

LIGHTING RETROFIT PROPOSAL

Lakewood Industrial LED Retrofit

PREPARED FOR

Lakewood Industrial Supply

Sarah Mitchell

Main Warehouse & Office

4820 Industrial Pkwy, Cleveland, OH 44135

PREPARED BY

Northbeam Lighting & Electric

1450 Brookpark Rd, Unit 6, Cleveland, OH 44109

(216) 555-0142

projects@northbeam.example

NET INVESTMENT

\$17,075.88

total project cost

ANNUAL SAVINGS

\$23,938.02

per year

SIMPLE PAYBACK

0.7 years

9 months

ENERGY SAVED

142,247 kWh

per year, 77% less

October 8, 2026

Sarah Mitchell

Lakewood Industrial Supply
4820 Industrial Pkwy, Cleveland, OH 44135

Dear Sarah,

Thank you for having us on site at Lakewood Industrial Supply. This proposal covers an LED lighting retrofit of your Main Warehouse & Office at 4820 Industrial Pkwy, Cleveland, OH 44135, based on the audit we completed on September 24, 2026.

We audited 84 fixtures across four spaces and propose replacing all of them, one for one. The retrofit is projected to save 142,247 kWh per year, which is 77% of what your lighting uses today.

The total investment is \$17,076, including installation and tax. Combined energy, demand charge and maintenance savings come to \$23,938 in the first year. That is a simple payback of about 9 months and a first-year return of 140.2%.

The savings shown are estimates. The inputs and the method behind every figure are set out on page 8, so you can check them against your own utility bills.

If you would like to go ahead, sign the acceptance on the last page or call me and we will confirm the schedule.

Sincerely,

Daniel Reyes

Project Manager, Northbeam Lighting & Electric
(216) 555-0142 | projects@northbeam.example

What this proposal covers

84 fixtures replaced, one for one

4 spaces, 7 fixture types

LED products and installation

Removal and disposal of existing lighting and ballasts

1 year workmanship warranty, plus manufacturer warranties

Dates

Site audit

September 24, 2026

Proposal

October 8, 2026

Valid until

November 7, 2026

Executive summary

Replacing 84 existing fixtures with LED cuts lighting energy use by 77% and pays for itself in about 9 months.

Net investment \$17,076 installed, tax included	Annual savings \$23,938 in the first year	Simple payback 9 months 0.7 years	Energy saved 142,247 kWh per year, 77% less
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Where the savings come from

\$23,938.02 per year

		
Energy	82%	\$19,630.08
Demand charges	10%	\$2,454.12
Maintenance	8%	\$1,853.82

Annual lighting energy use

185,385 kWh today

Today existing lighting		185,385 kWh
After retrofit 77% less energy		43,138 kWh

Investment

LED products (84 fixtures)	\$10,070.26
Installation	\$6,200.00
Sales tax on materials (8%)	\$805.62
Total investment	\$17,075.88

Return

Simple payback	0.7 years (9 months)
First-year return	140.2%
Savings over 10 years	\$260,354.02
10-year result, net	\$243,278.14

Scope at a glance

Fixtures replaced	84 of 84 audited
Connected lighting load	33.7 kW today, 8.2 kW after
Annual lighting energy cost	\$25,583.12 today, \$5,953.04 after

Energy analysis

The warehouse floor accounts for 92% of today's lighting energy, so that is where most of the saving comes from.

Annual energy use

Scenario	kWh per year	Energy cost	Change
Existing lighting	185,385	\$25,583.12	baseline
After LED retrofit	43,138	\$5,953.04	-142,247 kWh (-76.7%)

Energy cost is calculated at \$0.138 per kWh for each fixture line, then added up.

Energy by space

Space	Fixtures	Existing kWh	LED kWh	Saved kWh	Change
Main Building Warehouse Floor	44	169,782	36,374	133,408	-79%
Main Building Office & Lunchroom	24	4,942	2,746	2,196	-44%
Main Building Exterior & Parking	10	9,417	3,154	6,263	-67%
Mezzanine Storage Room	6	1,244	864	380	-31%
Total	84	185,385	43,138	142,247	-77%

Existing fixtures in scope

Fixture type	Space	Watts	Qty	kWh per year	Energy cost
Flood MH 1000W	Warehouse Floor	1,100 W	24	152,064	\$20,984.83
Metal Halide 250W	Warehouse Floor	290 W	8	13,363	\$1,844.09
Shoebox 250W HPS	Exterior & Parking	295 W	6	7,753	\$1,069.91
T8 4ft 2-Lamp	Office & Lunchroom	72 W	24	4,942	\$682.00
Vapor Tight 4ft 2-Lamp	Warehouse Floor	72 W	12	4,355	\$600.99
Wall Pack HPS 70W	Exterior & Parking	95 W	4	1,664	\$229.63
T8 4ft 1-Lamp	Storage Room	36 W	6	1,244	\$171.67
Total			84	185,385	\$25,583.12

LED retrofit specification

Every fixture is replaced one for one, so there is no change to layout, circuits or controls.

