Lodi School District Energy Efficiency

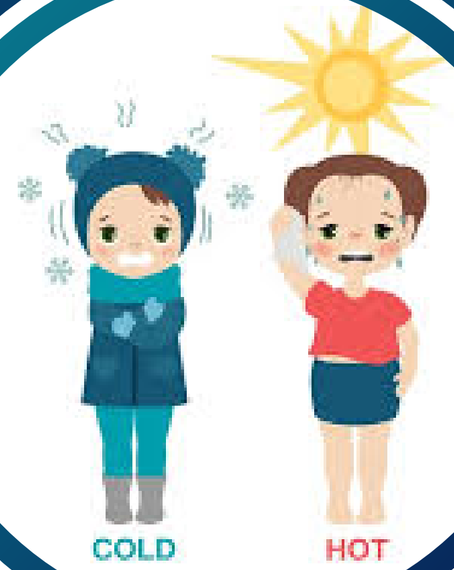
Phase 1

Driving the Future

a SAPS Club Project

...in the school gyms...

we have inefficient lighting at the elementary school



Poor heating and cooling in the high school gym

...the district could be saving money

Changes we can make...

Put new LED lights in the High School gym and move old LED’s to Elementary school gym

Replace old HS gym ceiling fans with efficient ones

Saving the school district money

How could we make this happen?

Steps to success

1. Visit Upper 90 to learn about renewable energy projects in area schools

UPPER90
a Centrix Company

Steps to success

2. Calculate volume of the HS gym, and the brightness of the lights in candles

Steps to success

3. Upper 90 selected new LED lights and energy effiecient fans

SINCE 1945 KEYSTONE LIGHT MADE EASY | XFIT | POWER SELECT | COLOR SELECT

KT-HBLED215PS-2FB-8CSD-VDIM-P

LED HIGH BAY FIXTURE

DESCRIPTION

2' LED High Bay Fixture | 120–277V Input | Frosted Lens | 0–10V Dimming | Premium Series

APPLICATION

Used for commercial and industrial high bay lighting applications

UL CERTIFIED | DLC LISTED PREMIUM | TAA** COMPLIANT | TRUSTED NLB WARRANTY | 10 YEAR LIMITED WARRANTY

PRODUCT FEATURES

- Powered by Keystone 0–10V dimming LED drivers
- Smooth diffused lens for an even appearance
- 0–10V Dimming, Dim-to-off
- Compatible with Keystone SmartSafe emergency LED drivers
- Compatible with Keystone 480–277V step down transformers
- Built in port to accept Quick install Keystone sensor (KTS-MW3-12V-PKO & KTS-PIR3-12V-PKO.) NO wiring required
- Ambient operating temperature: –40°C/–40°F to 50°C/122°F
- UL Listed 1598: Suitable for damp locations
- THD: <20%
- Power factor >0.95
- LED chip lifetime: L70 >100,000 hours @ 25°C/77°F ambient fixture temperature
- DLC Premium Listed
- Architectural grade compact design
- Frosted lens eliminates glare
- V-hook and chain mounting accessories included
- Compatible with Keystone SmartSafe emergency LED drivers; KT-EMRG-LED-12C-1200-EN /DF and KT-EMRG-LED-20SD-2000-EN / DF are optimal for fixture level installation; mounting kit KT-HBLED-EM-BR-1B-KIT required (sold separately)

****TAA options available, see Ordering Information below for details**

Steps to success

3. Upper 90 selected new LED lights and energy effiecient fans

Air Pear fan


Airius Destratification - Smoke Test - Blade Fan Vs Airius Model 45 (Comparison)
Video 4 x speed
Share
Blade Fan
Airius Fan
Watch on YouTube

Steps to success

3. Upper 90 selected new LED lights and energy effiecient fans

UPPER90
a Centrix Company

PROJECT QUOTE

Date: 6/26/25

UPPER 90 ENERGY	CUSTOMER
Ben Terpening **Upper 90 Energy** 792 Lois Dr, Sun Prairie, WI 53590 608-509-5728 ben@upper90.info	Neil Reible **Lodi School District** 115 SchoolStreet Lodi , WI 53555 re ib ln e @lo d isch o o lswi. o rg

PROJECT DESCRIPTION:
LED Lighting Upgrades and Destratification fans for the High School Gym

