

LGEA Presentation

Burlington County Bridge Commission

June 6, 2022

New Jersey's
Clean Energy Program

Lighting the way to New Jersey's Clean Energy Future



INTRODUCTIONS

- *Burlington County Bridge Commission*

- Steven Rathgeb – Sustainability Coordinator
- Mike Ott – Senior Engineer
- Sascha Harding – Resident Engineer
- Christine Nociti – CFO/Chief Compliance Officer
- John Moore – Director of PCNP

- *NJ Clean Energy Program*

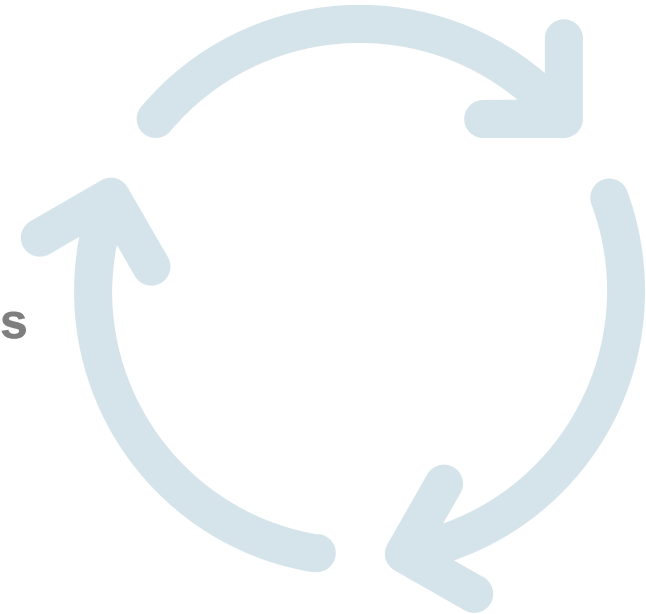
- Sarah Walters – LGEA Project Manager
- Moussa Traore – LGEA Lead Auditor
- Ryan Knippenberg – LGEA Project Auditor
- Meredith Coley – LGEA Account Manager
- Michelle Rossi – ESIP Coordinator (BPU)
- Arif Welcher – Government/Business Manager (BPU)

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 Burlington County Bridge Commission

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
- Bridge Equipment

Utility Consumption:

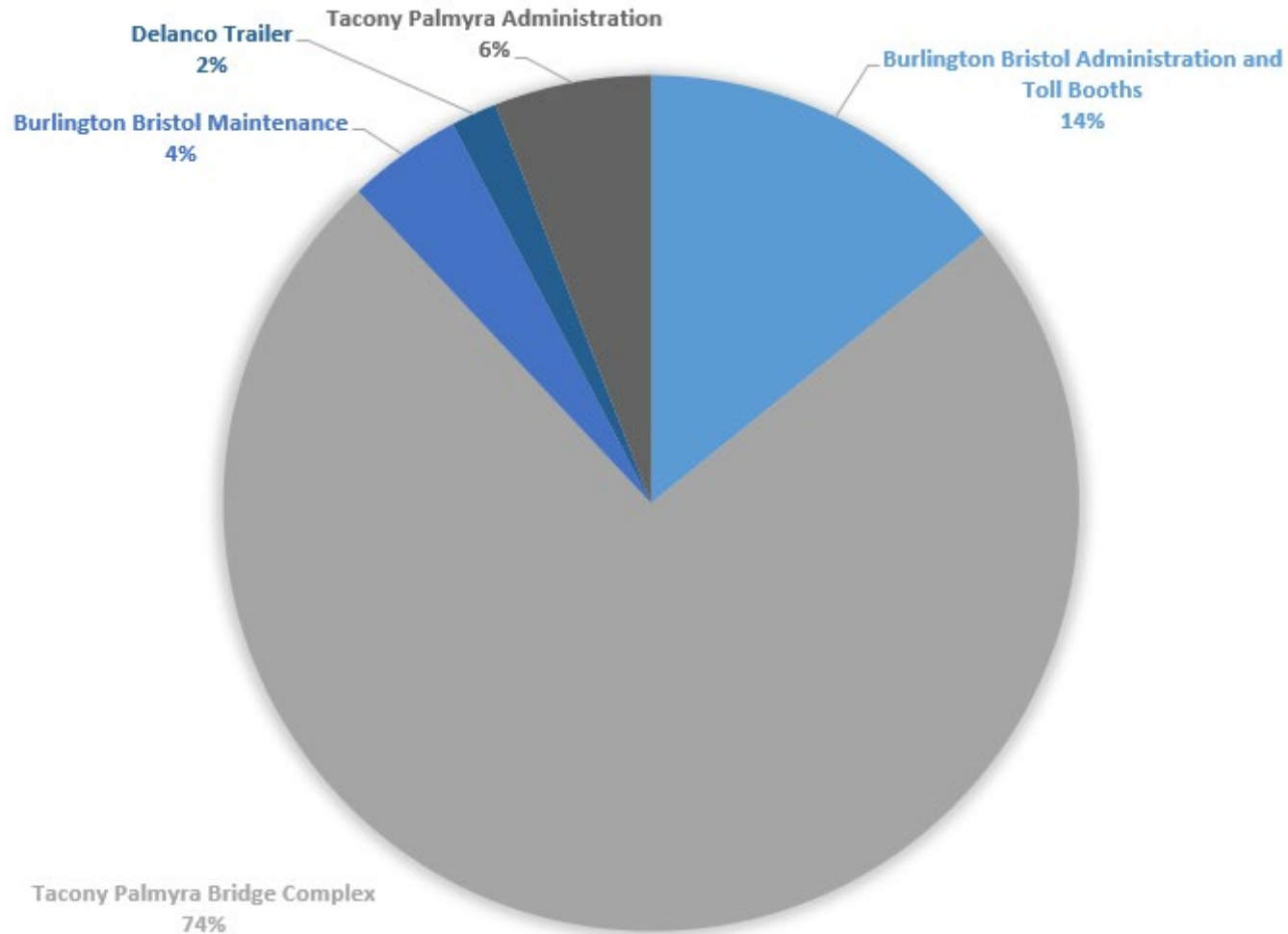
- Electric Consumption and Costs
- Natural Gas Consumption and Costs

