



## MASTERBRAND MASTERS THE ART OF ENERGY SAVINGS

Wood takes form and function in the capable hands of the craftsmen at MasterBrand. There, elegant cabinetry is created to help make houses into homes.

The human energy required is substantial, but it's the manufactured kind — the kilowatts and therms — that Reliability Engineer John Toohill has his eye on.

“Our biggest cost is materials, but anything we save in other areas helps our bottom line and helps us manage costs for customers,” says Toohill, one of about 850 employees working at MasterBrand’s Arthur plant.

Back in 2008, Toohill was head of the Maintenance Department when he first began exploring energy management, at the urging of a vendor. As luck would have it, that happened to be the first year Ameren Illinois launched its energy efficiency programs and incentives.

“I’ve been doing projects with Ameren Illinois since the first year,” says Toohill. “Our vendor, Power Supply of Illinois, got me into it through compressed air studies. Then we started looking into other opportunities for incentives.”

The following year, those opportunities came in the form of lighting upgrades, as Toohill’s team replaced outdated T12 lamps with high-efficiency T5 lighting, complete with motion sensors.

“People work two full shifts and one partial shift here, so lighting was a big one,” says Toohill, noting motion sensors in particular. “What’s the point of lighting a room if people aren’t working in there?”

Further lighting upgrades — including outdoor lighting — would follow.

“Outdoor lights are on every day and night, so we switched to LED lighting,” says Toohill. “Now we’re running the entire facility on about the same amperage as we ran one circuit before.”

Altogether, MasterBrand’s Arthur plant has completed about a dozen energy efficiency projects since 2008 — including compressed air, HVAC, and steam trap audits. Those projects have collectively reduced the plant’s annual energy use by more than 2.8 million kWh and 90,000 therms of natural gas. That equates to as much as \$70,000 saved in energy costs every single year.

Adding to those savings are more than \$242,000 in incentives provided by Ameren Illinois to slash project costs and payback periods.

Today those savings speak for themselves. But early on, the Ameren Illinois programs proved a tough sell to seasoned managers.

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### HEALING THE PLANET

Committed to eco-friendly cabinet manufacturing, MasterBrand re-uses or repurposes 90% of its construction waste. And by reducing its annual energy use by more than 2.8 million kWh and 90,000 therms at the Arthur plant, MasterBrand has achieved energy savings equivalent to eliminating greenhouse gas emissions from more than 500 cars for an entire year!

### Flip the Switch on Energy Waste

Lighting accounts for as much as 50% of the average business’ electricity consumption. On the bright side, that means you can enjoy significant savings — year after year — simply by making simple lighting improvements. Ameren Illinois offers cash incentives for a variety of lighting projects, including:

- Replacing T12s with high-performance T8 or T5 lamps
- LED exit signs
- Interior LED lighting
- High-bay lighting replacements
- Exterior lighting for canopies and garages
- Permanent lamp/fixture removal

# Discover the Power of Efficiency with Ameren Illinois!

## Large Facilities Retro Commissioning

The Large Facilities Retro Commissioning Program can defray a large percentage of survey phase costs for qualifying customers.

In addition, Ameren Illinois offers implementation incentives for energy efficiency measures with a payback period of one year or less. The program is available to Ameren Illinois customers with facilities of at least 100,000 square feet with an energy management system in place.

## Squeeze Savings from your Compressed Air System

Leaks in your compressed air system can cost your business thousands of dollars a year. In fact, as much as 30% of a compressor's output is wasted on leaks, according to the Department of Energy. Ameren Illinois provides cash incentives to help businesses make their compressed air systems more efficient.

## Incentives Available for Custom Projects

When a cookie-cutter approach won't work, try the custom incentive program. This program offers cash incentives for projects or processes unique to your business — projects not eligible for standard incentives.

*"We're trying to do our part, to save where we can. Energy efficiency gives us a competitive edge."*

— John Toohill, MasterBrand Reliability Engineer

"Management at every level was skeptical," says Toohill, who recalls the disbelief reflected in one pointed question: "Ameren Illinois is going to give you money?"

"To convince them, I had to figure out after the fact what we would have paid in energy costs if we hadn't done the improvements and be willing to hang my hat on it," he says.

As he developed an eye for energy efficiency, Toohill became a regular attendee at Ameren Illinois' Business Symposium. The popular annual event highlights programs and incentives for industries of all kinds, as well as new technologies to harness energy savings.

As MasterBrand's only Illinois-based facility, the Arthur plant is the only one eligible for Ameren Illinois incentives. However, lessons learned in Arthur can often be applied at other MasterBrand plants. Take, for instance, the HVAC retro commissioning project.

"We were using a proprietary energy management system built by a company that went out of business," says Toohill. "The contractors we brought in didn't understand how the system works."

But that all changed with an Ameren Illinois retro commissioning project, which focused on their facility's heating and ventilation system.

"Working with an Ameren Illinois Program Ally, we were able to get the parts we needed and fix 99% of the system issues," says Toohill. "The company is looking at replicating this at several other plants that have the exact same system."

Successes like these have proven the value of energy efficiency, and today the entire team has come on board to help MasterBrand master the art of energy efficiency.

"I have more support now than ever," says Toohill. Some of his toughest critics even accompanied him to the 2016 Business Symposium.

"We're trying to do our part, to save where we can. Energy efficiency gives us a competitive edge — even against other MasterBrand facilities," says Toohill, who is currently exploring the use of variable frequency drives to make the dust collection process more efficient.

"I would recommend the Ameren Illinois programs to other businesses — and I have. It's a good program."

For those who encounter management resistance, Toohill offers this advice: "Be conservative. Select one project with a good payback. Do that project and prove it. Let them get their feet wet before telling them to dive into the deep end of the pool."



## Energy Efficiency. It's Good Business.

Since 2008, Ameren Illinois has provided more than \$85 million in incentives to help business customers save more than \$350 million in annual energy costs. Incentives are available for a variety of energy-saving projects, including lighting, heating and cooling, refrigeration, motors, VFDs, process improvements, and compressed air.

**Why wait? Start your energy efficiency project today — and save!**

**READY TO BEGIN?**

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