LGEA Presentation

Morris School District

July 29, 2024

New Jersey's
Clean Energy Program

Lighting the way to New Jersey's Clean Energy Future

INTRODUCTIONS

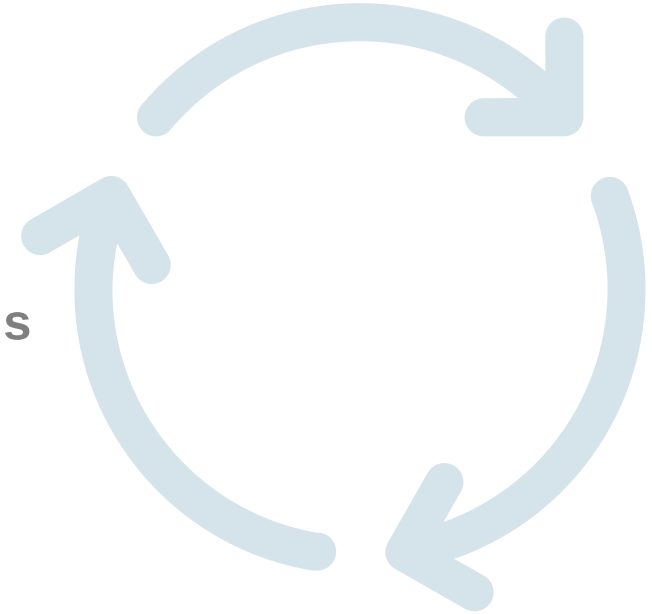
- *Morris School District*
  - Anthony Lo Franco
  - Al Rapa
  - Glenn Miller
  - Mark Prusina
  - Dan Borgo
- *NJ Clean Energy Program*
  - Sarah Walters – LGEA Project Manager
  - Moussa Traore – LGEA Technical Manager
  - Sabin Wagle – LGEA Project Auditor
  - Melissa Lott – LGEA Account Manager
  - Michelle Rossi – ESIP Coordinator (BPU)
- *Utility Energy Efficiency Programs*
  - Tiffany Lewis – JCP&L (TRC)
  - Andrew Doss – JCP&L (Willdan)

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)
- Energy Efficiency Incentive Programs
- Questions regarding the draft audit report
- Next steps for Morris School District

LGEA Process

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



New Jersey's cleanenergy program™

Site Visit & Utility Analysis

Overview of Systems, Baseline & Existing Conditions:

- Building Envelope
- Lighting System
- HVAC and Mechanical Systems
- Plug Load Equipment
- BAS

Utility Consumption:

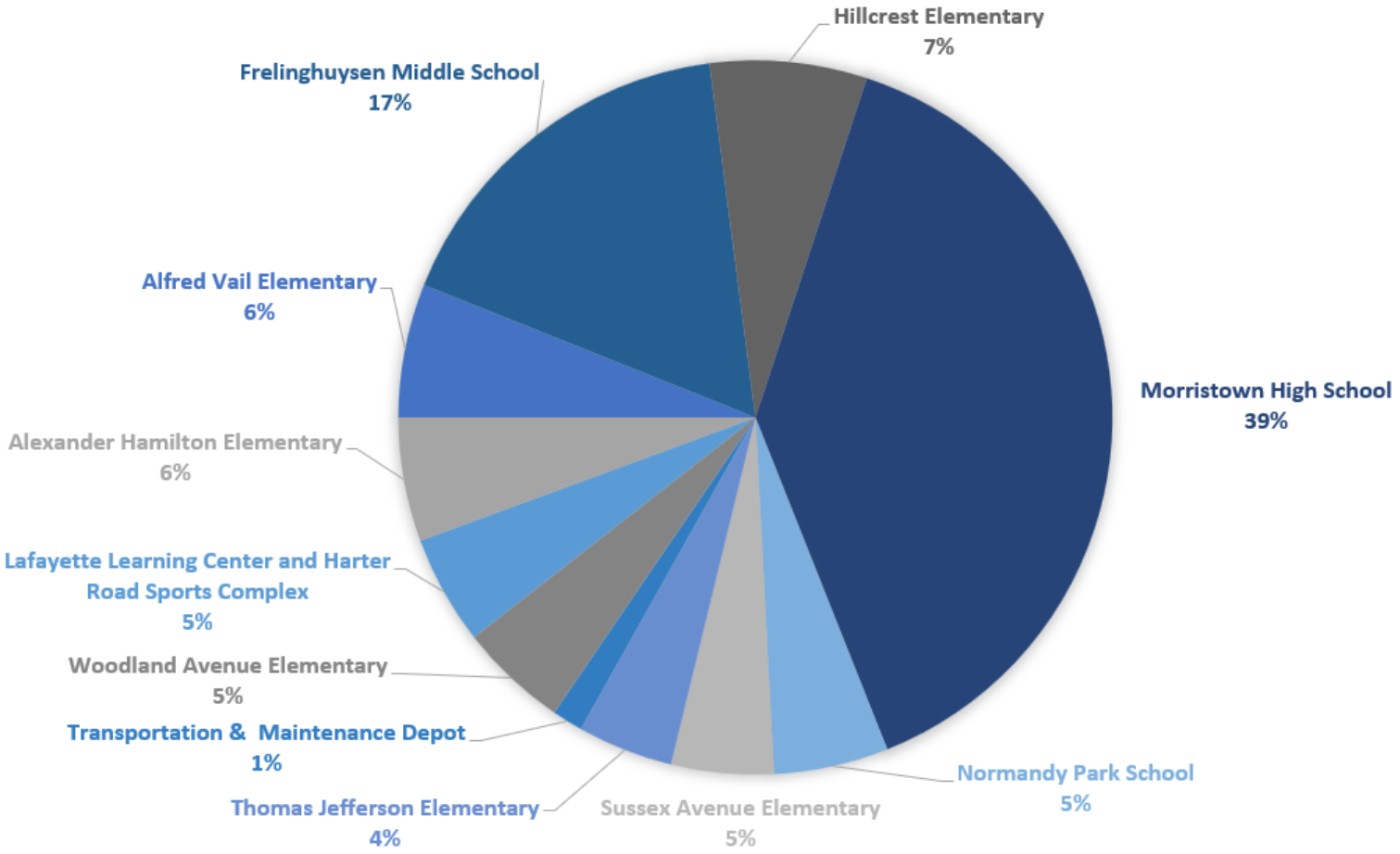
- Electric Consumption and Costs
- Natural Gas Consumption and Costs
- Water Consumption and Costs