Sites Visited/Analyzed

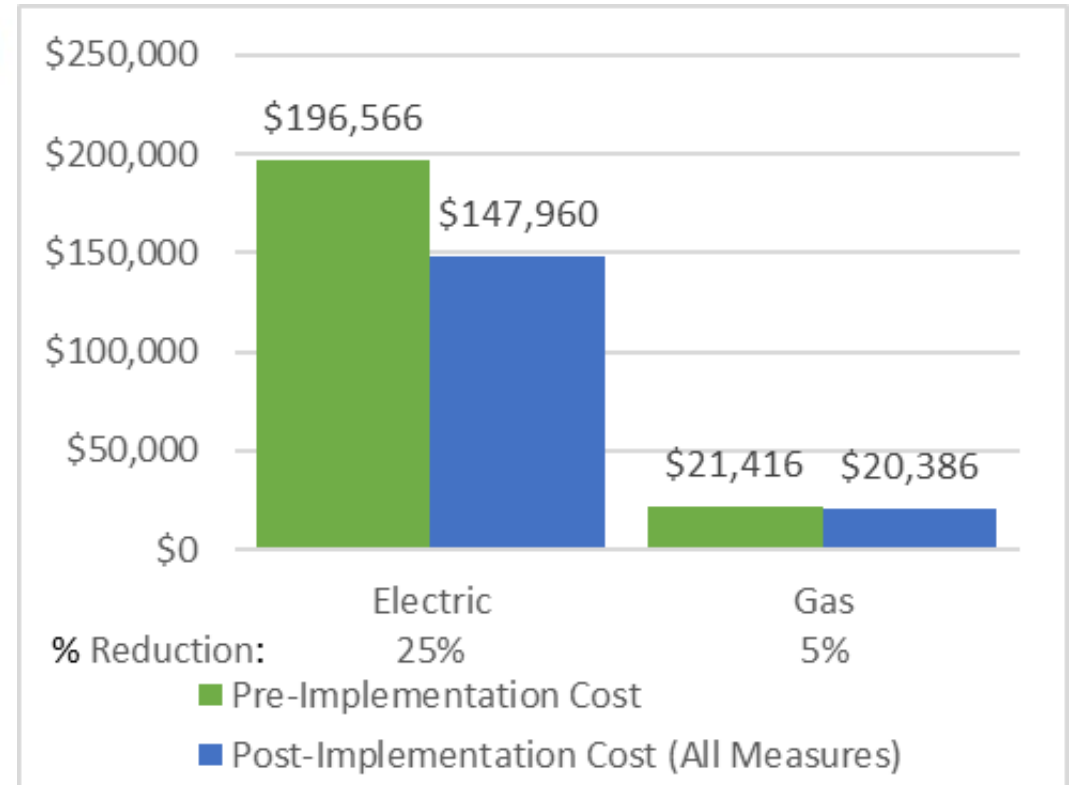
- Talcony Palmyra Administration
- Talcony Palmyra Toll Building
- Talcony Palmyra Police
- Talcony Palmyra Maintenance
- Talcony Palmyra Cove
- Delanco Trailer
- Burlington Bristol Administration
- Burlington Bristol Maintenance
- Talcony Palmyra Toll Booths
- Burlington Bristol Toll Booths

UTILITY BREAKOUT

Percent of Total Annual Energy Costs



Pre & Post Implementation Cost



BENCHMARKING

ENERGY STAR® Statement of Energy Performance

51
ENERGY STAR® Score¹

Tacony Palmyra - Administration Building

Primary Property Type: Office
Gross Floor Area (ft²): 4,766
Built: 1929

For Year Ending: August 31, 2021
Date Generated: February 27, 2022

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 Tacony Palmyra - Administration Building 1300 Route 73 North Palmyra Boro, New Jersey 08065	Property Owner Burlington County Bridge Commission 1300 Route 73 North Palmyra, NJ 08065 (856) 829-1500	Primary Contact Steven Rathgeb 1300 Route 73 North Palmyra, NJ 08065 (856) 829-1900 Ext. 1264 SRathgeb@bcbridges.org
Property ID: 19076138		

