



Small Business  
Energy Saver

---

## Duke Energy Small Business Energy Saver Program

# Energy Efficiency Proposal

---

Presented to:

**BOONE CO BD OF ED ADMIN  
OFFICE**

Karen Lenihan (Business Manager)  
Boone Co Bd Of Ed Admin Office  
8330 Us Highway 42

Florence, KY 41042  
859-282-3320

[karen.lenihan@boone.kyschools.us](mailto:karen.lenihan@boone.kyschools.us)

Presented by:

**Josh Makin**

Energy Service Representative  
LIME ENERGY SERVICES CO.  
11400 Mosteller Rd,  
Suite 2  
Cincinnati, OH 45241  
513-313-3606

[josh.makin@lime-energy.com](mailto:josh.makin@lime-energy.com)



---

### Contents:

- 2 Summary
- 3 Payment Options
- 4 Scope of Work
- 9 Delivery Plan
- 10 Participation Agreement
- 13 Payment Information

Accept this proposal today to join over  
**22,181** businesses that have already  
upgraded and started to save on their  
bottom line!

# Summary

Your business could spend up to **\$4,278** less on energy per year if you take advantage of our energy efficiency upgrades.

## VALUE ADDED BENEFITS

- ✓ **Reduce**  
Maintenance Costs
- ✓ **Enhance**  
Employee Productivity
- ✓ **Increase**  
Customer Comfort to Improve Sales
- ✓ **Improve**  
Workplace Safety and Reduce Potential Hazards

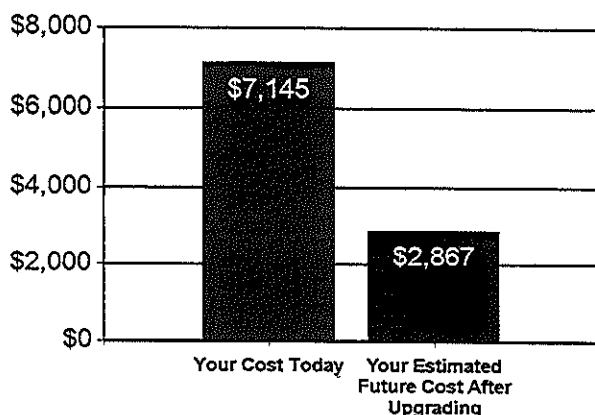
## EST. INCOME EXPECTED FROM YOUR ENERGY EFFICIENCY INVESTMENT\*

💰 Savings after  
**1 Month..... \$356.50**

💰 Savings after  
**1 Year..... \$4,278.01**

💰 Savings after  
**5 Years..... \$21,390.04**

Estimated Annual Lighting Cost Comparison



Total Upgrade Cost	\$25,469.83
Utility Incentive (54%)	\$13,687.75
Your Cost (46%)	\$11,782.08
Est. Annual Savings*	\$4,278.01/yr
Est. Investment Payback**	33 Months
Est. 1st Yr Return on Investment	36%

\*Estimated savings in dollars is based on a rate of \$0.078 per kWh applied to projected kWh savings amounts. See Scope of Work for a detailed breakdown of kWh energy savings.

\*\* Estimated Investment Payback is the amount of time it is expected to take to recover the project's investment through energy savings, dividing initial installed cost by the annual energy cost savings.

### Potential Ancillary Saving Benefits

Est. Maintenance Savings †	\$1,533.00
Est. Investment Payback ‡	24 Months

‡ Estimated Investment Payback with Maintenance Savings is the amount of time it is expected to take to recover the project's investment through energy savings, dividing initial installed cost by the annual energy cost savings plus estimated maintenance savings.

The maintenance savings estimated in this proposal are not guaranteed. The maintenance savings in this proposal are an estimate based upon Customer maintenance information obtained by the Energy Advisor through on-site observations and interviews with the Customer as well as information on the maintenance cost reduction between the existing and proposed measures outlined in the scope of work. Any changes in use, equipment, abnormal weather conditions, or other external factors can impact your maintenance costs and savings.

# Payment Options

## Option 1: Lump Sum Payment - Best Option!

Est. Investment Payback *	29
Est. 1st year return on investment	55%
Deposit (0%)	\$0.00
Total Payment	\$10,486.02

11.00% discount of **\$1,296.06** if you pay upgrade in full after completion

\*Estimated Investment Payback is the amount of time it is expected to take to recover the project's investment through energy savings, dividing initial installed cost by the annual energy cost savings.