Sites Visited/Analyzed

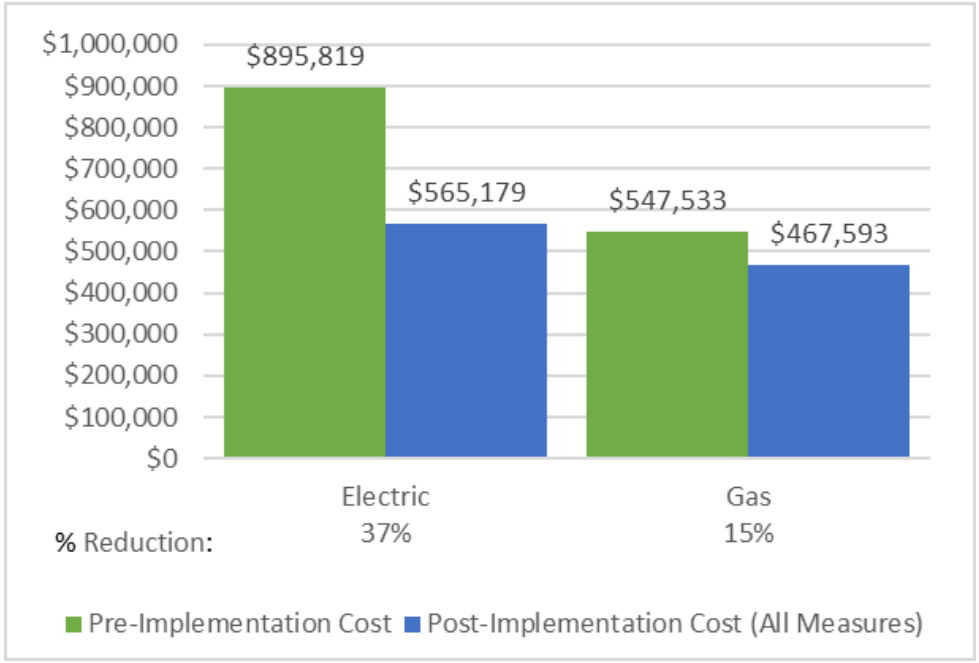
- Lafayette Learning Center
- Harter Road Sports Complex
- Alexander Hamilton Elementary
- Hillcrest Elementary
- Alfred Vail Elementary
- Sussex Avenue Elementary
- Woodland Avenue Elementary
- Thomas Jefferson Elementary
- Normandy Park School
- Frelinghuysen Middle School
- Morristown High School
- Maintenance Depot
- Transportation Depot

Utility Breakout

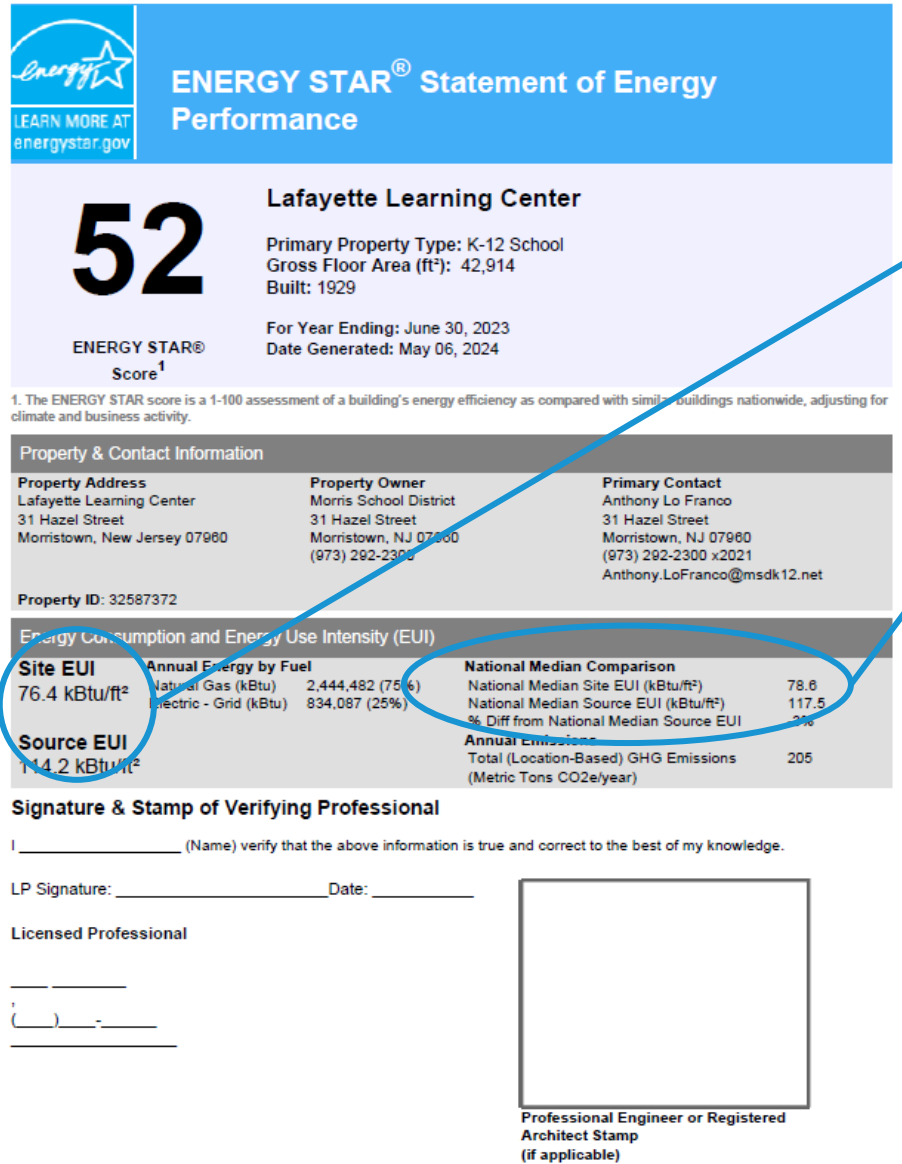
Percent of Total Annual Energy Costs



Pre & Post Implementation Cost



BENCHMARKING



ENERGY STAR® Statement of Energy Performance

LEARN MORE AT energystar.gov

52

ENERGY STAR® Score[1]