Energy Consumption and Energy Use Intensity (EUI)		
Site EUI 63.9 kBtu/ft ²	Annual Energy by Fuel Electricity - Grid (kBtu) 298,219 (98%) Natural Gas (kBtu) 6,273 (2%)	National Median Comparison National Median Site EUI (kBtu/ft ²) 65 National Median Source EUI (kBtu/ft ²) 179.7 % Diff from National Median Source EUI -2%
Source EUI 176.6 kBtu/ft ²	Annual Emissions Greenhouse Gas Emissions (Metric Tons CO ₂ e/year) 28	

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

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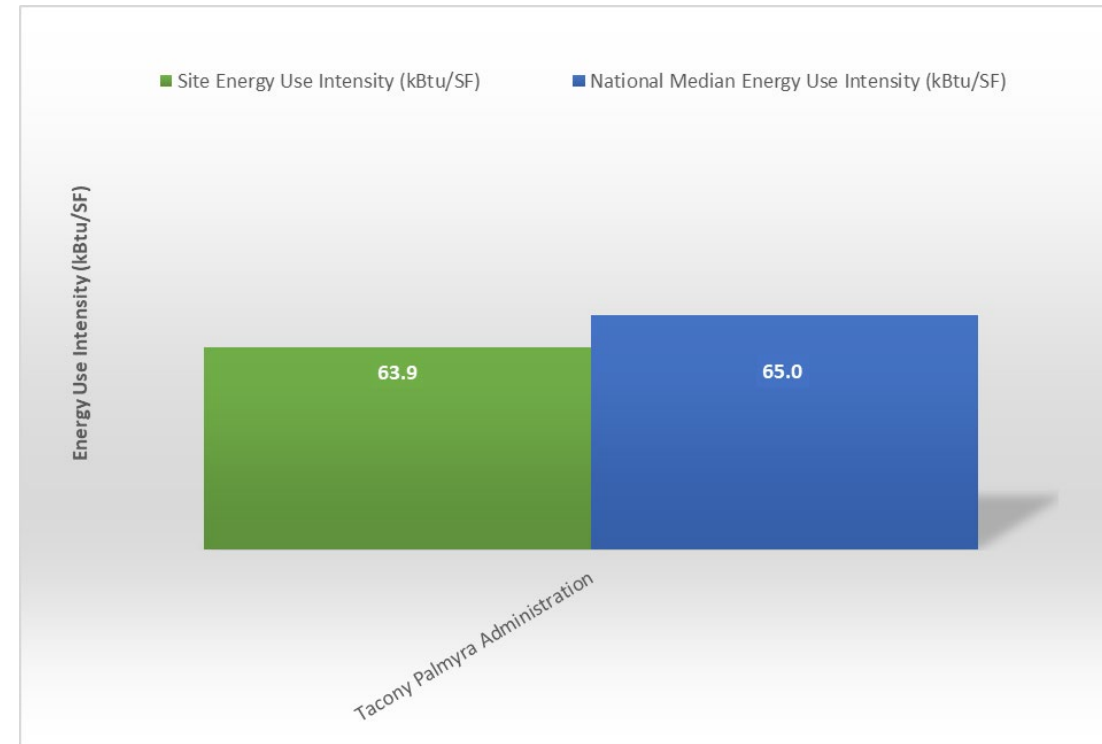
Professional Engineer or Registered Architect Stamp (if applicable)

Site EUI
63.9 kBtu/ft²

Source EUI
176.6 kBtu/ft²

National Median Comparison

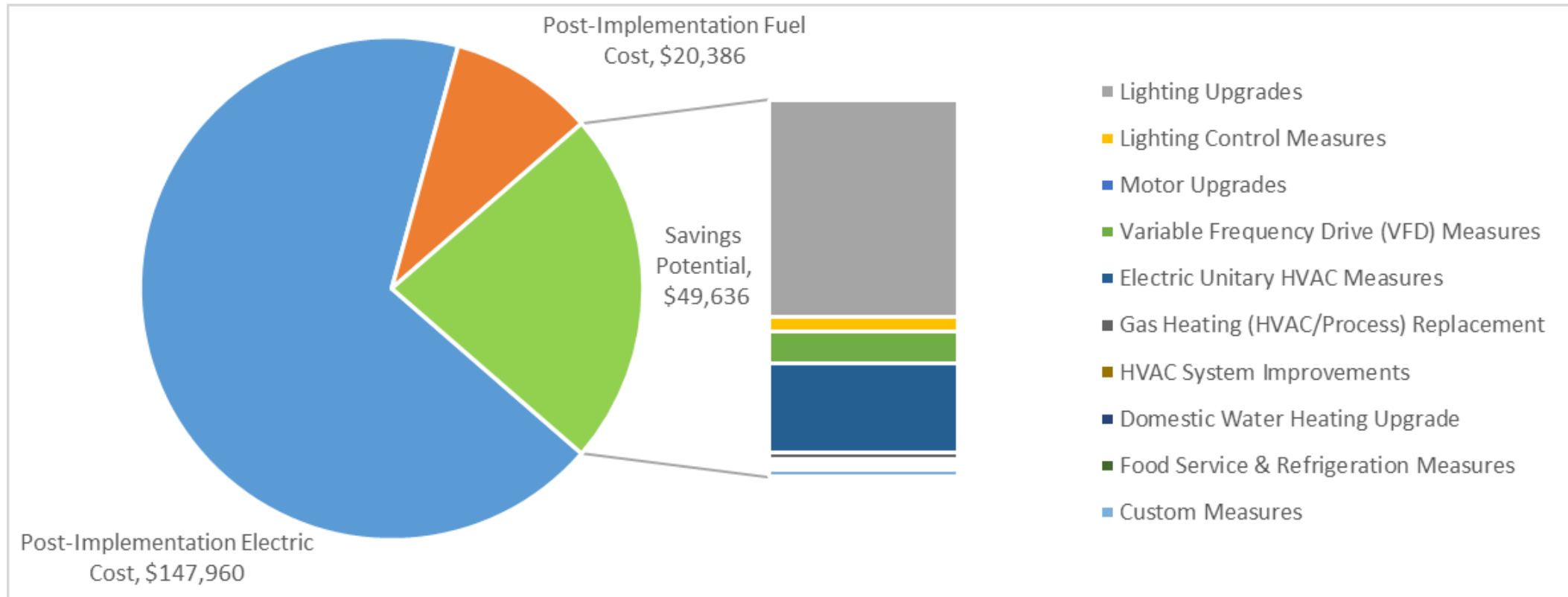
National Median Site EUI (kBtu/ft ²)	65
National Median Source EUI (kBtu/ft ²)	179.7
% Diff from National Median Source EUI	-2%



