


LGEA Presentation Community Loan Fund of NJ

December 5, 2022



New Jersey's
Clean Energy Program

Lighting the way to New Jersey's Clean Energy Future

INTRODUCTIONS

- *Community Loan Fund of NJ*
 - Caitlin Fair – Program Director

- *NJ Clean Energy Program*
 - Moussa Traore – LGEA Lead Auditor
 - Nicholas Nocco – LGEA Project Auditor
 - Amanda Muench – LGEA Account Manager

AGENDA

- The audit process overview
- Energy use & existing conditions
- Review of **E**nergy **C**onservation **M**easures (ECMs) identified & other recommendations
- Energy Efficiency Incentive Programs
- Questions regarding the draft audit report
- Next steps for Community Loan Fund of NJ

LGEA PROCESS

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



COMMUNITY CENTER & BARN

Overview of Systems, Baseline & Existing Conditions:

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

Utility Consumption:

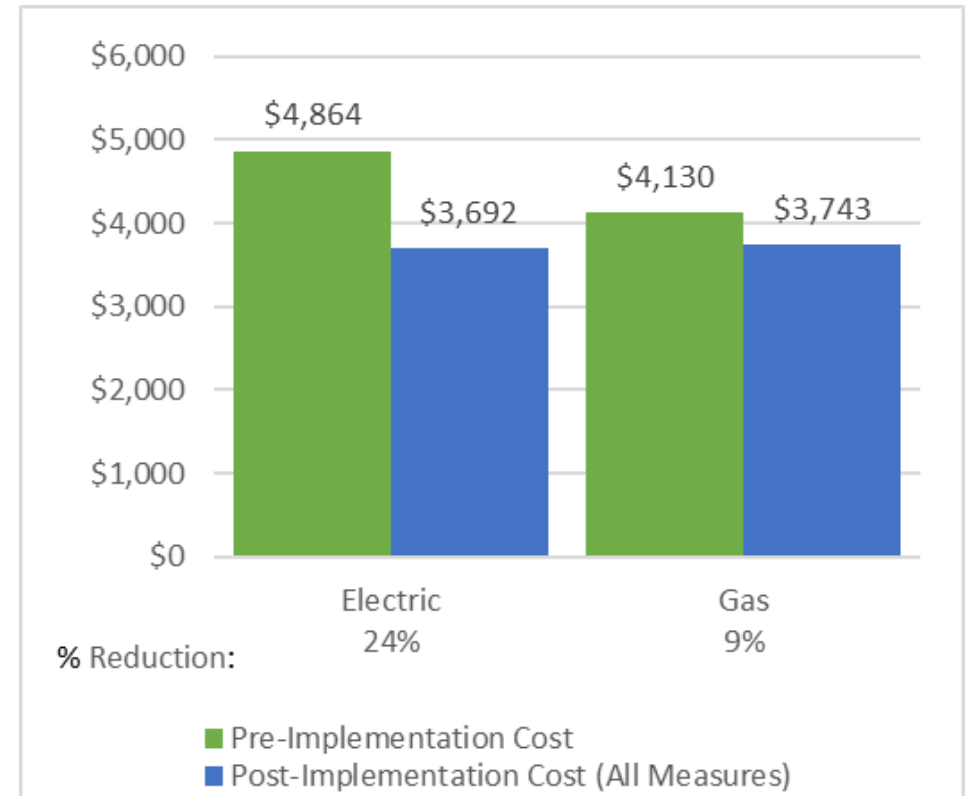
- Electric Consumption and Costs
- Natural Gas Consumption and Costs

UTILITY BREAKOUT

Percent of Total Annual Energy Costs



Pre & Post Implementation Cost



BENCHMARKING

ENERGY STAR® Statement of Energy Performance

N/A **East Trenton Community Center (campus)**

Primary Property Type: Other - Public Services
Gross Floor Area (ft²): 10,990
Built: 1960

For Year Ending: November 30, 2021
Date Generated: September 23, 2022

ENERGY STAR® Score¹

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
East Trenton Community Center (campus) 601 N. Clinton Avenue Trenton, New Jersey 08638	Community Loan Fund NJ 601 N. Clinton Ave. Trenton, NJ 08638 (267) 563-0711	Calvin Fair 601 N. Clinton Avenue Trenton, NJ 08638 (267) 563-0711 cfair@newjerseycommunitycapital.org