Price includes demo and disposal of existing fixtures and turning the lamps over to the district to be used at the elementary school

ID	Product No.	Descr i pti on	Quantity	TOTAL
#1	Material - High School Gym Fixtures	2' LED High Bay Fixture	42	$ 7,875.00
		KEYBL KT-HBLED215PS-2FB-8CSD-VDIM-P		$ -
#2	Labor - High School Gym Fixtures	Labor, Lift, Floor Covering, Demo & Disposal	42	$ 6,990.00
				$ -
#3	Material - Destratification Fans	Air Pear 25 Destrat Fan	8	$ 4,750.00
		A-25-SP-STD-120-W		
#4	Labor - Destratification Fans	Labor, Lift, Floor Covering, Demo & Disposal	1	$ 3,950.00
				$ -
#3	Upper 90 Costs	Design & Engineering, Project Management	1	$ 3,275.00
				$ -
			Subtotal	$ 26,840.00
			Tax Rate	0.00%
			Sales Tax	$ -
			Shipping and Handling	$ -
			TOTAL	$ 26,840.00

Energy Savings ($)	To be calculated with SAPS Club
Maintenance Savings ($)	To be calculated with SAPS Club
Simple Payback (years)	To be calculated with SAPS Club
Rebates (Focus on Energy and WPPI)	To be calculated with SAPS Club

This is a quotation for the products and / or services described above and is subject to the conditions below:

Applicable taxes and shipping are not included in this quote, but will be added to final invoice
All product returns are subject to a 25% restocking fee
Payment will be due net 30 days from date of purchase; please make check payable to Upper 90 Energy, LLC
To accept this quotation, sign here below and return via email to terpeningb@upper90energy.com

Signature: _____ Date: _____

If you have any questions or concerns with this quotation, please contact terpeningb@upper90energy.com or 608-509-5728

Steps to success

4. Learned how to calculate energy efficiency with Upper 90

Run Hours	HoursPer Day	Days	Weeks	Total	Total
School Hours:	10	6	39	2340	2600
Summer Hours:	4	5	13	260	

Electric Utility Rate: ($/kwh)	0.11

Existing:	
Fixture Quantity:	42
Fixture Type	High Bay
Ballast Factor	0.94
Lamps Per Fixture	6
Lamp Type	T5
Color	5000K
Lamp Wattage	54

Total Lamps	252
Fixture Wattage (W)	324
Total kW (kW)	13.608

Proposed:	
Fixture Quantity	42
Fixture Type	High Bay
Ballast Factor	1
Lamps Per Fixture	1
Lamp Type	LED Fixture
Color	5000K
Lamp Wattage	175

Total Lamps	42
Fixture Wattage (W)	175
Total kW (kW)	7.35

Annual Savings:	
kW Saved	6.26
kwh existing	35381
kwh proposed	19110
kwh saved	16271

Electrical Savings	$	1,789.79
Maintenance	$	252.00

Project Snapshot		
Cost	$	26,440
Rebate	$	2,520
WPPI One Time Rebate	$	10,000
WPPI Prescriptive Rebate	$	488
Net Cost	$	13,432

