



Delta, Canada

## CASE STUDY

# BOXMASTER

### CHALLENGE

Boxmaster, located in Delta, BC, produces a large volume of cardboard products from their warehouse headquarters. As a company which practices sustainability in all approaches of their manufacturing process, Boxmaster was looking for a more energy efficient lighting solution within their entire building facilities; offices, loading bays, warehouse, electrical rooms, and lounge/lunch rooms. They were looking to improve energy efficiency, and increase overall lighting quality for employees throughout their facilities.

### PROJECT SUMMARY

- Provided 80% lighting cost savings
- Improved employee safety and wellness
- 489,430 kWh saved - Over 96% reduction annually
- 10 year warranty and 20 year life expectancy

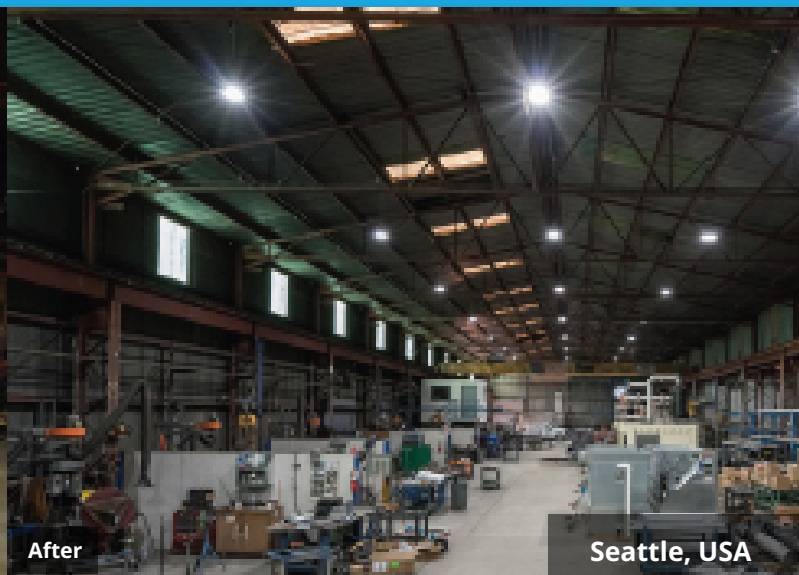
### SOLUTION

Radiance Energy replaced all existing light bulbs with an improved, energy efficient LED retrofit solution throughout all areas of Boxmaster warehouse facilities. With the Radiance Solution, employees can more easily distinguish objects and potential obstacles. Those with lighting sensitivities will have fewer headaches and less eye-strain with the low-flicker rates from specifically chosen products. Boxmaster is now saving 489,430 kWh annually, a significant reduction of 96%. Lighting energy cost savings were in-turn reduced by 80%.

Radiance Energy ensured a sustainable, more evenly-distributed lighting while providing Boxmaster with substantial lighting cost savings.

*"The financial impact has been great, we're always very busy in June, but we just had our lowest electricity bill ever. The lighting itself, the quality, is like night and day, Radiance told us that these LED lights are the closest you can get to sunlight and they didn't disappoint. We have 70 employees in the plant, and anybody that we talk to says how excited they are about it and how much brighter and cleaner it is."*

**Chris Hanna, Boxmaster Operations Manager**


**Before**
**After**
**Seattle, USA**

## CASE STUDY

# MCKINSTRY

*McKinstry Metal Fabrication, an industrial warehouse spanning 105,000 sq. ft. in Seattle, WA, partnered with Seattle Energy Group (SEG) to modernize its lighting infrastructure. The goal was to enhance energy efficiency, improve workplace lighting conditions, and maximize cost savings through the Seattle City Light Rebate Program.*

## CHALLENGE

The warehouse's existing lighting system was outdated, consuming excessive energy and leading to high operational costs. The facility required a modern lighting solution to enhance visibility, lower energy consumption, and improve overall work conditions.

