

## Level 2 Step 2.11 Energy Management Action Plan Template

<b>Project Objective:</b> Reduce electricity consumption for indoor lighting by 15% by end FY 2014.	<b>Planned Completion Date</b>
	September 30, 2014
	<b>Actual Completion Date</b>
September 19, 2014	

**Project Description:** Replace incandescent bulbs with compact fluorescent and old fixtures and ballast with energy efficient models.

**Project Budget:** \$1,500      **Project Leader:** G. Burdell

**Actual Cost:** \$1,080      **Management Review:** Pending

### Project Planning

Action Items	Responsible Position	Due Date	Required Resources/Comments
Measure lighting circuit amperage before project.	B. Franklin	8/26/14	
Identify and count incandescent fixtures	T. Edison	9/1/14	
Identify and count fixtures needing replacement	T. Edison	9/1/14	
Order replacement bulbs/fixtures	M. Faraday	9/5/14	
Schedule maintenance to replace bulbs	N. Tesla	9/9/14	
Schedule weekend crew to replace fixtures	N. Tesla	9/17/14	Electrical contractor: Sparkle Electrical
Measure lighting circuit amperage after project	B. Franklin	9/30/14	

### Project Results Verification

**Describe the method(s) to be used to verify the results of the action plan and the energy performance improvement achieved:**  
 Effective execution of action plan tasks to be verified through project team status reports and monitoring of completion dates. Pre- and post- measurements of amps using Amprobe meter will be used to determine energy savings.

Unit(s) of Measurement	Pre-Project Value	Post Project Value	Net Change	Source of Measurement (e.g. meter ID, calculation formula, etc.)	Responsible Party
Lighting circuit amps (7 circuits added together)	90.16	71.5	18.66	Amprobe ACD-16 meter	B. Franklin

**Evaluation of Results:** Based on amp readings, 2600 operating hours per year and 120 volt single phase power lighting kWh:  
 Before: 28,130 kW-hrs  
 After: 22,310 kW-hrs This is a 20.7% reduction, exceeding our expected reduction of 15%

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**Communication/Training Plan** (Departments affected by the project. Mark the first column for departments involved/affected with the project implementation. Mark the second column for departments involved/affected with sustaining the project improvements.)

All Departments		Production		Lab	X	
Sales/Marketing	X	Maintenance	X	Purchasing	X	X
Accounting	X	Transportation	X	Bldg/Facility Ops & Mgt	X	
Human Resources	X	Warehouse	X			
Customer Service	X	Custodial/Housekeeping	X			

### Sustaining the project improvements

Document the details for each responsibility necessary to sustain the energy savings achieved by the project's implementation.

Function	Tasks/Assignments for this Function
<b>Roles</b>	Purchasing and Maintenance
<b>Resources</b>	Maintenance and outside contractor are to perform the changeover. Purchasing is responsible for buying the supplies and equipment as specified.
<b>Communication</b>	All departments need to be advised that this project will be implemented in September 2014. Document the replacement lamp specifications for future purchases.
<b>Training</b>	Train Purchasing personnel on required replacement lamp specifications (needed to sustain the energy savings). Train Maintenance personnel on how to repair and maintain the new fixtures.
<b>Controls</b>	
<b>Monitoring &amp; Measurement</b>	B. Franklin to spot check lighting circuit kW to determine that equipment is being maintained properly.

### Project Follow-up Notes/Lessons Learned

There was a supply of incandescent lamps in our maintenance inventory when we implemented the project. A few of these were used as replacement lamps after the project. We have since returned these lamps and replaced the inventory with compact fluorescent replacement lamps.