A Business Case for LED Lighting

Q4 2014

Presented by Charlie Szoradi
Independence LED – Chairman and CEO

www.IndependenceLED.com
“TIME TO ACT.”

*Why LEDs are not Too Good to Be True.*

This presentation includes three primary modules with Q&A between each.

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USA
25% of Global Energy
5% of Population

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LED Module 1: State of the LED Technology

- Overview and Performance Trends
- Best Practices and Specification Guidelines
- Total Cost of Ownership vs. ROI metrics
- Opportunity: When and Where to retrofit with LEDs
- The “Rolling Retrofit” and “Leapfrog” paths
- New Construction vs. Retrofits
- Beam Angle Considerations
- Photometric Evaluations
- Working with Auditors, Manufacturers, Resellers, Representatives, and Installers
- Rebates

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LED Module 2: Case Studies

- Commercial
- Government
- Automotive
- Restaurant
- Industrial
- Retail
- Parking
- Building Energy Intelligence
- Smart Controls: Occupancy Sensors, Dimming, Light Harvesting, and Demand Response
- Warranties
- US Based Technology (Sample PA Manufacturing)
LED Module 3: Financing Paths

- Sample Savings Report
- On Balance Sheet Financing
- Operating Leases
- Lighting Service Contracts
- Maintenance Contracts
- SBA 504 loans - SEEDCOPA
LED Module 1:
State of the LED Technology
BUILDINGS = 40% of US Energy

30% of Commercial Electricity is Lighting

IMPACT: LEDs Cut Lighting Costs by 50% or more
Example of LED PERFORMANCE: 62.5% Savings

Old Tubes: Fluorescent

New Tubes: LED

32 Watts
20,000 Hour Life
(7 years)

12 Watts
60,000 Hour Life
(20 + years)

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Perspective

Where have we been

Where we are now

Where we are going
Where have we been

Source: U.S. Department of Energy

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Where we are now

Source: U.S. Department of Energy

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DOE Forecast: LEDs 74% of Lighting Sold by 2030

SAVINGS:

Reduce national lighting electricity use by nearly half
Annual equivalent 3,000 trillion British Thermal Units (Btus)

Annual Savings: $26 billion in today’s dollars
*Equivalent to the total energy consumed by 24 million American homes today*

Reduce Greenhouse Gas (GHG) emissions by 180 million metric tons
*Equivalent of taking 38 million of today’s passenger vehicles off the road*

Source: U.S. Department of Energy
LED General Lighting Market

$4B \rightarrow 11x \rightarrow $44B

2010 \rightarrow 2016

(CAGR 46%)
Compounded Annual Growth Rate


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General Lighting Market Share by Lamp Type

% of Total Market

Best Practices and Specification Guidelines

The #1 Best Practice is to align your lighting selections to your business objectives and not just purchase new lights.

The product Specifications then follow to meet your needs.
Determine Your Business Objective

The Four Cornerstones:

1. Why are you pursuing Lighting Solutions?
2. What are your Key Decision Criteria?
3. What is your Acquisition Preference?
4. Would you like someone to provide Support Services?
Why are you pursuing Lighting Solutions?

- Reduced Operating Expenses
- Energy Efficiency
- LEED Building Certification or Energy Star Points
- Corporate Initiative for CO2 reduction
- Create a building energy use template
- Take advantage of rebates currently available
- Property Renovation, New Construction, or Scheduled Re-Lamping

What are your Key Decision Criteria?

- Efficiency
- Cost
- Warranty
- Made in America
- References
What is your Acquisition Preference?

_____Cash
_____Terms
_____Financing
_____Operating Lease
(Note: Expect Credit Reviews for Purchases other than Cash.)

Would you like someone to provide any of these Support Services?

_____Audit your building lighting
_____Research and Provide Rebate information
_____Manage Rebate Process
_____Installation Coordination and Project Oversight
_____Track Energy Savings

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Total Cost of Ownership vs. ROI metrics

Return on Investment (ROI) may “win” the sprint...but look at the lowest Total Cost of Ownership (TCO) to pick the marathon champion.

