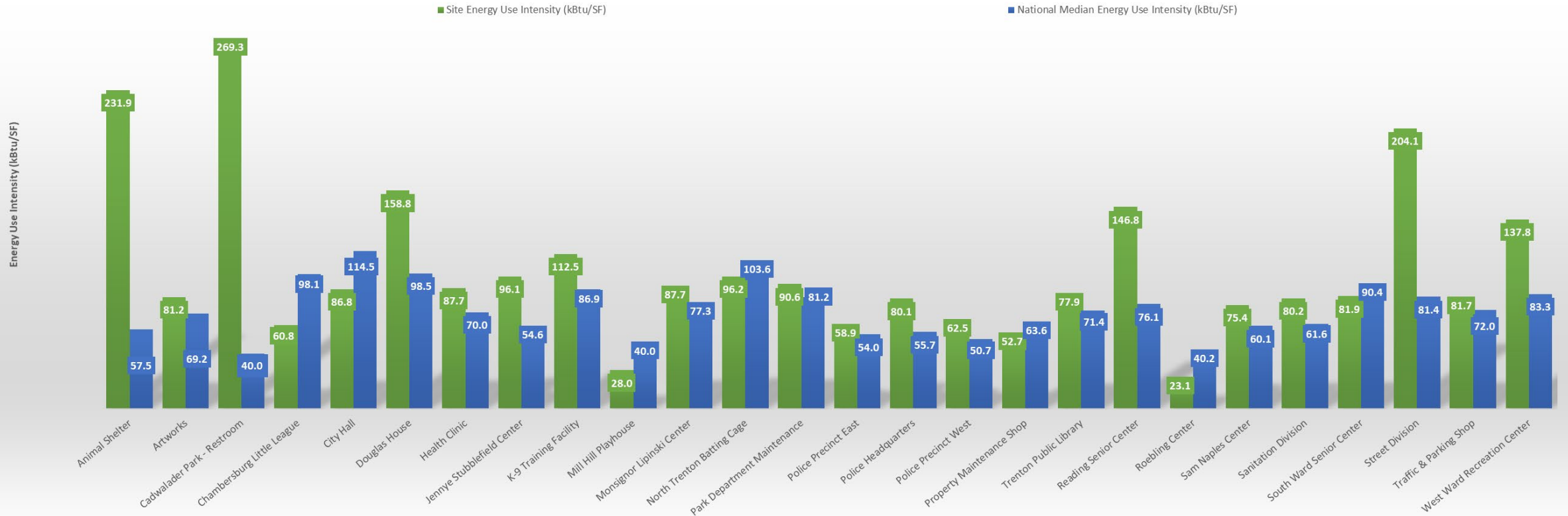
National Median Comparison

National Median Site EUI (kBtu/ft²)	114.5
National Median Source EUI (kBtu/ft²)	196.1
% Diff from National Median Source EUI	-24%

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.

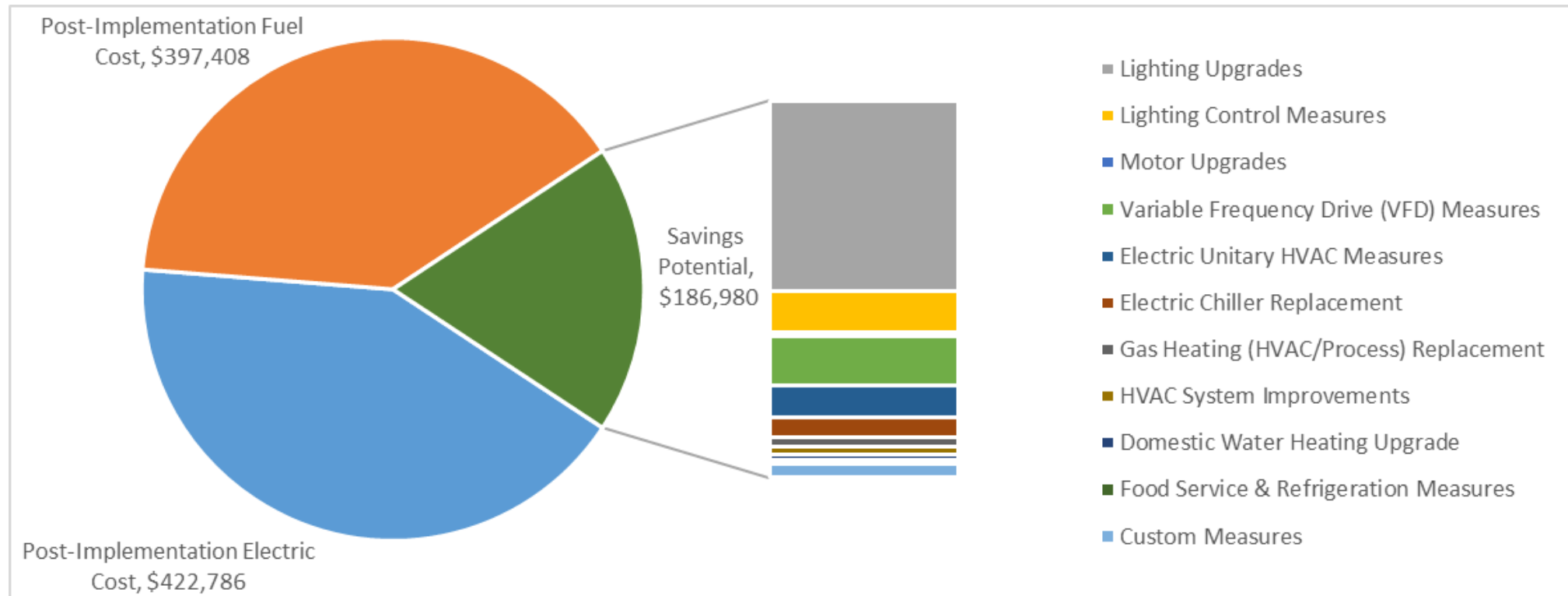
Site Name	ENERGY STAR® Score
Douglas House	N/A
Sanitation Division	N/A
Health Clinic	N/A
Jennye Stubblefield Center	N/A
Sam Naples Center	N/A
South Ward Senior Center	N/A
Artworks	N/A
Animal Shelter	N/A
Monsgnor Lipinski Center	N/A
Roebing Center	N/A
Trenton Public Library	N/A
City Hall	70
Reading Senior Center	N/A
West Ward Recreation Center	N/A
N. Trenton Batting Center	N/A
Chambersburg Little League	N/A
Cadwalader Park	N/A
Traffic & Parking Shop	N/A
Street Division	N/A
Property Maintenance Shop	N/A
Park Dept Maintenance	N/A
Police Precinct West	N/A
Police Precinct East	N/A
Police Headquarters	N/A
K-9 Training Facility	N/A
Mill Hill Playhouse	N/A

BENCHMARKING



ALL OPPORTUNITIES

Savings Potential



ALL OPPORTUNITIES

#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		740,661	147.5	-127.8	\$94,448	\$276,487	\$48,467	\$228,020	2.4	730,870
ECM 1	Install LED Fixtures	163,371	13.3	-8.3	\$21,618	\$90,255	\$10,485	\$79,770	3.7	163,545
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	77,450	25.8	-16.5	\$9,870	\$37,274	\$5,459	\$31,815	3.2	76,065
ECM 3	Retrofit Fixtures with LED Lamps	499,499	108.3	-103.0	\$62,903	\$148,813	\$32,523	\$116,290	1.8	490,925
ECM 4	Install LED Exit Signs	341	0.0	-0.1	\$57	\$145	\$0	\$145	2.5	334
Lighting Control Measures		164,346	35.3	-35.6	\$20,774	\$126,321	\$32,860	\$93,461	4.5	161,330
ECM 5	Install Occupancy Sensor Lighting Controls	120,149	27.7	-25.9	\$15,240	\$95,906	\$12,105	\$83,801	5.5	117,952
ECM 6	Install Daylight Dimming/Photocell Controls	94	0.0	0.0	\$18	\$400	\$0	\$400	22.0	94
ECM 7	Install High/Low Lighting Controls	44,103	7.6	-9.6	\$5,516	\$30,015	\$20,755	\$9,260	1.7	43,284
Motor Upgrades		11,421	2.5	0.0	\$1,682	\$19,394	\$0	\$19,394	11.5	11,501
ECM 8	Premium Efficiency Motors	11,421	2.5	0.0	\$1,682	\$19,394	\$0	\$19,394	11.5	11,501
Variable Frequency Drive (VFD) Measures		196,447	33.0	0.0	\$24,457	\$176,642	\$29,300	\$147,342	6.0	197,821
ECM 9	Install VFDs on Constant Volume (CV) Fans	149,366	23.3	0.0	\$18,524	\$53,317	\$15,400	\$37,917	2.0	150,410
ECM 10	Install VFDs on Chilled Water Pumps	22,029	7.0	0.0	\$2,773	\$52,758	\$8,300	\$44,458	16.0	22,183
ECM 11	Install VFDs on Heating Water Pumps	25,053	2.7	0.0	\$3,161	\$70,567	\$5,600	\$64,967	20.6	25,228
Electric Unitary HVAC Measures		108,246	64.3	65.5	\$15,840	\$499,226	\$56,921	\$442,305	27.9	116,675
ECM 12	Install High Efficiency Air Conditioning Units	85,932	54.2	65.5	\$12,235	\$439,200	\$51,326	\$387,874	31.7	94,205
ECM 13	Install High Efficiency Heat Pumps	21,496	9.0	0.0	\$3,477	\$56,156	\$5,515	\$50,641	14.6	21,646
ECM 14	Install High Efficiency PTAC/PTHP	818	1.2	0.0	\$128	\$3,869	\$80	\$3,789	29.6	824
Electric Chiller Replacement		76,304	134.5	0.0	\$9,463	\$341,274	\$8,000	\$333,274	35.2	76,838
ECM 15	Install High Efficiency Chillers	76,304	134.5	0.0	\$9,463	\$341,274	\$8,000	\$333,274	35.2	76,838