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

Savings Potential



ALL OPPORTUNITIES

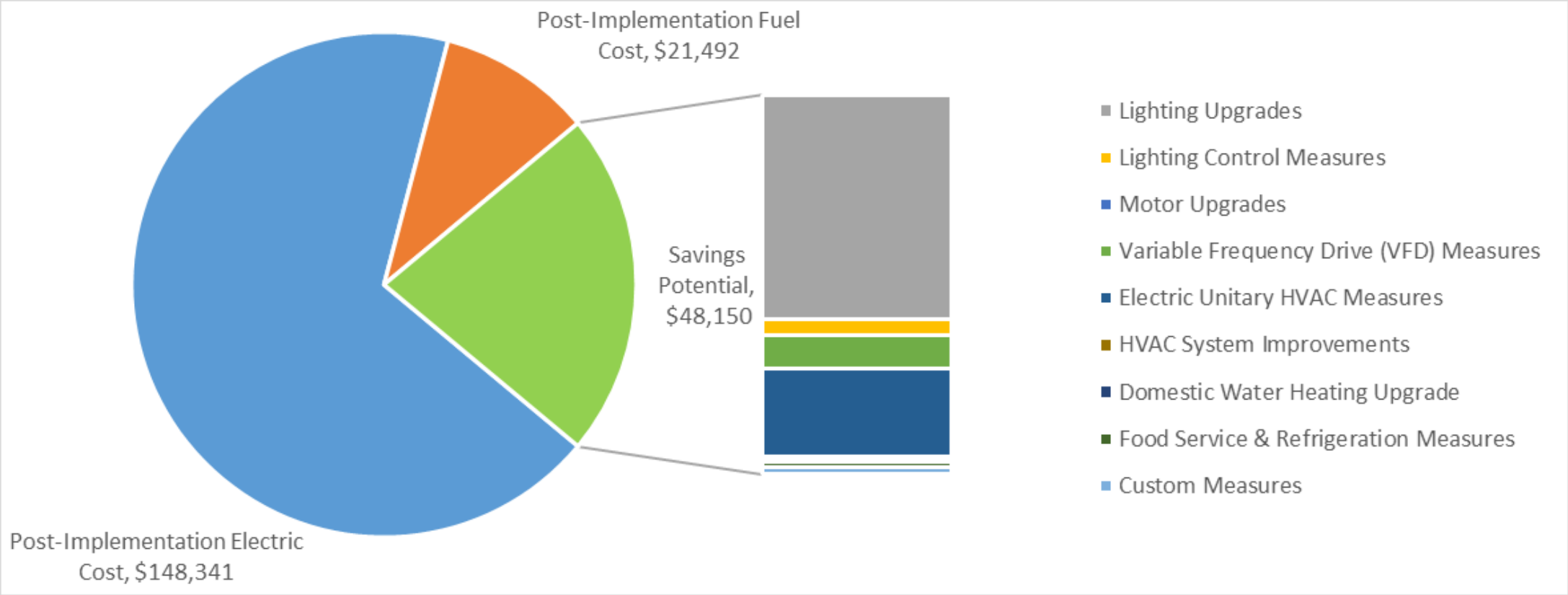
#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		243,072	21.3	-13.9	\$28,519	\$79,913	\$15,947	\$63,966	2.2	243,149
ECM 1	Install LED Fixtures	72,406	0.0	0.0	\$8,645	\$22,108	\$3,200	\$18,908	2.2	72,912
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	127	0.1	0.0	\$14	\$138	\$20	\$118	8.3	125
ECM 3	Retrofit Fixtures with LED Lamps	170,539	21.2	-13.8	\$19,860	\$57,667	\$12,727	\$44,940	2.3	170,112
Lighting Control Measures		17,248	4.0	-3.5	\$1,943	\$16,637	\$5,125	\$11,512	5.9	16,963
ECM 4	Install Occupancy Sensor Lighting Controls	11,832	3.1	-2.4	\$1,333	\$11,687	\$1,555	\$10,132	7.6	11,635
ECM 5	Install High/Low Lighting Controls	5,416	0.9	-1.1	\$610	\$4,950	\$3,570	\$1,380	2.3	5,327
Motor Upgrades		328	0.1	0.0	\$36	\$413	\$0	\$413	11.5	330
ECM 6	Premium Efficiency Motors	328	0.1	0.0	\$36	\$413	\$0	\$413	11.5	330
Variable Frequency Drive (VFD) Measures		35,626	7.7	0.0	\$4,227	\$45,503	\$2,200	\$43,303	10.2	35,875
ECM 7	Install VFDs on Constant Volume (CV) Fans	35,626	7.7	0.0	\$4,227	\$45,503	\$2,200	\$43,303	10.2	35,875
Electric Unitary HVAC Measures		103,676	10.3	8.7	\$11,653	\$37,374	\$1,700	\$35,674	3.1	105,416
ECM 8	Install High Efficiency Air Conditioning Units	3,100	1.4	8.7	\$434	\$18,713	\$1,700	\$17,013	39.2	4,137
ECM 9	Install High Efficiency Heat Pumps	100,576	8.9	0.0	\$11,219	\$18,661	\$0	\$18,661	1.7	101,279
Gas Heating (HVAC/Process) Replacement		0	0.0	100.2	\$977	\$42,002	\$2,700	\$39,302	40.2	11,732
ECM 10	Install High Efficiency Hot Water Boilers	0	0.0	41.6	\$405	\$24,511	\$1,200	\$23,311	57.5	4,867
ECM 11	Install High Efficiency Furnaces	0	0.0	58.6	\$571	\$17,491	\$1,500	\$15,991	28.0	6,865
HVAC System Improvements		2,233	0.0	7.7	\$348	\$454	\$36	\$418	1.2	3,154
ECM 12	Install Programmable Thermostats	540	0.0	5.4	\$130	\$330	\$0	\$330	2.5	1,172
ECM 13	Install Pipe Insulation	1,693	0.0	2.4	\$218	\$124	\$36	\$88	0.4	1,982
Domestic Water Heating Upgrade		2,884	0.0	3.5	\$371	\$3,504	\$298	\$3,206	8.6	3,310
ECM 14	Install High Efficiency Gas-Fired Water Heater	0	0.0	1.4	\$15	\$2,757	\$140	\$2,617	176.6	165
ECM 15	Install Low-Flow DHW Devices	2,884	0.0	2.1	\$356	\$747	\$158	\$589	1.7	3,145
Food Service & Refrigeration Measures		5,863	0.7	0.0	\$655	\$1,380	\$150	\$1,230	1.9	5,904
ECM 16	Vending Machine Control	5,863	0.7	0.0	\$655	\$1,380	\$150	\$1,230	1.9	5,904
Custom Measures		7,948	0.0	0.0	\$909	\$7,463	\$0	\$7,463	8.2	8,004
ECM 17	Install Heat Pump Water Heater	7,948	0.0	0.0	\$909	\$7,463	\$0	\$7,463	8.2	8,004
TOTALS		418,878	44.0	102.7	\$49,636	\$234,642	\$28,156	\$206,486	4.2	433,837

