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.
As part of the 2011 Chair’s Agenda on Advancing the Midwest’s New Energy Economy Through Investment, Innovation and International Trade, the Midwestern Governors Association (MGA) is publishing a series of success stories about companies in the region who are increasing their competitive edge by managing their energy consumption. This series, which focus on Midwestern leaders from the manufacturing, utility and government sectors, will be released over the next several months and will highlight successful Midwestern practices, polices and products.

The Midwest is, and has long been, America’s industrial and manufacturing powerhouse. From auto assembly lines, to renewable fuel plants, to food processing facilities, the world relies heavily on goods and resources produced and manufactured in the Midwest. Manufacturing is a critical part of the Midwestern economy, and is emerging as one of the strongest sectors of the U.S. economy once again. To continue growth and remain competitive, manufacturers need to reduce costs, while still providing the same quality product to consumers. Reducing the energy intensity of plants is one key opportunity for Midwestern industry. This is known as Industrial Energy Productivity (IEP).

There is tremendous potential to increase IEP in the Midwest. Manufacturing accounts for almost half of all energy use in all states included in the MGA footprint. The region is home to many energy intensive industries, including petroleum and coal products, chemicals, paper, primary metals and food processing. In 2006, the U.S. Census Bureau completed a Manufacturing Energy Consumption Survey and found that only 22 percent of companies have audited their energy use to identify areas for improvement, and just 10 percent are upgrading their equipment and facilities to improve IEP. An examination conducted by the American Council for an Energy Efficient Economy on numerous physical studies, including those by the U.S. Department of Energy and the University of Minnesota, shows significant potential for industries to increase energy productivity.

IEP can include a wide range of possible improvements—from plant or equipment retrofits, to process improvements, to major breakthroughs in the production process. Enacting simple changes in lighting or HVAC controls can yield major energy and cost savings. Larger retrofits include combined heat and power, which allow facilities to draw both thermal and electrical resources from a single plant. They also include waste heat recovery, which allows facilities to re-use excess heat produced from industrial processes. Not only does IEP allow industries to save money, expand and achieve long term productivity gains, it also has positive externalities in lower pollution and waste reduction.

There are many barriers to companies who take advantage of energy savings. Many firms are unaware of the potential return on investment that can be achieved through IEP. With many competing priorities and capital constraints, energy saving investments are limited and often viewed as discretionary. Energy use is widely accepted as a fixed cost of doing business, and not as an expense a company can control. Companies also typically lack dedicated and trained energy management staff or available and affordable technical assistance, thereby hindering many companies from making energy improvements. Many companies have payback periods of less than two years for investments.

This series will highlight Midwestern companies that have overcome industry barriers and are leading the way to increase energy productivity. MGA encourages sharing these stories with colleagues, peers and friends to broaden awareness about efforts to expand IEP in the Midwest. Please visit www.midwesterngovernors.org for more information about this issue and many others that are affecting the region.