ALL OPPORTUNITIES

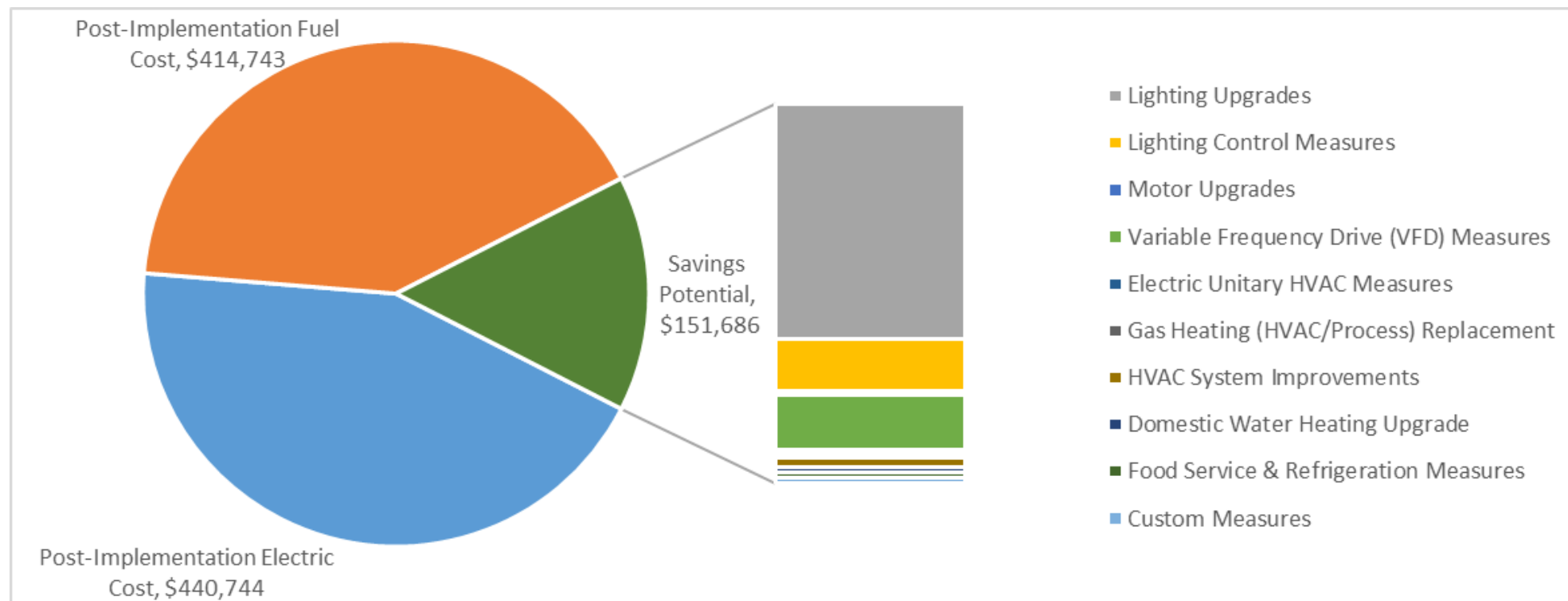
#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Gas Heating (HVAC/Process) Replacement		0	0.0	613.6	\$5,100	\$149,253	\$23,564	\$125,690	24.6	71,849
ECM 16	Install High Efficiency Hot Water Boilers	0	0.0	202.5	\$1,703	\$53,458	\$8,364	\$45,094	26.5	23,707
ECM 17	Install High Efficiency Furnaces	0	0.0	287.8	\$2,455	\$83,967	\$14,000	\$69,967	28.5	33,693
ECM 18	Install Infrared Heaters	0	0.0	123.4	\$942	\$11,828	\$1,200	\$10,628	11.3	14,450
HVAC System Improvements		5,850	0.0	371.9	\$3,679	\$8,884	\$2,142	\$6,742	1.8	49,434
ECM 19	Install Programmable Thermostats	1,640	0.0	76.2	\$791	\$4,618	\$0	\$4,618	5.8	10,574
ECM 20	Install Occupancy-Controlled Thermostats	3,163	0.0	26.0	\$618	\$716	\$450	\$266	0.4	6,229
ECM 21	Install Pipe Insulation	1,047	0.0	269.7	\$2,271	\$3,550	\$1,692	\$1,858	0.8	32,631
Domestic Water Heating Upgrade		9,331	0.0	116.4	\$2,378	\$26,301	\$4,236	\$22,066	9.3	23,020
ECM 22	Install High Efficiency Gas-Fired Water Heater	0	0.0	43.1	\$390	\$23,834	\$2,435	\$21,399	54.8	5,048
ECM 23	Install Low-Flow DHW Devices	9,331	0.0	73.2	\$1,988	\$2,467	\$1,800	\$667	0.3	17,972
Food Service & Refrigeration Measures		13,444	1.5	0.0	\$1,948	\$6,658	\$900	\$5,758	3.0	13,538
ECM 24	Replace Refrigeration Equipment	5,969	0.7	0.0	\$998	\$4,818	\$400	\$4,418	4.4	6,011
ECM 25	Vending Machine Control	7,475	0.9	0.0	\$950	\$1,840	\$500	\$1,340	1.4	7,527
Custom Measures		17,238	0.0	663.0	\$7,210	\$103,584	\$0	\$103,584	14.4	94,988
ECM 26	Optimize HVAC Schedule	14,996	0.0	29.0	\$2,073	\$4,800	\$0	\$4,800	2.3	18,497
ECM 27	Building Envelope Improvements	0	0.0	634.0	\$4,835	\$96,714	\$0	\$96,714	20.0	74,233
ECM 28	Install Heat Pump Water Heater	2,242	0.0	0.0	\$302	\$2,070	\$0	\$2,070	6.9	2,258
TOTALS		1,343,288	418.7	1,667.0	\$186,980	\$1,734,025	\$206,389	\$1,527,635	8.2	1,547,865

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs

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

COST EFFECTIVE OPPORTUNITIES

Savings Potential



COST EFFECTIVE OPPORTUNITIES

#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$) *	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs) **	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		738,914	146.5	-127.6	\$94,199	\$273,082	\$48,276	\$224,805	2.4	729,134
ECM 1	Install LED Fixtures	161,736	12.9	-8.1	\$21,394	\$87,616	\$10,395	\$77,221	3.6	161,922
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	77,339	25.3	-16.5	\$9,846	\$36,508	\$5,358	\$31,150	3.2	75,952
ECM 3	Retrofit Fixtures with LED Lamps	499,499	108.3	-103.0	\$62,903	\$148,813	\$32,523	\$116,290	1.8	490,925
ECM 4	Install LED Exit Signs	341	0.0	-0.1	\$57	\$145	\$0	\$145	2.5	334
Lighting Control Measures		164,270	35.3	-35.6	\$20,767	\$125,781	\$32,790	\$92,991	4.5	161,254
ECM 5	Install Occupancy Sensor Lighting Controls	120,074	27.7	-25.9	\$15,233	\$95,366	\$12,035	\$83,331	5.5	117,876
ECM 6	Install Daylight Dimming/Photocell Controls	94	0.0	0.0	\$18	\$400	\$0	\$400	22.0	94
ECM 7	Install High/Low Lighting Controls	44,103	7.6	-9.6	\$5,516	\$30,015	\$20,755	\$9,260	1.7	43,284
Motor Upgrades		8,743	1.9	0.0	\$1,321	\$8,997	\$0	\$8,997	6.8	8,805
ECM 8	Premium Efficiency Motors	8,743	1.9	0.0	\$1,321	\$8,997	\$0	\$8,997	6.8	8,805
Variable Frequency Drive (VFD) Measures		178,259	28.4	0.0	\$22,201	\$87,467	\$21,400	\$66,067	3.0	179,505
ECM 9	Install VFDs on Constant Volume (CV) Fans	149,366	23.3	0.0	\$18,524	\$53,317	\$15,400	\$37,917	2.0	150,410
ECM 10	Install VFDs on Chilled Water Pumps	12,421	3.3	0.0	\$1,581	\$9,476	\$4,000	\$5,476	3.5	12,508
ECM 11	Install VFDs on Heating Water Pumps	16,473	1.8	0.0	\$2,097	\$24,673	\$2,000	\$22,673	10.8	16,588
Electric Unitary HVAC Measures		11,576	2.5	0.0	\$1,384	\$13,155	\$2,050	\$11,105	8.0	11,657
ECM 13	Install High Efficiency Heat Pumps	11,576	2.5	0.0	\$1,384	\$13,155	\$2,050	\$11,105	8.0	11,657

