2015 SEMA
Sustainability Excellence in Manufacturing Awards

PROJECT ENTRY FORM

DEADLINE FOR SUBMITTAL: November 9, 2015

Email your submission to sschlegel@opxleadershipnetwork.org

TIMELINE:

- **JUDGING CONCLUDES:** December 4, 2015
- **ANNOUNCEMENT:** December 11, 2015
- **PRESENTATION:** April 13, 2016

VIEW EXAMPLES OF WINNING ENTRIES

SUBMISSION FORM

Dates of submittal to be included and are complete and operational since January 1, 2014.
Previous submissions may be considered.

Company:	The Sunny Delight Beverages Co.
Facility:	corporate
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Contact Information:	Amber Brovak, 732.230.2339, amber.brovak@sunnyd.com
Person(s) Responsible for Program:	Amber Brovak
Vendor/Supplier Contacts:	
Name:	Amber Brovak
Title:	HSE & Sustainability Manager

☑ I do want to share my case in a case study
Note: no confidential/ proprietary information should be provided by the submitter

☑ If my case is chosen, I agree to present my case at the conference

Project SUMMARY

Note: Use of Graphs, Charts and Photo Documentation is encouraged.

Provide an executive summary of the project. The content of this section should provide anyone reviewing the application with a general knowledge of the project. *(20 points available)* *(150 words max)*

After implementing the improved efficiency power quality project at another site, we reapplied the exact project to our California facility. This along with a replacement of our 30 year old refrigeration systems allowed us to achieve a 24% reduction in energy (KWH) at this facility.
These are true energy savings due to the efficiency of the new refrigeration systems and the conservation of energy while running and there were no changes in operations.

ENVIRONMENTAL IMPACT/SOCIAL SIGNIFICANCE

Be sure to discuss how the project will enhance your company and/or surrounding communities. Additionally, tell us how/if you were able to get information about these impacts out to 3rd parties. *(20 points available)* *(150 words max)*

This project has many benefits including environmental, cost and improved power quality, efficiency and reliability. With the 24% reduction, we have a reduction in our carbon footprint. The more stable power quality helps the site through surges and also helps the electrical supplier by decreasing demand and load during high demand times. Some of the impacts seen are more consistent electrical supply through equipment, more even voltage, and increased power factors. Additional benefits are increased motor reliability, reduced maintenance costs, reduced heat from motors and extended lifespan of equipment. For the refrigeration specifically we see more efficient cooling and increased reliability.

IMPORTANT PROJECT DATES / TIMELINES

When was this project completed?
(15 points available) *(50 words max)*

There project was started in June 2014 and completed in October 2014.

What are the important dates (project approval, installation timelines, length of monitoring/measurement, etc.)?
(50 words max)

Project approval and funding was completed in June 2014, installation was August and September 2014, and the project was online in October 2014

PROJECT EFFICIENCY AND COST EFFECTIVENESS

Fill in the information that is applicable to your project and as your company's policies will allow.

Fill out all applicable categories below in the specified units; be sure to include your calculations along with the percentage (%) reduction involved. This will allow incrementally smaller projects to compete with large projects (a plant that uses only 50,000 gallons per day and reduces water by 50% is just as important as a facility that uses 2 million gallons a day and reduces usage by 50,000 gallons a day! – a 2.5% reduction) *(20 points available)* *(50 words max)*

I think this is an extra box.

What was the ROI in the project and the payback period? *(50 words max)*

The simple payback for the two installations is 34 months.

PROJECT COST ANALYSIS

Note: Please make submissions as quantitative as possible.

MONEY AND TIME

TOTAL PROJECT COST ($) ➔	$1.3 million
CALCULATION ➔ (e.g. $1,200 man power + $800 materials + $ 350 disposal costs= $2,350 total)	$900K for refrigeration replacement and $400k for energy conservation portion

TOTAL COST SAVING ($) ➔	$477,500/year
CALCULATION ➔ (e.g. $1,500 less purchased plastic + $2,500 less water costs = $4,000 total)	Cost is off current electrical charges at the time of implementation and appropriation.

TIME TO COMPLETE THE PROJECT ➔ (months)	5 months
CALCULATION ➔ (e.g. 1 month to write a proposal + 2 months to approve funds + 1 month to install = 4 months)	1 month approval and appropriation 2 months planning 1 month install 1 month startup

RESOURCES

WATER SAVINGS ➔ (gallons/year)		OVERALL REDUCTION PERCENTAGE ➔ (% of total per year at the location)	
CALCULATION ➔ (e.g. 1,000 gals/day x 265 operational days/year = 265,000 gals/year)			

ELECTRICITY SAVINGS □ (KwH/year)	>1.8 million	OVERALL REDUCTION PERCENTAGE ➔ (% of total per year at the location)	24%
CALCULATION ➔ (e.g. 1,000 kWh/month x12 months/year = 12,000 kWh/year)	20% of savings is through the energy project (361,000 KWH) 80% of savings is through the refrigeration replacement (1,444,000 KWH)		

FUEL SAVINGS (SPECIFY TYPES) ➔ (KwH/year, BTU/yr)		OVERALL REDUCTION PERCENTAGE ➔ (% of total per year at the location)	
CALCULATION ➔ (e.g. 30 gals/month x12months/year = 360 gals/year)			

OTHER SAVINGS ➔ (specify units/year) (e.g. 5,000 gals of pickle/year)	
CALCULATION ➔ (e.g. 500 gals/month *12months/year = 6,000 gals/year)	

CHEMICALS REDUCTION ➔ (gallons or lbs – specify/year)	OVERALL REDUCTION PERCENTAGE ➔ (% of total per year at the location)
CALCULATION ➔ (e.g. 500 gals/month *12months/year = 6,000 gals/year)	Uncalculated savings include the reduced manpower to maintain the equipment, extended life of the equipment itself, reduction in replacement parts, less downtime due to power quality issues and increased power factor.

OTHER ➔	

ORIGINALITY OR ADAPTIVE REUSE

How did you come up with the idea for this project (was it an original design or applying knowledge from another type of project)? Please explain how the idea was developed/discovered and how did you modify to adapt to your location. *(10 points available; Bonus points for transferring practices examples from other plant or conference)* *(50 words max)*

We originally did this project at another location. The savings were so pronounced, we reapplied it to another site. This along with the refrigeration replacement allowed us to save over $250k per year and reduce our electrical consumption by 24%.

OR

Was this project adapted from another project? *(10 points available for creative adaptation)* *(50 words max)*

While the project at the first site did not include a refrigeration replacement, this replacement reinforced the environmental savings we required to align with our sustainability program and goals.

TECHNICAL VALUE AND TRANSFERABILITY

Key lessons learned.

Describe the project's unique attributes and critical factors (was location or external driver unique to your situation that may inhibit another from implementing as successfully). Identify the pitfalls and unforeseen problems/costs that you incurred that could be avoided at another facility. *(15 points available)* *(150 words max)*

This project is unique to our current site. While we could potentially reapply the energy power project at another site, the refrigeration upgrade would be site specific. The payback and overall advantages of the project encourages us to look at new opportunities to use this technology.