* - 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		243,072	21.3	-13.9	\$28,519	\$79,913	\$15,947	\$63,966	2.2	243,149
ECM 1	Install LED Fixtures	72,406	0.0	0.0	\$8,645	\$22,108	\$3,200	\$18,908	2.2	72,912
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	127	0.1	0.0	\$14	\$138	\$20	\$118	8.3	125
ECM 3	Retrofit Fixtures with LED Lamps	170,539	21.2	-13.8	\$19,860	\$57,667	\$12,727	\$44,940	2.3	170,112
Lighting Control Measures		17,248	4.0	-3.5	\$1,943	\$16,637	\$5,125	\$11,512	5.9	16,963
ECM 4	Install Occupancy Sensor Lighting Controls	11,832	3.1	-2.4	\$1,333	\$11,687	\$1,555	\$10,132	7.6	11,635
ECM 5	Install High/Low Lighting Controls	5,416	0.9	-1.1	\$610	\$4,950	\$3,570	\$1,380	2.3	5,327
Motor Upgrades		328	0.1	0.0	\$36	\$413	\$0	\$413	11.5	330
ECM 6	Premium Efficiency Motors	328	0.1	0.0	\$36	\$413	\$0	\$413	11.5	330
Variable Frequency Drive (VFD) Measures		35,626	7.7	0.0	\$4,227	\$45,503	\$2,200	\$43,303	10.2	35,875
ECM 7	Install VFDs on Constant Volume (CV) Fans	35,626	7.7	0.0	\$4,227	\$45,503	\$2,200	\$43,303	10.2	35,875
Electric Unitary HVAC Measures		100,576	8.9	0.0	\$11,219	\$18,661	\$0	\$18,661	1.7	101,279
ECM 9	Install High Efficiency Heat Pumps	100,576	8.9	0.0	\$11,219	\$18,661	\$0	\$18,661	1.7	101,279
HVAC System Improvements		2,233	0.0	7.7	\$348	\$454	\$36	\$418	1.2	3,154
ECM 12	Install Programmable Thermostats	540	0.0	5.4	\$130	\$330	\$0	\$330	2.5	1,172
ECM 13	Install Pipe Insulation	1,693	0.0	2.4	\$218	\$124	\$36	\$88	0.4	1,982
Domestic Water Heating Upgrade		2,884	0.0	2.1	\$356	\$747	\$158	\$589	1.7	3,145
ECM 15	Install Low-Flow DHW Devices	2,884	0.0	2.1	\$356	\$747	\$158	\$589	1.7	3,145
Food Service & Refrigeration Measures		5,863	0.7	0.0	\$655	\$1,380	\$150	\$1,230	1.9	5,904
ECM 16	Vending Machine Control	5,863	0.7	0.0	\$655	\$1,380	\$150	\$1,230	1.9	5,904
Custom Measures		7,526	0.0	0.0	\$848	\$5,080	\$0	\$5,080	6.0	7,579
ECM 17	Install Heat Pump Water Heater	7,526	0.0	0.0	\$848	\$5,080	\$0	\$5,080	6.0	7,579
TOTALS		415,356	42.6	-7.5	\$48,150	\$168,788	\$23,616	\$145,172	3.0	417,379