COST EFFECTIVE OPPORTUNITIES

#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Gas Heating (HVAC/Process) Replacement		0	0.0	215.2	\$1,586	\$24,191	\$3,200	\$20,991	13.2	25,193
ECM 17	Install High Efficiency Furnaces	0	0.0	91.8	\$645	\$12,363	\$2,000	\$10,363	16.1	10,743
ECM 18	Install Infrared Heaters	0	0.0	123.4	\$942	\$11,828	\$1,200	\$10,628	11.3	14,450
HVAC System Improvements		5,850	0.0	371.9	\$3,679	\$8,884	\$2,142	\$6,742	1.8	49,434
ECM 19	Install Programmable Thermostats	1,640	0.0	76.2	\$791	\$4,618	\$0	\$4,618	5.8	10,574
ECM 20	Install Occupancy-Controlled Thermostats	3,163	0.0	26.0	\$618	\$716	\$450	\$266	0.4	6,229
ECM 21	Install Pipe Insulation	1,047	0.0	269.7	\$2,271	\$3,550	\$1,692	\$1,858	0.8	32,631
Domestic Water Heating Upgrade		9,331	0.0	99.7	\$2,224	\$5,152	\$2,052	\$3,099	1.4	21,068
ECM 22	Install High Efficiency Gas-Fired Water Heater	0	0.0	26.4	\$236	\$2,685	\$252	\$2,433	10.3	3,095
ECM 23	Install Low-Flow DHW Devices	9,331	0.0	73.2	\$1,988	\$2,467	\$1,800	\$667	0.3	17,972
Food Service & Refrigeration Measures		13,444	1.5	0.0	\$1,948	\$6,658	\$900	\$5,758	3.0	13,538
ECM 24	Replace Refrigeration Equipment	5,969	0.7	0.0	\$998	\$4,818	\$400	\$4,418	4.4	6,011
ECM 25	Vending Machine Control	7,475	0.9	0.0	\$950	\$1,840	\$500	\$1,340	1.4	7,527
Custom Measures		17,238	0.0	29.0	\$2,375	\$6,870	\$0	\$6,870	2.9	20,755
ECM 26	Optimize HVAC Schedule	14,996	0.0	29.0	\$2,073	\$4,800	\$0	\$4,800	2.3	18,497
ECM 28	Install Heat Pump Water Heater	2,242	0.0	0.0	\$302	\$2,070	\$0	\$2,070	6.9	2,258
TOTALS		1,147,625	216.0	552.5	\$151,686	\$560,238	\$112,811	\$447,427	2.9	1,220,343

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs

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

DOUGLAS HOUSE

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			516	0.1	0	\$80	\$129	\$8	\$121	1.5	519
ECM 1	Retrofit Fixtures with LED Lamps	Yes	516	0.1	0	\$80	\$129	\$8	\$121	1.5	519
Unitary HVAC Measures			225	0.3	3	\$67	\$5,922	\$420	\$5,502	82.6	618
ECM 2	Install High Efficiency Air Conditioning Units	No	225	0.3	3	\$67	\$5,922	\$420	\$5,502	82.6	618
Domestic Water Heating Upgrade			0	0.0	1	\$5	\$14	\$14	\$0	0.0	67
ECM 3	Install Low-Flow DHW Devices	Yes	0	0.0	1	\$5	\$14	\$14	\$0	0.0	67
TOTALS (COST EFFECTIVE MEASURES)			516	0.1	1	\$85	\$143	\$22	\$121	1.4	586
TOTALS (ALL MEASURES)			741	0.4	4	\$152	\$6,065	\$442	\$5,622	37.1	1,204

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

SANITATION DIVISION

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			22,619	3.5	-5	\$2,982	\$4,914	\$181	\$4,733	1.6	22,168
ECM 1	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	238	0.0	0	\$31	\$84	\$10	\$74	2.4	233
ECM 2	Retrofit Fixtures with LED Lamps	Yes	22,381	3.5	-5	\$2,950	\$4,829	\$171	\$4,658	1.6	21,935
Lighting Control Measures			16,064	2.5	-4	\$2,118	\$1,833	\$840	\$993	0.5	15,743
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	3,010	0.5	-1	\$397	\$1,158	\$165	\$993	2.5	2,950
ECM 4	Install High/Low Lighting Controls	Yes	13,054	2.0	-3	\$1,721	\$675	\$675	\$0	0.0	12,794
Unitary HVAC Measures			960	0.5	0	\$129	\$5,642	\$0	\$5,642	43.8	967
ECM 5	Install High Efficiency Air Conditioning Units	No	960	0.5	0	\$129	\$5,642	\$0	\$5,642	43.8	967
Gas Heating (HVAC/Process) Replacement			0	0.0	98	\$942	\$19,248	\$3,000	\$16,248	17.3	11,450
ECM 6	Install High Efficiency Furnaces	No	0	0.0	98	\$942	\$19,248	\$3,000	\$16,248	17.3	11,450
HVAC System Improvements			0	0.0	3	\$29	\$173	\$120	\$53	1.8	351
ECM 7	Install Pipe Insulation	Yes	0	0.0	3	\$29	\$173	\$120	\$53	1.8	351
Domestic Water Heating Upgrade			0	0.0	1	\$9	\$14	\$14	\$0	0.0	111
ECM 8	Install Low-Flow DHW Devices	Yes	0	0.0	1	\$9	\$14	\$14	\$0	0.0	111
Custom Measures			0	0.0	146	\$1,406	\$36,902	\$0	\$36,902	26.2	17,095
ECM 9	Building Envelope Improvements	No	0	0.0	146	\$1,406	\$36,902	\$0	\$36,902	26.2	17,095
TOTALS (COST EFFECTIVE MEASURES)			38,682	6.0	-5	\$5,137	\$6,934	\$1,155	\$5,779	1.1	38,373
TOTALS (ALL MEASURES)			39,642	6.6	239	\$7,614	\$68,726	\$4,155	\$64,571	8.5	67,885

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

HEALTH CLINIC

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			12,029	4.8	-2	\$1,643	\$11,745	\$1,374	\$10,371	6.3	11,864
ECM 1	Install LED Fixtures	No	1,635	0.4	0	\$224	\$2,639	\$90	\$2,549	11.4	1,623
ECM 2	Retrofit Fixtures with LED Lamps	Yes	10,394	4.3	-2	\$1,418	\$9,106	\$1,284	\$7,822	5.5	10,240
Lighting Control Measures			1,898	0.9	0	\$259	\$4,573	\$1,970	\$2,603	10.1	1,864
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	1,278	0.6	0	\$174	\$2,548	\$370	\$2,178	12.5	1,255
ECM 4	Install High/Low Lighting Controls	Yes	620	0.3	0	\$85	\$2,025	\$1,600	\$425	5.0	609
Unitary HVAC Measures			21,214	9.6	9	\$3,018	\$60,594	\$8,255	\$52,339	17.3	22,394
ECM 5	Install High Efficiency Air Conditioning Units	No	21,214	9.6	9	\$3,018	\$60,594	\$8,255	\$52,339	17.3	22,394
Domestic Water Heating Upgrade			0	0.0	13	\$123	\$5,649	\$661	\$4,988	40.5	1,489
ECM 6	Install High Efficiency Gas-Fired Water Heater	No	0	0.0	6	\$57	\$5,513	\$560	\$4,953	87.5	685
ECM 7	Install Low-Flow DHW Devices	Yes	0	0.0	7	\$66	\$136	\$101	\$35	0.5	804
TOTALS (COST EFFECTIVE MEASURES)			12,292	5.2	5	\$1,743	\$13,815	\$3,355	\$10,460	6.0	12,908
TOTALS (ALL MEASURES)			35,142	15.3	19	\$5,043	\$82,562	\$12,260	\$70,301	13.9	37,610

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

JENNYE STUBBLEFIELD CENTER

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			9,192	3.5	-2	\$1,336	\$5,657	\$1,222	\$4,435	3.3	9,061
ECM 1	Retrofit Fixtures with LED Lamps	Yes	9,192	3.5	-2	\$1,336	\$5,657	\$1,222	\$4,435	3.3	9,061
Lighting Control Measures			1,759	0.7	0	\$255	\$2,295	\$420	\$1,875	7.4	1,727
ECM 2	Install Occupancy Sensor Lighting Controls	Yes	1,282	0.6	0	\$186	\$1,620	\$210	\$1,410	7.6	1,259
ECM 3	Install High/Low Lighting Controls	Yes	477	0.2	0	\$69	\$675	\$210	\$465	6.7	468
Unitary HVAC Measures			3,464	2.8	18	\$673	\$22,041	\$3,400	\$18,641	27.7	5,573
ECM 4	Install High Efficiency Air Conditioning Units	No	3,464	2.8	18	\$673	\$22,041	\$3,400	\$18,641	27.7	5,573
Gas Heating (HVAC/Process) Replacement			0	0.0	4	\$41	\$5,655	\$1,000	\$4,655	114.4	519
ECM 5	Install High Efficiency Furnaces	No	0	0.0	4	\$41	\$5,655	\$1,000	\$4,655	114.4	519
Domestic Water Heating Upgrade			0	0.0	2	\$16	\$29	\$26	\$3	0.2	199
ECM 6	Install Low-Flow DHW Devices	Yes	0	0.0	2	\$16	\$29	\$26	\$3	0.2	199
TOTALS (COST EFFECTIVE MEASURES)			10,951	4.3	0	\$1,606	\$7,981	\$1,668	\$6,313	3.9	10,987
TOTALS (ALL MEASURES)			14,414	7.0	22	\$2,319	\$35,677	\$6,068	\$29,609	12.8	17,080