Lafayette Learning Center

Primary Property Type: K-12 School
Gross Floor Area (ft²): 42,914
Built: 1929

For Year Ending: June 30, 2023
Date Generated: May 06, 2024

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
Lafayette Learning Center 31 Hazel Street Morristown, New Jersey 07960	Morris School District 31 Hazel Street Morristown, NJ 07960 (973) 292-2300	Anthony Lo Franco 31 Hazel Street Morristown, NJ 07960 (973) 292-2300 x2021 Anthony.LoFranco@msdk12.net

Property ID: 32587372

Energy Consumption and Energy Use Intensity (EUI)

Site EUI
76.4 kBtu/ft²

Source EUI
114.2 kBtu/ft²

Annual Energy by Fuel

Natural Gas (kBtu)	2,444,482 (75%)	
Electric - Grid (kBtu)	834,087 (25%)	

National Median Comparison

National Median Site EUI (kBtu/ft²)	78.6
National Median Source EUI (kBtu/ft²)	117.5
% Diff from National Median Source EUI	-3%

Annual Emissions

Total (Location-Based) GHG Emissions (Metric Tons CO2e/year)	205

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
76.4 kBtu/ft²

Source EUI
114.2 kBtu/ft²

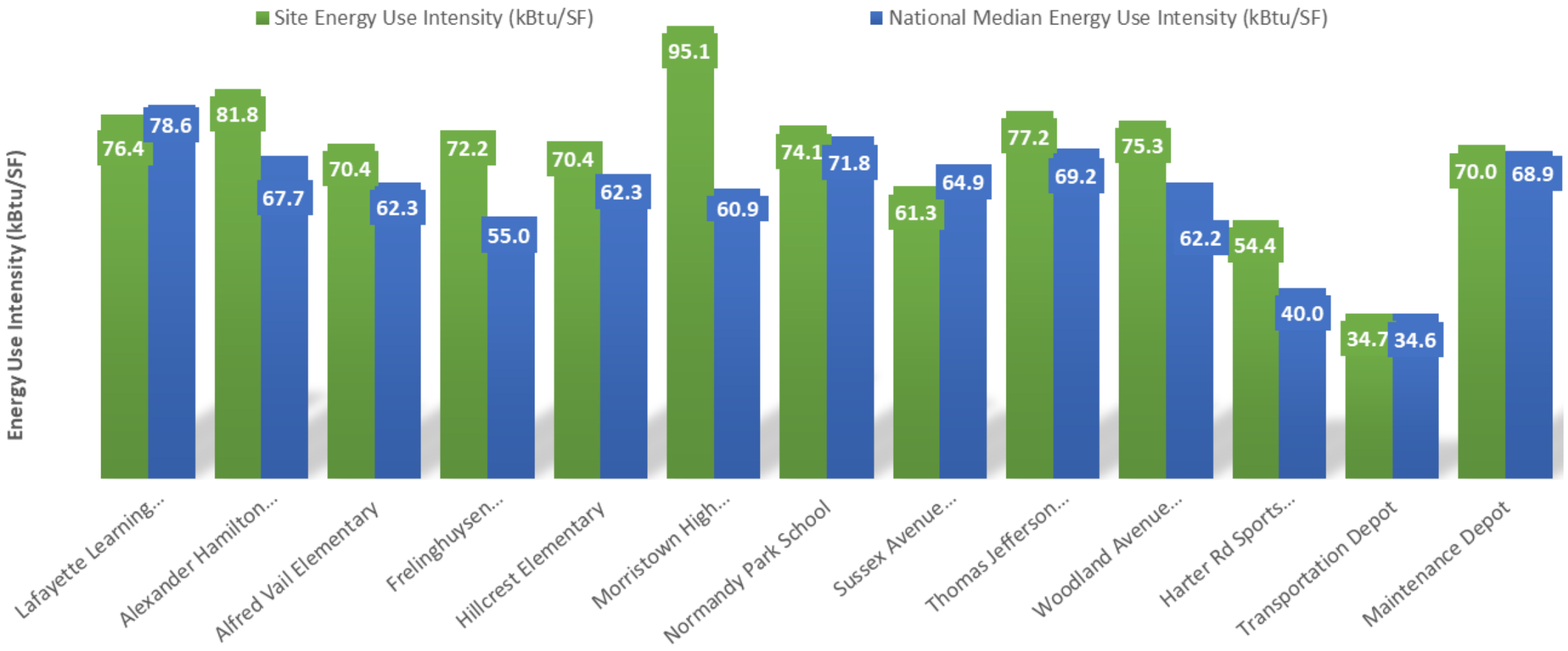
National Median Comparison

National Median Site EUI (kBtu/ft²)	78.6
National Median Source EUI (kBtu/ft²)	117.5
% Diff from National Median Source EUI	-3%

Site Name	ENERGY STAR® Score
Lafayette Learning Center	52
Harter Road Sports Complex	N/A
Alexander Hamilton Elementary	31
Hillcrest Elementary	9
Alfred Vail Elementary	37
Sussex Avenue Elementary	55
Woodland Avenue Elementary	31
Thomas Jefferson Elementary	38
Normandy Park School	46
Frelinghuysen Middle School	23
Morristown High School (Campus)	11
Maintenance Depot	48
Transportation Depot	N/A

