



*Building Name*

**Bert Corona Charter School A**

*Proposal Name*

**Final - Philips Evokit /OWL +OCC/DIM +Relamping  
12/9/2015**

*A Proposal For*

**Mr. Ruben Duenas**

*Chief Operations Officer  
Bert Corona Charter School*

*Wednesday, April 6, 2016*



860 Via De La Paz  
Suite C-2  
Pacific Palisades, CA 90272  
<http://greeneconome.com/>

Page 2 of 10

Wednesday, April 6, 2016

Mr. Ruben Duenas  
Chief Operations Officer  
Bert Corona Charter School  
9400 Remick Ave.  
Pacoima CA 91331

Hello,

We are excited to offer this proposal to replace all of your lighting with LED's. This will save on your energy costs, your HVAC costs, since they will require less cooling and on your maintenance costs since you will be having to replace them less often.

We have selected the Philips EvoKit Product, which is a full fixture replacement. This replacement will save 75% of your lighting kWh.

This proposal includes all installation costs, recycling, as well as sales tax. It does not include the cost of any permits or Title 24 compliance, if required.

All rebates are estimated and not guaranteed.

Please let me know if you have any questions.

We look forward to working with you.

Regards,  
Marika

*Note: Green EconoME reserves the right to change product to best in breed in Lighting and Efficiency Technology. This proposal assumes electrical infrastructure of the building is sufficient to accept this installation. Any issues with electrical infrastructure will be at an additional cost.  
Progress payment of 40% required when moving forward with this proposal.*

Marika Erdely  
CEO  
860 Via De La Paz  
Suite C-2  
Pacific Palisades, CA 90272  
Phone: 818-681-5750  
Email: [Marika@GreenEconoME.com](mailto:Marika@GreenEconoME.com)



## Executive Summary

### Project Overview

#### Cost of Project

Total Material Cost and Labor (\$)	55,877
Less Rebates and Incentives (\$)	(4,153)
<b>Net Cost of Project (\$)</b>	<b>51,724</b>

#### Annual Operating Savings

Energy Savings (\$) <sup>1,2</sup>	11,478
Maintenance Savings (\$) <sup>3</sup>	1,424
<b>Total Annual Operating Savings (\$)</b>	<b>12,903</b>

#### Operating Savings Over 10 Years

Energy Savings (\$) <sup>1,2</sup>	114,783
Maintenance Savings (\$) <sup>3</sup>	14,248
<b>Total Operating Savings Over 10 Years (\$)</b>	<b>129,031</b>

Payback Period (years) 4.9

1. Energy cost (\$) = 0.1600/kWh; Annual energy cost escalation (%) = 10.00
2. Energy savings are averaged over 10 year analysis period
3. Maintenance costs are averaged over 10 year analysis period
4. Product Tax Rate (%) = 9.00
5. Service Tax Rate (%) = 0.00

### Financial Summary

Total Project Cost (\$)	Net Project Cost (\$)	10 Yr Operating Savings (\$) <sup>1,2</sup>	Payback Period (yrs)	NPV (\$) <sup>3</sup>	IRR (%)
55,877	51,724	129,031	4.9	42,256	20.30

1. Energy cost (\$) = 0.1600/kWh; Annual energy cost escalation (%) = 10.00
2. Operating Savings equals the energy cost savings plus the maintenance savings averaged over the analysis period
3. Assumed Cost of capital (%) = 6.00
4. Product Tax Rate (%) = 9.00
5. Service Tax Rate (%) = 0.00



## Cash Flow Analysis

### 5 Year Cash Flow Analysis (\$)

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Product Costs	36,643	-	-	-	-	<b>36,643</b>
Installation Services	19,234	-	-	-	-	<b>19,234</b>
Incentives	4,153	-	-	-	-	<b>4,153</b>
Energy Savings	6,658	7,324	8,057	8,862	9,749	<b>40,650</b>
Maintenance Savings	-	394	3,706	394	4,865	<b>9,360</b>
HVAC Savings	544	598	658	724	796	<b>3,320</b>
<b>Net Cash Flow</b>	<b>(44,522)</b>	<b>8,317</b>	<b>12,420</b>	<b>9,980</b>	<b>15,410</b>	<b>1,605</b>
<b>Cumulative Cash Flow</b>	<b>(44,522)</b>	<b>(36,205)</b>	<b>(23,785)</b>	<b>(13,805)</b>	<b>1,605</b>	<b>1,605</b>