### Potential Ancillary Saving Benefits

Est. Maintenance Savings †	\$1,533.00
Est. Investment Payback ‡	22 Months

† The maintenance savings estimated in this proposal are not guaranteed. The maintenance savings in this proposal are an estimate based upon Customer maintenance information obtained by the Energy Advisor through on-site observations and interviews with the Customer as well as information on the maintenance cost reduction between the existing and proposed measures outlined in the scope of work. Any changes in use, equipment, abnormal weather conditions, or other external factors can impact your maintenance costs and savings.

‡ Estimated Investment Payback with Maintenance Savings is the amount of time it is expected to take to recover the project's investment through energy savings, dividing initial installed cost by the annual energy cost savings plus estimated maintenance savings.

## Option 2: Payment Plans

Term	12 Months	24 Months
Monthly Savings	\$356.52	\$356.52
Monthly Payment	\$981.84	\$490.92
Monthly Cash Flow	(\$625.32)	(\$134.40)

Payment plans are offered through Ascentium Capital (the "Lender").

## Option 3: Extended Financing Options

Term	36 Months	48 Months	60 Months
Monthly Savings	\$356.52	\$356.52	\$356.52
Monthly Payment	\$341.27	\$266.36	\$224.81
Monthly Cash Flow	\$15.25	\$90.16	\$131.71

Extended Financing Options are offered through the Lender. Participating Customers must qualify separately.

# Scope of Work

Building: BOONE CO BD OF ED ADMIN OFFICE		Existing Fixture		Proposed Fixture		Est. Energy Savings
Line	Location	Existing Type	Qty	Proposed Type	Qty	by Line Item
1	Floor 1: Reception	A 2x4, 4-Lamp T8 NP Fluorescent Fixture	7	will be Retrofit with (4) 4' RLED 4100K Lamps.	7	Watts: 490 Est. Hours: 8,760 kWh:4,292
2	Floor 1: Reception	A 2x2, 2- U-Lamp T8 Fluorescent Fixture	1	will be Retrofit with (2) 4' U-Bent RLED 4100K Lamps.	1	Watts: 30 Est. Hours: 8,760 kWh:263
3	Floor 1: Hallways	A 2x4, 2-Lamp T8 NP Fluorescent Fixture	21	will be Retrofit with (2) 4' RLED 4100K Lamps.	21	Watts: 756 Est. Hours: 3,129 kWh:2,365
4	Floor 1: Hallways	A 2x2, 2- U-Lamp T8 Fluorescent Fixture	2	will be Retrofit with (2) 4' U-Bent RLED 4100K Lamps.	2	Watts: 60 Est. Hours: 3,129 kWh:188
5	Floor 1: Offices	A 2x4, 2-Lamp T8 NP Fluorescent Fixture	52	will be Retrofit with (2) 4' RLED 4100K Lamps.	52	Watts: 1,872 Est. Hours: 2,086 kWh:3,904
6	Floor 1: Big Conference 267	A 2x4, 2-Lamp T8 NP Fluorescent Fixture	12	will be retrofit with a 2X4 31W LED EVO Troffer Retrofit Kit	12	Watts: 350 Est. Hours: 2,607 kWh:914
7	Floor 1: Break room	A 2x4, 4-Lamp T8 NP Fluorescent Fixture	2	will be Retrofit with (4) 4' RLED 4100K Lamps.	2	Watts: 140 Est. Hours: 2,607 kWh:365
8	Floor 1: Board room	A 2x4, 2-Lamp T8 NP Fluorescent Fixture	8	will be Retrofit with (2) 4' RLED 4100K Lamps.	8	Watts: 288 Est. Hours: 2,607 kWh:751
9	Floor 1: Restrooms	A 1x8, 2-Lamp T8 NP Fluorescent Fixture	2	will be Retrofit with (2) 4' RLED 4100K Lamps.	2	Watts: 72 Est. Hours: 2,086 kWh:150
10	Floor 1: Restrooms	A 1x4, 2-Lamp T8 NP Fluorescent Fixture	1	will be Retrofit with (2) 4' RLED 4100K Lamps.	1	Watts: 36 Est. Hours: 2,086 kWh:75