Maximize Net Operating Income (NOI) over multiple years with reliable technology.
Tubes

Total Cost of Ownership

- ** Avg. Overseas Manufactured LED Fixture **
  - 16W 10 Years = $210.87

- ** T5 Fluorescent **
  - 28W 10 Years = $282.27

- ** T8 Fluorescent (with Ballast) **
  - 35W 10 Years = $300.84

- ** T12 Fluorescent (with Ballast) **
  - 45W 10 Years = $318.17

Calculation Basis: U.S. average $.12 Cost / kWh and 6,000 hours of annual illumination.

www.IndependenceLED.com
# Troffers

## Total Cost of Ownership

<table>
<thead>
<tr>
<th>Type</th>
<th>Wattage</th>
<th>10 Years Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg. Overseas Manufactured LED Fixture</td>
<td>60W</td>
<td>$806.01</td>
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<tr>
<td>T5 Fluorescent</td>
<td>112W</td>
<td>$1,068.75</td>
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<tr>
<td>T8 Fluorescent (with Ballast)</td>
<td>140W</td>
<td>$1,189.68</td>
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<tr>
<td>T12 Fluorescent (with Ballast)</td>
<td>160W</td>
<td>$1,511.02</td>
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</table>

Calculation Basis: U.S. average $.12 Cost/kWh and 6,000 hours of annual illumination.

www.IndependenceLED.com
# Parking Fixtures

## Total Cost of Ownership

<table>
<thead>
<tr>
<th>LED Fixture</th>
<th>Wattage</th>
<th>10 Years Cost</th>
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<tbody>
<tr>
<td>Avg. Overseas Manufactured LED Fixture</td>
<td>60W</td>
<td>$1,040.34</td>
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<tr>
<td>Compact Fluorescent</td>
<td>64W</td>
<td>$1,082.47</td>
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<tr>
<td>Induction</td>
<td>120W</td>
<td>$964.01</td>
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<tr>
<td>Metal Halide</td>
<td>175W</td>
<td>$1,487.52</td>
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Calculation Basis: U.S. average $.12 Cost / kWh and 6,000 hours of annual illumination.

www.IndependenceLED.com
## High Bays

### Total Cost of Ownership

<table>
<thead>
<tr>
<th>Fixture Type</th>
<th>Power (W)</th>
<th>10 Years Cost</th>
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<tr>
<td>Avg. Overseas Manufactured LED Fixture</td>
<td>150W</td>
<td>$2,105.02</td>
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<tr>
<td>T5 Efficient Fluorescent</td>
<td>168W</td>
<td>$1,729.62</td>
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<tr>
<td>Induction</td>
<td>200W</td>
<td>$1,986.69</td>
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<tr>
<td>Metal Halide</td>
<td>450W</td>
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Calculation Basis: U.S. average $.12 Cost / kWh and 6,000 hours of annual illumination.

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Opportunity: When and Where to retrofit with LEDs

1. Since 2008, the efficiency of LEDs has significantly increased and the cost has significantly decreased.

2. The Cost of Waiting is NOW higher than the benefits of marginal improvements in efficiency and future cost reductions.

3. The delta of efficiency over traditional lighting is now so high that LED step improvements are less meaningful than the strides made to date.
Opportunity: When and Where to retrofit with LEDs

4. As LED demand increases and rare earth materials are utilized, the cost reductions will also begin to bottom out.

5. LEDs particularly make sense today in high cost / kWh areas (over $.14) and long run time areas (over 16 hours / day).

6. LEDs particularly make sense today in high REBATE areas, and the rebates may dry up...which is one more reason to act now.
Where: Use LEDs for these conditions:

- **High Cost of Electricity** (Over $0.14 / kWh)
- **Inefficient Existing Lighting** (Incandescent, Halogen, HID, or T12 Fluorescent)
- **High Rebates** (Utility Incentives and/or Tax Deductions)
- **Long Run Time** (16 to 24 Hours / Day over 7 days a week)
- **Need for Lights** (New Construction, Renovation, or Lights are due to burn out)
- **Green Minded** (Seeking LEED or Energy Star Points, CO2 Reduction Policy, etc.)

