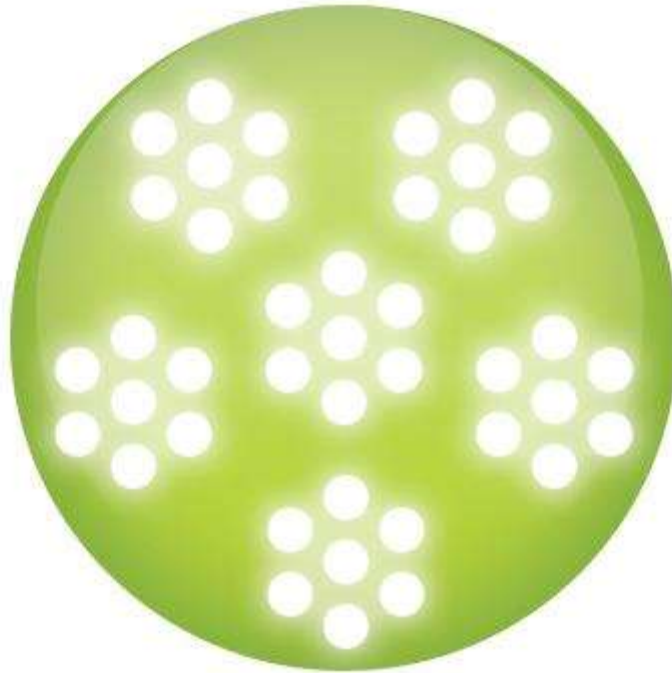


**NOTE: THIS COST BENEFIT ANALYSIS IS FOR ILLUSTRATION PURPOSES ONLY
FOR MORE DETAILS, ON HOW LEDS PERTAIN TO YOUR SPECIFIC APPLICATION
CONTACT US AT (212) 537-5788**



Cost Benefit Analysis

**Complete Retrofit of Gym w/o
Occupancy Sensors**



Executive Summary

Project Overview

Cost of Project

Total Material Cost and Labor (\$)	27,072
Less Rebates and Incentives (\$)	(2,922)
Net Cost of Project (\$)	24,150

Annual Operating Savings

Energy Savings (\$)	6,183
Maintenance Savings (\$)	0
Total Annual Operating Savings (\$)	6,183

Operating Savings Over 10 Years

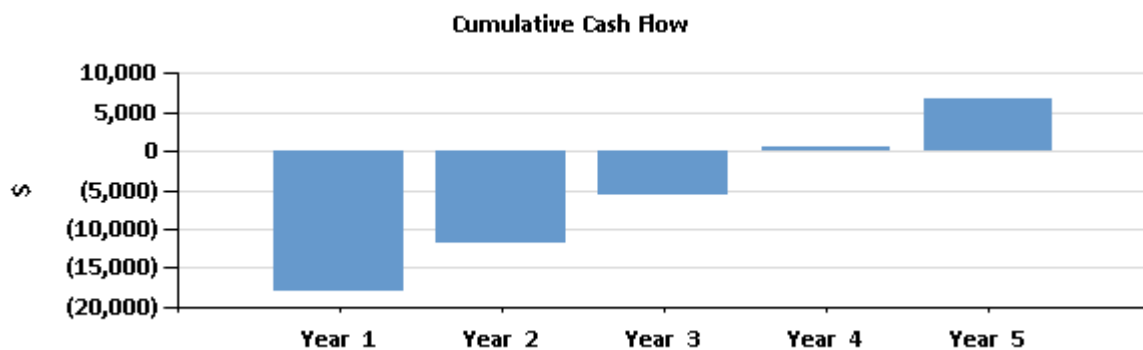
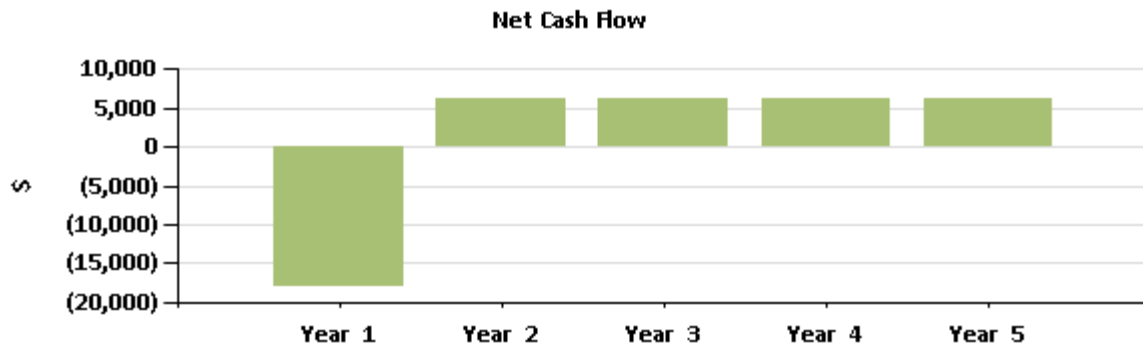
Energy Savings (\$)	61,830
Maintenance Savings (\$)	0
Total Operating Savings Over 10 Years (\$)	61,830