Building: BOONE CO BD OF ED ADMIN OFFICE		Existing Fixture		Proposed Fixture		Est. Energy Savings
Line	Location	Existing Type	Qty	Proposed Type	Qty	by Line Item
11	Floor 1: Restrooms	A 2x2, 2-Lamp T8 NP Fluorescent Fixture	1	will be Retrofit with (2) 2' RLED 4100K Lamps.	1	Watts: 13 Est. Hours: 2,086 kWh:27
12	Floor 1: Restrooms	A 2x4, 4-Lamp T8 NP Fluorescent Fixture	1	will be Retrofit with (4) 4' RLED 5000K Lamps.	1	Watts: 70 Est. Hours: 2,086 kWh:146
13	Floor 1: Reception office	A 2x4, 2-Lamp T8 NP Fluorescent Fixture	1	will be Retrofit with (2) 4' RLED 4100K Lamps.	1	Watts: 36 Est. Hours: 2,086 kWh:75
14	Floor 1: Finance department	A 2x4, 2-Lamp T8 NP Fluorescent Fixture	27	will be Retrofit with (2) 4' RLED 4100K Lamps.	27	Watts: 972 Est. Hours: 2,607 kWh:2,534
15	Floor 1: Finance offices	A 2x4, 3-Lamp T8 NP Fluorescent Fixture	31	will be Retrofit with (3) 4' RLED 4100K Lamps.	31	Watts: 1,767 Est. Hours: 2,607 kWh:4,607
16	Floor 1: Stairwell	A 2x4, 3-Lamp T8 NP Fluorescent Fixture	2	will be Retrofit with (3) 4' RLED 4100K Lamps.	2	Watts: 114 Est. Hours: 8,760 kWh:999
17	Floor 1: Stairwell	A 1x4, 2-Lamp T8 NP Fluorescent Fixture	1	will be Retrofit with (2) 4' RLED 4100K Lamps.	1	Watts: 36 Est. Hours: 8,760 kWh:315
18	Basement: Hr department	A 2x4, 2-Lamp T8 NP Fluorescent Fixture	19	will be Retrofit with (3) 4' RLED 4100K Lamps.	19	Watts: 456 Est. Hours: 2,607 kWh:1,189
19	Basement: Bistro	A 2x4, 3-Lamp T8 NP Fluorescent Fixture	3	will be Retrofit with (3) 4' RLED 4100K Lamps.	3	Watts: 171 Est. Hours: 2,607 kWh:446
20	Basement: Room 108	A 2x4, 3-Lamp T8 NP Fluorescent Fixture	2	will be Retrofit with (3) 4' RLED 4100K Lamps.	2	Watts: 114 Est. Hours: 2,086 kWh:238

Building: BOONE CO BD OF ED ADMIN OFFICE		Existing Fixture		Proposed Fixture		Est. Energy Savings
Line	Location	Existing Type	Qty	Proposed Type	Qty	by Line Item
21	Basement: Private offices	A 2x4, 3-Lamp T8 NP Fluorescent Fixture	26	will be Retrofit with (3) 4' RLED 4100K Lamps.	26	Watts: 1,482 Est. Hours: 2,607 kWh:3,864
22	Basement: Conference room	A 2x4, 3-Lamp T8 NP Fluorescent Fixture	4	will be Retrofit with (3) 4' RLED 4100K Lamps.	4	Watts: 228 Est. Hours: 2,086 kWh:476
23	Basement: Vault	A 2x4, 3-Lamp T8 NP Fluorescent Fixture	2	will be Retrofit with (3) 4' RLED 4100K Lamps.	2	Watts: 114 Est. Hours: 1,043 kWh:119
24	Floor 1: Restrooms	A 2x4, 3-Lamp T8 NP Fluorescent Fixture	5	will be Retrofit with (3) 4' RLED 5000K Lamps.	5	Watts: 285 Est. Hours: 2,086 kWh:594
25	Floor 1: Hallways	A 2x4, 4-Lamp T8 NP Fluorescent Fixture	20	will be Retrofit with (4) 4' RLED 4100K Lamps.	20	Watts: 1,400 Est. Hours: 3,129 kWh:4,380
26	Floor 1: Hallways	A 2x4, 2-Lamp T8 NP Fluorescent Fixture	14	will be Retrofit with (2) 4' RLED 4100K Lamps.	14	Watts: 504 Est. Hours: 3,129 kWh:1,577
27	Basement: Private offices	A 2x4, 3-Lamp T8 NP Fluorescent Fixture	1	will be Retrofit with (3) 4' RLED 4100K Lamps.	1	Watts: 57 Est. Hours: 2,607 kWh:149
28	Floor 1: Hallways	A 2x2, 2- U-Lamp T8 Fluorescent Fixture	7	will be Retrofit with (2) 4' U-Bent RLED 4100K Lamps.	7	Watts: 210 Est. Hours: 3,129 kWh:657
29	Basement: Technology	A 2x4, 4-Lamp T8 NP Fluorescent Fixture	12	will be Retrofit with (4) 4' RLED 4100K Lamps.	12	Watts: 840 Est. Hours: 2,607 kWh:2,190
30	Basement: Technology	A 2x2, 2- U-Lamp T8 Fluorescent Fixture	2	will be Retrofit with (2) 4' U-Bent RLED 5000K Lamps.	2	Watts: 60 Est. Hours: 2,607 kWh:156

