

# WALTON OUTREACH

## APPLIED SUSTAINABILITY CENTER



"To achieve the world's goal of reducing energy consumption it is critical to prioritize your approach to the task and energy efficiency is the necessary first step. Efficiency paves the way for the adoption of renewable energy and is the fastest, most cost effective method to reducing energy consumption."

-Erik Figenskau, President of Next Gen Illumination, Inc.

## An Energy Efficiency Success Story:

### Next Gen Illumination, Inc.

#### Project Overview:

Next Gen Illumination is in the business of providing the highest quality light, reducing energy consumption, minimizing waste, and saving money in energy, labor, replacement, and disposal costs.

Next Gen is a recipient of one of the Arkansas Energy Office's Green Technology Grants funded with ARRA funds from the Department of Energy that provides LED Demonstrations throughout the state. The goal of Next Gen Illumination during this grant was to reduce energy demand of the private sector and eliminate CO2 production in Arkansas by installing LED lighting throughout the state as a demonstration of the benefits and advantages to various industries and facilities both private and non-profit. The grant concluded at the end of March 2012 and all of the projects funded by the grant have concluded. The projects included Adventure Subaru facility in Fayetteville and other industrial sites in Arkansas as well as many other commercial sites. For example, Next Gen conducted demonstrations with Pinnacle Foods and Cargill. At Cargill, they replaced lights in a freezer area which drastically reduced their energy

consumption, increased light levels and lowered the ambient temperature by several degrees which is extremely important in that application. These demonstrations led to the beginning of a transition of their product line from being manufactured overseas to domestic production in Fayetteville, Arkansas. The domestic production is in its earliest stages but they anticipate bringing more manufacturing stateside as they move forward.

Next Gen prides itself on the development of markets. They look for a market area that is underserved or poorly served, research what those customers need and provide a lighting solution that fits their needs. Particularly in the poultry industry, where growers operate on very thin margins and existing lighting was less than optimal to promote need efficient poultry growth. Through the Arkansas Poultry Lighting Rebate Program and by building the light that these farmers needed, they were able to save significant amounts of money on energy costs as well as providing an environment in which their flocks are thriving.

## Success Stories

Arkansas Poultry Lighting Rebate Program Savings Summary and Projections: July 1st, 2011 - March 31st, 2012

Number of Applicants: 197

Number of Bulbs: 64,215

Total Rebate Amount: \$ 1,210,017.32

Total Private Investment: \$ 2,420,034.62

Average Bulb Cost: \$ 37.40

Estimated Annual Energy Savings (\$): \$ 1,533,052.86

Estimated Annual Energy Savings (kWh): 17,915,985



With respect to the LED poultry demonstration, Next Gen authored the original plan which advocated the use of AARA funds to place LED lighting in broiler houses in Arkansas. They forwarded this plan to State and Federal agencies where they felt had an interest in its adoption. They also met with State elected officials; Boozman, Lincoln and Pryor providing letters of endorsement for the plan. They lobbied Senator Lincoln while she was chairman of the Agriculture committee to include energy conservation through the NRCS of the USDA which resulted in EQiP 374 that provided a rebate for LED lighting in poultry houses.

**LOWER** Energy Cost  
Feed Cost  
Mortality Cost  
Maintenance Cost  
Grow Out Cost

**= MORE PROFIT**

**You can't afford not to convert**  
DISCOVER WHAT THOUSANDS OF GROWERS ALREADY KNOW

**POULTRY LED**  
BY NEXT GEN TECHNOLOGIES, LLC

Brashears Furniture is a retail furniture store with several locations throughout Arkansas. Their previous lighting was a mixture of incandescent and fluorescent sources. The display lighting consisted primarily of 50 watt halogen fixtures giving off between 300-400 degree temperatures. The retrofitted lighting was replaced with 4 1/2 watt LED bulbs with temperatures of only 115 degrees. The goal was to reduce the demand while minimizing the impact on sales.



The Northwest Arkansas Regional Airport located in Bentonville, Arkansas recently retro fitted lighting in the luggage and baggage area. The retrofit consisted of 44 ceiling fixtures, suspended and providing uplighting with 1,100 watts each that were replaced with 96 watt LED lights.



The newly constructed Adventure Subaru is located in Fayetteville ,Arkansas right on the west side of I-540. In its original plan, they anticipated their lighting to consume over a million kWh per year. Next Gen proposed a LED option which will reduce the load by 80%, consuming only 200,000 kWh per year. The exterior now has over 100 LED lights.

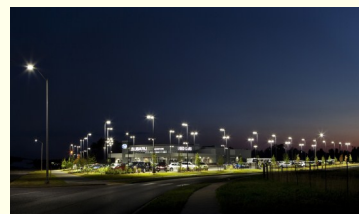


Photo credit: Julie Durham