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TACONY PALMYRA ADMINISTRATION

#	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			19,696	3.5	0	\$2,847	\$12,026	\$2,608	\$9,418	3.3	19,833
ECM 1	Install LED Fixtures	Yes	14,454	0.0	0	\$2,089	\$6,751	\$1,450	\$5,301	2.5	14,555
ECM 2	Retrofit Fixtures with LED Lamps	Yes	5,242	3.5	0	\$758	\$5,274	\$1,158	\$4,116	5.4	5,278
Lighting Control Measures			866	0.5	0	\$125	\$2,212	\$845	\$1,367	10.9	872
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	534	0.3	0	\$77	\$1,312	\$180	\$1,132	14.7	538
ECM 4	Install High/Low Lighting Controls	Yes	332	0.2	0	\$48	\$900	\$665	\$235	4.9	335
Variable Frequency Drive (VFD) Measures			6,602	2.4	0	\$954	\$13,809	\$525	\$13,284	13.9	6,649
ECM 5	Install VFDs on Constant Volume (CV) Fans	Yes	6,602	2.4	0	\$954	\$13,809	\$525	\$13,284	13.9	6,649
HVAC System Improvements			141	0.0	0	\$20	\$12	\$4	\$8	0.4	142
ECM 6	Install Pipe Insulation	Yes	141	0.0	0	\$20	\$12	\$4	\$8	0.4	142
Domestic Water Heating Upgrade			245	0.0	0	\$35	\$14	\$7	\$7	0.2	247
ECM 7	Install Low-Flow DHW Devices	Yes	245	0.0	0	\$35	\$14	\$7	\$7	0.2	247
Custom Measures			422	0.0	0	\$61	\$2,383	\$0	\$2,383	39.1	425
ECM 8	Install Heat Pump Water Heater	No	422	0.0	0	\$61	\$2,383	\$0	\$2,383	39.1	425
TOTALS (COST EFFECTIVE MEASURES)			27,550	6.4	0	\$3,983	\$28,073	\$3,989	\$24,084	6.0	27,743
TOTALS (ALL MEASURES)			27,972	6.4	0	\$4,044	\$30,456	\$3,989	\$26,467	6.5	28,168

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TACONY PALMYRA BRIDGE COMPLEX

#	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			174,107	16.3	-12	\$19,510	\$55,214	\$10,490	\$44,724	2.3	173,874
ECM 1	Install LED Fixtures	Yes	56,318	0.0	0	\$6,350	\$14,386	\$1,450	\$12,936	2.0	56,712
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	127	0.1	0	\$14	\$138	\$20	\$118	8.3	125
ECM 3	Retrofit Fixtures with LED Lamps	Yes	117,661	16.2	-12	\$13,146	\$40,690	\$9,020	\$31,670	2.4	117,037
Lighting Control Measures			13,177	3.1	-3	\$1,458	\$11,614	\$3,775	\$7,839	5.4	12,941
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	8,264	2.4	-2	\$915	\$7,789	\$1,010	\$6,779	7.4	8,116
ECM 5	Install High/Low Lighting Controls	Yes	4,914	0.7	-1	\$544	\$3,825	\$2,765	\$1,060	1.9	4,826
Variable Frequency Drive (VFD) Measures			29,024	5.4	0	\$3,272	\$31,693	\$1,675	\$30,018	9.2	29,227
ECM 6	Install VFDs on Constant Volume (CV) Fans	Yes	29,024	5.4	0	\$3,272	\$31,693	\$1,675	\$30,018	9.2	29,227
Unitary HVAC Measures			65,990	7.3	9	\$7,525	\$32,474	\$1,700	\$30,774	4.1	67,466
ECM 7	Install High Efficiency Air Conditioning Units	No	3,100	1.4	9	\$434	\$18,713	\$1,700	\$17,013	39.2	4,137
ECM 8	Install High Efficiency Heat Pumps	Yes	62,890	5.9	0	\$7,091	\$13,761	\$0	\$13,761	1.9	63,329
Gas Heating (HVAC/Process) Replacement			0	0.0	100	\$977	\$42,002	\$2,700	\$39,302	40.2	11,732
ECM 9	Install High Efficiency Hot Water Boilers	No	0	0.0	42	\$405	\$24,511	\$1,200	\$23,311	57.5	4,867
ECM 10	Install High Efficiency Furnaces	No	0	0.0	59	\$571	\$17,491	\$1,500	\$15,991	28.0	6,865
HVAC System Improvements			1,552	0.0	2	\$198	\$113	\$32	\$81	0.4	1,841
ECM 11	Install Pipe Insulation	Yes	1,552	0.0	2	\$198	\$113	\$32	\$81	0.4	1,841
Domestic Water Heating Upgrade			2,596	0.0	0	\$293	\$608	\$121	\$486	1.7	2,614
ECM 12	Install Low-Flow DHW Devices	Yes	2,596	0.0	0	\$293	\$608	\$121	\$486	1.7	2,614
Food Service & Refrigeration Measures			3,909	0.4	0	\$441	\$920	\$100	\$820	1.9	3,936
ECM 13	Vending Machine Control	Yes	3,909	0.4	0	\$441	\$920	\$100	\$820	1.9	3,936
Custom Measures			7,526	0.0	0	\$848	\$5,080	\$0	\$5,080	6.0	7,579
ECM 14	Install Heat Pump Water Heater	Yes	7,526	0.0	0	\$848	\$5,080	\$0	\$5,080	6.0	7,579
TOTALS (COST EFFECTIVE MEASURES)			294,781	31.1	-13	\$33,111	\$119,002	\$16,193	\$102,809	3.1	295,341
TOTALS (ALL MEASURES)			297,881	32.5	96	\$34,521	\$179,716	\$20,593	\$159,123	4.6	311,210

