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# Green Energy Management Solutions, LLC

## Saving Analysis for *Induction Lighting Retrofit*

Facility/Project Name: Tustin Pontiac Buick GMC Hummer Facility Owner: \_\_\_\_\_  
 Facility Address: \_\_\_\_\_ Facility Management Co: \_\_\_\_\_

**Energy Savings** Electric kWh Rate: 0.16

Existing Fixtures			* Yearly hours calc. 12hrs day operation x 7 days x 52 week =4380 hrs									
Description	CRI	Life Span	PF	THD	VOLTS	Watts/Fixture	QTY	Hrs/Year	Total kW	Annual kWh	Annual Energy Costs	15yr Cycle Costs
Display Lot MH SB		12000			277	1150	42	4,380	48	211,554	\$ 33,849	\$ 507,730
<b>Totals</b>										211,554	\$ 33,849	\$ 507,730

Proposed Fixtures												
Description	CRI	Life Span	PF	THD	VOLTS	Watts/Fixture	QTY	Hrs/Year	Total kW	Annual kWh	Annual Energy Costs	15yr Cycle Costs
Display lot Induction SB		100000	0.95	<10%	277	404	42	4,380	17	74,320	\$ 11,891	\$ 178,368
<b>Totals</b>										74,320	\$ 11,891	\$ 178,368

<b>ENERGY COSTS SAVINGS</b>	15 Years Total kWh Savings	Annual kWh Savings	Annual Energy Savings	15 Year Life Cycle Energy Savings	<b>ROI 1.27 YEARS</b> total cost with labor, delivery and installation, and disposal of removed lights <b>\$24,323.30</b>
	2,058,512	137,234	\$ 21,957	\$ 329,362	

This Price includes shipping and is good for 30 days from 10/6/09



# Green Energy Management Solutions, LLC

## Saving Analysis for GREEN Lighting Retrofit

Facility/Project Name: Tustin Pontiac Buick GMC Hummer

Facility Owner: 0

Facility Address: 0

Facility Management Co: 0

### Maintenance Labor Savings

Existing Lamps			Average labor cost \$125/hr x 2 fixture change outs per hour = \$62.50				15yr Cycle Costs-Labor
Bulb Type	Life Span/Hrs	Hrs/Year	Quantity	1 Bulb Change Cost	Aver. Labor Cost/1 Fixt	Total Annual Labor Costs	
Display Lot MH SB	12000	4,380	42		\$62.50	\$958	\$14,372
							\$0
<b>Totals</b>						<b>\$958</b>	<b>\$14,372</b>
Induction Bulb	Life Span/Hrs	Hrs/Year	Quantity	1 Bulb Change Cost	Aver. Labor Cost/1 Fixt	Yearly Labor Costs	15yr Cycle Costs-Labor
Display lot Induction SB	100000	4,380	42		\$0.00	\$0	\$0
							\$0
<b>Totals</b>						<b>\$0</b>	<b>\$0</b>
<b>TOTAL MAINTENANCE LABOR SAVINGS</b>	<b>Annual Maintenance Labor Savings</b>		<b>15 Year Life Cycle Maintenance Labor Saving</b>				Office: 949•429•3435 Cell: 949•547•8117 Email: Greenenergy@cox.net 620 Newport Center Drive Suite 1100 Newport Beach, CA 92660
	<b>\$958</b>		<b>\$14,372</b>				

## Saving Analysis for GREEN Lighting Retrofit

Facility/Project Name: Tustin Buick GMC Hummer

Facility Owner: 0

Facility Address: \_\_\_\_\_ 0

Facility Management Co: 0

### Maintenance Material Savings

#### Existing Lamps

Bulb Type	Life Span/Hrs	Hrs/Year	Quantity	Maintenance Material Cost	Annual Maintenance Costs	15yr Cycle Maintenance Costs
Display Lot MH SB	12000	4,380	42	\$75.00	\$1,150	\$17,246
<b>Totals</b>					<b>\$2,181</b>	<b>\$37,869</b>

Induction Bulb	Life Span/Hrs	Hrs/Year	Quantity	Main. Material Cost	Yr Maintenance Costs	15yr Cycle Main. Costs
Display lot Induction SB	100000	4,380	42		\$0	\$0
<b>Totals</b>					<b>\$0</b>	<b>\$0</b>

<b>TOTAL MAINTENANCE MATERIAL SAVINGS</b>	<b>Total Annual Maintenance Material Savings</b>	<b>15 Year Life Cycle Total Maintenance Material Savings</b>
	<b>\$2,181</b>	<b>\$37,869</b>

# Saving Analysis for GREEN Lighting Retrofit

Facility/Project Name: Tustin Pontiac Buick GMC Hummer

Facility Owner: 0

Facility Address: 0

Facility Management Co: 0

## Total Combined NET Savings for 15 Year Cycle by Year

15 Years Cycle	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year10
<b>Total Net Savings by Year</b>	\$1,116.89	\$26,557.08	\$51,997.27	\$77,437.46	\$102,877.65	\$128,317.84	\$153,758.03	\$179,198.22	\$204,638.42	\$230,078.61
	Year 11	Year 12	Year 13	Year 14	Year 15					
	\$255,518.80	\$280,958.99	\$306,399.18	\$331,839.37	\$357,279.56					

## Total Combined NET Savings for 15 Year Cycle by Type

15 Year Energy	\$329,361.98
15 Year Labor	\$14,371.88
15 Year Material	\$37,869.00
<b>Total NET SAVINGS</b>	<b>\$381,602.86</b>

## Total Costs of Retrofit and Payback Years

	Cost Per Fixture	Total Cost of Fixtures		Labor Cost Per Fixture	Total Installation Labor
SB-N-IN-400	\$675.00	\$28,350.00	Fixture 1	\$62.50	\$2,625.00
SCE rebate		-\$6,861.70			
disposal	\$5.00	\$210.00			
		<b>\$21,698.30</b>	Electrician Labor \$125.00 x 2 change outs an hour = \$62.50		<b>\$2,625.00</b>

<b>Total Project Cost (Fixtures + Labor)</b>	<b>\$24,323.30</b>
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<b>Project Payback in Years</b>	<b>1.27</b>
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## Summary of Savings

Facility/Project Name:	Tustin Pontiac Buick GMC Hummer
Facility Address:	0
Facility Owner:	0
Facility Management Co:	0

Life Cycle kWh Savings	2,058,512	Simple Pay Back in Years  1.27
Life Cycle Energy Cost Savings	\$329,361.98	
Life Cycle Labor Cost Savings	\$14,371.88	
Life Cycle Material Cost Savings	\$37,869.00	
Life Cycle Gross Cost Savings	\$381,602.86	
Life Cycle Net Cost Savings		

## Summary of Benefits

Life cycle air pollution reduction (lbs of CO <sub>2</sub> )	2,943,673
Life cycle air pollution reduction (number of cars removed from the road)	2,546
Life cycle air pollution reduction equivalence (acres of forest)	4,014