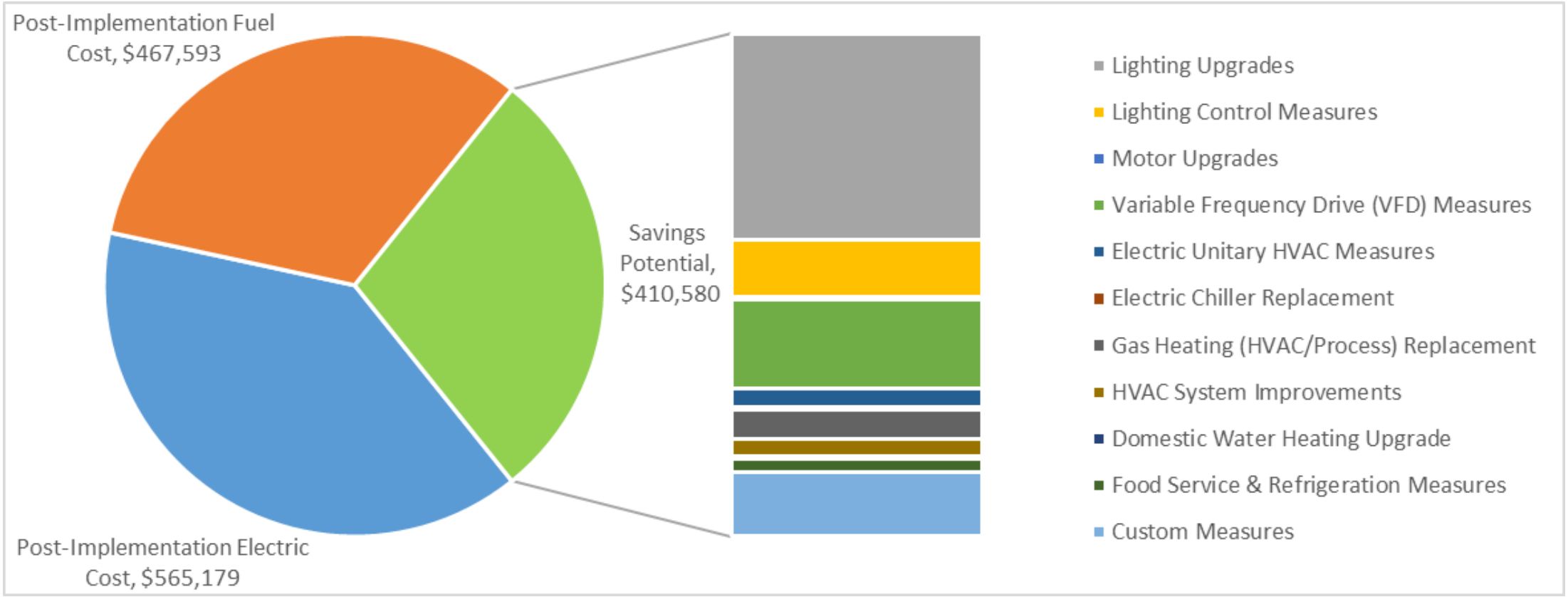
ENERGY STAR® scores are percentile ranking from 1 (least efficient) to 100 (most efficient). It compares your building's energy performance to similar buildings nationwide.

BENCHMARKING



All Opportunities

Savings Potential



ALL OPPORTUNITIES (1 OF 2)

#	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_2e Emissions Reduction (lbs)
Lighting Upgrades		**1,249,724**	**260.7**	**-239.9**	**$168,591**	**$717,900**	**$117,580**	**$600,320**	**3.6**	**1,230,368**
ECM 1	Install LED Fixtures	242,286	37.7	-27.4	$33,155	$193,810	$16,300	$177,510	5.4	240,772
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	4,541	0.9	-1.0	$619	$3,540	$410	$3,130	5.1	4,451
ECM 3	Retrofit Fixtures with LED Lamps	1,002,897	222.1	-211.5	$134,817	$520,550	$100,870	$419,680	3.1	985,144
Lighting Control Measures		**338,498**	**72.6**	**-73.2**	**$45,837**	**$411,980**	**$95,550**	**$316,430**	**6.9**	**332,293**
ECM 4	Install Occupancy Sensor Lighting Controls	255,170	61.1	-55.7	$34,490	$321,740	$37,730	$284,010	8.2	250,435
ECM 5	Install Daylight Dimming/Photocell Controls	3,678	0.2	-0.2	$481	$1,960	$1,120	$840	1.7	3,679
ECM 6	Install High/Low Lighting Controls	79,650	11.3	-17.3	$10,866	$88,280	$56,700	$31,580	2.9	78,178
Motor Upgrades		**23,285**	**3.4**	**0.0**	**$3,131**	**$45,100**	**$0**	**$45,100**	**14.4**	**23,448**
ECM 7	Premium Efficiency Motors	23,285	3.4	0.0	$3,131	$45,100	$0	$45,100	14.4	23,448
Variable Frequency Drive (VFD) Measures		**508,476**	**89.1**	**130.1**	**$71,708**	**$479,700**	**$43,600**	**$436,100**	**6.1**	**527,262**
ECM 8	Install VFDs on Constant Volume (CV) Fans	285,703	62.2	0.0	$39,503	$267,400	$20,500	$246,900	6.3	287,700
ECM 9	Install VFDs on Chilled Water Pumps	5,309	1.1	0.0	$757	$5,600	$900	$4,700	6.2	5,346
ECM 10	Install VFDs on Heating Water Pumps	155,866	14.8	0.0	$21,192	$145,800	$15,000	$130,800	6.2	156,955
ECM 11	Install Boiler Draft Fan VFDs	33,981	10.4	0.0	$4,840	$31,800	$4,800	$27,000	5.6	34,219
ECM 12	Install VFDs on Kitchen Hood Fan Motors	21,218	0.7	130.1	$4,503	$24,600	$1,500	$23,100	5.1	36,597
ECM 13	Install VFDs on Process/Pool Filtration Pumps	6,399	0.0	0.0	$913	$4,500	$900	$3,600	3.9	6,444
Unitary HVAC Measures		**109,861**	**88.7**	**1.9**	**$15,169**	**$442,400**	**$15,300**	**$427,100**	**28.2**	**110,854**
ECM 14	Install High Efficiency Air Conditioning Units	54,838	53.6	1.9	$7,655	$378,200	$13,500	$364,700	47.6	55,446
ECM 15	Install High Efficiency Heat Pumps	55,023	35.0	0.0	$7,514	$64,200	$1,800	$62,400	8.3	55,408
Electric Chiller Replacement		**21,002**	**-3.6**	**0.0**	**$2,990**	**$142,200**	**$7,700**	**$134,500**	**45.0**	**21,149**
ECM 16	Install High Efficiency Chillers	21,002	-3.6	0.0	$2,990	$142,200	$7,700	$134,500	45.0	21,149

ALL OPPORTUNITIES (2 OF 2)