Property ID: 22817895

Energy Consumption and Energy Use Intensity (EUI)

Site EUI	Annual Energy by Fuel	National Median Comparison
43.8 kBtu/ft²	Natural Gas (kBtu) 409,800 (85%) Electricity Grid (kBtu) 71,683 (15%)	National Median Site EUI (kBtu/ft²) 68.1 National Median Source EUI (kBtu/ft²) 89.3 % Diff from National Median Source EUI -36%
Source EUI	Annual Emissions	
57.4 kBtu/ft²	Greenhouse Gas Emissions (Metric Tons CO2e/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

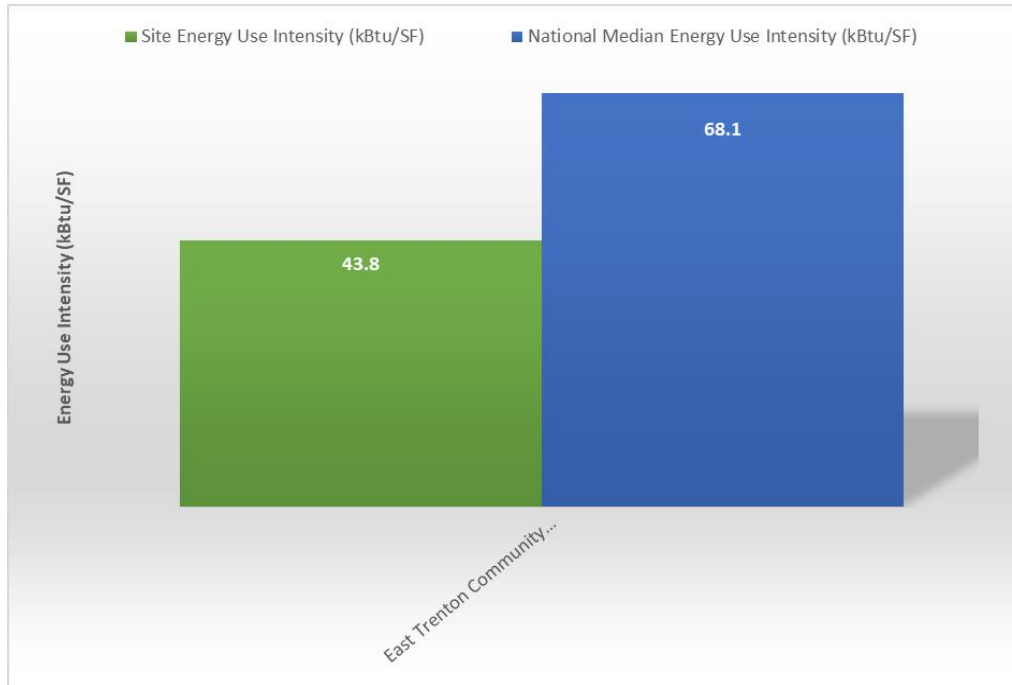
Professional Engineer or Registered Architect Stamp (if applicable)