Target three or more of these overlapping six factors.

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High kWh States often also have the Highest Rebates
All of Europe, the Caribbean, and a majority of Central and South America have higher costs of electricity than the US.

**Legend: Color Coding by kWh Costs**

- **GREENS** = High kWh
- **Blue** = Extremely High

- $0.33 and up
- $0.25 - $0.32
- $0.20 - $0.24
- $0.13 - $0.19
- $0.08 - $0.12
- Below $0.08

[www.IndependenceLED.com](http://www.IndependenceLED.com)
U.S. Linear Lighting Order of Magnitude

2,385,399,000 (2.3B) fluorescent tubes in American ceilings

48.1%: T8s totaling 1,148,222,000 Tubes

39.5%: T12s totaling 941,335,000 Tubes

12.4%: T5s or Miscellaneous totaling 295,842,000 Tubes

Source: U.S. Energy Information Administration
Report released January 2012: Number and Length of Linear Fluorescent Tubes across major U.S. Property Sectors
<table>
<thead>
<tr>
<th>U.S. Property (Non-Residential)</th>
<th>Number of Buildings (thousand)</th>
<th>Total Floorspace (million sq. ft.)</th>
<th>Total Floorspace sq. ft.</th>
<th>Est. Avg. LED Cost/sq. ft. $1 (thousand)</th>
<th>Est. Avg. ROI 30%</th>
<th>TOTAL Annual Savings with LEDs $20,727,300,000</th>
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<tr>
<td>TOTAL of All Buildings:</td>
<td>4,859</td>
<td>71,658</td>
<td>71,658,000,000</td>
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<tr>
<td>Principal Building Activity</td>
<td></td>
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<td>Education</td>
<td>386</td>
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<td>Food Sales</td>
<td>226</td>
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<td>Food Service</td>
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<td>Healthcare - Inpatient</td>
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<td>Healthcare - Outpatient</td>
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<td>Lodging</td>
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<td>Mercantile - Enclosed and Strip Malls</td>
<td>213</td>
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<td>Office</td>
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<td>Public Assembly</td>
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<td>Public Order and Safety</td>
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<td>1,090</td>
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<td>$327,000,000</td>
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<td>Religious Worship</td>
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<td>Service</td>
<td>622</td>
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<td>4,050,000,000</td>
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<tr>
<td>Warehouse and Storage</td>
<td>597</td>
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<td>Other</td>
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<td>Vacant</td>
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<td>2,567</td>
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<td></td>
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<tr>
<td>TOTAL Annual Savings with LEDs</td>
<td></td>
<td></td>
<td></td>
<td>$20,727,300,000</td>
<td></td>
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</tr>
</tbody>
</table>

Source: U.S. Energy Information Administration (sq. ft. Report)
http://www.eia.gov/consumption/commercial/data/2003/

www.IndependenceLED.com
The “Rolling Retrofit” and “Leapfrog” paths

When bulbs burn out roll into the new LED technology, and continue to purge the old lights over the next few years.

Don’t replace old lights with the next best version of the old technology, but leap over to LEDs.
New Construction vs. Retrofits

For New Construction go with LEDs across the board, because of the sunk cost of equipment and installation labor to pay for some form of lights.

For Retrofits look for ROI over 33% and Payback within 3 years.
Beam Angle Considerations

For Retrofits or New Construction, select LED fixtures to match your beam angle needs:

- **Wide**
  - e.g. Parking Garages
- **Normal**
  - e.g. Office Troffers
- **Narrow**
  - e.g. Retail or Warehouse Aisle Lighting

Wide (180°) VTW2

Normal (60°)- VT/R2 & VT2

Narrow (40°)- VTN1, VTN2
Photometric Analysis

Request layouts and foot candle output before purchase:
Working with Auditors, Manufacturers, Resellers, Representatives, and Installers

Do it right once.