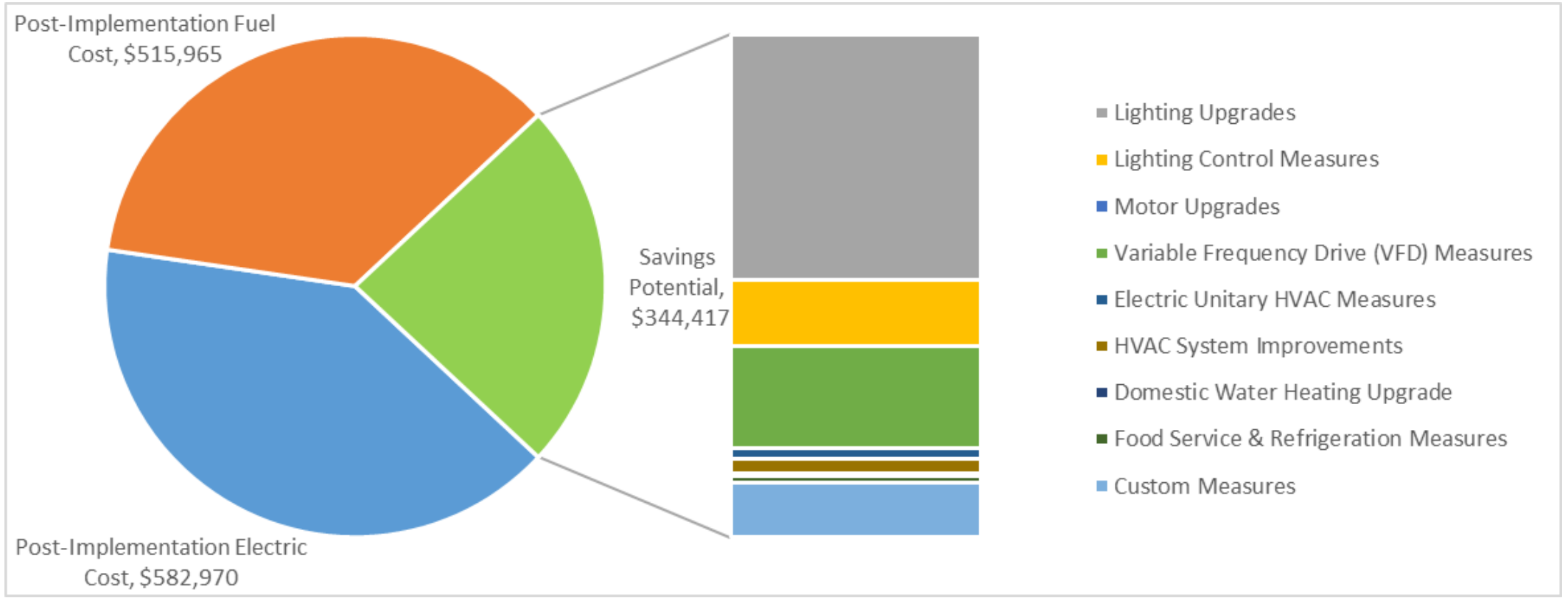
#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings ($)	Estimated M&L Cost ($)	Estimated Incentive ($)*	Estimated Net M&L Cost ($)	Simple Payback Period (yrs)**	CO_2e Emissions Reduction (lbs)
Gas Heating (HVAC/Process) Replacement		**0**	**0.0**	**1,954.0**	**$23,656**	**$1,951,700**	**$41,100**	**$1,910,600**	**80.8**	**228,786**
ECM 17	Install High Efficiency Hot Water Boilers	0	0.0	1,461.8	$17,741	$1,259,700	$32,600	$1,227,100	69.2	171,162
ECM 18	Install High Efficiency Steam Boilers	0	0.0	459.9	$5,548	$684,000	$8,000	$676,000	121.8	53,852
ECM 19	Install High Efficiency Furnaces	0	0.0	32.2	$367	$8,000	$500	$7,500	20.4	3,771
HVAC System Improvements		**4,659**	**0.0**	**1,078.9**	**$14,068**	**$128,290**	**$410**	**$127,880**	**9.1**	**131,016**
ECM 20	Install Programmable Thermostats	1,043	0.0	654.9	$8,373	$77,400	$0	$77,400	9.2	77,726
ECM 21	Implement Demand Control Ventilation (DCV)	2,300	0.0	369.7	$4,773	$48,100	$0	$48,100	10.1	45,604
ECM 22	Install Pipe Insulation	1,316	0.0	54.3	$922	$2,790	$410	$2,380	2.6	7,686
Domestic Water Heating Upgrade		**2,700**	**0.0**	**121.4**	**$1,822**	**$122,840**	**$1,270**	**$121,570**	**66.7**	**16,938**
ECM 23	Install High Efficiency Gas-Fired Water Heater	0	0.0	40.6	$463	$119,800	$0	$119,800	258.9	4,756
ECM 24	Install Low-Flow DHW Devices	2,700	0.0	80.8	$1,359	$3,040	$1,270	$1,770	1.3	12,183
Food Service & Refrigeration Measures		**77,579**	**7.8**	**0.0**	**$10,761**	**$151,940**	**$6,140**	**$145,800**	**13.5**	**78,121**
ECM 25	Refrigerator/Freezer Case Electrically Commutated Motors	3,839	0.5	0.0	$516	$5,600	$600	$5,000	9.7	3,866
ECM 26	Refrigeration Controls	10,814	0.2	0.0	$1,454	$19,040	$840	$18,200	12.5	10,889
ECM 27	Replace Refrigeration Equipment	62,925	7.2	0.0	$8,791	$127,300	$4,700	$122,600	13.9	63,365
Custom Measures		**63,657**	**0.0**	**3,641.8**	**$52,846**	**$624,400**	**$0**	**$624,400**	**11.8**	**490,506**
ECM 28	Retro-Commissioning Study	98,262	0.0	2,050.8	$38,522	$264,900	$0	$264,900	6.9	339,067
ECM 29	Building Envelope Improvements	3,290	0.0	686.0	$9,064	$230,100	$0	$230,100	25.4	83,635
ECM 30	Replace Electric Water Heater with Heat Pump Water Heater	9,045	0.0	0.0	$1,216	$19,400	$0	$19,400	16.0	9,108
ECM 31	Replace Gas Fired Water Heater with Heat Pump Water Heater	-46,940	0.0	502.0	-$547	$45,800	$0	$45,800	-83.7	11,510
ECM 32	Install Semi-Automatic Cover for Swimming Pool	0	0.0	403.0	$4,591	$64,200	$0	$64,200	14.0	47,186
TOTALS (ALL MEASURES)		**2,399,442**	**518.7**	**6,614.9**	**$410,580**	**$5,218,450**	**$328,650**	**$4,889,800**	**11.9**	**3,190,741**

* - 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).