Building: BOONE CO BD OF ED ADMIN OFFICE		Existing Fixture		Proposed Fixture		Est. Energy Savings
Line	Location	Existing Type	Qty	Proposed Type	Qty	by Line Item
31	Basement: Room 127	A 2x4, 4-Lamp T8 NP Fluorescent Fixture	3	will be Retrofit with (4) 4' RLED 4100K Lamps.	3	Watts: 210 Est. Hours: 1,564 kWh:328
32	Basement: Copy room	A 2x4, 3-Lamp T8 NP Fluorescent Fixture	10	will be Retrofit with (3) 4' RLED 4100K Lamps.	10	Watts: 570 Est. Hours: 2,607 kWh:1,486
33	Basement: Copy room	A 1x8, 2-Lamp T8 NP Fluorescent Fixture	6	will be Retrofit with (2) 4' RLED 4100K Lamps.	6	Watts: 216 Est. Hours: 2,607 kWh:563
34	Basement: Room 135-139	A 2x4, 4-Lamp T8 NP Fluorescent Fixture	17	will be Retrofit with (4) 4' RLED 4100K Lamps.	17	Watts: 1,190 Est. Hours: 2,086 kWh:2,482
35	Basement: Room 140	A 1x8, 2-Lamp T12 Fluorescent Fixture	1	will be Retrofit with (1) 1x8 Pan Retrofit Kit, and (4) 4' RLED 5000K Lamps.	1	Watts: 75 Est. Hours: 1,304 kWh:98
36	Basement: Room 130-134	A 2x4, 4-Lamp T8 NP Fluorescent Fixture	12	will be Retrofit with (4) 4' RLED 4100K Lamps.	12	Watts: 840 Est. Hours: 2,086 kWh:1,752
37	Basement: Food admin restrooms	A 2x2, 2- U-Lamp T8 Fluorescent Fixture	2	will be Retrofit with (2) 4' U-Bent RLED 5000K Lamps.	2	Watts: 60 Est. Hours: 1,043 kWh:63
38	Basement: Room 150-164	A 2x4, 3-Lamp T8 NP Fluorescent Fixture	30	will be Retrofit with (3) 4' RLED 4100K Lamps.	30	Watts: 1,710 Est. Hours: 2,086 kWh:3,567
39	Floor 1: Stairwell	A 2x4, 4-Lamp T8 NP Fluorescent Fixture	4	will be Retrofit with (4) 4' RLED 4100K Lamps.	4	Watts: 280 Est. Hours: 8,760 kWh:2,453
40	Floor 1: Stairwell	A 1x4, 2-Lamp T8 NP Fluorescent Fixture	2	will be Retrofit with (2) 4' RLED 4100K Lamps.	2	Watts: 72 Est. Hours: 8,760 kWh:631

Building: BOONE CO BD OF ED ADMIN OFFICE		Existing Fixture		Proposed Fixture		Est. Energy Savings
Line	Location	Existing Type	Qty	Proposed Type	Qty	by Line Item
41	Exterior: Exterior	A 250w Metal Halide Fixture	3	will be replaced with a new LED AREA, FLOOD, 60W, 5000K	3	Watts: 708 Est. Hours: 4,693 kWh:3,322

Total Purchase Price	\$24,173.77
Project Incentive Duke Energy project incentive paid directly to Lime Energy.	\$13,687.75
Customer Price Balance to be paid by Participating Customer directly to Company	\$10,486.02
Total Est. kW Savings *	18.95428
Total Est. kWh Savings **	54,748

\* 1000 Watts = 1 kW

\*\* Est kWh Savings = Est. kW Savings x Est. Hours of Operation.