Energy Savings	$	1,789.79
Maintenance Savings	$	252.00

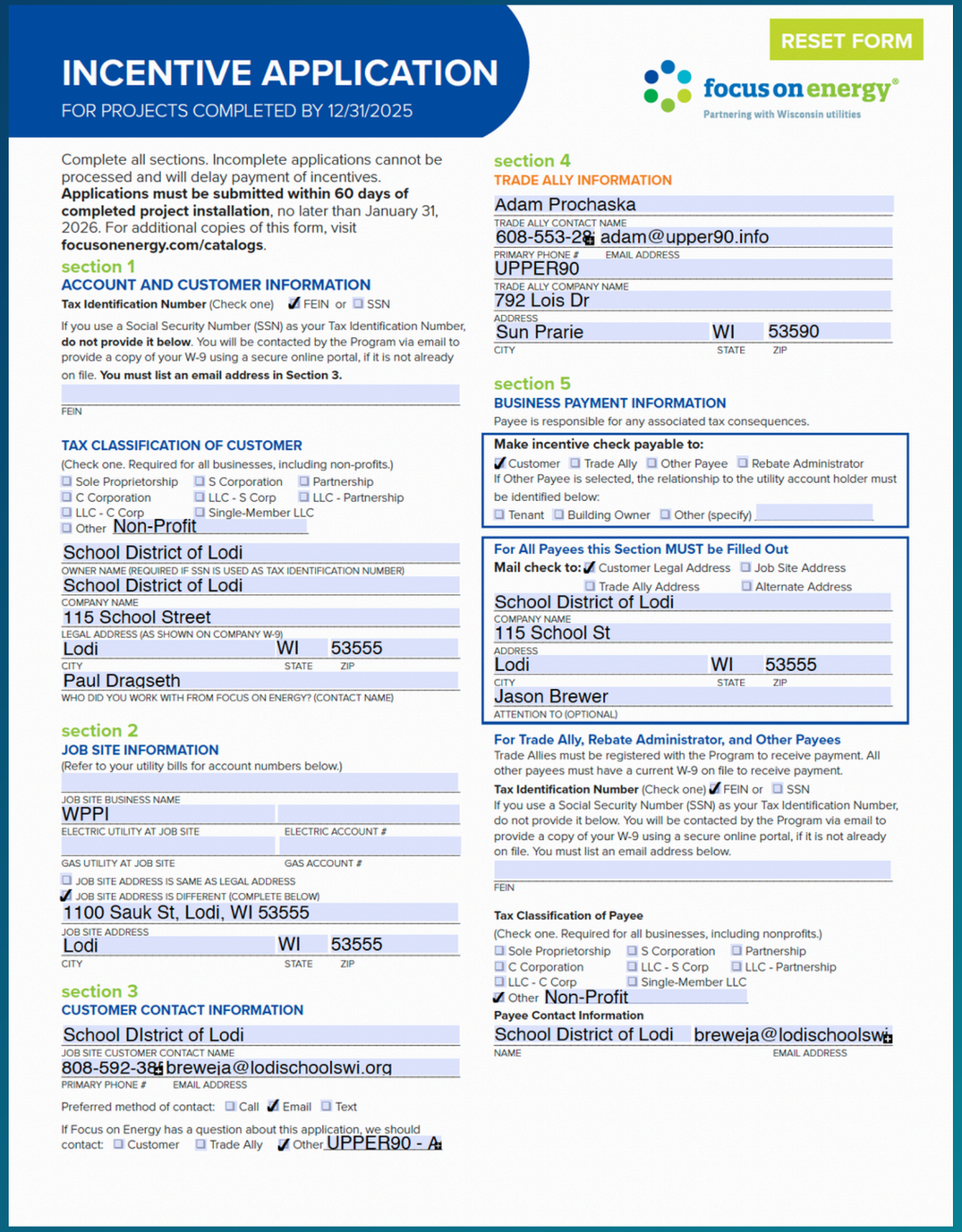
Simple Payback	6.58

Steps to success

5. Applied for, and completed the focus on energy rebate

focus on energy℠

Partnering with Wisconsin utilities



RESET FORM

INCENTIVE APPLICATION

FOR PROJECTS COMPLETED BY 12/31/2025

focus on energy® Partnering with Wisconsin utilities

Complete all sections. Incomplete applications cannot be processed and will delay payment of incentives. **Applications must be submitted within 60 days of completed project installation**, no later than January 31, 2026. For additional copies of this form, visit **focusonenergy.com/catalogs**.

section 1
ACCOUNT AND CUSTOMER INFORMATION

Tax Identification Number (Check one) ☑ FEIN or ☐ SSN

If you use a Social Security Number (SSN) as your Tax Identification Number, **do not provide it below**. You will be contacted by the Program via email to provide a copy of your W-9 using a secure online portal, if it is not already on file. **You must list an email address in Section 3.**

FEIN

TAX CLASSIFICATION OF CUSTOMER

(Check one. Required for all businesses, including non-profits.)

☐ Sole Proprietorship ☐ S Corporation ☐ Partnership
☐ C Corporation ☐ LLC - S Corp ☐ LLC - Partnership
☐ LLC - C Corp ☐ Single-Member LLC
☐ Other Non-Profit

School District of Lodi
OWNER NAME (REQUIRED IF SSN IS USED AS TAX IDENTIFICATION NUMBER)

School District of Lodi
COMPANY NAME

115 School Street
LEGAL ADDRESS (AS SHOWN ON COMPANY W-9)

Lodi | WI | 53555
CITY | STATE | ZIP

Paul Dragseth
WHO DID YOU WORK WITH FROM FOCUS ON ENERGY? (CONTACT NAME)

section 2
JOB SITE INFORMATION

(Refer to your utility bills for account numbers below.)