Cost Effective Opportunities

Savings Potential



New Jersey's cleanenergy program™

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_2e Emissions Reduction (lbs)
Lighting Upgrades		**1,245,974**	**256.9**	**-239.8**	**$168,063**	**$707,700**	**$116,680**	**$591,020**	**3.5**	**1,226,612**
ECM 1	Install LED Fixtures	238,536	33.9	-27.2	$32,627	$183,610	$15,400	$168,210	5.2	237,016
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	4,541	0.9	-1.0	$619	$3,540	$410	$3,130	5.1	4,451
ECM 3	Retrofit Fixtures with LED Lamps	1,002,897	222.1	-211.5	$134,817	$520,550	$100,870	$419,680	3.1	985,144
Lighting Control Measures		**338,408**	**72.6**	**-73.2**	**$45,825**	**$411,700**	**$95,480**	**$316,220**	**6.9**	**332,205**
ECM 4	Install Occupancy Sensor Lighting Controls	255,170	61.1	-55.7	$34,490	$321,740	$37,730	$284,010	8.2	250,435
ECM 5	Install Daylight Dimming/Photocell Controls	3,678	0.2	-0.2	$481	$1,960	$1,120	$840	1.7	3,679
ECM 6	Install High/Low Lighting Controls	79,560	11.3	-17.3	$10,854	$88,000	$56,630	$31,370	2.9	78,090
Variable Frequency Drive (VFD) Measures		**492,356**	**84.2**	**117.8**	**$69,323**	**$438,500**	**$41,100**	**$397,400**	**5.7**	**509,594**
ECM 8	Install VFDs on Constant Volume (CV) Fans	283,100	61.5	0.0	$39,127	$259,500	$20,300	$239,200	6.1	285,080
ECM 9	Install VFDs on Chilled Water Pumps	5,309	1.1	0.0	$757	$5,600	$900	$4,700	6.2	5,346
ECM 10	Install VFDs on Heating Water Pumps	150,539	14.2	0.0	$20,476	$131,700	$14,700	$117,000	5.7	151,592
ECM 11	Install Boiler Draft Fan VFDs	28,161	7.2	0.0	$4,017	$20,000	$3,000	$17,000	4.2	28,358
ECM 12	Install VFDs on Kitchen Hood Fan Motors	18,846	0.2	117.8	$4,033	$17,200	$1,300	$15,900	3.9	32,774
ECM 13	Install VFDs on Process/Pool Filtration Pumps	6,399	0.0	0.0	$913	$4,500	$900	$3,600	3.9	6,444
Unitary HVAC Measures		**54,199**	**34.3**	**0.0**	**$7,403**	**$59,500**	**$1,600**	**$57,900**	**7.8**	**54,578**
ECM 15	Install High Efficiency Heat Pumps	54,199	34.3	0.0	$7,403	$59,500	$1,600	$57,900	7.8	54,578
HVAC System Improvements		**4,080**	**0.0**	**796.2**	**$10,459**	**$70,000**	**$410**	**$69,590**	**6.7**	**97,333**
ECM 20	Install Programmable Thermostats	1,043	0.0	487.2	$6,277	$45,310	$0	$45,310	7.2	58,096
ECM 21	Implement Demand Control Ventilation (DCV)	1,721	0.0	254.7	$3,260	$21,900	$0	$21,900	6.7	31,551
ECM 22	Install Pipe Insulation	1,316	0.0	54.3	$922	$2,790	$410	$2,380	2.6	7,686
Domestic Water Heating Upgrade		**2,700**	**0.0**	**80.8**	**$1,359**	**$3,040**	**$1,270**	**$1,770**	**1.3**	**12,183**
ECM 24	Install Low-Flow DHW Devices	2,700	0.0	80.8	$1,359	$3,040	$1,270	$1,770	1.3	12,183
Food Service & Refrigeration Measures		**34,828**	**3.1**	**0.0**	**$4,733**	**$50,780**	**$2,830**	**$47,950**	**10.1**	**35,072**
ECM 25	Refrigerator/Freezer Case Electrically Commutated Motors	3,839	0.5	0.0	$516	$5,600	$600	$5,000	9.7	3,866
ECM 26	Refrigeration Controls	8,857	0.1	0.0	$1,202	$14,280	$630	$13,650	11.4	8,919
ECM 27	Replace Refrigeration Equipment	22,131	2.5	0.0	$3,014	$30,900	$1,600	$29,300	9.7	22,286
Custom Measures		**100,219**	**0.0**	**1,933.1**	**$37,252**	**$243,500**	**$0**	**$243,500**	**6.5**	**327,263**
ECM 28	Retro-Commissioning Study	95,911	0.0	1,933.1	$36,701	$238,500	$0	$238,500	6.5	322,924
ECM 30	Replace Electric Water Heater with Heat Pump Water Heater	4,308	0.0	0.0	$551	$5,000	$0	$5,000	9.1	4,338
TOTALS		**2,272,764**	**451.1**	**2,615.0**	**$344,417**	**$1,984,720**	**$259,370**	**$1,725,350**	**5.0**	**2,594,838**

* - 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)