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

SAM NAPLES CENTER

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			35,411	7.8	-7	\$4,711	\$16,500	\$2,495	\$14,005	3.0	34,829
ECM 1	Install LED Fixtures	Yes	18,541	3.6	-3	\$2,469	\$7,223	\$850	\$6,373	2.6	18,262
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	67	0.0	0	\$9	\$146	\$9	\$137	15.4	66
ECM 3	Retrofit Fixtures with LED Lamps	Yes	16,803	4.2	-4	\$2,234	\$9,131	\$1,636	\$7,495	3.4	16,501
Lighting Control Measures			6,369	1.5	-1	\$847	\$5,523	\$1,215	\$4,308	5.1	6,254
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	4,891	1.2	-1	\$650	\$3,858	\$445	\$3,413	5.2	4,803
ECM 5	Install High/Low Lighting Controls	Yes	1,478	0.3	0	\$196	\$1,665	\$770	\$895	4.6	1,451
Motor Upgrades			973	0.2	0	\$131	\$876	\$0	\$876	6.7	980
ECM 6	Premium Efficiency Motors	Yes	973	0.2	0	\$131	\$876	\$0	\$876	6.7	980
Unitary HVAC Measures			19,329	10.7	6	\$2,662	\$40,964	\$7,535	\$33,429	12.6	20,213
ECM 7	Install High Efficiency Air Conditioning Units	No	19,329	10.7	6	\$2,662	\$40,964	\$7,535	\$33,429	12.6	20,213
Gas Heating (HVAC/Process) Replacement			0	0.0	63	\$556	\$35,158	\$6,000	\$29,158	52.5	7,372
ECM 8	Install High Efficiency Furnaces	No	0	0.0	63	\$556	\$35,158	\$6,000	\$29,158	52.5	7,372
HVAC System Improvements			0	0.0	2	\$16	\$46	\$32	\$14	0.9	218
ECM 9	Install Pipe Insulation	Yes	0	0.0	2	\$16	\$46	\$32	\$14	0.9	218
Domestic Water Heating Upgrade			0	0.0	3	\$29	\$108	\$82	\$25	0.9	390
ECM 10	Install Low-Flow DHW Devices	Yes	0	0.0	3	\$29	\$108	\$82	\$25	0.9	390
Food Service & Refrigeration Measures			1,551	0.2	0	\$209	\$460	\$100	\$360	1.7	1,562
ECM 11	Vending Machine Control	Yes	1,551	0.2	0	\$209	\$460	\$100	\$360	1.7	1,562
TOTALS (COST EFFECTIVE MEASURES)			44,303	9.6	-3	\$5,944	\$23,513	\$3,924	\$19,589	3.3	44,233
TOTALS (ALL MEASURES)			63,632	20.4	66	\$9,162	\$99,635	\$17,459	\$82,176	9.0	71,818

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

SOUTH WARD SENIOR CENTER

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			7,638	4.5	-2	\$1,196	\$6,239	\$1,191	\$5,048	4.2	7,501
ECM 1	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	3,003	2.6	-1	\$470	\$3,932	\$600	\$3,332	7.1	2,949
ECM 2	Retrofit Fixtures with LED Lamps	Yes	4,635	1.9	-1	\$726	\$2,307	\$591	\$1,716	2.4	4,552
Lighting Control Measures			1,477	0.8	0	\$231	\$2,456	\$335	\$2,121	9.2	1,451
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	1,319	0.7	0	\$206	\$2,006	\$195	\$1,811	8.8	1,295
ECM 4	Install High/Low Lighting Controls	Yes	158	0.1	0	\$25	\$450	\$140	\$310	12.5	155
Unitary HVAC Measures			1,930	1.4	0	\$306	\$23,235	\$0	\$23,235	76.0	1,944
ECM 5	Install High Efficiency Air Conditioning Units	No	1,930	1.4	0	\$306	\$23,235	\$0	\$23,235	76.0	1,944
HVAC System Improvements			0	0.0	37	\$341	\$339	\$108	\$231	0.7	4,370
ECM 6	Install Pipe Insulation	Yes	0	0.0	37	\$341	\$339	\$108	\$231	0.7	4,370
Domestic Water Heating Upgrade			0	0.0	2	\$16	\$29	\$26	\$3	0.2	199
ECM 7	Install Low-Flow DHW Devices	Yes	0	0.0	2	\$16	\$29	\$26	\$3	0.2	199
Food Service & Refrigeration Measures			1,016	0.1	0	\$161	\$2,368	\$400	\$1,968	12.2	1,023
ECM 8	Replace Refrigeration Equipment	Yes	1,016	0.1	0	\$161	\$2,368	\$400	\$1,968	12.2	1,023
TOTALS (COST EFFECTIVE MEASURES)			10,131	5.4	37	\$1,944	\$11,430	\$2,060	\$9,371	4.8	14,544
TOTALS (ALL MEASURES)			12,061	6.8	37	\$2,250	\$34,665	\$2,060	\$32,606	14.5	16,487

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

ARTWORKS

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			5,794	2.0	-1	\$1,117	\$3,831	\$494	\$3,337	3.0	5,740
ECM 1	Install LED Fixtures	Yes	1,878	0.0	0	\$365	\$1,710	\$250	\$1,460	4.0	1,891
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	2,269	1.2	0	\$436	\$1,473	\$234	\$1,239	2.8	2,229
ECM 3	Retrofit Fixtures with LED Lamps	Yes	1,647	0.8	0	\$316	\$648	\$10	\$638	2.0	1,621
Lighting Control Measures			1,039	0.5	0	\$200	\$1,650	\$175	\$1,475	7.4	1,023
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	946	0.5	0	\$182	\$1,250	\$175	\$1,075	5.9	929
ECM 5	Install Photocell Controls	Yes	94	0.0	0	\$18	\$400	\$0	\$400	22.0	94
Unitary HVAC Measures			1,886	1.7	0	\$366	\$5,175	\$0	\$5,175	14.1	1,899
ECM 6	Install High Efficiency Heat Pumps	No	1,886	1.7	0	\$366	\$5,175	\$0	\$5,175	14.1	1,899
Domestic Water Heating Upgrade			0	0.0	1	\$13	\$22	\$18	\$3	0.2	144
ECM 7	Install Low-Flow DHW Devices	Yes	0	0.0	1	\$13	\$22	\$18	\$3	0.2	144
TOTALS (COST EFFECTIVE MEASURES)			6,834	2.5	0	\$1,330	\$5,503	\$687	\$4,815	3.6	6,907
TOTALS (ALL MEASURES)			8,719	4.2	0	\$1,696	\$10,677	\$687	\$9,990	5.9	8,806

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

ANIMAL SHELTER

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			7,955	1.0	-2	\$1,031	\$1,461	\$400	\$1,061	1.0	7,812
ECM 1	Retrofit Fixtures with LED Lamps	Yes	7,955	1.0	-2	\$1,031	\$1,461	\$400	\$1,061	1.0	7,812
Lighting Control Measures			1,145	0.1	0	\$148	\$727	\$180	\$547	3.7	1,125
ECM 2	Install Occupancy Sensor Lighting Controls	Yes	763	0.1	0	\$99	\$502	\$75	\$427	4.3	750
ECM 3	Install High/Low Lighting Controls	Yes	382	0.0	0	\$49	\$225	\$105	\$120	2.4	375
Domestic Water Heating Upgrade			0	0.0	10	\$89	\$13,045	\$1,414	\$11,631	131.3	1,172
ECM 4	Install High Efficiency Gas-Fired Water Heater	No	0	0.0	9	\$79	\$13,024	\$1,399	\$11,625	146.3	1,051
ECM 5	Install Low-Flow DHW Devices	Yes	0	0.0	1	\$9	\$22	\$15	\$6	0.7	121
TOTALS (COST EFFECTIVE MEASURES)			9,100	1.2	-1	\$1,188	\$2,209	\$595	\$1,614	1.4	9,057
TOTALS (ALL MEASURES)			9,100	1.2	8	\$1,268	\$15,233	\$1,994	\$13,239	10.4	10,108

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

MONSIGNOR LIPINSKI CENTER

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			10,788	3.6	-1	\$1,422	\$7,183	\$890	\$6,293	4.4	10,751
ECM 1	Install LED Fixtures	Yes	6,303	0.0	0	\$836	\$3,270	\$250	\$3,020	3.6	6,347
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	4,415	3.3	-1	\$577	\$3,826	\$640	\$3,186	5.5	4,335
ECM 3	Retrofit Fixtures with LED Lamps	Yes	70	0.2	0	\$9	\$86	\$0	\$86	9.4	69
Lighting Control Measures			652	0.4	0	\$85	\$450	\$450	\$0	0.0	641
ECM 4	Install High/Low Lighting Controls	Yes	652	0.4	0	\$85	\$450	\$450	\$0	0.0	641
HVAC System Improvements			0	0.0	17	\$157	\$660	\$0	\$660	4.2	1,951
ECM 5	Install Programmable Thermostats	Yes	0	0.0	17	\$157	\$660	\$0	\$660	4.2	1,951
Domestic Water Heating Upgrade			0	0.0	1	\$12	\$22	\$18	\$3	0.3	144
ECM 6	Install Low-Flow DHW Devices	Yes	0	0.0	1	\$12	\$22	\$18	\$3	0.3	144
TOTALS (COST EFFECTIVE MEASURES)			11,440	4.0	17	\$1,675	\$8,314	\$1,358	\$6,955	4.2	13,487
TOTALS (ALL MEASURES)			11,440	4.0	17	\$1,675	\$8,314	\$1,358	\$6,955	4.2	13,487

