



# Propel your performance

How lighting impacts your warehouse & distribution facility

# Warehouse & distribution challenges

Lighting is a crucial component of every warehouse and distribution environment. Your facility lighting must run consistently, efficiently, and sometimes ever continuously (24/7) often in challenging conditions.

Inefficient or ineffective lighting often results in costly, disruptive, and even dangerous systems.

Improving your facility productivity, while also saving significant amounts on your energy bills is the goal of warehouse and distribution facility operators across the country.

### Facility challenges:







Safety



Vigorous competition



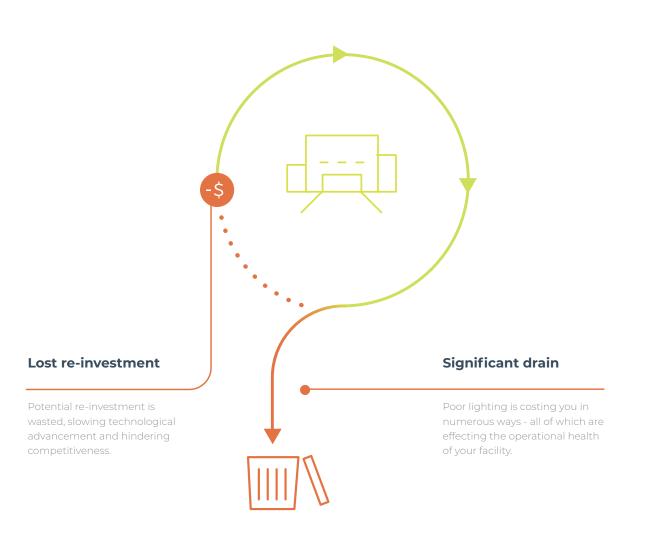
Environmenta concerns



Regulatory pressures



Inflexible profit margins



## Pitfalls of poor lighting

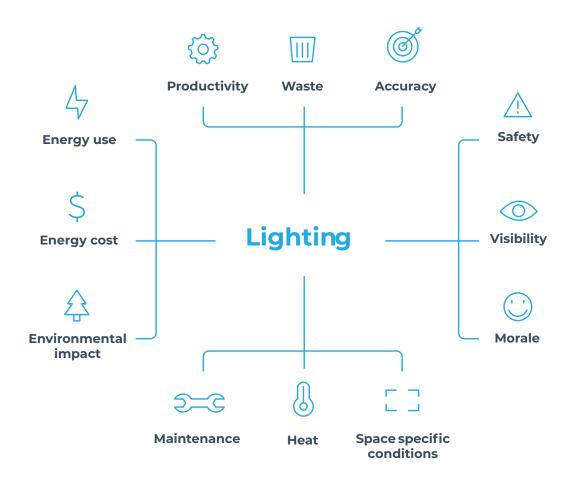
Energy costs are a major operational factor for warehouse and distribution facilities, In terms of electricity use, lighting can use more than cooling, ventilation and space heating combined. However, as crucial as operating costs are they only tell part of the story.

The repercussions of poor lighting run deep into numerous areas of your entire warehouse and distribution facility, critically impacting the productive health of your entire operation. Here productivity, safety and operational costs are all intricately connected.

The bottom line is outdated lighting systems are costing you time, money, impaired performance and safety.

10%

Of total revenue is spent on energy costs by some warehouses, with warehouses as a whole spending an average of .70 cents per square foot on energy



## The future is very bright

What if you could improve these issues and also save on costs? What if you could do what's best for your operations, employees and environment while saving energy?

Fortunately, the technology is here and it's use is transforming business productivity. Not only are LED lighting products cheaper and more efficient, they produce better quality light.

LED unlocks a huge amount of potential and excels in every quantifiable metric. It's more than just an upgrade, it's a step into a more profitable and productive future. 66

PEC changed our business with their lighting system. Not only did they save us with efficiency [but] the temperature in our warehouse is lower, our lighting is better, the warehouse is safer, and our energy bills are lower.

Branch Manager | ABC Supply Co Waxahachie, TX



**25**×

Times longer lifespan than traditional bulbs



80%

Less energy than incandescent bulbs



**261**%

Avg. increased light levels



16%

Avg maintenance savings in addition to energy use



Extra lifetime if run 24 hours a day, seven days a week! That's 25,000 hours or more extra life! \$31,851

Annual energy savings of Marten Transport with a return on investment in 2.27 years.



Improved light levels have immediate and meaningful benefits. PEC clients have noted improvements in both employee morale and safety.



"Our previous lighting maintenance costs were over \$80,000 – and now, our expenses don't even come close."

## Not all LED solutions are equal

LED solutions can vary widely. Common issues from improper implementation include:

- Inferior LED products and poor designs that will cost more over time, don't last long, and don't produce appropriate or improved light levels
- Dangerous and improper implementation. Poorly fitted and installed fixtures have consequences and have been known to cause damage including fires!
- Poor value. Many LED lighting installations miss out on 70% of the lifetime value from an optimized system.

