



Alliance for Industrial Efficiency

alliance4industrialefficiency.org

Save Energy, Cut Operating Costs, Improve Global Competitiveness

The Benefits of Utility Industrial Energy-Efficiency (IEE) Programs

Companies like Kellogg, Whirlpool and Nissin Brake have reduced operating expenses and improved their global competitiveness—and all in a way that benefits surrounding communities.

So, what's their secret?

These companies are part of a cohort of savvy industrial manufacturers who are leveraging industrial energy-efficiency programs to dramatically reduce energy use—and therefore energy costs—at their manufacturing facilities.



The industrial sector—which includes manufacturing, mining, construction and agriculture—consumes about one-third of electricity generated in the United States, making it the economy's largest energy user.¹ The industrial sector also represents the lowest-hanging fruit for huge energy reductions, saving more energy per program dollar than other customer sectors on a national level.² Along with large energy use, there are opportunities for large energy reductions; proven cost-effective efficiency measures can easily slash up to 32 percent of industrial energy use.³

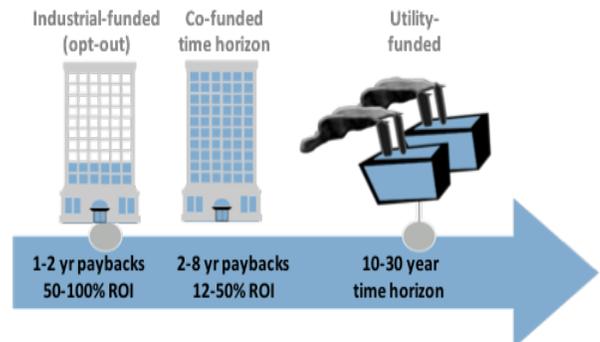
Well-designed utility industrial efficiency programs are a proven way to save companies money and achieve huge energy savings. These programs—typically funded through a small fee on utility bills—can finance energy-efficiency projects, making efficiency investments pencil out for industrial manufacturers. And they are a smart investment

because they dramatically reduce energy demand, resulting in lower energy prices for all customers.

HOW DO INDUSTRIAL EFFICIENCY PROGRAMS WORK?

Manufacturers are typically only able to justify investments with a short (one- to two-year) payback period. Industrial efficiency programs are designed to help offset investments in energy-efficiency improvements in order to ensure a satisfactory payback period for industrial manufacturers. Programs can include:

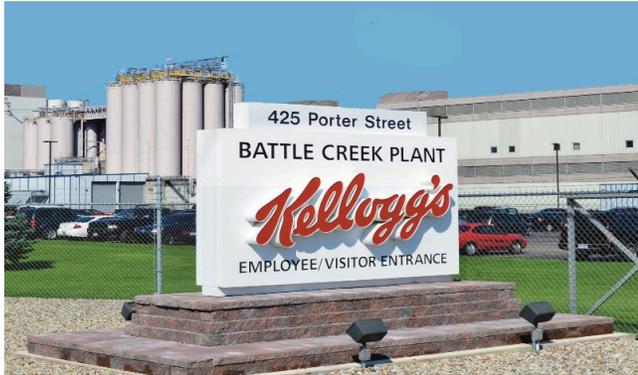
- **Program rebates** to make longer term investments (e.g., those with returns of 2 to 8 years) cost-effective.
- Access to **technical experts and program staff** who can supplement company resources and identify potential projects.



For example, Nissin Brake, an Ohio-based automotive supplier, took advantage of utility rebates to invest in energy-efficient air compressor controls, air drying, and lighting, saving the company an annual 801,921 kilowatt hours a year. Absent utility rebates, it would have taken Nissin Brake three years to accrue savings to cover this investment; however, the company received over \$58,000 in utility rebates from AEP Ohio, reducing the payback period to only 1.9 years. The utility incentives helped gain internal approval for the energy-efficiency projects. Dana Ware, Assistant Manager, Production Support, stated, “Certainly, the incentive payment helped gain



these approvals by covering over 30 percent of the cost of the project. The energy efficiency project would not have been completed if AEP's [incentive] program did not exist."



Kellogg's plant in Battle Creek, Michigan, also took advantage of utility incentives to invest in an air compressor control system to ensure maximum efficiency, saving Kellogg an annual 836,000 kilowatt hours a year and yielding nearly \$90,000 in annual savings.

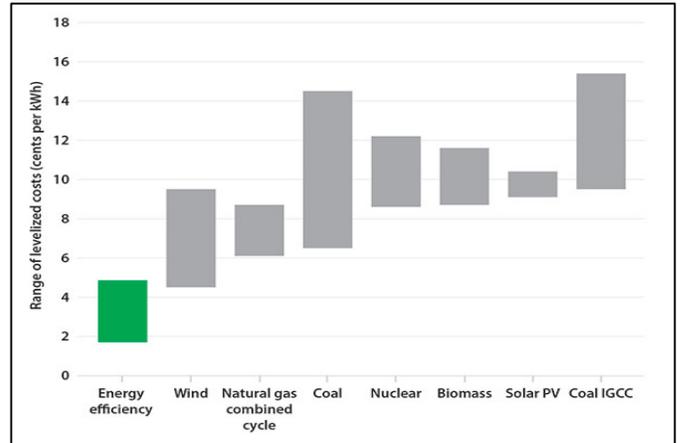
Both Nissin and Kellogg worked proactively with utility regulators and staff to design their custom industrial efficiency retrofits to meet their specific manufacturing and energy needs.

WHO ELSE BENEFITS FROM EE PROGRAMS?

While large manufacturers are clear beneficiaries of industrial efficiency programs, **all** utility customers benefit from lower electricity demand.

When utilities build new power plants to meet electricity demand, they pass the cost of these investments on to all customers in the form of higher bills. Energy-efficiency programs allow utilities to defer power plant construction or transmission and distribution system upgrades, lowering bills for everyone (see figure below).

Levelized Costs of Electricity Resource Options⁴



OPT IN AND SAVE BIG!

Leading industrial manufacturers are working with utilities across the country to design industrial efficiency programs that provide the right incentives to make energy-efficiency investments pencil out. Instead of following the trend in some states to allow industrial manufacturers to "opt out" of all efficiency programs, these manufacturers are taking advantage of the huge energy and cost savings that can be achieved through well-designed industrial efficiency programs.

Manufacturers can learn from the experiences of these industrial-efficiency leaders, thereby helping to design industrial-efficiency programs that will help their bottom lines and their communities. For more information, visit <http://alliance4industrialefficiency.org/>.

¹ U.S. Energy Information Administration, April 2015, "Annual Energy Outlook 2015," (https://www.eia.gov/forecasts/aeo/section_deliveredenergy.cfm)

² SEE Action, 2014, "Industrial Energy Efficiency: Designing Effective State Programs for the Industrial Sector," (www4.eere.energy.gov/seeaction/publication/industrial-energy-efficiency-designing-effective-state-programs-industrial-sector)

³ U.S. DOE, June 2015, "Report to Congress: Barriers to Industrial Energy Efficiency," at iii (http://www.energy.gov/sites/prod/files/2015/06/f23/EXEC-2014-005846_6%20Report_signed_v2.pdf).

⁴ Maggie Molina, American Council for an Energy-Efficient Economy, March 2014, "The Best Value for America's Energy Dollar: A National Review of the Cost of Utility Energy Efficiency Programs," at vi (<http://aceee.org/sites/default/files/publications/researchreports/u1402.pdf>).