Payback Period (years)	3.9
Net Present Value (\$)	22,512
Internal Rate of Return (%)	25.07

Cash Flow Analysis

10 Year Cash Flow Analysis (\$)

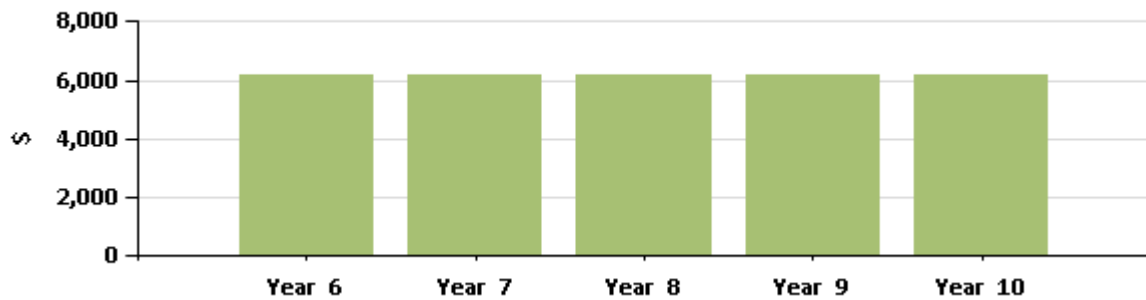
	Year 1	Year 2	Year 3	Year 4	Year 5
Product Costs	19,882	-	-	-	-
Installation Services	7,191	-	-	-	-
Incentives	2,922	-	-	-	-
Energy Savings	6,183	6,183	6,183	6,183	6,183
Net Cash Flow	(17,967)	6,183	6,183	6,183	6,183
Cumulative Cash Flow	(17,967)	(11,784)	(5,601)	582	6,766



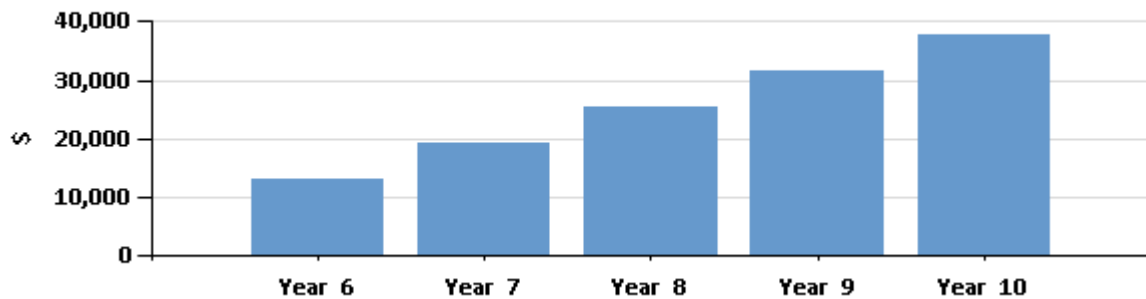
10 Year Cash Flow Analysis (\$)