## Energy Usages and Costs

### Annual Energy Usage

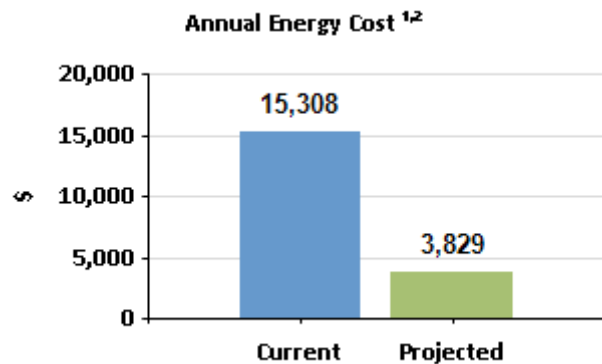
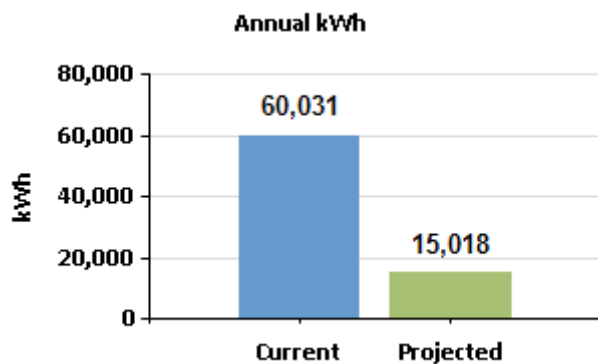
Current Usage (kWh)	Projected Usage (kWh)	Reduction (%)	Current Cost (\$) <sup>1,2</sup>	Projected Cost (\$) <sup>1,2</sup>	Savings (\$)	Savings (%)
60,031	15,018	75	15,308	3,829	11,478	75

1. Energy cost (\$) = 0.1600/kWh; Annual energy cost escalation (%) = 10.00
2. Energy costs are averaged over 10 year analysis period

### Annual Energy Usage Reduction

Current Usage (kWh)	Projected Usage (kWh)	Reduction (kWh)	Reduction (%)
60,031	15,018	45,013	75

### Energy Comparison



1. Energy Cost (\$) = 0.1600/kWh; Annual energy cost escalation (%) = 10.00
2. Energy costs are averaged over 10 year analysis period

### Watts Summary

Existing Watts <sup>1</sup>	Proposed Watts <sup>1</sup>	Reduced Watts	Reduction (%)



23,647	6,145	17,502	75
--------	-------	--------	----

1. The watts calculations in this table take into account existing fixtures that are being replaced, upgraded, and/or have new lighting controls being proposed for them

### Lighting Wattage Comparison

Area :								
Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts
Campus :								
Additional ext lights.	Mogel Base Wall Pack	10	90	900	Replacement LED	10	20	200
Campus :								
Admin restroom	2x4, 4 Lamp, F32 T8 Prismatic	1	145	145	Philips 2X4 LED	1	36	36
Campus :								
Admin room a	2x4, 4 Lamp, F32 T8 Prismatic	2	145	290	Philips 2X4 LED	2	36	72
Campus :								
Admin room b	2x4, 4 Lamp, F32 T8 Prismatic	2	145	290	Philips 2X4 LED	2	36	72
Campus :								
Admin room c	2x4, 4 Lamp, F32 T8 Prismatic	1	145	145	Philips 2X4 LED	1	36	36
Campus :								
Admin room d	2x4, 4 Lamp, F32 T8 Prismatic	2	145	290	Philips 2X4 LED	2	36	72
Campus :								
Admin room e	2x4, 4 Lamp, F32 T8 Prismatic	1	145	145	Philips 2X4 LED	1	36	36

