



# LED Lighting Savings and Benefits Analysis

Simply Silver Jewellery Store  
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## LED Lighting 'Shines'

Eco Tec Lighting LED Lighting offers better quality light than traditional lighting; saves up to 80% in energy, and can last well over a decade.

## INTRODUCTION

This LED Savings and Benefits Analysis addresses the costs, savings and benefits of Eco Tec Lighting for your facility.

Eco Tec Lighting LED Lamps will provide significant energy and lamp replacement savings, long term reliability and enhanced 'user friendly' light quality – all backed by UL, LM79, LM80 and third party certified testing.

Eco Tec Lighting LED Lamps consumes up to 80% less energy and lasts over 50,000 hours (11 ½ years at 12 hours per day, 7 days per week) - to eliminate light bulb (and ballast) replacements and disposal for years to come.

Also, because LED lighting emits very little heat, air conditioning is no longer required to compensate for that heat - reducing energy costs even further.

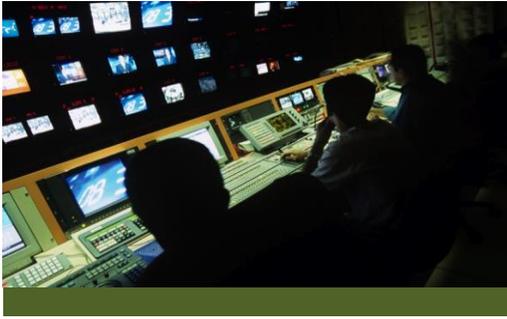
LEDs do not generate UV radiation as they are lit by electric current flowing to semiconductors. Any heat generated is not in the infrared or ultraviolet part of the light spectrum.

Finally, every Eco Tec Lighting LED lamp is designed to eliminate the annoying sideways light glare so typical with traditional lighting - for a headache free, enjoyable user experience.

Count on Eco Tec Lighting

LED Is Replacing All Lighting - some interesting facts...

- Lighting uses 20% of the world's energy.
- By 2014, 50% of new lights will be LED;
- By 2030, almost every light will be LED based.



# Executive Summary

This Savings and Benefits Analysis estimates the cost savings realized by retrofitting your facility with high quality, energy efficient LED lighting.

Eco Tec Lighting LED Lamps will save 81% or \$7,793 every year, providing a 61% annual return on investment with a breakeven of 1.25 yrs. yrs.; totaling \$78,860 of savings during the LED lamp's lifetime.

<b>MONTHLY SAVINGS LOST WITH CURRENT LIGHTING</b>	<b>\$649</b>
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Based on a preliminary audit, your energy savings and financial benefits with Eco Tec Lighting LED Lighting are:

## CURRENT ANNUAL LIGHTING COST

<i>Energy currently used (kWh)</i>	51,688
Energy cost	\$6,203
Air conditioning cost	\$513
Lamp replacement cost	\$2,841
Ballast replacement cost	\$9
<b>Current annual lighting cost</b>	<b>\$9,565</b>

## PROPOSED ANNUAL LED LIGHTING COST

<i>Energy used by LED (kWh)</i>	14,768
Energy cost	\$1,772
Air conditioning cost	\$0
Lamp replacement cost	\$0
Ballast replacement cost	\$0
<b>LED annual lighting cost</b>	<b>\$1,772</b>

## PROJECTED ANNUAL SAVINGS WITH LED

<i>Energy saved (kWh)</i>	36,920
Energy savings	\$4,430
Air conditioning savings	\$513
Lamp replacement savings	\$2,841
Ballast replacement savings	\$9
<b>LED savings - annual</b>	<b>\$7,793</b>
<b>LED savings - during LED lifetime</b>	<b>\$78,860</b>