	Year 6	Year 7	Year 8	Year 9	Year 10	Total
Product Costs	-	-	-	-	-	19,882
Installation Services	-	-	-	-	-	7,191
Incentives	-	-	-	-	-	2,922
Energy Savings	6,183	6,183	6,183	6,183	6,183	61,831
Net Cash Flow	6,183	6,183	6,183	6,183	6,183	37,681
Cumulative Cash Flow	12,949	19,132	25,315	31,498	37,681	37,681

Net Cash Flow



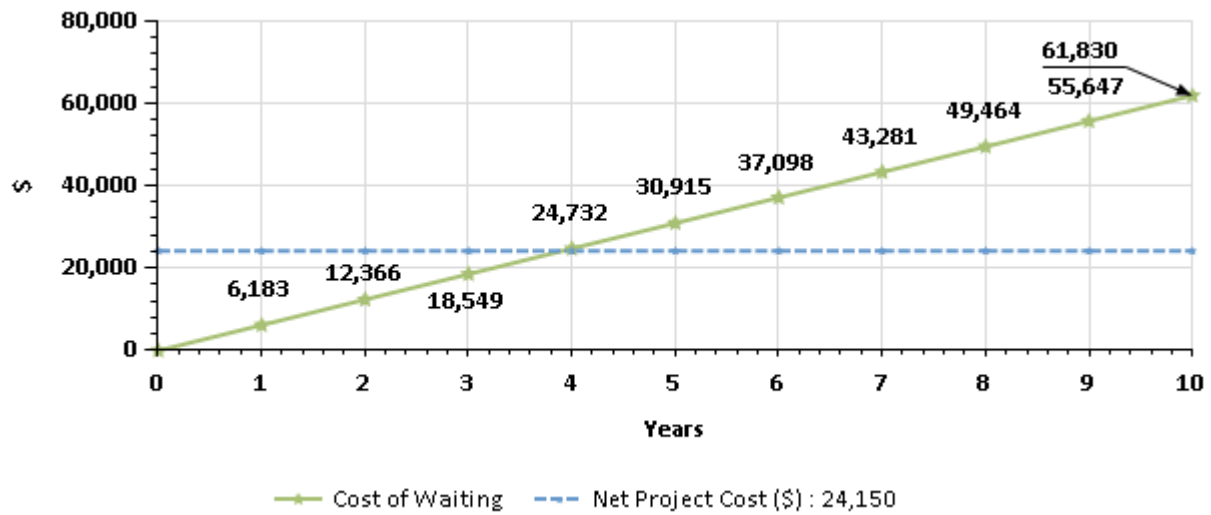
Cumulative Cash Flow



Cost of Waiting

Cost of Waiting

Monthly (\$)	Yearly (\$)	10 Years (\$)
515	6,183	61,830

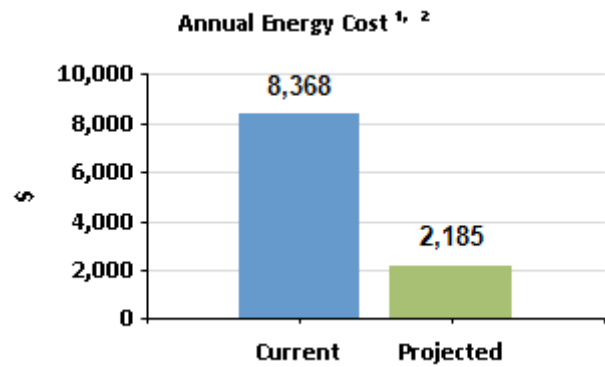
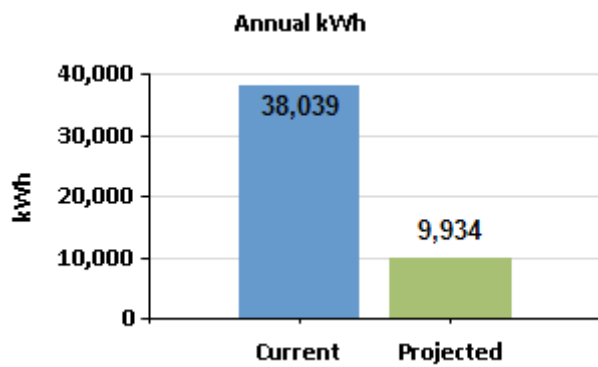