Campus :								
Building A room a	2x4, 4 Lamp, F28 T8 Prismatic F28	4	135	540	Philips 2X4 LED	4	36	144
Campus :								
Building a room b	2x4, 4 Lamp, F28 T8 Prismatic F28	2	135	270	Philips 2X4 LED	2	36	72
Campus :								
Building a room c	2x4, 4 Lamp, F28 T8 Prismatic F28	1	135	135	Philips 2X4 LED	1	36	36
Campus :								
Building A Room D	2x4, 4 Lamp, F28 T8 Prismatic F28	1	135	135	Philips 2X4 LED	1	36	36
Campus :								
Classroom 1	2x4, 4 Lamp, F32 T8 Prismatic	8	145	1,160	Philips 2X4 LED	8	36	288
Campus :								
Classroom 10	2x4, 4 Lamp, F32 T8 Prismatic	10	145	1,450	Philips 2X4 LED	10	36	360
Campus :								
Classroom 11	2x4, 4 Lamp, F32 T8 Prismatic	8	145	1,160	Philips 2X4 LED	8	36	288
Campus :								
Classroom 12	2x4, 4 Lamp, F32 T8 Prismatic	8	145	1,160	Philips 2X4 LED	8	36	288
Campus :								
Classroom 13	2x4, 4 Lamp, F32 T8 Prismatic	8	145	1,160	Philips 2X4 LED	8	36	288
Campus :								
Classroom 14	2x4, 4 Lamp, F32 T8	8	145	1,160	Philips 2X4 LED	8	36	288

	Prismatic							
Campus :								
Classroom 15	2x4, 4 Lamp, F32 T8 Prismatic	8	145	1,160	Philips 2X4 LED	8	36	288
Campus :								
Classroom 2	2x4, 4 Lamp, F32 T8 Prismatic	8	145	1,160	Philips 2X4 LED	8	36	288
Campus :								
Classroom 3	2x4, 4 Lamp, F32 T8 Prismatic	8	145	1,160	Philips 2X4 LED	8	36	288
Campus :								
Classroom 4	2x4, 4 Lamp, F32 T8 Prismatic	8	145	1,160	Philips 2X4 LED	8	36	288
Campus :								
Classroom 5	2x4, 4 Lamp, F32 T8 Prismatic	8	145	1,160	Philips 2X4 LED	8	36	288
Campus :								
Classroom 6	2x4, 4 Lamp, F32 T8 Prismatic	8	145	1,160	Philips 2X4 LED	8	36	288
Campus :								
Classroom 7	2x4, 4 Lamp, F32 T8 Prismatic	8	145	1,160	Philips 2X4 LED	8	36	288
Campus :								
Classroom 8	2x4, 4 Lamp, F32 T8 Prismatic	8	145	1,160	Philips 2X4 LED	8	36	288
Campus :								
Classroom 9	2x4, 4 Lamp, F32 T8 Prismatic	8	145	1,160	Philips 2X4 LED	8	36	288
Campus :								





Dining area	4ft, 2 Lamp, F32 T8	4	75	300	Philips OWL Wrap/Strip	4	37	148
Campus :								
Exterior Small Wall packs	Incan 43Watt A19	14	43	602	GC A19 12W LED	14	12	168
Campus :								
Main office	2x4, 4 Lamp, F28 T8 Prismatic F28	3	135	405	Philips 2X4 LED	3	36	108
Campus :								
Net server room.	2x4, 3 Lamp, F32 T8 Parabolic	1	115	115	Philips 2X4 LED	1	36	36
Campus :								
Restrooms Boys	4ft, 2 Lamp, F32 T8	3	75	225	Philips OWL Wrap/Strip	3	37	111
Campus :								
Restrooms Girls	4ft, 2 Lamp, F32 T8	3	75	225	Philips OWL Wrap/Strip	3	37	111
<b>Total</b>			<b>4193</b>	<b>22,847</b>			<b>1115</b>	<b>5,886</b>

## Environmental Impact

### Greenhouse Gas Analysis

Current (kgCO <sub>2</sub> e)	Projected (kgCO <sub>2</sub> e)	Gases Avoided (kgCO <sub>2</sub> e)	Reduction (%)
42,371	10,600	31,771	75

### Greenhouse Gas Analysis

#### Greenhouse Gas Comparisons<sup>1</sup>

Greenhouse Gas	Current <sup>1</sup>	Projected <sup>1</sup>	Avoided	Environmental Effect
Carbon Dioxide, CO <sub>2</sub> (kg)	42,188	10,554	31,634	Greenhouse Gas, Global Warming
Nitrous Oxide, N <sub>2</sub> O (g)	541	135	406	Greenhouse Gas, Global Warming
Methane, CH <sub>4</sub> (g)	844	211	633	Greenhouse Gas, Global Warming
Nitrogen Oxides, NO <sub>x</sub> (g)	36,909	9,234	27,675	Smog, Acid rain, Global Warming
Sulfur Oxides, SO <sub>x</sub> (g)	79,829	19,971	59,858	Acid rain

1. Average emission rates per kWh are based on estimates from eGrid 2012