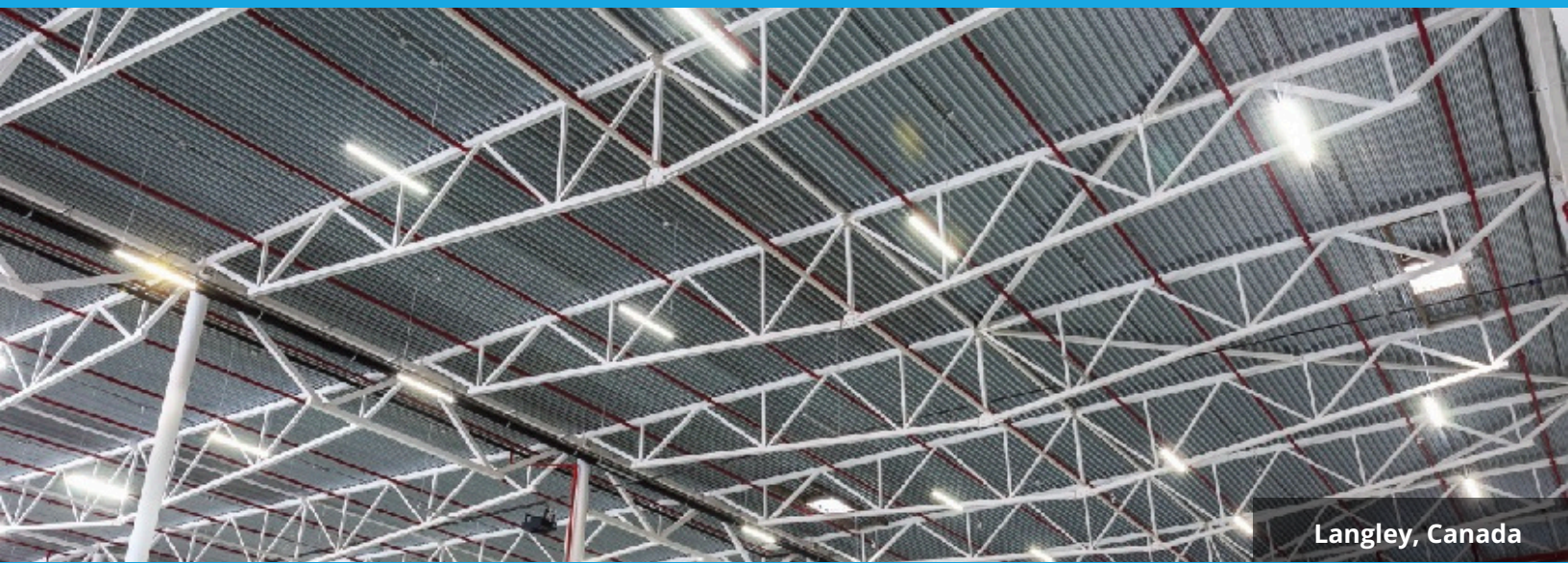
## SOLUTION

SRadiance Energy, in collaboration with SEG, implemented a comprehensive LED lighting retrofit that replaced inefficient fixtures with high-efficiency LED high bays. Key aspects of the upgrade included:

- **LED Technology Replacement:** Outdated fixtures were replaced with 190 high-efficiency high bay LEDs.
- **Significant Energy Reduction:** Lowered total power consumption from 720W per fixture to 160W.
- **Extended Warranty:** The new lighting system includes a 10-year warranty, ensuring long-term reliability.
- **Seattle City Light Rebate Program:** A substantial 57% rebate on the total project cost.

## PROJECT SUMMARY

- **Facility Size:** 105,000 sq. ft.
- **Energy Cost Savings:** 71% reduction in energy expenses.
- **Rebate on Total Cost:** 57% project cost covered by Seattle City Light.
- **Return on Investment (ROI):** Achieved in 2.4 years, including maintenance savings.



Langley, Canada

## CASE STUDY

# ATLAS SIGN & AWNING



*Atlas Sign and Awning specializes in design, production and installation of signage across North America. They are one of BC's fastest growing businesses.*

## CHALLENGE

Atlas experienced strong growth over the last few years; however, poor lighting in the warehouse and manufacturing areas held the company back from its full potential.

## SOLUTION

Radiance Energy replaced the warehouse metal halide high bay fixtures with LED lighting, resulting in a 100% increase in light levels while reducing energy use by half. Replacing the office troffer lights with flat panel LEDs resulted in a light quality improvement of 50% and saved more than 70% in energy costs.

*"The Radiance lights give us better light levels and make our staff happier and more productive. All this while saving us a lot of money!"*

**Kevin MacDonald, Owner and CFO, Atlas Sign & Awning**

## PROJECT SUMMARY

- 2 million kWh savings over 10 years
- 74% energy savings
- Increased light output
- Over \$33,000 rebate from local utility





Port Coquitlam, Canada

## CASE STUDY WESGAR

*Wesgar is an industry leader in high-precision sheet metal manufacturing with almost 50 years of experience, operating in two locations, covering over 100,000 square feet.*

### CHALLENGE

Wesgar is a fully integrated precision sheet metal manufacturer serving OEM, telecom, medical, industrial controls, power monitoring and architectural industries. Employee health and safety are paramount.