## LED RETROFIT COST

LED Lighting, FOB Warehouse	\$12,195
Fixtures, Brackets	\$0
Dimmers / Timers	\$0
Occupancy Sensors	\$0
Installation	\$669
Eco Disposal	\$0
3rd Party Warranty	\$0
Freight	---
<b>Total - Purchase Price</b>	<b>\$12,863</b>
Incentive - kW Saved	\$0
Incentive - w / Lamp	\$0
Incentive - Fixtures	(\$2,797)
EPAct Section 179D	(\$257)
Accelerated Deprec'n	\$0
<b>Total - Incentives and Rebates</b>	<b>(\$3,054)</b>
<b>Net LED Retrofit Cost</b>	<b>\$9,809</b>

## ANNUAL ECO SAVINGS

Energy (kWh)	36,920
CO2 removed	56,118
Equivalent number of cars removed	5
Equivalent number of trees planted	653
Lamps saved from waste in LED life	2,129
Ballasts saved from waste in LED life	15

## SUMMARY

Purchase Price Before Incentives	\$12,863
Incentives and Rebates	(\$3,054)
<b>Net Purchase Price</b>	<b>\$9,809</b>
<b>Annual Savings</b>	<b>\$7,793</b>
% Saved Every Year	81%
Annual ROI	61%
<b>Payback*</b>	<b>1.25 yrs.</b>
* Payback includes costs adjusted for annual inflation.	
Avg. LED Lamp Lifetime	9.1 yrs.
Max. LED Lamp Lifetime	14.4 yrs.
<b>Lifetime LED Savings</b>	<b>\$78,860</b>
Lifetime LED ROI	804%



# FINANCING

Short term, cash flow friendly financing is readily available, where the monthly payments are covered by the projected savings, and there is no balloon payment.

Finance your LED  
Lighting retrofit  
with Cash Flow  
Friendly  
Financing.

## 100% Financing Available

Financing for 100% of the capital costs associated with the retrofit, including lamps, brackets, poles, sensors, timers, installation, disposal, recycling, delivery, installation management and consulting is available. Financing is facilitated on your behalf with a highly reputable financier, specializing in the funding of green energy projects.

## Cash Flow Friendly Financing

Financing utilizes a payment plan whereby the projected savings will cover the monthly payments - without any balloon payment - so that you are cash flow positive from day one. Title to the retrofit LED lighting remains with you.

## Rebates And Incentives Are 'Cash' To The Business

Financing is based on the gross amount of the project without any reduction for rebates, incentives or accelerated depreciation. The monies received from these programs are for your immediate and sole benefit, and are not due to the financier.

## Estimated Financing

Any rebates or incentives are paid directly to the customer.

Total Cost of LED Retrofit	\$12,863
Deposit (if any)	\$0
Amount To Be Financed	<u>\$12,863</u>

Estimated Interest Rate	6.00%
Estimated Documentation Fee	\$1,050
Term Number of Years (estimated)	5
Balloon Payment	\$1

## Est. Monthly Cash Flow

Estimated Monthly Lease Payment	\$249
Monthly Savings From LED Retrofit	<u>\$649</u>
Monthly Free Cash Flow	<u>\$401</u>

*Payments are estimates and subject to change and credit approval.  
A documentation fee and / or deposit payment may be required.*

# THE BENEFITS OF LED LIGHTING

LED (Light Emitting Diode) lighting has become very popular due to its long life and substantial energy savings.

## Significant Energy Savings

Traditional indoor and outdoor lighting can be replaced with LED lighting that consumes up to 80% less energy without affecting the 'look' of the light - for example a 90w Halogen light bulb requires only 18w of LED light to replace it.

## Running Cool For Air Conditioning Savings

LED lighting produces 10 times less BTUs than fluorescent and 30 times less BYUs than incandescent, to significantly reduce the amount of heat emitted from the light that must be cooled down to maintain the room temperature.