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

DELANCO TRAILER

#	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			8,918	0.1	0	\$1,333	\$2,151	\$438	\$1,713	1.3	8,980
ECM 1	Retrofit Fixtures with LED Lamps	Yes	8,918	0.1	0	\$1,333	\$2,151	\$438	\$1,713	1.3	8,980
Lighting Control Measures			92	0.0	0	\$14	\$270	\$35	\$235	17.1	92
ECM 2	Install Occupancy Sensor Lighting Controls	Yes	92	0.0	0	\$14	\$270	\$35	\$235	17.1	92
Domestic Water Heating Upgrade			43	0.0	0	\$6	\$7	\$4	\$4	0.6	43
ECM 3	Install Low-Flow DHW Devices	Yes	43	0.0	0	\$6	\$7	\$4	\$4	0.6	43
TOTALS (COST EFFECTIVE MEASURES)			9,052	0.1	0	\$1,353	\$2,429	\$477	\$1,952	1.4	9,115
TOTALS (ALL MEASURES)			9,052	0.1	0	\$1,353	\$2,429	\$477	\$1,952	1.4	9,115

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BURLINGTON BRISTOL ADMIN & TOLL BOOTHS

#	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			24,387	0.6	-1	\$2,661	\$5,816	\$1,301	\$4,515	1.7	24,446
ECM 1	Install LED Fixtures	Yes	635	0.0	0	\$70	\$308	\$100	\$208	3.0	640
ECM 2	Retrofit Fixtures with LED Lamps	Yes	23,752	0.6	-1	\$2,591	\$5,508	\$1,201	\$4,307	1.7	23,806
Lighting Control Measures			2,678	0.3	-1	\$287	\$2,001	\$400	\$1,601	5.6	2,630
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	2,508	0.3	-1	\$269	\$1,776	\$260	\$1,516	5.6	2,463
ECM 4	Install High/Low Lighting Controls	Yes	170	0.0	0	\$18	\$225	\$140	\$85	4.7	167
Motor Upgrades			328	0.1	0	\$36	\$413	\$0	\$413	11.5	330
ECM 5	Premium Efficiency Motors	Yes	328	0.1	0	\$36	\$413	\$0	\$413	11.5	330
Unitary HVAC Measures			37,686	3.0	0	\$4,128	\$4,900	\$0	\$4,900	1.2	37,950
ECM 6	Install High Efficiency Heat Pumps	Yes	37,686	3.0	0	\$4,128	\$4,900	\$0	\$4,900	1.2	37,950
Domestic Water Heating Upgrade			0	0.0	1	\$8	\$14	\$6	\$9	1.1	88
ECM 7	Install Low-Flow DHW Devices	Yes	0	0.0	1	\$8	\$14	\$6	\$9	1.1	88
Food Service & Refrigeration Measures			1,954	0.2	0	\$214	\$460	\$50	\$410	1.9	1,968
ECM 8	Vending Machine Control	Yes	1,954	0.2	0	\$214	\$460	\$50	\$410	1.9	1,968
TOTALS (COST EFFECTIVE MEASURES)			67,034	4.2	-1	\$7,334	\$13,605	\$1,757	\$11,848	1.6	67,412
TOTALS (ALL MEASURES)			67,034	4.2	-1	\$7,334	\$13,605	\$1,757	\$11,848	1.6	67,412