JOB SITE BUSINESS NAME: WPPI

ELECTRIC UTILITY AT JOB SITE | ELECTRIC ACCOUNT #

GAS UTILITY AT JOB SITE | GAS ACCOUNT #

☐ JOB SITE ADDRESS IS SAME AS LEGAL ADDRESS
☑ JOB SITE ADDRESS IS DIFFERENT (COMPLETE BELOW)

1100 Sauk St, Lodi, WI 53555
JOB SITE ADDRESS

Lodi | WI | 53555
CITY | STATE | ZIP

section 3
CUSTOMER CONTACT INFORMATION

School DIstrict of Lodi
JOB SITE CUSTOMER CONTACT NAME

808-592-38 | breweja@lodischoolswi.org
PRIMARY PHONE # | EMAIL ADDRESS

Preferred method of contact: ☐ Call ☑ Email ☐ Text

If Focus on Energy has a question about this application, we should contact: ☐ Customer ☐ Trade Ally ☑ Other UPPER90 - A

section 4
TRADE ALLY INFORMATION

Adam Prochaska
TRADE ALLY CONTACT NAME

608-553-28 | adam@upper90.info
PRIMARY PHONE # | EMAIL ADDRESS

UPPER90
TRADE ALLY COMPANY NAME

792 Lois Dr
ADDRESS

Sun Prarie | WI | 53590
CITY | STATE | ZIP

section 5
BUSINESS PAYMENT INFORMATION

Payee is responsible for any associated tax consequences.

Make incentive check payable to:

☑ Customer ☐ Trade Ally ☐ Other Payee ☐ Rebate Administrator

If Other Payee is selected, the relationship to the utility account holder must be identified below:

☐ Tenant ☐ Building Owner ☐ Other (specify)

For All Payees this Section MUST be Filled Out

Mail check to: ☑ Customer Legal Address ☐ Job Site Address ☐ Trade Ally Address ☐ Alternate Address

School District of Lodi
COMPANY NAME

115 School St
ADDRESS

Lodi | WI | 53555
CITY | STATE | ZIP

Jason Brewer
ATTENTION TO (OPTIONAL)

For Trade Ally, Rebate Administrator, and Other Payees

Trade Allies must be registered with the Program to receive payment. All other payees must have a current W-9 on file to receive payment.

Tax Identification Number (Check one) ☑ FEIN or ☐ SSN

If you use a Social Security Number (SSN) as your Tax Identification Number, do not provide it below. You will be contacted by the Program via email to provide a copy of your W-9 using a secure online portal, if it is not already on file. You must list an email address below.

FEIN

Tax Classification of Payee

(Check one. Required for all businesses, including nonprofits.)

☐ Sole Proprietorship ☐ S Corporation ☐ Partnership
☐ C Corporation ☐ LLC - S Corp ☐ LLC - Partnership
☐ LLC - C Corp ☐ Single-Member LLC
☑ Other Non-Profit

Payee Contact Information

School District of Lodi | breweja@lodischoolswi
NAME | EMAIL ADDRESS

Be more energy efficient

Have brighter lighting

Helping protect the enviroment

...After Renovations...

