



SECTOR OVERVIEW

Industrial Energy Efficiency



Industrial facilities are often the largest economic drivers and biggest power users within a utility's service territory. This unique position allows individual efficiency projects in the industrial sector to offer significant energy savings, foster the creation of jobs and improve a region's economic competitiveness.

The industrial sector uses about 1,320 average megawatts of energy each year within BPA's service area. That is as much energy as the city of Seattle uses and more than the region's nuclear plant produces. The Northwest Power and Conservation Council's Sixth Power Plan suggests that it is possible for the Northwest to save nearly 800 average megawatts of that energy by 2029.

Industrial energy savings are relatively low cost when compared to residential conservation, but many industrial conservation measures are complex and require considerable design work and careful implementation.

BPA supports industrial energy efficiency programs with financial incentives to utilities. These incentives can reduce the cost of upgrading to energy efficient options for utility customers and help offset utility implementation costs. The specific reimbursement varies by program. For specific amounts, please see the BPA Energy Efficiency Implementation Manual.

The Energy Smart Industrial Program

BPA has created the Energy Smart Industrial Program to help its utility customers meet the Sixth Power Plan energy efficiency goals and overcome the barriers inherent in industrial energy efficiency projects.

Participation in the program can help utilities achieve internal energy efficiency targets and increase end user satisfaction by assuring projects meet end user quality assurance standards and are completed as planned.

The Energy Smart Industrial Program works with BPA utility customers to deliver cost-effective energy efficiency in all

parts of the industrial sector. ESI Program staff members are experts in industrial sector energy efficiency. They provide technical expertise and resources that may not be available at the utility level to help utilities achieve energy efficiency goals. Program delivery is customized for each utility to assure that utility/end user relationships are maintained, existing utility industrial programs are not negatively affected and projects are completed to the satisfaction of both utilities and end users.

Components of the Energy Smart Industrial Program

Custom Projects: Custom projects encompass retrofit, expansion and new construction capital energy efficiency projects. The program helps a company acquire and install the most energy efficient equipment and processes in the industry. New incentive flexibility allows the cost of these projects to be tailored to the specific Energy Efficiency Incentive budget needs of every utility.

Energy management pilots: The Energy Smart Industrial Program includes several pilots that seek energy savings through improved operations and maintenance. Energy management pilots have the following three elements:

- **Track and Tune:** Instead of large capital intensive projects, Track and Tune projects are designed to financially and technically help the end user do the little things well while documenting energy performance and savings over multiple years.
- **Energy Project Manager:** The Energy Project Manager will act as a co-funded on-site staff member at an



industrial end user to overcome the lack of manpower for energy efficiency projects many face. The Energy Project Manager will work in tandem with the Energy Smart Industrial Program partner and Technical Service Provider to foster the greatest savings for end users with significant potential.

- **High Performance Energy Management:** The High Performance Energy Management pilot is designed to integrate energy efficiency as a core business practice and lets industrial customers apply the principles of continuous improvement to energy management, fostering substantial, long-term savings.

Energy Smart Industrial Partners: BPA has selected Cascade Energy Engineering, Strategic Energy Group and Evergreen Consulting to serve as implementation partners for the ESI Program. These organizations provide Energy Smart Industrial Partners to utilities who act as a “go-to” expert to consult on coordination of Energy Smart Industrial Program resources to support their conservation program. The partner can be a significant resource in helping utilities plan industrial projects that will meet their energy efficiency incentive budget and rate period planning needs.

Enhanced Lighting: Enhanced lighting extends the existing Northwest Lighting Trade Ally Network and assigns industrial lighting specialists to participating utilities to promote lighting based energy savings.

Enhanced Technical Service Providers: To foster industrial energy savings, BPA has expanded its Technical Service Provider services for the Energy Smart Industrial Program, including quick-response time and materials work and BPA funding of scoping, detailed assessments and measurement and verification activities.

Green Motors: The Green Motors program is a means by which BPA helps incent rewinding industrial motors in a fashion that maintains or improves their energy efficiency.

Small industrial measures: The Energy Smart Industrial Program provides incentives to foster efficiency in small-scale industrial facilities and small systems that have been underserved. Currently, small compressed air measures (less than 75 horsepower) are included with expanded offerings possible in the future.

Trade Ally Delivered Small Industrial Measures: These measures are cost-effective, simple measures with broad market applicability, such as energy efficient systems for compressed air refrigeration and efficient industrial motors that can be installed by BPA’s trade allies. Projects of this size use a simple, streamlined analytical approach, including measurement and verification, due to the small scale of energy savings and incentives.

For more information

Please visit www.bpa.gov/go/industrial.