Retrofit schedule

Space	Existing fixture	LED replacement	Load	Unit price	Total
Main Building Warehouse Floor	Flood MH 1000W 1,100 W x 24	LED High Bay 200W 200 W x 24	-82%	\$189.69	\$4,552.56
Main Building Warehouse Floor	Metal Halide 250W 290 W x 8	LED High Bay 150W 150 W x 8	-48%	\$178.25	\$1,426.00
Main Building Warehouse Floor	Vapor Tight 4ft 2-Lamp 72 W x 12	LED Vapor Tight 4ft 30W 30 W x 12	-58%	\$74.75	\$897.00
Main Building Office & Lunchroom	T8 4ft 2-Lamp 72 W x 24	LED Panel 2x4 40W 40 W x 24	-44%	\$55.20	\$1,324.80
Main Building Exterior & Parking	Shoebox 250W HPS 295 W x 6	LED Shoebox 100W 100 W x 6	-66%	\$212.75	\$1,276.50
Main Building Exterior & Parking	Wall Pack HPS 70W 95 W x 4	LED Wall Pack 30W 30 W x 4	-68%	\$86.25	\$345.00
Mezzanine Storage Room	T8 4ft 1-Lamp 36 W x 6	LED Strip 4ft 25W 25 W x 6	-31%	\$41.40	\$248.40
LED products		84 fixtures			\$10,070.26

Load is the change in connected watts for the line (watts x quantity).

Installation

Fixtures to install	84
Installation, fixed price	\$6,200.00

Project price

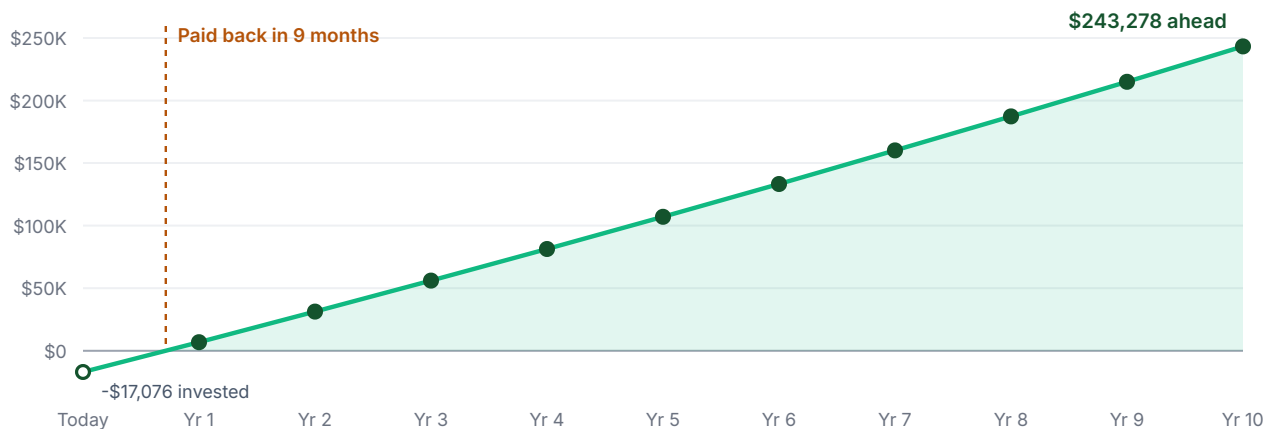
LED products	\$10,070.26
Installation	\$6,200.00
Subtotal	\$16,270.26
Sales tax on materials (8%)	\$805.62
Total investment	\$17,075.88

Financial analysis

The project is paid back inside the first year and is \$243,278 ahead after ten.

Return		Over 10 years	
Simple payback	0.7 years (9 months)	Savings over 10 years	\$260,354.02
First-year return	140.2%	Less investment	-\$17,075.88
		Result after the investment	\$243,278.14

Running total, year by year



Period	Savings in the year	Running total
Today (investment)	n/a	-\$17,075.88
Year 1	\$23,938.02	\$6,862.14
Year 2	\$24,379.70	\$31,241.84
Year 3	\$24,830.22	\$56,072.06
Year 4	\$25,289.75	\$81,361.81
Year 5	\$25,758.47	\$107,120.28
Year 6	\$26,236.56	\$133,356.84
Year 7	\$26,724.22	\$160,081.06
Year 8	\$27,221.62	\$187,302.68
Year 9	\$27,728.98	\$215,031.66
Year 10	\$28,246.48	\$243,278.14

Energy and demand savings grow 2% a year with utility rates. Maintenance savings are held flat.

Maintenance savings

LED fixtures last several times longer than the lamps they replace, which removes most relamping visits and lift rentals.