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

BURLINGTON BRISTOL 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			15,965	0.7	-1	\$2,168	\$4,706	\$1,110	\$3,596	1.7	16,016
ECM 1	Install LED Fixtures	Yes	999	0.0	0	\$136	\$663	\$200	\$463	3.4	1,006
ECM 2	Retrofit Fixtures with LED Lamps	Yes	14,967	0.7	-1	\$2,032	\$4,044	\$910	\$3,134	1.5	15,010
Lighting Control Measures			435	0.1	0	\$58	\$540	\$70	\$470	8.1	427
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	435	0.1	0	\$58	\$540	\$70	\$470	8.1	427
HVAC System Improvements			540	0.0	5	\$130	\$330	\$0	\$330	2.5	1,172
ECM 4	Install Programmable Thermostats	Yes	540	0.0	5	\$130	\$330	\$0	\$330	2.5	1,172
Domestic Water Heating Upgrade			0	0.0	3	\$28	\$2,860	\$161	\$2,700	94.7	318
ECM 5	Install High Efficiency Gas-Fired Water Heater	No	0	0.0	1	\$15	\$2,757	\$140	\$2,617	176.5	165
ECM 6	Install Low-Flow DHW Devices	Yes	0	0.0	1	\$14	\$104	\$21	\$83	6.1	152
TOTALS (COST EFFECTIVE MEASURES)			16,940	0.8	6	\$2,369	\$5,680	\$1,201	\$4,479	1.9	17,767
TOTALS (ALL MEASURES)			16,940	0.8	7	\$2,384	\$8,436	\$1,341	\$7,096	3.0	17,932

* - All incentives presented in this table are included as placeholders for planning purposes 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

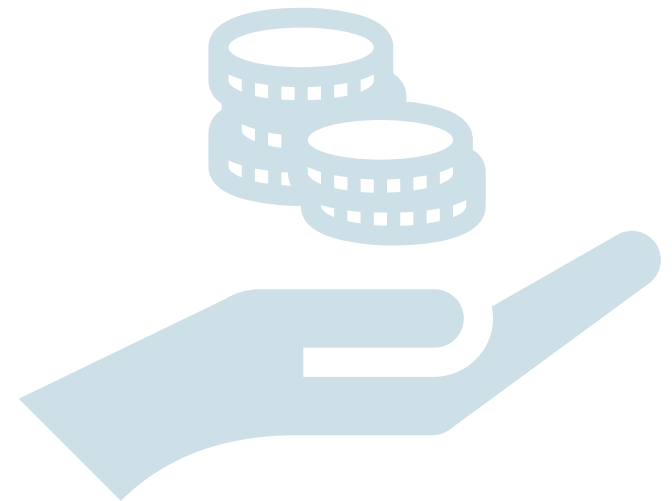
- Electric Submeter



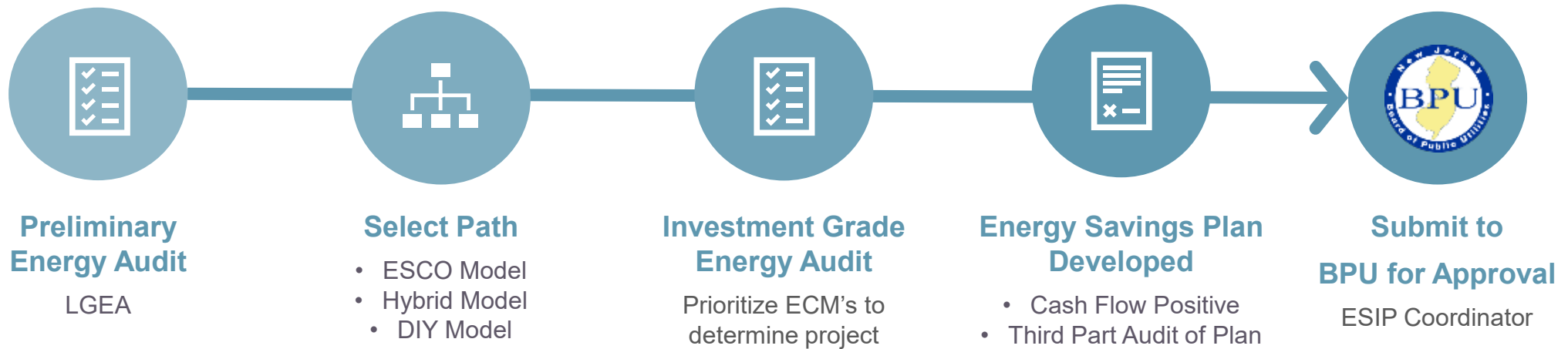
FINANCING MECHANISM: ESIP

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
- NJBPU Approved EE Incentive Programs: NJCEP or Utility
- Project is paid for with the value of its own energy savings
- 15 or 20 year self-funding loan
- Can be combined with Federal/State Pandemic Relief Funds
- No upfront capital expenses
- No referendum is required
- No impact to taxpayers



FINANCING MECHANISM: ESIP



ENERGY SAVINGS IMPROVEMENT PROGRAM

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C&I TRANSITION OF ENERGY EFFICIENCY 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



UTILITY RUN ENERGY EFFICIENCY PROGRAMS

PRESCRIPTIVE & CUSTOM REBATES:

- Individual high efficiency equipment rebates for renovation, remodeling, and equipment replacement
- Flexibility to do a little or a lot
- No size requirement

DIRECT INSTALL:

- Turn-key retrofit program to replace outdated and inefficient equipment including, lighting, HVAC, refrigeration, etc.
- The facility must have an average electric peak demand <200kW in the previous year to qualify

ENGINEERED SOLUTIONS:

- Comprehensive, whole-building approach to saving energy
- The facility must have an average electric peak demand >200kW in the previous year to qualify



UTILITY RUN ENERGY EFFICIENCY PROGRAMS

PSE&G

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THANK YOU

