



## Montaplast Lighting Project Summary

* \$555,715	Total project cost, half of which was subsidized by ARRA stimulus funds
* 1,096	400 watt halide fixtures replaced with T54 high output fluorescent fixtures
* 2,600	Kentucky man hours utilized to complete the project
* 6,224,894	Lbs. of carbon dioxide reduced annually
* 320,495	Equivalent gallons of gasoline saved annually
* 2,723,052	Kilowatt hours reduced annually
* 60%	Reduction in electricity consumed for lighting
* 25%	Longer lamp life
* \$150,000	Annual electricity cost savings
* 3.5	Years to pay back total project cost

On May 13, 2010, Governor Beshear announced that Montaplast of North America, Inc. was selected to receive American Recovery and Reinvestment Act (ARRA) funding through the Kentucky Cabinet for Economic Development's Industrial Facility Retrofit Showcase for a lighting retrofit project at their Frankfort plant complex. The lighting to be retrofitted was originally installed during Montaplast's 1992 construction and 1997 plant expansion. The project began in the summer of 2010 to replace the existing dim and high cost metal halide lighting with nearly 1,100 new energy-efficient 54 watt fluorescent fixtures in three different warehouse areas and two production plant buildings. Over the next year, Montaplast partnered with Frankfort based Art's Electric to install the new fixtures and the automated lighting control systems. The control systems included motion sensors in all of the warehouse areas, and a system in the production areas designed to control the number of bulbs utilized based on the ambient lighting provided through the existing skylights in the manufacturing plants.

Montaplast invested \$277,857.50 in the project, an amount matched by ARRA stimulus funds. The Cabinet for Economic Development monitored all expenditures and provided thorough guidance throughout the project. The results of the project have been tremendous. Montaplast has reduced the cost of lighting the facility by 60%, saving over 2.7 million kilowatt hours per year. The payback for the company's investment will occur in less than two years, and the quality of the new lighting has provided for a much better work environment for the 600 production and skilled employees in the plant and warehouse buildings.

Montaplast has also welcomed the opportunity to be considered a showcase facility for energy innovation. The company was featured in the U.S. Department of Energy publication "Energy Empowers" which detailed the project scope and the company's goal to be an energy-efficient, responsible corporate partner with the local community. Montaplast also hosted members from the U.S. Department of Energy, the Kentucky Department for Energy Development and Independence, and the Kentucky Cabinet for Economic Development to provide a live demonstration of the application and savings of the new lighting systems. The overwhelmingly positive results and lessons learned from the lighting retrofit project are being applied through continuation of our energy reduction program. The company has performed Level One and Level Three energy audits with an independent firm to identify and implement other energy savings opportunities, especially with the building envelope and manufacturing equipment. Montaplast

would like to thank all of the federal and state agencies that provided the initial opportunity and ongoing support throughout this lighting retrofit project. The photographs below provide evidence of the dramatic improvement in lighting provided by the new fixtures.

Before the retrofit, lighting in Plant 1 was dim and inefficient.



After the retrofit, lighting in Plant 1 is bright and effective.