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

ROEBLING CENTER

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			16,582	2.7	-3	\$2,135	\$3,904	\$582	\$3,322	1.6	16,348
ECM 1	Install LED Fixtures	Yes	5,308	0.4	0	\$688	\$2,889	\$450	\$2,439	3.5	5,289
ECM 2	Retrofit Fixtures with LED Lamps	Yes	11,274	2.3	-3	\$1,447	\$1,015	\$132	\$883	0.6	11,059
Lighting Control Measures			946	0.2	0	\$121	\$1,890	\$245	\$1,645	13.5	928
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	946	0.2	0	\$121	\$1,890	\$245	\$1,645	13.5	928
Unitary HVAC Measures			1,371	1.7	3	\$204	\$13,545	\$1,580	\$11,965	58.6	1,704
ECM 4	Install High Efficiency Air Conditioning Units	No	1,371	1.7	3	\$204	\$13,545	\$1,580	\$11,965	58.6	1,704
Domestic Water Heating Upgrade			0	0.0	5	\$48	\$79	\$79	\$0	0.0	611
ECM 5	Install Low-Flow DHW Devices	Yes	0	0.0	5	\$48	\$79	\$79	\$0	0.0	611
TOTALS (COST EFFECTIVE MEASURES)			17,529	2.9	2	\$2,304	\$5,873	\$906	\$4,967	2.2	17,887
TOTALS (ALL MEASURES)			18,900	4.6	5	\$2,509	\$19,417	\$2,486	\$16,931	6.7	19,591

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

TRENTON PUBLIC LIBRARY

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			131,441	18.0	-25	\$15,471	\$33,821	\$4,733	\$29,088	1.9	129,415
ECM 1	Install LED Fixtures	Yes	15,140	0.3	0	\$1,806	\$9,893	\$535	\$9,358	5.2	15,201
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	45,619	7.5	-10	\$5,360	\$12,045	\$1,620	\$10,425	1.9	44,801
ECM 3	Retrofit Fixtures with LED Lamps	Yes	70,682	10.3	-15	\$8,305	\$11,883	\$2,578	\$9,305	1.1	69,413
Lighting Control Measures			24,026	3.6	-5	\$2,823	\$11,283	\$2,795	\$8,488	3.0	23,594
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	21,608	3.3	-5	\$2,539	\$9,258	\$1,195	\$8,063	3.2	21,220
ECM 5	Install High/Low Lighting Controls	Yes	2,417	0.3	-1	\$284	\$2,025	\$1,600	\$425	1.5	2,374
Unitary HVAC Measures			11,576	2.5	0	\$1,384	\$13,155	\$2,050	\$11,105	8.0	11,657
ECM 6	Install High Efficiency Heat Pumps	Yes	11,576	2.5	0	\$1,384	\$13,155	\$2,050	\$11,105	8.0	11,657
HVAC System Improvements			0	0.0	2	\$20	\$35	\$24	\$11	0.5	241
ECM 7	Install Pipe Insulation	Yes	0	0.0	2	\$20	\$35	\$24	\$11	0.5	241
Domestic Water Heating Upgrade			0	0.0	8	\$80	\$2,713	\$321	\$2,392	29.8	972
ECM 8	Install High Efficiency Gas-Fired Water Heater	No	0	0.0	2	\$18	\$2,612	\$224	\$2,388	133.5	217
ECM 9	Install Low-Flow DHW Devices	Yes	0	0.0	6	\$62	\$100	\$97	\$3	0.1	755
Custom Measures			14,996	0.0	29	\$2,073	\$4,800	\$0	\$4,800	2.3	18,497
ECM 10	Optimize HVAC Schedule	Yes	14,996	0.0	29	\$2,073	\$4,800	\$0	\$4,800	2.3	18,497
TOTALS (COST EFFECTIVE MEASURES)			182,039	24.1	7	\$21,833	\$63,194	\$9,699	\$53,495	2.5	184,159
TOTALS (ALL MEASURES)			182,039	24.1	9	\$21,851	\$65,807	\$9,923	\$55,884	2.6	184,376

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

CITY HALL

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			109,434	24.6	-22	\$12,710	\$33,094	\$8,000	\$25,093	2.0	107,664
ECM 1	Install LED Fixtures	Yes	1,590	0.0	0	\$202	\$1,656	\$190	\$1,466	7.2	1,602
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	704	0.3	0	\$84	\$550	\$80	\$470	5.6	698
ECM 3	Retrofit Fixtures with LED Lamps	Yes	107,139	24.3	-22	\$12,423	\$30,887	\$7,730	\$23,157	1.9	105,365
Lighting Control Measures			26,693	5.6	-6	\$3,077	\$27,129	\$7,960	\$19,169	6.2	26,214
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	18,130	4.6	-4	\$2,090	\$19,254	\$2,615	\$16,639	8.0	17,804
ECM 5	Install High/Low Lighting Controls	Yes	8,564	1.1	-2	\$987	\$7,875	\$5,345	\$2,530	2.6	8,410
Motor Upgrades			1,768	0.3	0	\$225	\$6,281	\$0	\$6,281	27.9	1,781
ECM 6	Premium Efficiency Motors	No	1,768	0.3	0	\$225	\$6,281	\$0	\$6,281	27.9	1,781
Variable Frequency Drive (VFD) Measures			28,894	5.1	0	\$3,678	\$34,150	\$6,000	\$28,150	7.7	29,096
ECM 7	Install VFDs on Chilled Water Pumps	Yes	12,421	3.3	0	\$1,581	\$9,476	\$4,000	\$5,476	3.5	12,508
ECM 8	Install VFDs on Heating Water Pumps	Yes	16,473	1.8	0	\$2,097	\$24,673	\$2,000	\$22,673	10.8	16,588
Unitary HVAC Measures			13,524	9.2	0	\$1,721	\$76,106	\$9,015	\$67,091	39.0	13,618
ECM 9	Install High Efficiency Air Conditioning Units	No	13,030	8.9	0	\$1,658	\$70,976	\$9,015	\$61,961	37.4	13,121
ECM 10	Install High Efficiency Heat Pumps	No	494	0.3	0	\$63	\$5,130	\$0	\$5,130	81.6	497
Domestic Water Heating Upgrade			6,141	0.0	0	\$782	\$323	\$316	\$6	0.0	6,184
ECM 11	Install Low-Flow DHW Devices	Yes	6,141	0.0	0	\$782	\$323	\$316	\$6	0.0	6,184
Food Service & Refrigeration Measures			1,954	0.2	0	\$249	\$460	\$100	\$360	1.4	1,968
ECM 12	Vending Machine Control	Yes	1,954	0.2	0	\$249	\$460	\$100	\$360	1.4	1,968
TOTALS (COST EFFECTIVE MEASURES)			173,116	35.5	-27	\$20,495	\$95,155	\$22,377	\$72,778	3.6	171,126
TOTALS (ALL MEASURES)			188,408	45.0	-27	\$22,442	\$177,542	\$31,392	\$146,150	6.5	186,525

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

READING SENIOR CENTER

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			22,764	8.9	-5	\$3,808	\$12,140	\$2,240	\$9,900	2.6	22,356
ECM 1	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	4,780	1.9	-1	\$800	\$2,508	\$360	\$2,148	2.7	4,695
ECM 2	Retrofit Fixtures with LED Lamps	Yes	17,643	6.9	-4	\$2,951	\$9,488	\$1,880	\$7,608	2.6	17,327
ECM 3	Install LED Exit Signs	Yes	341	0.0	0	\$57	\$145	\$0	\$145	2.5	334
Lighting Control Measures			2,688	1.1	-1	\$450	\$1,852	\$160	\$1,692	3.8	2,640
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	2,688	1.1	-1	\$450	\$1,852	\$160	\$1,692	3.8	2,640
Motor Upgrades			4,949	1.2	0	\$837	\$5,574	\$0	\$5,574	6.7	4,983
ECM 5	Premium Efficiency Motors	Yes	4,949	1.2	0	\$837	\$5,574	\$0	\$5,574	6.7	4,983
Unitary HVAC Measures			1,575	1.1	0	\$266	\$6,521	\$1,050	\$5,471	20.5	1,586
ECM 6	Install High Efficiency Air Conditioning Units	No	1,575	1.1	0	\$266	\$6,521	\$1,050	\$5,471	20.5	1,586
Gas Heating (HVAC/Process) Replacement			0	0.0	130	\$1,080	\$30,534	\$4,764	\$25,771	23.9	15,237
ECM 7	Install High Efficiency Hot Water Boilers	No	0	0.0	130	\$1,080	\$30,534	\$4,764	\$25,771	23.9	15,237
HVAC System Improvements			0	0.0	6	\$50	\$79	\$36	\$43	0.9	705
ECM 8	Install Pipe Insulation	Yes	0	0.0	6	\$50	\$79	\$36	\$43	0.9	705
Domestic Water Heating Upgrade			0	0.0	2	\$14	\$29	\$26	\$3	0.2	199
ECM 9	Install Low-Flow DHW Devices	Yes	0	0.0	2	\$14	\$29	\$26	\$3	0.2	199
Food Service & Refrigeration Measures			4,953	0.6	0	\$837	\$2,450	\$0	\$2,450	2.9	4,988
ECM 10	Replace Refrigeration Equipment	Yes	4,953	0.6	0	\$837	\$2,450	\$0	\$2,450	2.9	4,988
TOTALS (COST EFFECTIVE MEASURES)			35,354	11.7	2	\$5,995	\$22,125	\$2,462	\$19,663	3.3	35,871
TOTALS (ALL MEASURES)			36,929	12.8	132	\$7,341	\$59,180	\$8,275	\$50,905	6.9	52,694

