

Colorado Industrial Energy Challenge Program

In November 2007, Colorado Governor Bill Ritter set forth the Colorado Climate Action Plan, which established a goal of reducing statewide greenhouse gas emissions 20% by 2020, using 2005 as a baseline year. The foundation of the Colorado Climate Action Plan is achieving half of the greenhouse gas reductions through energy efficiency. A new industrial energy efficiency program is slated to produce 15% of the energy efficiency reduction goals.

The Colorado team has produced an ambitious plan to achieve the former Governor's objectives. Led by the Governor's Energy Office (GEO) and the Southwest Energy Efficiency Project (SWEET), the team also includes Colorado State University's Industrial Assessment Center and the ETC Group. The cornerstone of the project involves a program the state has developed similar to the U.S. Department of Energy (DOE) Advanced Manufacturing Office (AMO) Save Energy Now LEADER initiative. Colorado's Industrial Energy Challenge (CIEC) targets large and medium-size industrial firms in Colorado, including companies involved with manufacturing, mining, oil and gas, and high-tech sectors, as well as ski resorts.

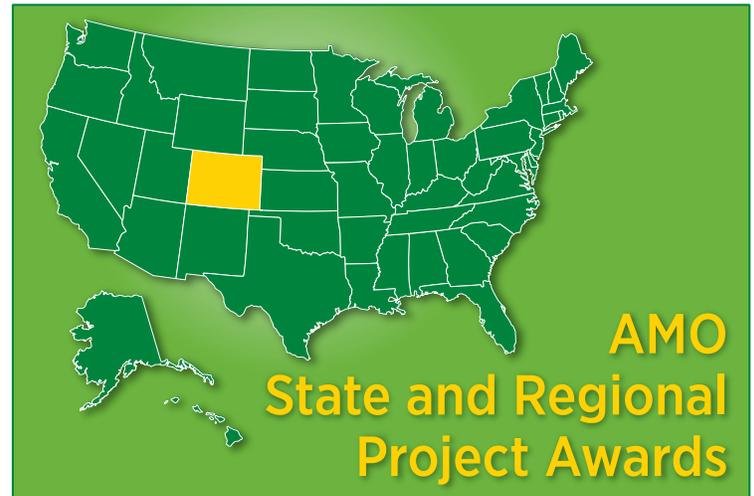
The CIEC program encourages large and medium-size industrial firms in Colorado to set five-year goals to reduce total energy consumption or energy intensity. In return for that commitment, the Colorado team will conduct energy assessments, host networking meetings, provide training workshops on industrial energy efficiency best practices, and provide recognition from Colorado's Governor.

Progress and Milestones

Activity Description	Goal	Completed to Date
Assessments	12	9
Identified Energy Savings (Trillion Btu)	-	594
Implemented Energy Savings (Trillion Btu)	-	270*
Trainings	10	4
Individuals/Plants Trained	-	63/36
Networking Meetings	5	4
Attendees (Individuals/Companies)	-	55/37

(As of June 2011)

*270 billion Btu have been implemented in total by partners; this number is not reflective of energy improvements implemented as a result of the identified savings



Project Description

Funding Amount: \$900,000

Funding Source: U.S. Department of Energy, Advanced Manufacturing Office

Program Period: 3/1/2010 to 10/31/2012

Project Success Highlights

- The program has received recognition and participation from Colorado's Governor for two years in a row
- Current participation from 21 member companies with average energy costs of \$4 million per year.
- Identified savings of more than 590 billion Btu per year.
- Four successful networking events have been held for member companies.

Primary Investigator

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Project Partners

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The CIEC program held its first recognition event in July 2010 with 13 charter companies. Eight additional companies have joined since then, bringing the total to 21. The second annual recognition event was held on July 6, 2011. Thirteen of the participating companies have adopted program-required five-year energy efficiency goals and have submitted energy consumption data for the base year and for 2010. The member companies report their results to the program annually. From 2009–2010, member companies achieved energy savings of 2.5% or 270 billion Btu per year.

To ensure continuous progress, the program has held four successful networking meetings for participating companies. The networking meetings provide the opportunity for energy managers to share successes from recent projects/best practices, as well as to discuss challenges of projects that are being implemented or considered. Although it is difficult to directly measure progress, the meetings help attendees to reinforce each other's efforts, as well as provide new ideas from a highly trustworthy source—industry peers.

The program has also provided two full-day workshops on how to improve the energy efficiency of compressed air and steam systems and a half-day workshop on developing a continual improvement approach to energy efficiency. The CIEC program has set a target of one workshop or webinar per quarter and at least two networking events per year.

The program has also begun or completed energy assessments for 15 of the 21 participants, helping them identify energy saving opportunities in their operations. These assessments involve most of the standard industrial energy systems, including fans, pumps, lighting, steam, and compressed air. So far, the CIEC team has identified potential energy savings of more than 590 billion Btu per year.

Thus far, one of the CIEC program's main success factors is that it has allowed companies some flexibility in setting goals. Member companies can decide if they want to pursue goals based on energy intensity or total energy consumption, as long as they meet levels acceptable to the program manager. This makes the program more attractive to manufacturers for which energy consumption is not dependent on production. The other key to this program's success has been having the support of the Governor in recognizing companies that commit to a five-year goal, as well as companies that achieve excellent results.

Benefits

- Reducing industrial energy intensity of participating companies by at least 2% per year for the project period, or 6% overall.
- Reducing GHG emissions and contributing to the goals of the Colorado Climate Action Plan.
- Conducting energy assessments and trainings to identify energy savings opportunities for manufacturers in Colorado.
- Helping participating companies to develop systems for continual improvements in energy efficiency.
- Expanding the partnership among academia, state offices, and utilities that will continue to help reduce the energy intensity of industrial facilities in Colorado.

A Strong Energy Portfolio for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, a cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.

For Additional Information:

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