Engage experienced support companies or outsource people, and check references and review case studies.
Rebates

Check to see if LED products meet either DLC or Energy Star standards, since Utility Companies often use the listings to determine rebate eligibility.

**Mostly for Fixtures and COMMERCIAL Applications:**
Design Lights Consortium (DLC) Qualified Products List (QPL)

**Mostly for Socket and Pin Bulbs and RESIDENTIAL Applications:**
Energy Star
LED Module 2: Case Studies
Commercial

Office Sector

Sample Accounts

wwwIndependenceLED.com
CASE STUDY: NYC High Rise

Project: Morgan Stanley World Headquarters

Highlights: 42 Stories with 1.3 Million Sq. Ft.
Address: 1585 Broadway New York, NY 10036
Owner: Morgan Stanley + Hines Management
LED Installation: 2011

Morgan Stanley

Opportunity
Morgan Stanley demonstrated national leadership in energy intelligence by retrofitting its World Headquarters in Times Square with LED tubes, making it the first major high rise headquarters in America to embrace the new technology. The existing 4’ 32 watt T8 fluorescent tubes, running 24/7 for 8,760h/year, in areas like the exit stairs, each consumed 280 kWh per year. At $.18/kWh, the T8 tubes cost $50.46 each per year to operate.

Solution
Independence LED provided an LED solution with 15 watt LED tubes that created an average energy savings of 53% over the existing fluorescent tubes. The new LEDs also reduced the maintenance labor to replace the less efficient fluorescent tubes that burn out more frequently.

Results
By reducing the tube wattage by an average of 53%, the annual savings is 148.92 kWh and $26.81 per tube every year. Over the approximate 7 year life of the LEDs at 24h/day, the lifetime energy savings is over $183 for every tube, plus 1,367 lbs in CO2 emission reduction. The building was completed in 1990, and as a young architect, Independence LED’s CEO, Charlie Szoradi, worked on the high profile project while employed at Gwathmey Siegel Architects in New York City.
Government

Public Sector

Sample Accounts

www.IndependenceLED.com
CASE STUDY: GOVERNMENT Hospital

Project: Durham Veterans Administration Medical Center
Highlights: First LED Retrofit at a VA Medical Center
Address: 508 Fulton St, Durham, NC 27705
Owner: U.S. Department of Veterans Affairs (www.va.gov)
LED Installation: Q1 2013

Opportunity
Lighting consumes a significant amount of electricity in the 24/7 areas of a hospital. Like similar structures, the Durham VA Medical Center had inefficient T12 fluorescent fixtures illuminating the back of house and common areas of the 271 bed facility. With a run time of 8,760h/year, the existing 1,200 fixtures used 355,025 kWh per year. At a $.10/kWh electricity rate, the T12 tubes cost $35,501 per year to operate.

Solution
Independence LED’s U.S. Made LED tubes cut the wattage consumption by over 50% while also improving light levels in the machine rooms, adding to the safety of working conditions. The LED lights reduce the annual kWh to 183,627, enabling the Durham VA Medical Center to become the first VA Hospital to set an efficiency benchmark for other public and private sector hospitals.

Results
By replacing fluorescent tubes with new LEDs, the annual energy savings is 171,398 kWh, yielding an electricity savings of $17,140 per year. Over the life of the LEDs, the energy and maintenance savings will be over $150,000. If each of the more than 1,700 facilities in the VA health system were to switch to LED technology, the ten year savings could exceed $1 Billion. This adds up to tax payer savings and more resources for the VA to service our heroes.

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Automotive

Auto Facilities

Sample Accounts

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CASE STUDY: AUTO Dealership

Project: BMW Dealership
Highlights: 1st BMW Dealership in the US with Independence LEDs
State: Virginia
Owner: BMW Dealership
LED Installation: Q4 2013

Opportunity Lighting consumes a significant amount of electricity for automotive dealerships. Like many other dealerships, this one had 2'x2' troffers with a pair of 32 watt U bend fluorescent tubes, totaling 64 watts per fixture. At 12 hours of illumination over 6 days a week (3,744h/year), each fixture used 239.6 kWh/year. At the average electricity rate in Virginia of $0.087/kWh, the lighting cost was $20.84 per fixture per year.