Energy Usages and Costs

Annual Energy Usage Reduction

Current Usage (kWh)	Projected Usage (kWh)	Reduction (kWh)	Reduction (%)
38,039	9,934	28,104	74

Energy Comparison



1. Energy Cost (\$) = 0.2200/kWh; Annual energy cost escalation (%) = 0.00
2. Energy costs are averaged over 10 year analysis period

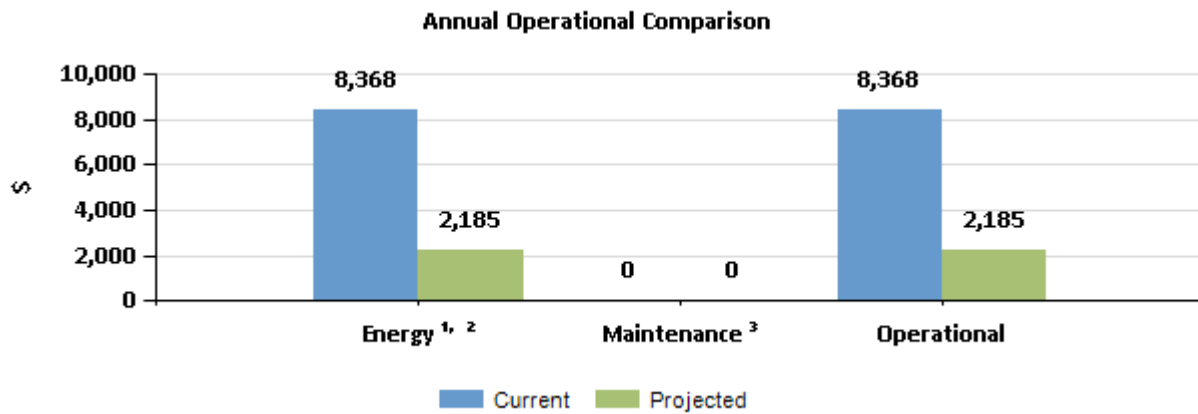
Operational Overview

Operational Savings Summary

Operational Area	Current Annual (\$)	Projected Annual (\$)	Reduction (%)	Current 10 Year (\$)	Projected 10 Year (\$)	Reduction (%)
Energy ^{1, 2}	8,368	2,185	74	83,685	21,854	74
Maintenance ³	0	0	0	0	0	0
Total	8,368	2,185	74	83,685	21,854	74

1. Energy cost (\$) = 0.2200/kWh; Annual energy cost escalation (%) = 0.00
2. Energy costs are averaged over 10 year analysis period
3. Maintenance costs are averaged over 10 year analysis period

Annual Operational Savings Comparison



1. Energy cost (\$) = 0.2200/kWh; Annual energy cost escalation (%) = 0.00
2. Energy costs are averaged over 10 year analysis period
3. Maintenance costs are averaged over 10 year analysis period

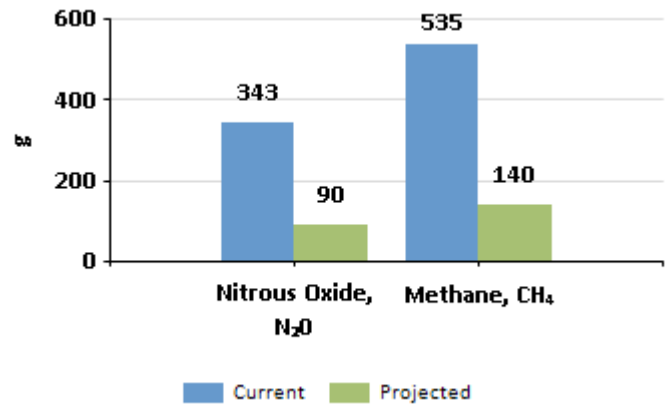
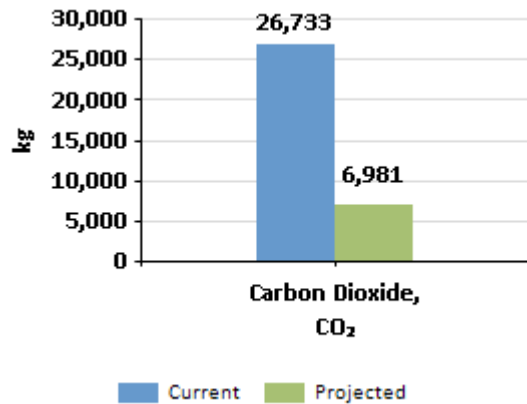
Environmental Impact