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

WEST WARD RECREATION CENTER

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			19,695	9.0	-2	\$3,065	\$17,593	\$2,475	\$15,118	4.9	19,568
ECM 1	Install LED Fixtures	Yes	17,506	6.9	-2	\$2,726	\$15,415	\$2,050	\$13,365	4.9	17,419
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	739	0.7	0	\$114	\$944	\$140	\$804	7.0	726
ECM 3	Retrofit Fixtures with LED Lamps	Yes	1,449	1.3	0	\$224	\$1,235	\$285	\$950	4.2	1,423
Lighting Control Measures			1,221	1.0	0	\$189	\$2,870	\$385	\$2,485	13.1	1,199
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	1,221	1.0	0	\$189	\$2,870	\$385	\$2,485	13.1	1,199
Motor Upgrades			665	0.2	0	\$104	\$2,850	\$0	\$2,850	27.3	670
ECM 5	Premium Efficiency Motors	No	665	0.2	0	\$104	\$2,850	\$0	\$2,850	27.3	670
Unitary HVAC Measures			4,568	5.4	0	\$715	\$46,042	\$6,390	\$39,652	55.4	4,600
ECM 6	Install High Efficiency Air Conditioning Units	No	3,750	4.3	0	\$587	\$42,173	\$6,310	\$35,863	61.1	3,776
ECM 7	Install High Efficiency PTAC/PTHP	No	818	1.2	0	\$128	\$3,869	\$80	\$3,789	29.6	824
Gas Heating (HVAC/Process) Replacement			0	0.0	67	\$579	\$17,948	\$2,800	\$15,148	26.2	7,887
ECM 8	Install High Efficiency Hot Water Boilers	No	0	0.0	67	\$579	\$17,948	\$2,800	\$15,148	26.2	7,887
HVAC System Improvements			0	0.0	0	\$4	\$29	\$20	\$9	2.5	49
ECM 9	Install Pipe Insulation	Yes	0	0.0	0	\$4	\$29	\$20	\$9	2.5	49
Domestic Water Heating Upgrade			0	0.0	5	\$42	\$154	\$91	\$62	1.5	569
ECM 10	Install Low-Flow DHW Devices	Yes	0	0.0	5	\$42	\$154	\$91	\$62	1.5	569
TOTALS (COST EFFECTIVE MEASURES)			20,916	10.0	3	\$3,299	\$20,646	\$2,971	\$17,674	5.4	21,386
TOTALS (ALL MEASURES)			26,149	15.7	70	\$4,697	\$87,486	\$12,161	\$75,324	16.0	34,543

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

N. TRENTON BATTING CAGE

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			915	0.6	0	\$192	\$1,152	\$200	\$952	5.0	903
ECM 1	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	612	0.5	0	\$128	\$988	\$160	\$828	6.5	600
ECM 2	Retrofit Fixtures with LED Lamps	Yes	303	0.1	0	\$64	\$163	\$40	\$123	1.9	303
Lighting Control Measures			267	0.2	0	\$56	\$760	\$105	\$655	11.7	262
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	267	0.2	0	\$56	\$760	\$105	\$655	11.7	262
Gas Heating (HVAC/Process) Replacement			0	0.0	13	\$119	\$5,713	\$1,000	\$4,713	39.7	1,556
ECM 4	Install High Efficiency Furnaces	No	0	0.0	13	\$119	\$5,713	\$1,000	\$4,713	39.7	1,556
Domestic Water Heating Upgrade			278	0.0	0	\$59	\$14	\$14	\$0	0.0	280
ECM 5	Install Low-Flow DHW Devices	Yes	278	0.0	0	\$59	\$14	\$14	\$0	0.0	280
TOTALS (COST EFFECTIVE MEASURES)			1,460	0.8	0	\$306	\$1,926	\$319	\$1,607	5.2	1,445
TOTALS (ALL MEASURES)			1,460	0.8	13	\$425	\$7,639	\$1,319	\$6,320	14.9	3,001

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs..

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

CHAMBERSBURG LITTLE LEAGUE

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			1,556	0.1	0	\$380	\$1,793	\$340	\$1,453	3.8	1,564
ECM 1	Install LED Fixtures	Yes	1,452	0.0	0	\$354	\$1,503	\$300	\$1,203	3.4	1,462
ECM 2	Retrofit Fixtures with LED Lamps	Yes	104	0.1	0	\$25	\$290	\$40	\$250	9.9	102
Lighting Control Measures			37	0.0	0	\$9	\$232	\$40	\$192	21.5	36
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	37	0.0	0	\$9	\$232	\$40	\$192	21.5	36
HVAC System Improvements			21	0.0	6	\$61	\$694	\$24	\$670	11.0	741
ECM 4	Install Programmable Thermostats	Yes	0	0.0	6	\$56	\$660	\$0	\$660	11.9	720
ECM 5	Install Pipe Insulation	Yes	21	0.0	0	\$5	\$35	\$24	\$11	2.0	21
Domestic Water Heating Upgrade			360	0.0	0	\$88	\$22	\$18	\$3	0.0	362
ECM 6	Install Low-Flow DHW Devices	Yes	360	0.0	0	\$88	\$22	\$18	\$3	0.0	362
TOTALS (COST EFFECTIVE MEASURES)			1,974	0.1	6	\$537	\$2,741	\$422	\$2,318	4.3	2,704
TOTALS (ALL MEASURES)			1,974	0.1	6	\$537	\$2,741	\$422	\$2,318	4.3	2,704

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

CADWALADER PARK – RESTROOM

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			3,070	0.0	0	\$257	\$296	\$15	\$281	1.1	3,091
ECM 1	Retrofit Fixtures with LED Lamps	Yes	3,070	0.0	0	\$257	\$296	\$15	\$281	1.1	3,091
Lighting Control Measures			75	0.0	0	\$6	\$540	\$70	\$470	74.7	76
ECM 2	Install Occupancy Sensor Lighting Controls	No	75	0.0	0	\$6	\$540	\$70	\$470	74.7	76
HVAC System Improvements			114	0.0	0	\$10	\$58	\$40	\$18	1.8	115
ECM 3	Install Pipe Insulation	Yes	114	0.0	0	\$10	\$58	\$40	\$18	1.8	115
Domestic Water Heating Upgrade			654	0.0	0	\$55	\$57	\$57	\$0	0.0	659
ECM 4	Install Low-Flow DHW Devices	Yes	654	0.0	0	\$55	\$57	\$57	\$0	0.0	659
TOTALS (COST EFFECTIVE MEASURES)			3,839	0.0	0	\$321	\$411	\$112	\$299	0.9	3,865
TOTALS (ALL MEASURES)			3,914	0.1	0	\$328	\$951	\$182	\$769	2.3	3,941

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

TRAFFIC & PARKING SHOP

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			5,184	1.8	-1	\$679	\$2,155	\$482	\$1,673	2.5	5,091
ECM 1	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	1,146	0.4	0	\$150	\$494	\$80	\$414	2.8	1,125
ECM 2	Retrofit Fixtures with LED Lamps	Yes	4,038	1.4	-1	\$529	\$1,661	\$402	\$1,259	2.4	3,966
Lighting Control Measures			7,730	2.4	-2	\$1,013	\$2,816	\$370	\$2,446	2.4	7,591
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	7,730	2.4	-2	\$1,013	\$2,816	\$370	\$2,446	2.4	7,591
Unitary HVAC Measures			3,606	2.5	0	\$479	\$19,764	\$2,076	\$17,688	36.9	3,632
ECM 4	Install High Efficiency Air Conditioning Units	No	3,606	2.5	0	\$479	\$19,764	\$2,076	\$17,688	36.9	3,632
Gas Heating (HVAC/Process) Replacement			0	0.0	18	\$154	\$5,830	\$1,000	\$4,830	31.4	2,052
ECM 5	Install High Efficiency Furnaces	No	0	0.0	18	\$154	\$5,830	\$1,000	\$4,830	31.4	2,052
HVAC System Improvements			220	0.0	0	\$29	\$58	\$40	\$18	0.6	221
ECM 6	Install Pipe Insulation	Yes	220	0.0	0	\$29	\$58	\$40	\$18	0.6	221
Domestic Water Heating Upgrade			139	0.0	0	\$18	\$14	\$8	\$6	0.3	140
ECM 7	Install Low-Flow DHW Devices	Yes	139	0.0	0	\$18	\$14	\$8	\$6	0.3	140
TOTALS			16,879	6.7	15	\$2,373	\$30,638	\$3,976	\$26,662	11.2	18,727

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

STREET DIVISION

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			8,859	1.0	-1	\$1,191	\$17,862	\$3,357	\$484	\$2,873	2.4	8,792
ECM 1	Install LED Fixtures	Yes	3,323	0.0	0	\$450	\$6,748	\$1,609	\$200	\$1,409	3.1	3,347
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	1,727	0.4	0	\$231	\$3,461	\$803	\$110	\$693	3.0	1,692
ECM 3	Retrofit Fixtures with LED Lamps	Yes	3,809	0.6	-1	\$510	\$7,653	\$945	\$174	\$771	1.5	3,753
Lighting Control Measures			15,705	3.2	-4	\$2,098	\$16,786	\$2,932	\$390	\$2,542	1.2	15,392
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	15,705	3.2	-4	\$2,098	\$16,786	\$2,932	\$390	\$2,542	1.2	15,392
Unitary HVAC Measures			320	0.2	0	\$43	\$650	\$1,406	\$0	\$1,406	32.5	322
ECM 5	Install High Efficiency Air Conditioning Units	No	320	0.2	0	\$43	\$650	\$1,406	\$0	\$1,406	32.5	322
Domestic Water Heating Upgrade			417	0.0	0	\$56	\$565	\$22	\$22	\$0	0.0	420
ECM 6	Install Low-Flow DHW Devices	Yes	417	0.0	0	\$56	\$565	\$22	\$22	\$0	0.0	420
TOTALS (COST EFFECTIVE MEASURES)			24,981	4.2	-5	\$3,345	\$35,212	\$6,311	\$896	\$5,415	1.6	24,604
TOTALS (ALL MEASURES)			25,301	4.4	-5	\$3,389	\$35,862	\$7,717	\$896	\$6,821	2.0	24,926