## No More Lamp (and Ballast) Replacements

There is no comparison between the cost of LED lights vs. traditional lighting, where the true cost of the bulb is the cost of replacement bulbs and the labor expense and time needed to replace them. These are significant factors, especially where there are a large number of installed bulbs. For office buildings and skyscrapers, maintenance costs to replace bulbs can be enormous. These issues can all be virtually eliminated with the LED option.

## Enhanced User Experience

LEDs, being from the blue light spectrum, offers greater contrast than traditional light from the yellow light spectrum. In many cases, users report they no longer require their reading glasses, and they no longer suffer from eyestrain or headaches.

## No More Breakage

Due to the long life of LED lighting, there is no longer any day-to-day need to handle light bulbs, fluorescent tubes, etc., eliminating all breakage.

## Reduced Carbon Footprint

One of the most serious environmental issues concerning traditional lighting are the CO2 emissions released during the process of generating electricity. One incandescent bulb causes 150 lbs. of CO2 to be released into the atmosphere every year; and one CFL bulb causes 35 lbs. of CO2 per year. Compare those to an LED bulb, which causes only 15 lbs. of CO2 to be released per year. By upgrading LED lighting, you save significant CO2 from the atmosphere.

## No More Toxic Mercury

Switching to LED lighting will reduce the toxic mercury released into the environment. For example, fluorescent bulbs utilize mercury to produce light. The EPA considers mercury a hazardous waste, and even strictly regulates the disposal of fluorescent bulbs. In contrast, LED lights do not contain any hazardous materials. Using LED lighting will significantly reduce the amount of this hazardous material produced.

## LED Lighting 'Shines'



Eco Tec Lighting LED Lighting offers better quality light than traditional lighting; saves up to 80% of energy and lasts well over a decade.

# THE BENEFITS OF Eco Tec Lighting LED LIGHTING

Eco Tec Lighting offers all the lighting specifications and ancillary services necessary for a successful LED retrofit installation.

## Unique Optics

Maximum light inside the beam angle eliminates sideways glare so typical with traditional light.



## Ultra Bright Parking Lot Light

Even the ultra bright 1000w HPS lamps used by car dealers can now be replaced with our LED lamps.



## Extensive 3rd Party Testing

LED lamps and fixtures are tested at DOE approved labs for UL, LM79, LM80, life prediction, etc.



## American LEDs and Design

Wherever possible, LEDs made in USA are used, along with in-house R&D and design.



## Uncompromising Reliability

Every LED lamp is quality control aged and tested for 48 to 72 hours to ensure extra long life.



## Headache and Eyestrain Free

"Your lamps are relaxing, with more contrast – I no longer need my eye glasses." - PhD, Librarian.



## Cash Flow Friendly Financing

Short term financing with payments paid by the savings - with no balloon payment.



## Installation

Professional nationwide installation - even overnight, with online portal to review job status.



## USA 3rd Party Warranty

5 or 10 year USA underwritten repair or replacement and reinstallation for failure, color shift or light loss.



## EPA Compliant Recycling

EPA compliant recycling assures proper disposal of lamps replaced with LED.



## Everything you need.

Eco Tec Lighting offers a complete complement of support and services to ensure every aspect of your LED lighting retrofit project is a success - in terms of savings, installation, finance, reliability and user friendliness.



## **DISCLAIMER**

This LED Savings and Benefits Analysis is calculated based on a cursory light assessment and information provided or assumed from prevailing conditions. Energy savings, rebates, grants, tax incentives, financing, costs, installation, and other items listed herein are estimates based on technical knowledge of lighting systems, potential financing options, utility company descriptions of rebate programs, governmental grants that may or may not be available, tax incentive programs, and data provided by both the client and the representative providing data. This Analysis does not guarantee any cost or energy savings, nor does it guarantee financing, rebates, tax incentives, or grants. This Analysis is provided solely for the purpose of providing an assessment of potential energy and cost savings and funding options including grants, tax incentives, rebates, and financing.

### **Eco Tec Lighting**

The power of eco lighting.

Westminster, CO

Westminster, CO



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