Radiance Energy conducted a thorough audit and energy analysis of Wesgar's manufacturing and office areas. Radiance found that there was poor visibility and low light levels throughout their facility. There was also high flicker rates and maintenance costs.

### SOLUTION

Radiance Energy replaced their existing metal halide fixtures with high-efficiency high bay lighting with controls for their warehouse areas and installed LED flat panels to replace the fluorescent tubes in the offices.

### PROJECT SUMMARY

- Saved 77% in energy and maintenance costs
- 10yr manufacturers warranty, 20yr life expectancy
- Up to 300% increase in brightness & visibility levels
- Healthier and safer lighting environment





Richmond, Canada

## CASE STUDY

# EBCO INDUSTRIES

### CHALLENGE

Ebco Industries faced several challenges with its outdated lighting system, including excessive energy use, high maintenance costs, and inadequate lighting levels for industrial tasks. The company needed a modern lighting solution that would provide consistent illumination, reduce operational expenses, and align with sustainability goals.

### PROJECT SUMMARY

The LED upgrade at Ebco Industries in July 2023 successfully improved energy efficiency, reduced operational costs, and created a safer, better-lit work environment. By transitioning to LED solutions, the facility achieved:

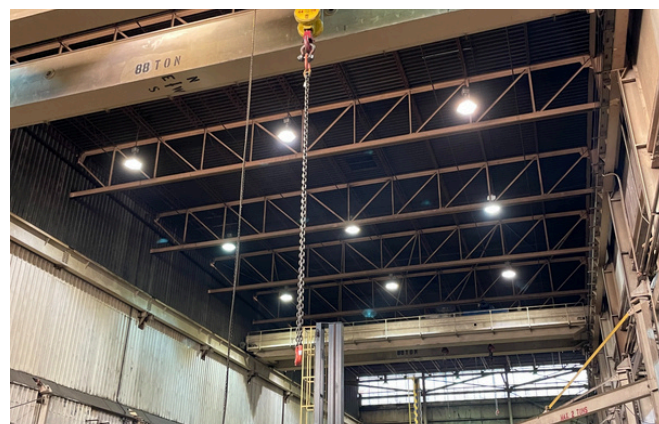
- Annual Energy Savings: 605,920 kWh
- Annual Cost Savings: \$63,573
- Estimated Payback Period: 3.1 years
- Total Cumulative Savings Over 10 Years: \$538,834

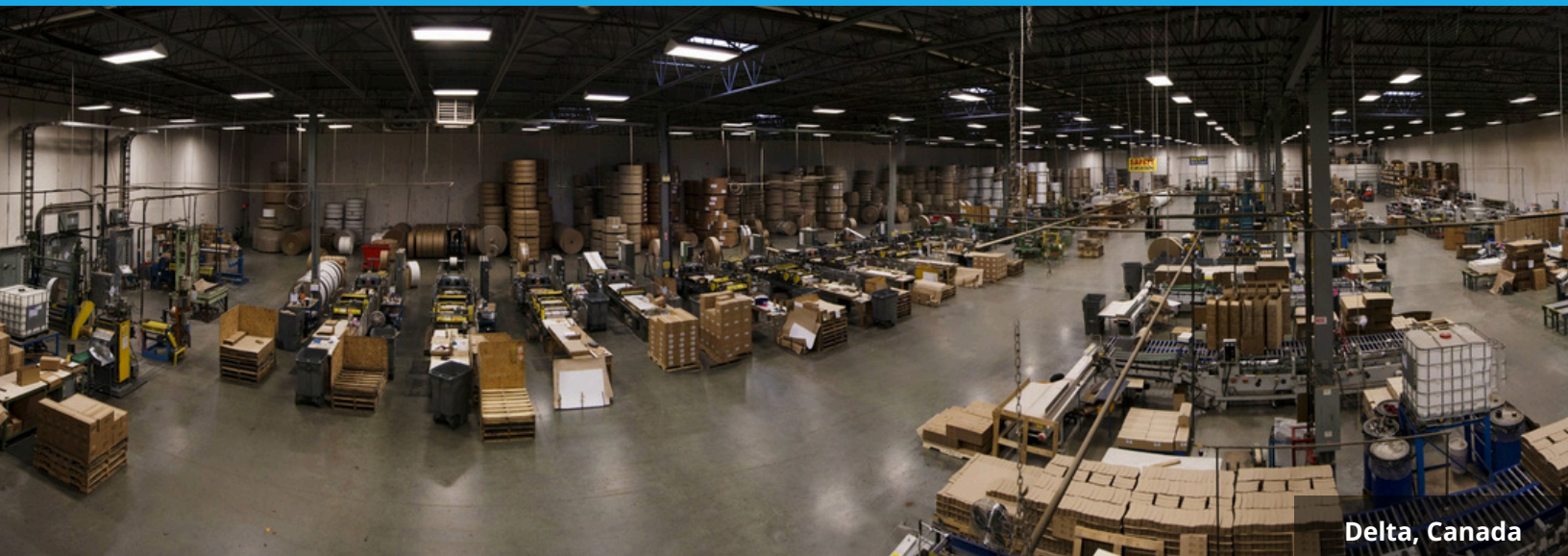
This project showcases Radiance Energy's commitment to providing sustainable and cost-effective lighting solutions.