LED lighting at LES and brighter lights at LHS

Even heating and cooling in LHS gym

District is saving money

Future Directions

Capital Improvement Measure	Description	Estimated Price		Estimated Annual Savings		Estimated Utility Rebate	Simple Payback (years)	
		Low	High	Energy	Maintenance			
Electric Data Submetering (District Wide)	Sub metering of main [illegible]al panels in the Entire District. Create recommendations t[illegible]ce energy savings opportunities using AI. F[illegible] investig[illegible]ting for foo[illegible]service, community use, and solar.	$50,400	$50,400	$39,072	$0	$0	1.3	1.3
LED Gymnasium Lighting (District Wide)	Repl[illegible] Lighting i[illegible] High School gym, Middle School Gym & Wrest[illegible]oth Elem[illegible]y Gyms, and Primary Gym. New LED Keyston[illegible]bays incl[illegible]ireless dimming via a switch and phone app, motion sensing, and [illegible]t sensing technology.	$87,121	$111,321	$5,296	$2,052	$5,985	11.0	14.3
Destratification Fans (District Wide)	El[illegible]ate stratifi[illegible] areas with high ceilings by installing ceiling fans to pus[illegible]m ai[illegible]nd maintain a consistent temperature in the space. Includ[illegible]S library, MS gym, MS cafeteria, both Elementary gyms, and th[illegible]gym.	$66,800	$85,330	$4,455	$2,748	$0	9.3	11.8
Building Envelope Improvements (District Wide)	The exterior doors will be weather-stripped to reduce air infiltration. The roof/wall gaps will be sealed with a two part foam to reduce air infiltration. Windows will be sealed at the sills and frame.	$63,574	$76,958	$6,717	$2,065	$0	7.2	8.8
Water Conservation (Entire District)	Water Conservation of toilets and sinks involving retro commissioning and fixture tuning. Includes mixture of new valves, valve rebuilds, spud & flushtube replacements, new flow controls, and deduct irrigation meter to save and conserve water.	$171,739	$231,848	$15,550	$5,301	$0	8.2	11.1
HVAC Retrocommissioining (District Wide)	High School: re-balance AHU's 1-13,15,16,17, &18 as many units showing building static pressure issues. Install VFDs to constant volume units with no existing VFDs. Install CO2 and demand control ventilation to appropriate units. AHU-18 serving the pool chemical room is 100% outside air with constant volume supply fan. BAS is not showing the interlock with the exhaust fan serving the space. Implement building automation changes for further efficiencies. Primary School: Based on printscreens from the BAS, building appears to be negative -0.2 which would cause outside air to be pulled in through building penetrations. AHU's dampers do not appear to be operating correctly. Implement building automation changes for further efficiencies. MS: Install VFDs to constant volume units with no existing VFDs. Install CO2 and demand control ventilation to appropriate units. Implement building automation changes for further efficiencies. Elementary: school has over 41 RTUs that all appeared to be sized 3-5tons w/ gas heat. Controls should be reviewed for inefficiencies of each unit.	$164,115	$200,585	$23,483	$5,628	$12,500	5.2	6.5
		$603,749	$756,442	$94,572	$17,794	$18,485	5.2	6.6

Capital Improvement Measure	Description	Estimated Price		Estimated Annual Production	Distrit Wide Electrical Offset	Federal Tax Credit (30%)	Estimated Utility Rebate	Simple Payback (years)	
		Low	High						
Solar PV Array Installation (High School)	Install an approximate 287kW solar array on the ground near the Auditorium entrance. Interconnect system into main service. Structural engineering need to take place to determine exact scope and design. System produces 16% of 2023 electric building usage.	$634,356	$775,324	$33,072	8.9%	$190,307	$14,350	13.0	17.3
Solar PV Array Installation (Primary School)	Install an approximate 152kW solar array on the ground near the Auditorium entrance. Interconnect system into main service. Structural engineering need to take place to determine exact scope and design. System produces 60% of 2023 electric building usage.	$331,529	$405,203	$25,756	6.9%	$99,459	$7,600	8.7	11.6
Solar PV Array Installation (Middle School)	Install an approximate 232kW solar array on the Middle School roof. Interconnect system into main service with no monthly excess generation. Structural engineering need to take place to determine exact scope and design. System produces 52% of 2023 electric building usage.	$468,772	$572,944	$34,432	9.2%	$140,632	$11,600	9.2	12.2
Solar PV Array Installation (Elementary School)	Install an approximate 153kW solar array on the Elementary School roof. Interconnect system into main service with no monthly excess generation. Structural engineering need to take place to determine exact scope and design. System produces 38% of 2023 electric building usage.	$344,795	$421,417	$22,538	6.1%	$103,439	$7,650	10.4	13.8
Solar PV Array Installation (District Office)	Install an approximate 72kW solar array on the District Office roof. Interconnect system into main service with no monthly excess generation. Structural engineering need to take place to determine exact scope and design.	$169,322	$206,950	$11,722	3.1%	$50,797	$3,600	9.8	13.0
		$1,948,775	$2,381,837	$127,519	34.2%	$584,633	$44,800	10.3	13.7