Site EUI
43.8 kBtu/ft²

Source EUI
57.4 kBtu/ft²

National Median Comparison

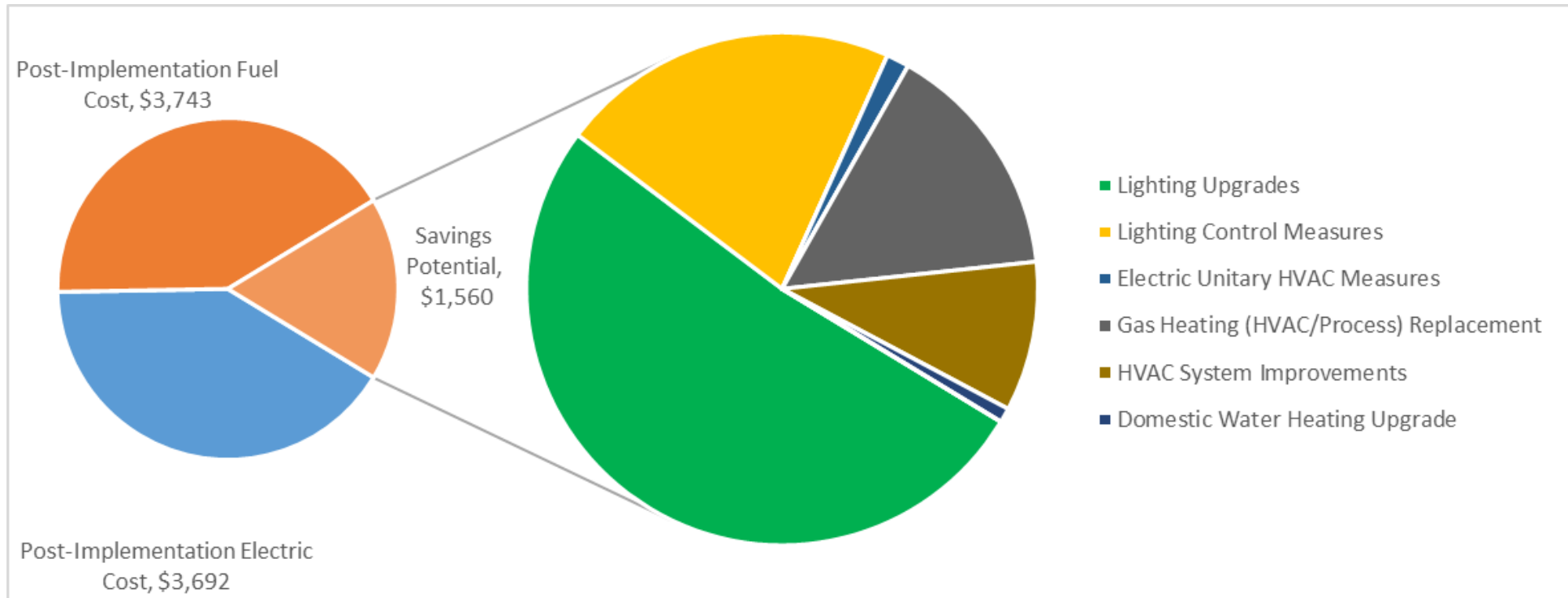
National Median Site EUI (kBtu/ft²)	68.1
National Median Source EUI (kBtu/ft²)	89.3
% Diff from National Median Source EUI	-36%
Annual Emissions	
Greenhouse Gas Emissions (Metric Tons CO2e/year)	28