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

PROPERTY MAINTENANCE SHOP

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			13,218	6.6	-3	\$1,602	\$9,259	\$1,454	\$7,805	4.9	13,000
ECM 1	Install LED Fixtures	Yes	753	0.0	0	\$93	\$389	\$100	\$289	3.1	759
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	11,805	6.3	-3	\$1,430	\$8,535	\$1,290	\$7,245	5.1	11,593
ECM 3	Retrofit Fixtures with LED Lamps	Yes	660	0.3	0	\$80	\$334	\$64	\$270	3.4	648
Lighting Control Measures			2,083	0.7	0	\$252	\$2,385	\$350	\$2,035	8.1	2,046
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	1,929	0.6	0	\$234	\$2,160	\$280	\$1,880	8.0	1,895
ECM 5	Install High/Low Lighting Controls	Yes	154	0.0	0	\$19	\$225	\$70	\$155	8.3	151
Unitary HVAC Measures			3,734	2.2	5	\$500	\$20,636	\$2,215	\$18,421	36.8	4,305
ECM 6	Install High Efficiency Air Conditioning Units	No	3,734	2.2	5	\$500	\$20,636	\$2,215	\$18,421	36.8	4,305
Gas Heating (HVAC/Process) Replacement			0	0.0	42	\$368	\$6,131	\$600	\$5,531	15.0	4,892
ECM 7	Install Infrared Heaters	Yes	0	0.0	42	\$368	\$6,131	\$600	\$5,531	15.0	4,892
HVAC System Improvements			3,481	0.0	26	\$657	\$733	\$462	\$271	0.4	6,549
ECM 8	Install Occupancy-Controlled Thermostats	Yes	3,163	0.0	26	\$618	\$716	\$450	\$266	0.4	6,229
ECM 9	Install Pipe Insulation	Yes	318	0.0	0	\$39	\$17	\$12	\$5	0.1	320
Domestic Water Heating Upgrade			303	0.0	0	\$37	\$22	\$15	\$6	0.2	305
ECM 10	Install Low-Flow DHW Devices	Yes	303	0.0	0	\$37	\$22	\$15	\$6	0.2	305
TOTALS (COST EFFECTIVE MEASURES)			19,084	7.3	65	\$2,917	\$18,530	\$2,881	\$15,648	5.4	26,792
TOTALS (ALL MEASURES)			22,818	9.5	69	\$3,417	\$39,166	\$5,096	\$34,070	10.0	31,097

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

PARK DEPARTMENT MAINTENANCE

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			13,355	2.7	-3	\$1,778	\$5,709	\$1,043	\$4,666	2.6	13,092
ECM 1	Install LED Fixtures	Yes	7,087	1.3	-2	\$943	\$2,955	\$300	\$2,655	2.8	6,945
ECM 2	Retrofit Fixtures with LED Lamps	Yes	6,268	1.4	-1	\$834	\$2,754	\$743	\$2,011	2.4	6,147
Lighting Control Measures			2,754	0.6	-1	\$367	\$3,660	\$820	\$2,840	7.7	2,699
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	2,126	0.5	0	\$283	\$3,210	\$420	\$2,790	9.9	2,084
ECM 4	Install High/Low Lighting Controls	Yes	628	0.1	0	\$84	\$450	\$400	\$50	0.6	616
Gas Heating (HVAC/Process) Replacement			0	0.0	173	\$1,218	\$18,060	\$2,600	\$15,460	12.7	20,300
ECM 5	Install High Efficiency Furnaces	Yes	0	0.0	92	\$645	\$12,363	\$2,000	\$10,363	16.1	10,743
ECM 6	Install Infrared Heaters	Yes	0	0.0	82	\$574	\$5,696	\$600	\$5,096	8.9	9,557
HVAC System Improvements			374	0.0	147	\$1,082	\$2,114	\$440	\$1,674	1.5	17,559
ECM 7	Install Programmable Thermostats	Yes	0	0.0	53	\$375	\$990	\$0	\$990	2.6	6,252
ECM 8	Install Pipe Insulation	Yes	374	0.0	93	\$706	\$1,124	\$440	\$684	1.0	11,307
Custom Measures			2,242	0.0	488	\$3,731	\$61,882	\$0	\$61,882	16.6	59,396
ECM 9	Building Envelope Improvements	No	0	0.0	488	\$3,429	\$59,812	\$0	\$59,812	17.4	57,139
ECM 10	Install Heat Pump Water Heater	Yes	2,242	0.0	0	\$302	\$2,070	\$0	\$2,070	6.9	2,258
TOTALS (COST EFFECTIVE MEASURES)			18,725	3.3	316	\$4,746	\$31,612	\$4,903	\$26,709	5.6	55,908
TOTALS (ALL MEASURES)			18,725	3.3	804	\$8,175	\$91,424	\$4,903	\$86,521	10.6	113,047

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

POLICE PRECINCT WEST

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			30,896	5.0	-7	\$3,815	\$6,710	\$1,746	\$4,964	1.3	30,347
ECM 1	Retrofit Fixtures with LED Lamps	Yes	30,896	5.0	-7	\$3,815	\$6,710	\$1,746	\$4,964	1.3	30,347
Lighting Control Measures			8,049	1.2	-2	\$994	\$4,334	\$1,790	\$2,544	2.6	7,904
ECM 2	Install Occupancy Sensor Lighting Controls	Yes	4,694	0.7	-1	\$580	\$2,084	\$270	\$1,814	3.1	4,610
ECM 3	Install High/Low Lighting Controls	Yes	3,354	0.5	-1	\$414	\$2,250	\$1,520	\$730	1.8	3,294
Motor Upgrades			2,245	0.2	0	\$282	\$1,415	\$0	\$1,415	5.0	2,261
ECM 4	Premium Efficiency Motors	Yes	2,245	0.2	0	\$282	\$1,415	\$0	\$1,415	5.0	2,261
Unitary HVAC Measures			4,299	2.3	1	\$548	\$32,264	\$3,160	\$29,104	53.1	4,414
ECM 5	Install High Efficiency Air Conditioning Units	No	4,299	2.3	1	\$548	\$32,264	\$3,160	\$29,104	53.1	4,414
Domestic Water Heating Upgrade			0	0.0	6	\$64	\$250	\$129	\$122	1.9	716
ECM 6	Install Low-Flow DHW Devices	Yes	0	0.0	6	\$64	\$250	\$129	\$122	1.9	716
TOTALS (COST EFFECTIVE MEASURES)			41,190	6.4	-2	\$5,154	\$12,709	\$3,665	\$9,045	1.8	41,228
TOTALS (ALL MEASURES)			45,488	8.7	-1	\$5,702	\$44,974	\$6,825	\$38,149	6.7	45,643

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

POLICE PRECINCT EAST

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			42,750	4.6	-3	\$5,477	\$20,621	\$2,765	\$17,856	3.3	42,683
ECM 1	Install LED Fixtures	Yes	27,856	0.0	0	\$3,589	\$14,560	\$1,175	\$13,385	3.7	28,051
ECM 2	Retrofit Fixtures with LED Lamps	Yes	14,894	4.6	-3	\$1,888	\$6,061	\$1,590	\$4,471	2.4	14,632
Lighting Control Measures			3,618	1.1	-1	\$458	\$4,436	\$1,380	\$3,056	6.7	3,553
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	1,939	0.7	0	\$246	\$3,086	\$405	\$2,681	10.9	1,904
ECM 4	Install High/Low Lighting Controls	Yes	1,679	0.4	0	\$213	\$1,350	\$975	\$375	1.8	1,649
Motor Upgrades			244	0.0	0	\$31	\$1,266	\$0	\$1,266	40.3	246
ECM 5	Premium Efficiency Motors	No	244	0.0	0	\$31	\$1,266	\$0	\$1,266	40.3	246
Unitary HVAC Measures			1,916	2.3	1	\$258	\$32,264	\$3,160	\$29,104	112.8	2,061
ECM 6	Install High Efficiency Air Conditioning Units	No	1,916	2.3	1	\$258	\$32,264	\$3,160	\$29,104	112.8	2,061
Domestic Water Heating Upgrade			0	0.0	6	\$61	\$250	\$129	\$122	2.0	716
ECM 7	Install Low-Flow DHW Devices	Yes	0	0.0	6	\$61	\$250	\$129	\$122	2.0	716
TOTALS (COST EFFECTIVE MEASURES)			46,368	5.7	2	\$5,997	\$25,307	\$4,274	\$21,034	3.5	46,952
TOTALS (ALL MEASURES)			48,528	8.0	3	\$6,286	\$58,837	\$7,434	\$51,404	8.2	49,258