LAFAYETTE LEARNING CENTER AND HARTER ROAD SPORTS 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_2e Emissions Reduction (lbs)
Lighting Upgrades			**62,255**	**9.2**	**-13**	**$8,836**	**$28,800**	**$5,460**	**$23,340**	**2.6**	**61,195**
ECM 1	Install LED Fixtures	Yes	5,821	0.0	0	$841	$4,160	$500	$3,660	4.4	5,862
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	207	0.0	0	$29	$90	$10	$80	2.7	202
ECM 3	Retrofit Fixtures with LED Lamps	Yes	56,228	9.1	-13	$7,965	$24,550	$4,950	$19,600	2.5	55,131
Lighting Control Measures			**15,263**	**2.4**	**-4**	**$2,161**	**$21,740**	**$5,600**	**$16,140**	**7.5**	**14,959**
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	11,146	2.0	-3	$1,578	$15,840	$1,910	$13,930	8.8	10,923
ECM 5	Install High/Low Lighting Controls	Yes	4,117	0.5	-1	$583	$5,900	$3,690	$2,210	3.8	4,035
Variable Frequency Drive (VFD) Measures			**4,269**	**0.8**	**14**	**$789**	**$11,600**	**$300**	**$11,300**	**14.3**	**5,902**
ECM 6	Install VFDs on Constant Volume (CV) Fans	No	2,602	0.7	0	$376	$7,900	$200	$7,700	20.5	2,621
ECM 7	Install VFDs on Kitchen Hood Fan Motors	Yes	1,667	0.1	14	$413	$3,700	$100	$3,600	8.7	3,281
Unitary HVAC Measures			**2,918**	**3.7**	**0**	**$422**	**$26,900**	**$400**	**$26,500**	**62.8**	**2,938**
ECM 8	Install High Efficiency Air Conditioning Units	No	2,918	3.7	0	$422	$26,900	$400	$26,500	62.8	2,938
HVAC System Improvements			**0**	**0.0**	**92**	**$1,158**	**$22,790**	**$0**	**$22,790**	**19.7**	**10,772**
ECM 9	Install Programmable Thermostats	No	0	0.0	80	$1,007	$16,990	$0	$16,990	16.9	9,366
ECM 10	Implement Demand Control Ventilation (DCV)	No	0	0.0	12	$151	$5,800	$0	$5,800	38.4	1,406
Domestic Water Heating Upgrade			**147**	**0.0**	**5**	**$81**	**$230**	**$100**	**$130**	**1.6**	**708**
ECM 11	Install Low-Flow DHW Devices	Yes	147	0.0	5	$81	$230	$100	$130	1.6	708
Food Service & Refrigeration Measures			**1,006**	**0.1**	**0**	**$145**	**$2,700**	**$0**	**$2,700**	**18.6**	**1,013**
ECM 12	Replace Refrigeration Equipment	No	1,006	0.1	0	$145	$2,700	$0	$2,700	18.6	1,013
Custom Measures			**-5,855**	**0.0**	**206**	**$1,743**	**$33,000**	**$0**	**$33,000**	**18.9**	**18,183**
ECM 13	Retro-Commissioning Study	No	2,351	0.0	118	$1,821	$26,400	$0	$26,400	14.5	16,142
ECM 14	Replace Gas Fired Water Heater with Heat Pump Water Heater	No	-8,206	0.0	88	-$78	$6,600	$0	$6,600	**-84.6**	2,040
TOTALS (COST EFFECTIVE MEASURES)			**79,333**	**11.7**	**2**	**$11,492**	**$54,470**	**$11,260**	**$43,210**	**3.8**	**80,142**
TOTALS (ALL MEASURES)			**80,003**	**16.2**	**300**	**$15,336**	**$147,760**	**$11,860**	**$135,900**	**8.9**	**115,669**

* - 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 Best Practices by building

WATER BEST PRACTICES

- Leak Detection and Repair
- Toilets and Urinals
- Faucets and Showerheads
- Commercial Kitchen Equipment
- Laundry Equipment
- Cooling Towners
- Steam Boiler System
- Pools and Spas
- Laboratory and Medical Equipment
- Water Metering and Submetering
- Vehicle Washing
- Single Pass Cooling System
- Landscaping and Irrigation
- On-Site Alternative Water Sources