Solution Independence LED provided a 30 watt LED Retrofit Kit solution with a pair of 15 watt 2' LED tubes. The solution saves 34 watts per fixture for over 53% savings.

2'x2' Troffers and Custom Pendant Fixtures
Independence LED provides solutions for diverse standard and custom existing lighting and applications.

Results By reducing the 2'x2' fixture wattage from 64 to 30, the annual savings is 127.3 kWh and $11 per fixture. Over the 60,000 hour 16 year life of the LEDs at 12/6, the lifetime energy savings is over $176 per fixture. With historical 3% average annual increases in energy cost and reduced bulb replacement and maintenance labor, the savings is over $348 per fixture. Since the lighting upgrade, Sterling BMW has added Rolls Royce to its offerings.
CASE STUDY: RESTAURANT Interior

Project: Burger King
Highlights: 1st of 46 New Jersey franchise owned locations
Address: 803 Roosevelt Ave, Carteret, NJ 07008
Owner: Parade Enterprises (www.bkparade.com)
LED Installation: Q1 2014

Opportunity: Lighting consumes a significant amount of electricity for Quick Serve Restaurants (QSRs), especially for ones running 24/7 such as this sample Burger King location. Like many similar Burger Kings that are about 2,400 sq. ft., this one has 35 troffer fixtures that are 2’x4’ with four 32 watt fluorescent tubes, totaling 128 watts per fixture. At 8,760h/year the fixtures each used 1,121 kWh/year. With an electricity rate of $.083/kWh, the lighting cost was $93 per fixture per year and $3,257 for all 35 fixtures.

Solution: Independence LED provided a 44 watt LED Retrofit Kit solution that saves 84 watts per fixture for over 65% savings. Each fixture delivers 4,400 directional lumens, at bright white 5000K for the Kitchen areas and 4000K warmer light to enhance the dining areas.

Daylight Balancing “Light Harvesting”: Independence LED provides Smart Control enabled external drivers, to automatically dim the lights on bright sunny days, if Burger King chooses to activate the system.

Results: By reducing the fixture wattage from 128 to 44, the annual savings is 735 kWh and $61 per fixture. With 35 fixtures, the annual savings is $2,137. Over the 60,000 hour 7 year life of the LEDs at 24/7, the lifetime energy savings is almost $15,000. With historical 3% average annual increases in energy cost and reduced bulb replacement and maintenance labor, the savings is over $18,000 per location. With 46 locations, the lifetime savings for this franchise owner exceeds $828,000. This project set the QSR efficiency benchmark in 2014.
CASE STUDY: Distribution Center

Project: Gretz Beer Company
Highlights: Major Beer Distributor in Southeastern, PA
Address: 2801 Township Line Rd. Hatfield, PA 19440
Owner: www.abwholesaler.com/Group12/GretzBeer
LED Installation: Q3 2014

Opportunity
Gretz undertook a comprehensive new state-of-the art design for its facility in this 320,000 sq. ft. warehouse. If they had installed commonly used 450 watt Metal Halide high bay fixtures at 24/7 hours of illumination per day (8,760h/year), each fixture would have used 3,942 kWh/year. At the average electricity rate in PA of $.12/kWh, the lighting cost would have been $473.04 per fixture per year. With high bay bulb replacement and maintenance labor costs of over $48, the annual cost would have exceeded $521 per fixture.

Solution
Independence LED’s 174 watt LED high bay fixture saves 275 watts per fixture, for over 64% savings with the reduced maintenance costs. The external driver and aluminum heat sinks are ideal for industrial applications.

