INDUSTRIAL TECHNOLOGIES PROGRAM

Northwest *Save Energy Now*Industrial Energy Efficiency Initiative

Limited access to capital is often cited as the main reason that energy efficiency programs do not get implemented in industrial facilities. Although the desire to improve energy efficiency is there, plant managers often find that they cannot justify purchasing the new equipment or changing a process because the payback period is longer than one year. However, there are still several no- and low-cost opportunities to improve industrial energy efficiency.

The Washington State University Extension Energy Program (WSU), Oregon Department of Energy (ODOE), Idaho Office of Energy (IOER) and Montana Department of Environmental Quality (MDEQ) have developed a multifaceted approach to help mediumand large-sized industrial plants identify and implement these affordable energy efficiency measures, as well as help implement projects with long payback periods. The Northwest team effort will deliver training, assessments, and technical and project implementation support directly to industries while strengthening the infrastructure elements that support significant reductions in industrial energy use over the long term.





Benefits

- Reduced energy intensity and carbon emissions at medium- and largesized industrial plants in the Pacific Northwest
- Identification of low-cost solutions that will improve energy efficiency by up to 15 percent
- Introducing a Creation of a sustainable state-sponsored program in Montana
 Oregon dedicated to industrial energy efficiency while strengthening the programs in Oregon, Idaho and Washington
- Increasing awareness about the benefits of reducing energy use and available resources
- Collaborating with regional stakeholders to strategically plan for further improvements in energy efficiency

Applications in Our Nation's Industry

This project will establish a partnership among energy service providers, academia, government, utilities and energy/industry associations that will continue to help reduce the energy intensity of industrial manufacturers in Montana, Idaho, Oregon and Washington.

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Project Description

The overall objective of this project is to collaboratively help achieve a 2.5 percent annual reduction in energy intensity in the region, or 7.5 percent over the project period. The collaboration also aims to increase energy efficiency awareness, identify and employ low-cost energy efficiency improvements in plants, expand partnerships between state and regional energy efficiency groups, and enhance the regional energy efficiency infrastructure.

Through leveraged resources, the regional team will work toward this goal by increasing communications, conducting energy assessments, hosting trainings, and providing assistance for project implementation and operations assistance. Specific tasks include

- The pulp and paper industry is a large energy consumer. The team will utilize paper machine scorecard evaluations to identify low-cost improvements that will result in notable energy savings.
- The team will conduct energy assessments to identify areas and processes that are energy inefficient.
 The team will offer technical assistance and project implementation support to help ensure the recommended energy efficiency improvements are executed.
- A two-pronged training component will consist of BestPractices approaches to improved system efficiency and mentored-style training that will have Qualified Specialists work with teams to follow a 90-day action plan to lower the energy intensity of steam systems in their respective plants.
- Conduct outreach to promote regional program resources and the application of emerging technologies. Delivery of the monthly electronic Newsbriefs will further raise awareness
- Establish a state-sponsored industrial energy efficiency program for

Montana's manufacturers while strengthening the established industrial programs in Idaho and Oregon. WSU will lend their leadership, training and technical expertise to the initiative while continuing to provide services to Washington industries.

• Convene a leadership team to address obstacles to implementing energy efficiency projects, and to develop a strategic action plan that will ultimately help towards reducing regional industrial energy use by 25%. Further coordinate infrastructure activities with stakeholders and service providers, such as sponsoring the Northwest Industrial Energy Efficiency Summit in January 2010.

Progress and Milestones

The project's planned tasks include:

- Conducting 16 energy assessments and two paper machine assessments. The team will also provide post-assessment support to 19 projects to help ensure that recommendations are implemented.
- Hosting 16 BestPractices trainings and 1 mentored training.
- Deploying ongoing outreach effort, including articles in stakeholder newsletters, delivery of monthly electronic *Industrial Newsbriefs*, and conferences.
- Authoring a case study that will highlight all of the project activities and projected energy savings.
- Establish a Northwest Industrial Energy Efficiency Coalition Leadership Team, meet quarterly, develop action plan, establish website to communicate progress and results.
- Coordinate state industrial energy programs to leverage and expand resources available to regional industries.

Primary Investigator

Washington State University Energy Extension Program, Olympia, WA

Project Partners

Boise Building Solutions, Medford, OR Cascade Natural Gas, Seattle, WA Dick Reese and Associates, Inc., Norcross, GA

Energy Trust of Oregon, Portland, OR Idaho Office of Energy Resources, Boise, ID

Idaho TechHelp, Boise, ID

Montana Department of Environmental Quality, Helena, MT

Montana Manufacturing Extension Center, Bozeman, MT

Northwest CHP Application Center, Olympia, WA

Northwest Energy Efficiency Alliance, Portland, OR

Northwest Food Processors Association, Portland, OR

Oregon Department of Energy, Salem, OR

Oregon Manufacturing Extension Partnership, Beaverton, OR

Oregon State University Industrial Assessment Center, Corvallis, OR Pacific Power, Medford, OR University of Washington Industrial

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