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

K-9 TRAINING FACILITY

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			15,332	1.8	-3	\$2,144	\$4,445	\$900	\$3,545	1.7	15,142
ECM 1	Install LED Fixtures	Yes	3,119	0.0	0	\$441	\$1,707	\$150	\$1,557	3.5	3,141
ECM 2	Retrofit Fixtures with LED Lamps	Yes	12,213	1.8	-3	\$1,703	\$2,739	\$750	\$1,989	1.2	12,002
Lighting Control Measures			3,797	0.6	-1	\$529	\$1,691	\$300	\$1,391	2.6	3,729
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	3,622	0.5	-1	\$505	\$1,466	\$195	\$1,271	2.5	3,557
ECM 4	Install High/Low Lighting Controls	Yes	175	0.0	0	\$24	\$225	\$105	\$120	4.9	172
Unitary HVAC Measures			711	0.5	20	\$278	\$7,043	\$1,050	\$5,993	21.5	3,046
ECM 5	Install High Efficiency Air Conditioning Units	No	711	0.5	20	\$278	\$7,043	\$1,050	\$5,993	21.5	3,046
Gas Heating (HVAC/Process) Replacement			0	0.0	5	\$44	\$4,975	\$800	\$4,175	93.9	583
ECM 6	Install High Efficiency Hot Water Boilers	No	0	0.0	5	\$44	\$4,975	\$800	\$4,175	93.9	583
Domestic Water Heating Upgrade			0	0.0	27	\$241	\$2,692	\$259	\$2,433	10.1	3,151
ECM 7	Install High Efficiency Gas-Fired Water Heater	Yes	0	0.0	26	\$236	\$2,685	\$252	\$2,433	10.3	3,095
ECM 8	Install Low-Flow DHW Devices	Yes	0	0.0	0	\$4	\$7	\$7	\$0	0.0	56
TOTALS (COST EFFECTIVE MEASURES)			19,129	2.4	24	\$2,913	\$8,828	\$1,459	\$7,369	2.5	22,022
TOTALS (ALL MEASURES)			19,839	2.9	48	\$3,236	\$20,846	\$3,309	\$17,537	5.4	25,650

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

MILL HILL PLAYHOUSE

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			4,673	2.8	0	\$1,031	\$3,134	\$314	\$2,820	2.7	4,706
ECM 1	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	No	112	0.5	0	\$25	\$766	\$101	\$665	27.0	112
ECM 2	Retrofit Fixtures with LED Lamps	Yes	4,562	2.2	0	\$1,007	\$2,368	\$213	\$2,155	2.1	4,594
Unitary HVAC Measures			7,540	4.5	0	\$1,664	\$32,697	\$3,465	\$29,232	17.6	7,593
ECM 3	Install High Efficiency Heat Pumps	No	7,540	4.5	0	\$1,664	\$32,697	\$3,465	\$29,232	17.6	7,593
Domestic Water Heating Upgrade			1,039	0.0	0	\$229	\$50	\$47	\$3	0.0	1,046
ECM 4	Install Low-Flow DHW Devices	Yes	1,039	0.0	0	\$229	\$50	\$47	\$3	0.0	1,046
TOTALS (COST EFFECTIVE MEASURES)			5,600	2.2	0	\$1,236	\$2,418	\$260	\$2,158	1.7	5,640
TOTALS (ALL MEASURES)			13,252	7.2	0	\$2,924	\$35,881	\$3,826	\$32,055	11.0	13,345

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs.

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

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

MEASURES FOR FUTURE CONSIDERATION

- Retro-Commissioning Study
- Upgrade/Replace Energy Management System
- Installation of an Energy Management System
- High Speed Insulated Overhead Doors
- Heating System Upgrades
- Vestibule Revolving Doors
- Window Replacements

SOLAR ENERGY GENERATION POTENTIAL

	City Hall	Police Headquarters
<i>Potential:</i>	HIGH	HIGH
<i>System Potential: (kW)</i>	188	186
<i>Electric Generation: (kWh per year)</i>	223,978	221,595
<i>Displaced Cost: (per year)</i>	\$28,510	\$27,480

Successor Solar Incentive Program

<https://www.njcleanenergy.com/renewable-energy/programs/susi-program>

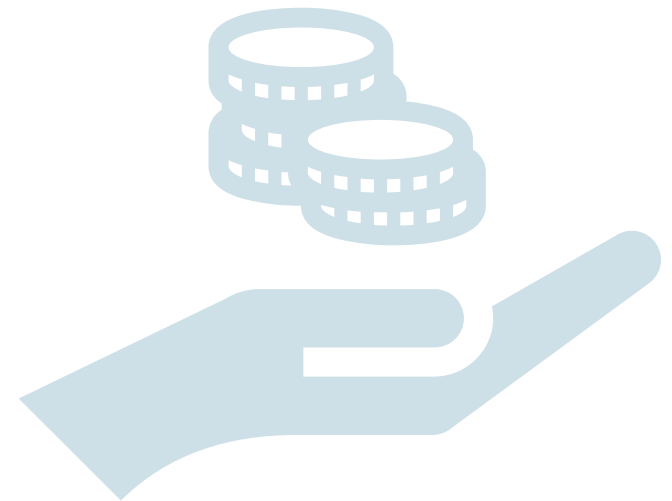
Community Solar Energy Pilot Program

<http://www.NJCleanEnergy.com/CommunitySolar>

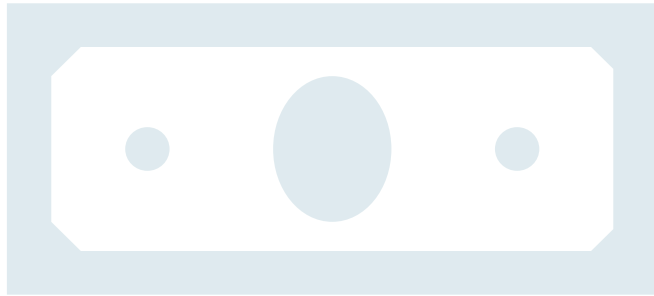
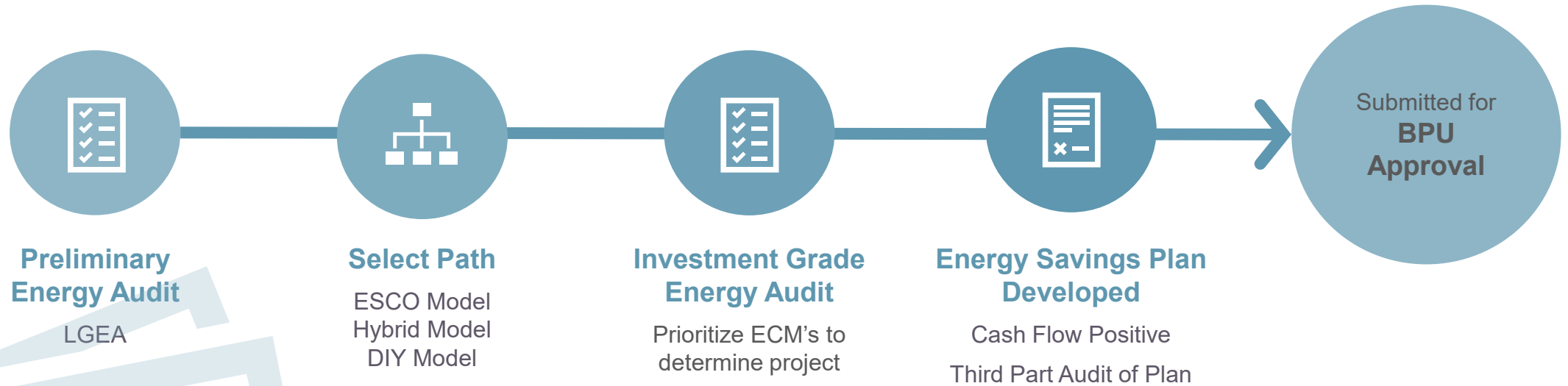
FINANCING MECHANISM: ESIP

ENERGY SAVINGS IMPROVEMENT PROGRAM (ESIP)

- Energy Performance Contracting – NJ ESIP
- Financing Mechanism that allows state entities to make energy efficiency improvements without impacting their budgets
- Administered by the NJBPU
- Project is paid for with the value of its own energy savings
- 15 or 20 year self-funding loan
- Recent Energy Efficiency Transition
 - NJBPU Approved Incentive Programs
 - Utility or NJCEP
- Can be combined with Federal/State Pandemic Relief Funds
- No upfront capital expenses
- No referendum or impact to tax payers



FINANCING MECHANISM: ESIP



ENERGY SAVINGS IMPROVEMENT PROGRAM

FOR MORE INFORMATION

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NJCEP COMMERCIAL & INDUSTRIAL PROGRAMS

<https://www.njcleanenergy.com/transition>

LOCAL
GOVERNMENT
CUSTOMERS

COMMERCIAL &
INSTITUTIONAL
CUSTOMERS

LARGE
ENERGY
CUSTOMERS

EXISTING BUILDINGS

MEASUREMENT & AUDITS

FREE Energy Audits



RETROFITS

Prescriptive &
Custom Rebates

Direct Install

Engineered Solutions

And more from
your local utility!



Incentives up
to \$4 million
for eligible projects



NEW CONSTRUCTION

Prescriptive & Custom
Rebates for New
Construction and
Gut Rehabs

Pay for Performance
incentives for
buildings over
50,000 sq. ft.



DISTRIBUTED ENERGY RESOURCES

Combined Heat & Power
and Fuel Cell Installation
Incentives

Microgrid Development

Battery Storage

Muni EV Fleets



Key:

Programs run by NJCEP



Programs run by investor-owned utility companies



CLEAN FLEET ELECTRIC VEHICLE INCENTIVE PROGRAM

www.NJCleanEnergy.com/EV

- Electric vehicles are now included on the State Purchasing Contract under Award T0099
- Clean Fleet Electric Vehicle Incentive Program
 - Designed to encourage local and state governments to add EVs to their fleet
 - \$4,000 per battery electric vehicle (maximum of 2); and
 - \$1,500 for one Level-Two EV charging station
 - Grants awarded on rolling basis until June 2021, or until funding expended
- Questions? EV.programs@bpu.nj.gov



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THANK YOU

