Becoming more energy productive within the industrial sector can spur job creation and cost savings. Midwestern companies are not just leaders in utilizing cutting-edge solutions and technology, but they are also the manufacturers of the new, efficient equipment that firms around the world are demanding in their efforts to be more energy productive.

This series will highlight those initiatives and companies that are leading the nation in energy productivity.

www.midwesterngovernors.org
ALLIANT ENERGY IS DOING SOMETHING COUNTER-INTUITIVE FOR A COMPANY THAT SELLS ENERGY: IT’S HELPING ITS CUSTOMERS USE LESS ENERGY. For Alliant Energy, energy efficiency isn’t a money-losing proposition. Primarily, energy efficiency promotes wise use of environmental resources, which is one of Alliant Energy’s core values. Secondly, “reducing costs for our customers” is part of Alliant Energy’s corporate strategy. Saving money for its customers increases consumer satisfaction, allowing the company to be more competitive. This advantage allows companies to keep their plants in the Alliant Energy service territory, and possibly expand operations.

Alliant Energy is a publicly traded utility holding company that provides electricity and natural gas to 1.4 million customers in Iowa, Minnesota, and Wisconsin. Based in Madison, Wisconsin, the company generates electricity with coal-fired, natural gas, and wind power stations.

INCENTIVES TO EFFICIENCY. Alliant Energy has long offered IEP programs to its customers. From 1993 to 2007, Alliant Energy customers saved 2.77 million MWh of electricity and 79.1 million therms of natural gas. By 2013, Alliant Energy expects its customers to have conserved nearly 4 million MWh, which is enough energy to power 365,000 homes for a year.

Through its Shared Savings program, available in Minnesota and Wisconsin, Alliant Energy pays the up-front cost of high-efficiency equipment. Over a set period, usually five years, the customer pays off the investment in their regular utility bills. But even with the repayment, customers’ bills are lower than before. In Iowa, Alliant Energy’s Performance Contracting program offers similar benefits.

Alliant Energy’s programs benefit industrial customers seeking to retrofit both existing facilities and building new plants. Cargill Meat Solutions and Hormel Foods serve as two examples of Alliant Energy’s efforts.

CARGILL MEAT SOLUTIONS. Cargill Meat Solutions pork plant in Ottumwa, Iowa, processes nearly 17,000 hogs a day, employing 2,500 people in producing 4.5 million pounds of pork daily. The nation’s largest privately held firm, and one of the Midwest’s leading industrial employers, Cargill is always looking for ways to save. In the Ottumwa plant, the aging lighting system was becoming a big energy hog.

Working with Alliant Energy’s experts, Cargill Meat Solutions replaced the plant’s 400-watt metal halide lighting with energy-efficient 320-watt pulse start lighting and a shatter-proof coating. Six phases, 18 months, and $536,000 later, the project was completed. “The lighting system is a tremendous improvement. Not only is the lighting brighter, it has made working conditions safer for our employees,” says plant manager Randy Zorn. “They generate a superior light source and reduce energy costs and that translates down the line to a better return on investment.”

Financed by Alliant Energy’s Performance Contracting program, Cargill Meat Solutions is now saving 1.86 million kWh each year, an annual savings of $85,000 in energy costs.

HORMEL FOODS. In 2010, Hormel Foods built Progressive Processing, a plant in Dubuque, Iowa. It is the only refrigerated processing facility to achieve the green-building gold standard, LEED certification. The plant employs insulation, windows, skylights, occupancy sensors, water-source heat pumps, and variable speed drives to maximize energy use. For example, a compressed air system and heat pumps allow the plant to recover heat that would otherwise be wasted as useful energy. Meters throughout the facility allow employees to track energy use in real time. The plant will use 28 percent less energy compared to a plant built to current code--generating savings of $143,000 per year.

Hormel Foods, a Fortune 500 company with nearly 20,000 employees, built Progressive Processing under Alliant Energy’s Commercial New Construction program, which provided Hormel Foods with nearly $240,000 in incentives in addition to future energy savings. “This facility is a strong commitment to the community of Dubuque, and strong commitment to our environmental sustainability initiatives,” explains plant manager Mark Zelle. “Alliant Energy’s energy efficiency programs help us produce a competitive product while limiting the effect Progressive Processing will have on the environment.”

FUTURE ENERGY SAVINGS. Even with more than 20 years of experience in helping customers achieve their energy saving goals, Alliant Energy is continuing to look for new programs that will achieve deeper savings. “We are looking beyond traditional retrofit projects and seeking to help customers understand how they use energy in the processes and how they can harness that knowledge,” noted Kari Gehrke, Senior Product Manager for industrial energy efficiency programs at Alliant Energy. Alliant Energy is making IEP a reality in the Midwest, with positive impacts—both financial and environmental.