Greenhouse Gas Analysis

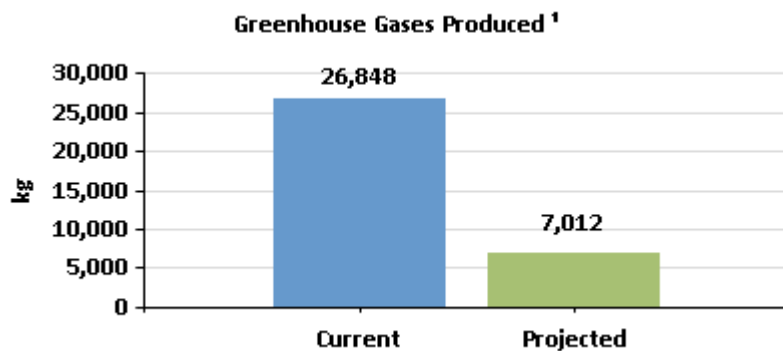
Greenhouse Gas Comparisons¹

Greenhouse Gas	Current ¹	Projected ¹	Avoided	Environmental Effect
Carbon Dioxide, CO ₂ (kg)	26,733	6,981	19,752	Greenhouse Gas, Global Warming
Nitrous Oxide, N ₂ O (g)	343	90	253	Greenhouse Gas, Global Warming
Methane, CH ₄ (g)	535	140	395	Greenhouse Gas, Global Warming
Nitrogen Oxides, NO _x (g)	23,388	6,108	17,280	Smog, Acid rain, Global Warming
Sulfur Oxides, SO _x (g)	50,584	13,210	37,374	Acid rain

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



Greenhouse Gas Comparables



Comparable Metrics

Barrels of oil consumed: 46

Urban forests (acre): 16

Fewer cars on the road: 4

Gasoline consumed (gallon):
2232

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



Bill of Materials **NOTE: EVERY JOB IS DIFFERENT AND THESE PARTICULAR SOLUTIONS MAY NOT APPLY TO YOUR OPERATION. THEY ARE FOR ILLUSTRATION PURPOSES ONLY.**

CALL US TO DISCUSS YOUR APPLICATION (212) 537-5788

Products

Fixtures

Part Number	Short Description	Qty	Cost (\$)	Extended (\$)
GTSOLM21	30-60W LED MODULE	42	349.84	14,693.28
R2-31340K-85-FB2-V1DIM	3' 2L LED T8 Lamps	22	98.80	2,173.60
Total				16,866.88

Lamps

Part Number	Short Description	Qty	Cost (\$)	Extended (\$)
GTSOL50-PAR38-NEW-MFL	50W PAR38 SELF DRIVEN LED LAMP	12	251.24	3,014.88
Total				3,014.88

Installation

Description	Qty	Cost (\$)	Extended (\$)
Disposal of Lamps	1	137.82	137.82
Mobilization of Electrician	1	2,177.60	2,177.60
REPLACE 100W HIGHBAY	42	81.66	3,429.72
REPLACE 250W PAR38	12	8.17	98.04
REPLACE 3' 2L	22	61.25	1,347.50
Total			7,190.68



Appendix

Financial Assumptions

Cost of Capital (%)	Analysis Period (yrs)	Energy Cost (\$/kWh)
6.0	10	0.2200

Financial Assumptions

Analysis Period (yrs)	10
Payback Calculation Method	Simple Payback
Cost of Capital (%)	6.0
Energy Cost (\$/kWh)	0.2200
Energy Cost Annual Increase (%)	0.00
Product Tax Rate (%)	8.87
Service Tax Rate (%)	8.88
Cooling Savings Factor	0
Cooling Season Months	0
Heating Cost Factor	0
Heating Season Months	0