Annual maintenance cost

Maintenance cost today	\$2,311.92
Maintenance cost after the retrofit	\$458.10
Annual maintenance savings	\$1,853.82

A lamp replacement today is costed as the lamp, 10% of a ballast and half an hour of labor. An LED replacement is costed at half the fixture cost plus half an hour of labor.

Expected life at current operating hours

Space	Existing	LED	Lamp life today	LED life
Main Building Warehouse Floor	Flood MH 1000W	LED High Bay 200W	1.7 yrs	17.4 yrs
Main Building Warehouse Floor	Metal Halide 250W	LED High Bay 150W	1.7 yrs	17.4 yrs
Main Building Warehouse Floor	Vapor Tight 4ft 2-Lamp	LED Vapor Tight 4ft 30W	4.0 yrs	9.9 yrs
Main Building Office & Lunchroom	T8 4ft 2-Lamp	LED Panel 2×4 40W	7.0 yrs	17.5 yrs
Main Building Exterior & Parking	Shoebox 250W HPS	LED Shoebox 100W	3.4 yrs	22.8 yrs
Main Building Exterior & Parking	Wall Pack HPS 70W	LED Wall Pack 30W	2.7 yrs	11.4 yrs
Mezzanine Storage Room	T8 4ft 1-Lamp	LED Strip 4ft 25W	3.5 yrs	8.7 yrs

Environmental impact

CO ₂ avoided 18,492 kg per year	Trees equivalent 849 trees planted per year	Cars off the road 4.0 vehicles per year
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Based on 142,247 kWh saved per year at 0.13 kg of CO₂ per kWh.

Key assumptions and methodology

Calculation inputs

Energy rate	\$0.138 per kWh
Energy escalation	2% per year
Demand rate	\$8.50 per kW per month
CO ₂ factor	0.13 kg per kWh
Labor rate	\$65.00 per hour
Sales tax	8% on materials, labor not taxed
Rebate program	Not included

Methodology

- Energy use = watts x quantity x hours per day x days per year, for each fixture line. kWh is rounded to a whole number per line.
- Energy savings = existing energy cost minus energy cost after the retrofit, at \$0.138 per kWh.
- Demand savings = reduction in connected load (kW) x demand rate x 12 months. Exterior & Parking is left out because it is not on at the daytime peak.
- Maintenance savings = maintenance cost today minus maintenance cost after the retrofit.
- Simple payback = net investment divided by first-year savings. First-year return = first-year savings divided by net investment.
- Fixtures that are not being replaced, and fixtures marked out of scope, add no savings.
- Amounts are rounded to the cent on each line. Totals are the sum of the lines.
- Savings are estimates based on the audited fixtures and stated operating hours. Actual results vary with use, rates and equipment.

Terms and conditions

1. **Proposal validity.** Prices and terms quoted are valid for 30 days from the proposal date unless otherwise stated in writing.
2. **Payment terms.** Unless otherwise agreed in writing, Customer will pay 50% deposit upon contract signing and the remaining 50% within 15 days of project completion and invoice. Late payments incur interest at 1.5% per month.
3. **Scheduling.** Project start and completion dates are estimated and subject to change due to material lead times, crew availability, or site conditions. Contractor will provide written notice of schedule changes.
4. **Warranty.** Contractor warrants workmanship for 1 year from completion. Manufacturer warranties apply to installed products and are provided to Customer where available. Warranty coverage excludes damage from misuse, vandalism, acts of God, or alterations by others.
5. **Savings estimates.** Any energy or cost savings stated in this proposal are estimates only and not guaranteed. Actual savings depend on usage patterns, utility rates, and site conditions.
6. **Scope changes.** Any changes to scope, products, or schedule requested by Customer or required due to unforeseen site conditions will be documented and billed as a change order. Work will not proceed on change order items without Customer authorization.
7. **Disposal and recycling.** Contractor will handle removal and disposal of existing lighting and ballasts as described in the proposal. Additional disposal fees apply for hazardous materials or items not specified in the scope.
8. **Permits and inspections.** Contractor will obtain routine permits and coordinate required inspections as specified. Fees for permits are included only if stated; otherwise Customer is responsible for permit fees and any related code-compliance work not included in the proposal.
9. **Site access and conditions.** Customer will provide safe access, power, and necessary site conditions for the work. Delays or additional costs resulting from inadequate access or site preparation are Customer responsibility.
10. **Acceptance.** The project is considered accepted when Contractor notifies Customer of completion and Customer signs the final acceptance form or pays the final invoice without written dispute within 10 days.

Acceptance

Lakewood Industrial Supply accepts this proposal for the Main Warehouse & Office LED retrofit.

\$17,075.88 including tax

Client authorized signature

Date

Printed name and title

Purchase order #

Sample proposal. The contractor and client shown are fictional. Created with LumaQuote.