### SOLUTION

Radiance Energy conducted an in-depth energy audit and implemented a custom LED lighting upgrade designed to meet Ebco Industries' needs. Key aspects of the solution included:

- Energy-Efficient LED Fixtures: Replacement of outdated lighting with high-performance LED fixtures.
- Enhanced Lighting Quality: Improved visibility across warehouse and production areas.
- Significant Cost Savings: An estimated 74% reduction in energy costs.
- BC Hydro Incentive: Secured a \$141,007 rebate, covering 40% of the project cost.
- Long-Term Savings: Lower maintenance expenses due to high-durability LED technology.





## **CASE STUDY**

# **SEASIDE PAPER PRODUCTS**

### **CHALLENGE**

The existing lighting system at Seaside Paper Products was outdated, leading to inconsistent lighting levels, high energy consumption, and increased maintenance costs. The facility required a modern solution to improve visibility, enhance safety, and reduce operational expenses.

### **PROJECT SUMMARY**

The LED lighting upgrade at Seaside Paper Products successfully enhanced workplace lighting conditions while reducing energy expenses. By adopting energy-efficient LED solutions, the facility now benefits from lower maintenance costs, improved task visibility, and a more sustainable work environment.

### **SOLUTION**

Radiance Energy conducted a thorough lighting audit and implemented an advanced LED lighting upgrade tailored to the facility's operational needs. The solution provided:

- Harmonized lighting levels in both warehouse and manufacturing areas to ensure optimal visibility for task work.
- Improved energy efficiency, reducing electricity consumption and lowering operating costs.
- Enhanced safety and productivity by delivering consistent, high-quality illumination.
- Significant cost savings, with BC Hydro covering over 40% of the project cost through incentives.



**WE AIM TO GET THE BEST FEEDBACK BY PROVIDING THE BEST SOLUTIONS, SERVICE, AND CLIENT EXPERIENCE.**

## SEASIDE PAPER PRODUCTS TESTIMONIAL



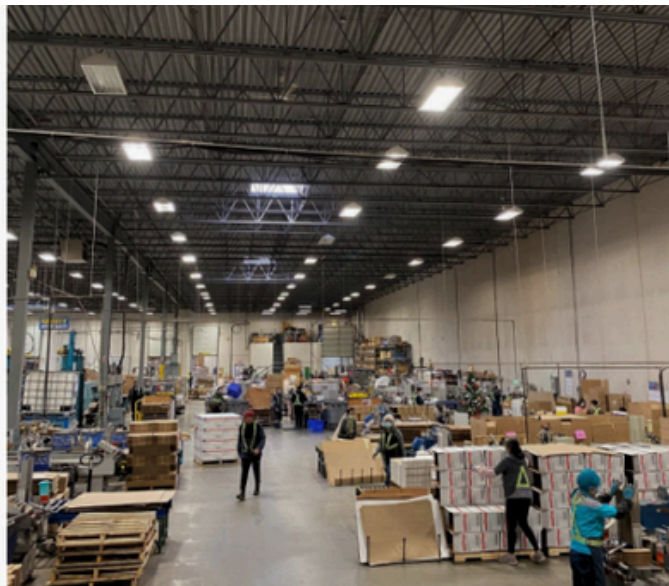
**Seaside Paper Products**

1 review



★★★★★ 4 months ago

Andy and his team at Radiance did a fantastic job upgrading our facilities lighting to LED. From the proposal all through completion of the work was a seamless experience. The new LED lighting has greatly improved visibility (much brighter) and has significantly reduced our hydro electric bill. Highly recommend Radiance to anyone.



**BEFORE**



**AFTER**