### **How PEC does it:**

- Take comprehensive light leve readings of your facility
- Look at IES industry standards
- Address exactly how you use your lights and what your individual needs are.





Both facilities purchased a "LED upgrade"

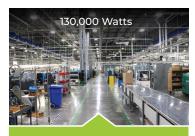


Both car dealerships are 100% LED

LED fixtures range from 1,000 to 100,000+

Largest lumen variance in lighting history





One consumes 85% more power



Both LED systems produce the same amount of visible light

Light levels no longer directly correlate with system wattage

LEDs range from 50 lumens Watts per watt to 200+





One will last 28.5 years longer



Both LED systems produce the same amount of visible light

Useful lifetime ratings have the largest discrepancy in lighting history

### The PEC impact: Reddaway

Reddaway is a US trucking warehouse business with numerous locations. It employs 2600 people and has a presence across multiple states.

A PEC customer for many years, Reddaway has enjoyed significant operational benefits including:

- Reduced energy costs
- Improved employee morale
- Increased safety



PEC has demonstrated extremely advanced knowledge in the areas of light retrofits, current lighting technologies, energy rebate programs, and project management. PEC does more than a "bulb swap". PEC performs a comprehensive site analysis, provides options, and explains how best to leverage available incentives.

Vice President of Terminal Solutions Reddaway







**341,918** kWhs

Displaced energy



**2.55** years

Rate of Return on Investment



\$86,245

Covered by incentives



\$31,901

Annual energy savings

### **Meet our experts**

Pacific Energy Concepts is North America's most innovative energy optimization company. We deliver custom LED lighting solutions that help our customers run efficient, save money and work happy. We're here to help facilitate the success of each company as a whole.

With deep knowledge of the lighting industry, We are experts in designing, developing, and deploying targeted solutions in complex and specialized environments. This is why brands like Costco, IKEA, Jeld-Wen and Alaska Airlines (to name a few of the 5000 companies we work with) put their trust in us.

Others change lightbulbs. We transform businesses.

\$100M

Energy saved

5000

Partnered companies

Inc.5000

2019 company

7000+

Completed projects



























\$1.16+M

Savings to date on IKEA distribution centers



**6,124,732** kWh

Total annual energy savings from 4 major IKEA distribution centers



600+

Costco Wholesale warehouse locations



1001

Projects complete for Costco



Costco has been in partnership with Pacific Energy Concepts for over three years. PEC has proven to be an expert in developing and implementing custom LED lighting solutions. They successfully helped us develop an LED retrofit scope of work and then proceeded to roll this out over 600+ Costco Wholesale warehouse locations.

We are continually impressed by PEC's ability to manage dozens of projects at once. It is not uncommon for us to roll out entire regions of stores throughout the U.S. and Canada simultaneously.

PEC is with us every step of the way. With a developed national network of competent installers throughout North America, they are able to execute at a very high level. We have found Pacific Energy Concepts to be a professional and efficient. We know they will always do the right thing for the team members here at Costco Wholesale. We will continue to partner with PEC for the foreseeable future as they help us to achieve our sustainability goals."

Manager,
Energy Systems Costco Wholesale

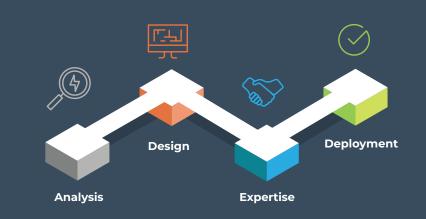
## The PEC way

Traditional lighting companies will try to sell you on their lighting fixtures, without understanding how you use your space and what you're looking to achieve

#### That's not us.

PEC's proprietary approach begins with a comprehensive analysis of your building's lighting system.

Our expert team develops a customized lighting solution, manages the project and incentive process from start to finish – delivering impact to your building's operations and your bottom line.



#### Energy assessment

Every project begins with a complete assessment of your unique lighting needs and objectives. We discuss how you're currently using your space, review existing technologies, and establish clear directives for how to add value to your building.

### 2 Energy audit

Our team conducts a thorough evaluation of your site compiling existing infrastructure data, measuring building dimensions and performing a complete onsite level analysis.

### 3 Lighting design

We use 3D design software to help us all visualize the latest in lighting technology in your space. The result? A customized 3D model of your site incorporating our solutions — including projected light levels and photometrics.

### 4 Incentive management

Energy incentives are one of the most easily misunderstood aspects of lighting renovation. PEC guides you through the process, handling all the paperwork and capturing the most advantageous energy savings for any incentive program.

### Project Management

You will be assigned a designated Project manager (PM) who will be your main point of contact throughout the rest of the project. They will keep you informed about what to expect, schedule contractors and arrange for material delivery and installation.

### Installation

PEC oversees your project from start to finish, including delivery, installation, and warranty claims.

#### Completion

Once the install is done, your PM will perform an onsite 100% re-audit to confirm the project was implemented correctly. If everything meets our standards, your PM will schedule a tour with an incentive inspector