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



COMMUNITY CENTER & BARN

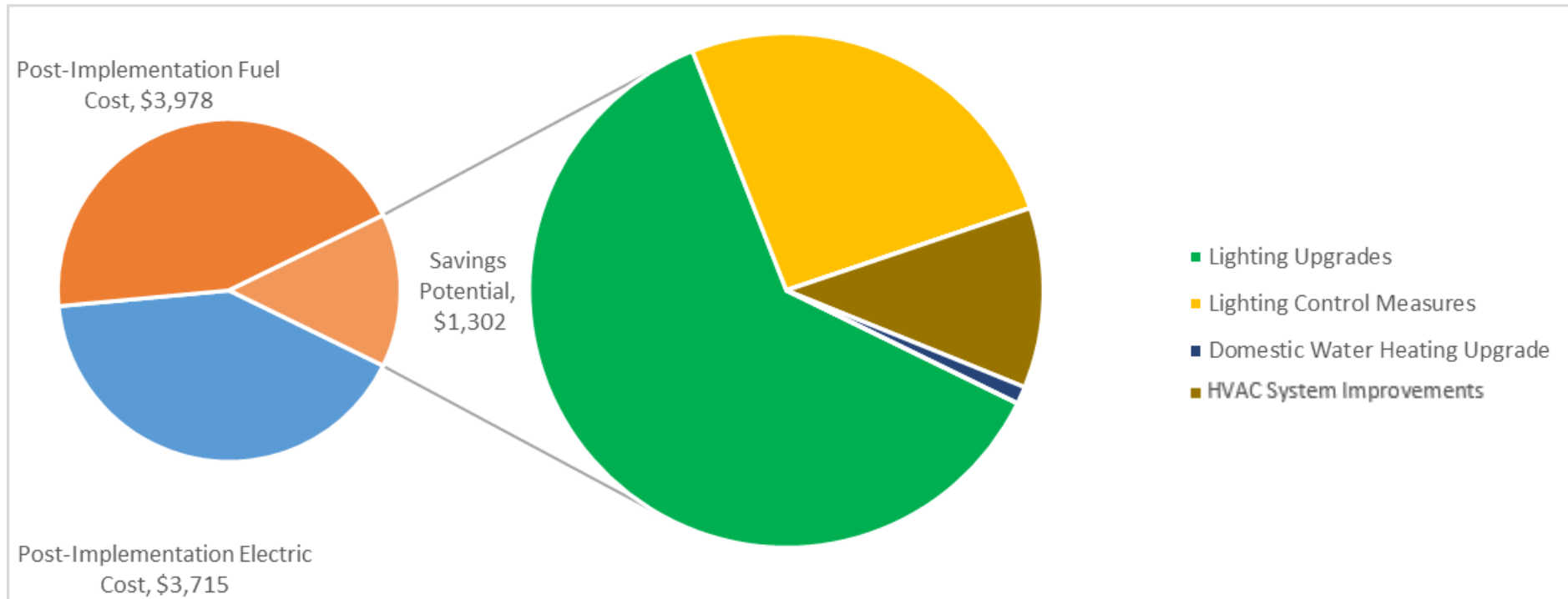
#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			3,501	1.8	-1	\$804	\$2,371	\$461	\$1,910	2.4	3,453
ECM 1	Install LED Fixtures	Yes	324	0.0	0	\$75	\$206	\$50	\$156	2.1	326
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	1,156	0.9	0	\$265	\$1,092	\$170	\$922	3.5	1,135
ECM 3	Retrofit Fixtures with LED Lamps	Yes	2,021	0.9	0	\$464	\$1,073	\$241	\$832	1.8	1,992
Lighting Control Measures			1,462	0.7	0	\$335	\$3,453	\$670	\$2,783	8.3	1,436
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	1,280	0.6	0	\$294	\$2,778	\$250	\$2,528	8.6	1,257
ECM 5	Install High/Low Lighting Controls	Yes	182	0.1	0	\$42	\$675	\$420	\$255	6.1	179
Unitary HVAC Measures			97	0.1	0	\$22	\$643	\$0	\$643	28.7	97
ECM 6	Install High Efficiency Air Conditioning Units	No	97	0.1	0	\$22	\$643	\$0	\$643	28.7	97
Gas Heating (HVAC/Process) Replacement			0	0.0	23	\$236	\$6,146	\$400	\$5,746	24.4	2,748
ECM 7	Install High Efficiency Hot Water Boilers	No	0	0.0	23	\$236	\$6,146	\$400	\$5,746	24.4	2,748
HVAC System Improvements			0	0.0	15	\$147	\$274	\$80	\$194	1.3	1,719
ECM 8	Install Pipe Insulation	Yes	0	0.0	15	\$147	\$274	\$80	\$194	1.3	1,719
Domestic Water Heating Upgrade			0	0.0	1	\$14	\$22	\$11	\$11	0.8	167
ECM 9	Install Low-Flow DHW Devices	Yes	0	0.0	1	\$14	\$22	\$11	\$11	0.8	167
TOTALS (COST EFFECTIVE MEASURES)			4,964	2.4	15	\$1,302	\$6,119	\$1,222	\$4,898	3.8	6,775
TOTALS (ALL MEASURES)			5,060	2.6	39	\$1,560	\$12,908	\$1,622	\$11,286	7.2	9,621

* - 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



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

C&I TRANSITION OF ENERGY EFFICIENCY PROGRAMS

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

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

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

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 Lead Energy Auditor

MTraore@trccompanies.com

(732) 902-1797

Amanda Muench – LGEA Account Manager

AMuench@trccompanies.com

(732) 612-9381

Nicholas Nocco – LGEA Energy Auditor

NNocco@trccompanies.com

(848) 235-4169

THANK YOU