Results
By reducing fixture wattage from 450 to 174, the annual savings is 2,417 kWh and $290 per fixture + the $48 in reduced bulb replacement and maintenance labor for total savings of over $338 per fixture. The saving over the long 7 year life of the LEDs (8,760h/year) is $2,315 per fixture and even higher with inflation on energy. With over 300 high bays, the annual savings is over $101,400. Independence also provided on-board motion sensors for added savings and other LEDs throughout the interior and exterior.

<table>
<thead>
<tr>
<th>Annual Operations</th>
<th>Sample High Bay Fixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Metal Halide</td>
<td>$521.04</td>
</tr>
<tr>
<td>New LED Fixture</td>
<td>$338.13</td>
</tr>
</tbody>
</table>

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CASE STUDY: Big Box

Project: Canadian Tire Store (One of 490 Locations)
Highlights: Retrofit of Emergency Lighting Fixtures in 65,538 sq. ft. Facility
Address: 656 Erb St. West, Waterloo, ON, Canada, N2T 2Z7
Owner: Canadian Tire Store (www.canadiantire.ca)
LED Installation: Spring 2014

Opportunity The 24/7 emergency lighting (EL) fixtures consume a significant amount of electricity in a large retail center. Canadian Tire had T8 fluorescent tubes with (8) 32 watt 4’ tubes in each 224 watt fixture. With a 24/7 run time of 8,760h/year, each EL fixture used 1,962 kWh per year. At a $.135/kWh electricity rate, the T8 fixtures cost $264.90 Canadian per year to operate.

Solution Independence LED’s Canadian Manufacturer Representative, Accolades Inc., provided an LED solution with (4) 16w LED tubes per fixture that create an average energy savings of 71% over the existing fluorescent tubes.

Accolades Inc. delamped the EL fixtures in the retail floor with one 16w LED tube for every two 28w fluorescent tubes. The LED tubes also reduce the load required by the Uninterruptable Power Supply to power the EL fixtures.

Results By reducing the EL fixture wattage by an average of 71%, the annual savings is 1,401 kWh and $5189.22 Canadian per fixture every year. Over the approximate 7 year life of the LED’s at 24h/day, the lifetime energy savings is over $1,296. The retrofit project also earned a Save on Energy incentive. If each of the 490 Canadian Tire stores switched to LED technology for their EL systems, the total annual savings would be $2.6 million with lifetime savings over $25 million.
CASE STUDY: Parking Garage

Project: Brooklyn Renaissance Plaza and New York Marriott at the Brooklyn Bridge
Highlights: 888 Parking Spaces for 1.2 Million Sq. Ft. Mixed-Use Office/Retail/Hotel
Address: 335 Adams Street, Downtown, Brooklyn, NY 11201
Owner: Muss Development, LLC (www.Muss.com)
LED Installation: Fall 2013

Opportunity
Lighting consumes the vast majority of electricity for a 24/7 parking garages. Like many similar facilities, the garage at the Brooklyn Renaissance Plaza used inefficient 175 watt metal halide fixtures to light their 888 parking spaces. The garage's 375 fixtures also produced a poor quality yellowish brown light, adding to the operating inefficiency. With an electricity rate of $.20/kWh, the annual lighting cost was nearly $115,000, or $306 per fixture.

Solution
Independence LED Authorized Reseller/Distributor Jim Nork approached property owners Muss Development and garage operator Standard Parking with a solution to replace the 175 watt metal halide fixtures with the latest high-efficiency 44 watt US Made Independence LED Vaporight fixtures. The new Vaporight fixtures save 131 watts per fixture, produce an outstanding 75% energy savings and deliver 4,400 directional lumens, at 5000K, which greatly improves quality of the light in the garage.

Results
By reducing the fixture wattage from 175 to 44, the savings is an outstanding annual $230 per fixture. With 375 fixtures, the annual savings is $86,250. Over the 60,000 hour 7 year life of the LEDs at 24/7, the lifetime energy savings is $603,750. With historical 3% average annual increase in energy cost and reduced bulb replacement and maintenance labor, the savings is closer to $700,000. This project also earned a major $68,000 NYSERDA energy rebate, bringing the payback to under a year and a half and the ROI to over 70%.