See individual reports for specific Water Best Practices by building

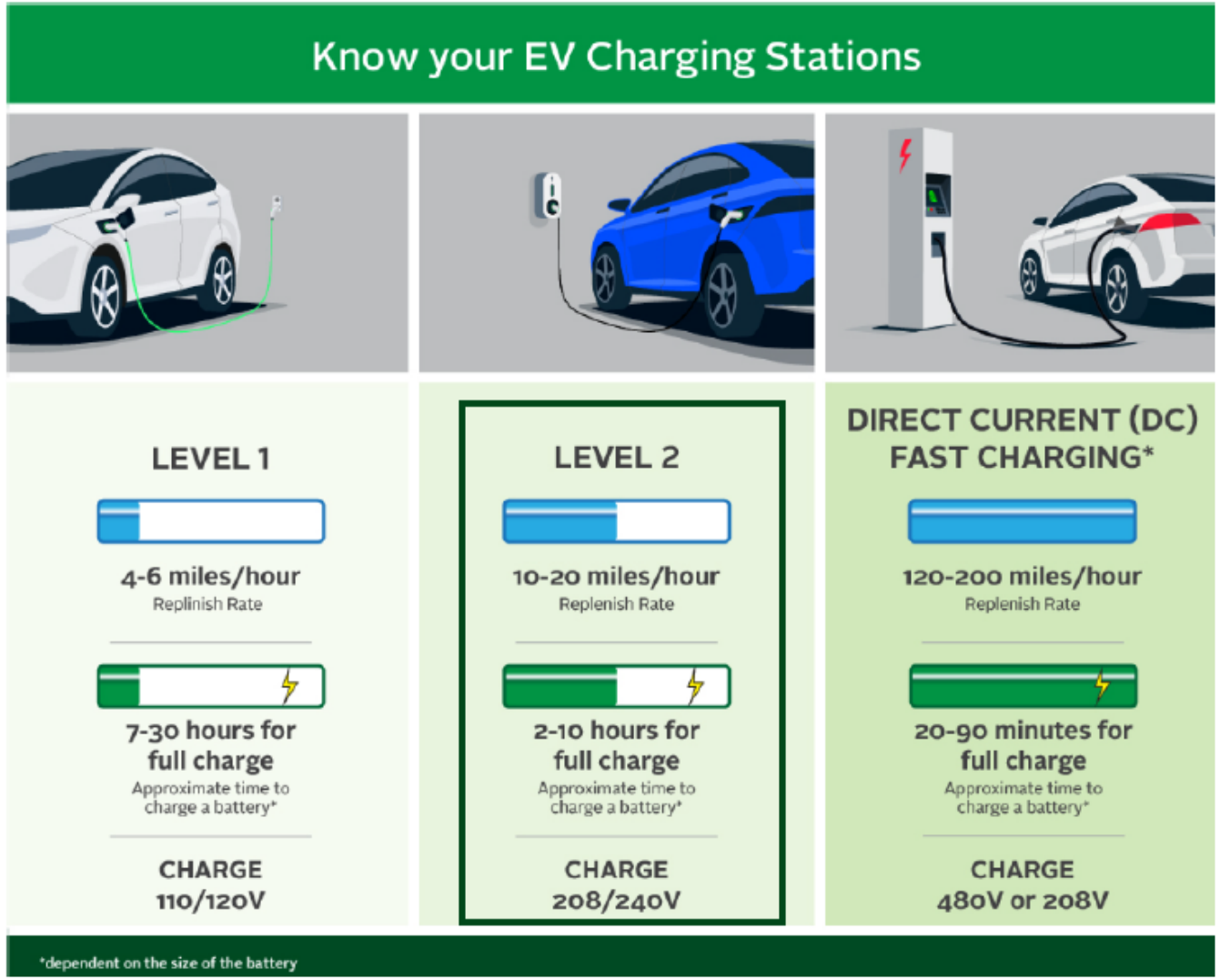
BPU New Jersey's cleanenergy program™

Measures for Future Consideration

- Retro-Commissioning Study
- Upgrade/Replace Energy Management System
- Install Building Insulation
- Heating System Conversion from Steam to Hot Water
- Upgrade to a Heat Pump System
- Window Replacements
- Replace Smooth V-Belts with Notched or Synchronous Belts

EV Charging Station Potential

NJCleanEnergy.com/EV



	Morris School District
Potential:	**Medium**

Solar Energy Generation Potential

NJCleanEnergy.com/renewable-energy

	Lafayette	Hamilton	Hillcrest	Morristown HS	Woodland	Frelinghuysen	Normandy Park	Sussex	Thomas Jefferson
Potential:	**High**	**High**	**High**	**High**	**High**	**High**	**High**	**High**	**High**
System Potential: (kW)	79	80	100	83	72	320	105	81	69
Electric Generation: (kWh per year)	94,118	95,310	119,137	98,884	85,778	381,239	125,094	96,501	82,204
Displaced Cost: (per year)	$13,600	$13,470	$15,330	$13,780	$11,530	$48,780	$17,640	$13,690	$11,370

FINANCING MECHANISM: ESIP

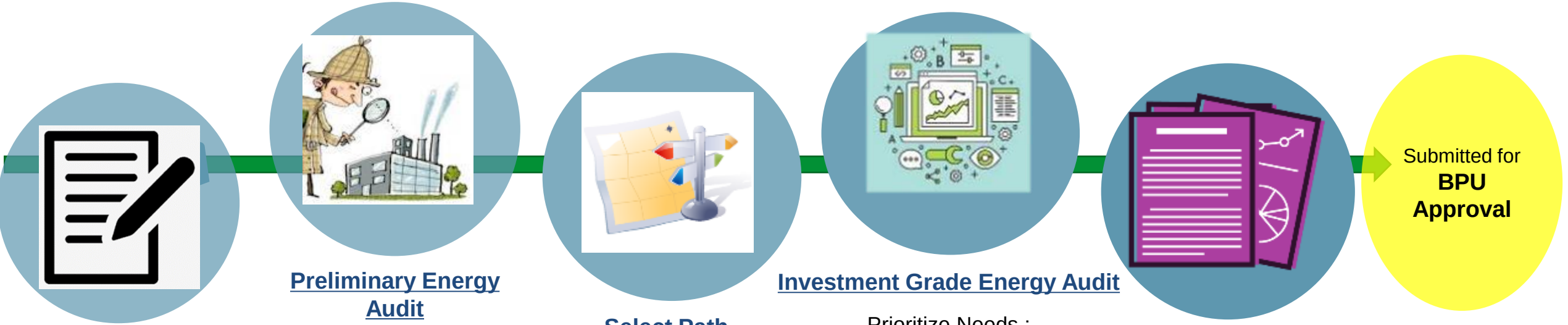
NJCleanEnergy.com/ESIP

ENERGY SAVINGS IMPROVEMENT PROGRAM (ESIP)

- Energy Performance Contracting = NJ ESIP Program
- A creative tool and financing mechanism that allows public 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
- 2 Options: Lease Purchase Loan or Bond
- 15 or 20 year pay back term
- NJBPU Approved Incentive Programs
    - Utility or NJCEP
- Can be combined with Federal/State Grants
- No upfront capital expenses
- No referendum or impact to tax payers

Energy Savings Improvement Program

NJCleanEnergy.com/ESIP



ESIP Intake Form

Get informed;
Begin the process

Preliminary Energy Audit

Free LGEA
or
other ASHRAE Level II Audit

Select Path

ESCO, Hybrid or DIY Model;
Local Public Contract Law
Public School Contract Law
Compliance

Investment Grade Energy Audit

Prioritize Needs ;
Select Project's ECM's

Energy Savings Plan

Must be Cash Flow Positive;
Purchase Savings Guarantee?
Third Party Verification

Submitted for **BPU Approval**

New Jersey's cleanenergy program™

Energy Savings Improvement Program

NJCleanEnergy.com/ESIP

FOR MORE INFORMATION

Michelle Rossi

ESIP Coordinator

ESIP@bpu.nj.gov

o: 609.913.6295

c: 609.915.0903

C&I Energy Efficiency Programs

NJCleanEnergy.com

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 investor-owned utility companies

Programs run by NJCEP

UTILITY RUN ENERGY EFFICIENCY PROGRAMS*

NJCleanEnergy.com/Transition

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

ENERGY MANAGEMENT :

- Includes the Building Tune-up (BT), Retro-commissioning (RCx), and Strategic Energy Management (SEM) subprograms. These subprograms offer a comprehensive mix of custom energy-savings measures such as basic HVAC tune-ups, building systems tune-ups, controls' calibration, diagnostic testing, and installation of measures to enhance your building's energy performance and savings.

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

Other programs may be available to you. Check with your Utility Provider to see a full list of offering and what you may be qualified for.

Utility Run Energy Efficiency Programs

JCP&L

Tiffany Lewis – TLewis@trccompanies.com
Andrew Doss – ADoss@willdan.com
Sirajuddin Shaikh - sirshaikh@firstenergycorp.com

PSE&G

Dave Kirsch – David.Kirsch@pseg.com
Steve Barba – Steven.T.Barba@pseg.com

For More Information

Sarah Walters – LGEA Project Manager
SWalters@trccompanies.com
(732) 589-7372

Moussa Traore – LGEA Technical Manager
MTraore@trccompanies.com
(732) 902-1797

Melissa Lott – LGEA Account Manager
MLott@trccompanies.com
(732) 589-7397

Sabin Wagle – LGEA Energy Auditor
SWagle@trccompanies.com
(908) 514-2475

THANK YOU