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Residential – Single and Multi-Family

60 Watt Incandescent Replacement with LED just 8 Watts.
The industry range is currently 9.5w to 11w.

86% SAVINGS

wwwIndependenceLED.com
Building Energy Intelligence

Measurement is the Key to Management.

Ongoing Measurement and Verification through monitoring is now facilitated through energy dashboard systems.
Smart Controls: Occupancy Sensors, Dimming, Light Harvesting, and Demand Response

Go beyond the LED savings with controls.

Design the right applications to meet your business needs with available technology.

Choose Smart Control “Enabled” LEDs to enable future upgrades at your discretion.
Warranties

Look for the strongest warranties.

Read the “fine print” to ensure that you are covered.

Some warranties restrict coverage based on daily limits of run time.
US Based Technology (Sample PA Manufacturing)

“Drill Down” to the focus on US Made LEDs

• The Energy Economy vs. other Market sectors
• Energy Reduction vs. Energy Production
• Lighting vs. other Reduction Technologies
• LEDs vs. other Lighting types
• LED Tubes vs. other LED types
• US Manufacturing vs. foreign companies
US Manufacturing: Boyertown, PA

In 2010, Independence LED moved its manufacturing from China to America.

Production for LED Tubes:
4 lines x 3 shifts x 7 days = $162 Million in Annual Product
US Facility: 36,000 Sq. Ft. with 4 Automated Lines

Capacity:
18,000 to 40,000 Diodes Per Hour Per Line

Accuracy Tolerance: 1/1,000 Inch

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1. Research and Development
2. Engineering: Product & Packaging
3. Manufacturing: Components
4. Manufacturing: Assembly
5. Manufacturing: Packaging
6. Fulfillment
7. Transportation
8. Energy Auditing
9. Installation
10. Customer Services
11. Marketing Services
12. Accounting Services
13. Financial Services
14. Legal Services
15. Training Services

…More

www.LedEnergyFitness.com
LED Module 3: Financing Paths
## Facility 24/7 Illumination

<table>
<thead>
<tr>
<th>Description</th>
<th>Square Footage: 100,000</th>
<th>9/9/2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing 4' T12 Fluorescent</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Current Cost Per Sqft:</td>
<td>$0.95</td>
<td>W/Sqft:</td>
</tr>
<tr>
<td>Annual LED Cost Per SqFt:</td>
<td>$0.32</td>
<td>ASHRAE: 0.8</td>
</tr>
<tr>
<td>Price per kWh:</td>
<td>$0.120</td>
<td>Current: 0.90</td>
</tr>
<tr>
<td>Annual kWh Saved:</td>
<td>525,571</td>
<td>LED: 0.3</td>
</tr>
</tbody>
</table>

## ANNUAL LIGHTING SAVINGS: 69%

### SAVINGS REPORT

<table>
<thead>
<tr>
<th>Description</th>
<th>Annual</th>
<th>Lifetime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Lighting Electricity Cost</td>
<td>$94,603</td>
<td>$707,697</td>
</tr>
<tr>
<td>Projected Lighting Electricity Cost (LED)</td>
<td>$31,534</td>
<td>$235,899</td>
</tr>
<tr>
<td><strong>Reduction in Electricity Costs with LEDs</strong></td>
<td>$63,069</td>
<td>$471,798</td>
</tr>
<tr>
<td><strong>Additional Operating Savings:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulb Replacement Savings</td>
<td>$1,752</td>
<td>$12,000</td>
</tr>
<tr>
<td>Maintenance Labor Savings</td>
<td>$5,000</td>
<td>$34,248</td>
</tr>
<tr>
<td>Reduced Heating/Air Conditioning Load</td>
<td>$1,892</td>
<td>$14,154</td>
</tr>
<tr>
<td><strong>Total Additional Operating Savings</strong></td>
<td>$8,644</td>
<td>$60,402</td>
</tr>
</tbody>
</table>

### Total Savings with LEDs

<table>
<thead>
<tr>
<th>Description</th>
<th>Annual</th>
<th>Lifetime</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Savings with LEDs</strong></td>
<td>$71,713</td>
<td>$532,201</td>
</tr>
</tbody>
</table>
## FINANCIAL ANALYSIS

<table>
<thead>
<tr>
<th></th>
<th>Payback (Months)</th>
<th>ROI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of LED Bulbs</td>
<td>$149,900</td>
<td>25</td>
</tr>
<tr>
<td>Total Estimated Cost*</td>
<td>$169,900</td>
<td>28</td>
</tr>
<tr>
<td>Less Incentives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Net Cost to Customer*</td>
<td>$169,900</td>
<td>28</td>
</tr>
</tbody>
</table>

*Note: Pricing valid for 45 days from issue; does not include sales tax and shipping

### Monthly Cash Flows

<table>
<thead>
<tr>
<th></th>
<th>Payment</th>
<th>LED Savings</th>
<th>Net Cash Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 Months @ 8%</td>
<td>($5,324.05)</td>
<td>5,976.04</td>
<td>$651.99</td>
</tr>
<tr>
<td>60 Months @ 8%</td>
<td>($3,444.96)</td>
<td>5,976.04</td>
<td>$2,531.08</td>
</tr>
</tbody>
</table>

### FINANCIAL METRICS

- NPV: $103,507
- IRR: 42%

### BONUS INCENTIVES

- Federal Tax Deduction Available: $60,000 ($0.60/sqft)
- Deduction Cash Value: $21,000 (Based on 35% tax bracket)
- Property Value Increase: $717,125 (Based on 10% cap rate)
- EcoAdvantage: CO2 Emissions Reduction: 5,111,148 lbs. or 426 SUVs off the road

*EPAct Federal Tax Deduction is an estimate based on standard IRS and DOE guidelines. Actual numbers may vary.
*Only areas that have bi-level switching to qualify for EPAct incentives (80% of space or more typically qualifies).
*Property Value Increase calculated with 10% cap rate applied to reduction in operating costs.
On Balance Sheet Financing

**Challenge:** Some buyers have not budgeted for LEDs but see the value in a retrofit or new construction LED installation.

**Solution:** Financing companies are increasingly comfortable lending on LEDs after seeing the performance over the past five years.

**Consideration for:** Building Owners
Operating Leases

**Challenge:** Some buyers have restrictions for “on balance sheet” liabilities.

**Solution:** Some financing companies are increasingly creative with off balance sheet financing structures.

**Consideration for:** Building Owners and Tenants
Lighting Service Contracts

Challenge: Some buyers may not want to actually purchase the LEDs upfront or over time.

Solution: Some LED manufacturers are confident enough in the reliability of their products that they retain ownership and warranty the light output over time vs the light “bulbs.”

Consideration for: Business/Building Owners or Gov’t Agencies
Maintenance Contracts

**Challenge:** Some buyers may already have outside maintenance companies for cleaning services that in some cases change the lights.

**Solution:** This is an opportunity for “Plug and Play” LED bulb technology that does not require an electrician for installation.

**Consideration for:** REITS, Corporate Campuses, Airports, etc.
SBA 504 loans - SEEDCOPA

Regional Example:
Seedcopa was one of the first Certified Development Companies formed in Pennsylvania to offer the SBA 504 program. See: www.seedcopa.com

Investigate all of your options for funding.
10 Reasons **why Independence LED is the preferred choice in the LED Tube and Fixture marketplace.**

#1: Our Proven Track Record of Sales
#2: Multiple Industry *FIRSTS*
#3: The Made in America Advantage
#4: The Right Technology
#5: The Right Quality Assurance and Warranty
#6: The Right Management and Support Team
#7: The Right Auditing and Proposal Software
#8: Rebate Ready Products
#9: Industry Leadership
#10: $0 Down Financing for Cashflow Positive Results and an innovative new Lighting Service model and LED Rental Center

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