

Reflections on the 2009 ACEEE Summer Study on Energy Efficiency in Industry

The 2009 Industrial Summer Study returned to western New York State for the first time since 1995, when the conference was held across the river from Niagara Falls in Grand Island. For our social event, the conference also returned to the New York Power Authority's amazing [Niagara Power Project](#). The social event, along with the entire conference schedule, allowed many opportunities for informal discussions and networking—consistently some of the most important elements of ACEEE conferences.

The conference attracted a record attendance of 262 in spite of the current state of the economy. As with past ACEEE Summer Studies, the level of complete dedication to the cause was evident among the attendees. There were many new faces at the 2009 conference, with only 50 of the 2007 attendees returning. Some of the past attendees have indicated that they were unable to attend due to travel restrictions within their organizations, which suggests that there has otherwise been a dramatic growth in interest in manufacturing energy efficiency. The attendees appeared to be somewhat younger than at past conferences, and more experienced attendees provided excellent outreach and a willingness to share their knowledge with the newer additions to the community.

Once again the conference had strong leadership from the conference co-chairs, Dana Levy from [NYSERDA](#) and Raymond Monroe from [SFSA](#), and a strong contingent of panel leaders, many returning to the role. Because these conference leaders are involved with manufacturing energy efficiency on a daily basis, they were able to ensure that the conference was responsive to current economic and political trends.

The sense of the conference was that there are significant changes on the horizon for manufacturing, both in North America and internationally, and that industrial firms, energy efficiency programs, and service providers have much to learn about their roles in climate change. While there was some sense that this represents an opportunity, there was also some palpable fear that manufacturing firms are not as involved in the conversation as they need to be, especially smaller firms.

The tone of the conference was set in the opening plenary by [Andre de Fontaine](#) and [Bill Prindle](#)'s discussion of preliminary findings from a study by the [Pew Center on Global Climate Change](#) on [Best Practices in Corporate Energy Efficiency Strategies](#). This presentation teed up the general theme of the conference with its "Seven Habits of Highly Effective Energy-Efficient Companies" that set forth the idea that industrial firms need to undergo a change in culture with respect to energy use, as was shown through example of how the most active companies address energy efficiency on many levels. They are seeing increasing communications across departments and back down the supply chain on energy and climate issues.

The theme of moving beyond managing energy as a discrete item flowed throughout the conference, with a focus on the systems that are needed to bring us to the next level of energy efficiency. This *systems* focus ranged from a technical discussion of the need to move beyond components to how technology integrates into processes and plants to *internalizing energy efficiency* discussions across the corporate structure—from operators to financial executives. The sense was that in order to fully implement and achieve energy efficiency, senior corporate managers need to take ownership of this issue instead of relying on mid-level managers and engineers doing simple payback calculations. This concept can perhaps best be summed up by the quotation: "change the culture and everything else follows."

Many industrial energy program staff were present at the conference, with over 20 programs represented. These ranged from the well-established programs of Wisconsin Focus on Energy, NYSERDA, and Southern California Edison to brand new programs from organizations such as Tennessee Valley Authority, who were seeking guidance on how to work with their industrial customers. Several presentations discussed details of program design, structure, and regulation, and an in-person meeting of ACEEE's [Industrial Program Managers Network](#) was held during one of the informal session slots. Among the themes that emerged from the program manager discussions were: (1) challenges in measurement and verification; (2) measuring free-riders and spillover (i.e., net-to-gross); (3) the need for market analysis to understand customers; and (4) meeting ever-increasing energy efficiency targets.

Workforce was a recurring theme with attendees, including program directors, contractors, and companies, all expressing concerns about the age and adequacy of the current energy efficiency workforce. In particular, attendees expressed concerns about where the staff would come from to achieve the aggressive energy efficiency and climate goals currently being discussed. DOE's [Industrial Assessment Centers Program](#) was as frequently mentioned for its role in creating a trained workforce as it was as an assessment program. Several attendees mentioned the need to train not only engineers, but also plant operators and company financial staff on energy efficiency.

ACEEE was privileged to name three Champions of Energy Efficiency awards. Presented to outstanding leaders involved with the industrial sector, the awards recognize leadership and accomplishment in the energy efficiency field. Winners were selected based on demonstrated excellence in program implementation, leadership, research and development, energy policy, private sector initiatives, and international initiatives. The 2009 winners were: (1) [Canadian Industry Program for Energy Conservation \(CIPEC\)](#) for leadership in building government–industry partnerships to promote energy efficiency in manufacturing; (2) [American Iron and Steel Institute \(AISI\)](#) for leadership in energy efficiency research in manufacturing and support for sustainable energy policies in manufacturing; and (3) [Tom Casten](#) for career-long leadership in the energy efficiency field, and innovation in promoting the recovery of wasted industrial energy.

ACEEE expresses its thanks to the 21 organizations that supported the conference with their contributions, which helped keep the conference affordable. In addition, ICF International and NYSERDA provided funding for student scholarships to attend Summer Study. We were able to offer these to three students, Timothy Perrin, Barry Liner, and Tony Simon. Timothy is a student at New York Institute of Technology majoring in Energy Management. Barry is currently attending George Mason University working on his PH.D. in IT with a concentration in Civil, Environmental, and Infrastructure Engineering. Tony is majoring in Electrical Engineering with a focus in Power, Energy Efficiency and Renewable Energy at the University of Washington.

Finally, ACEEE was thrilled that we were able to hold our event at the [Conference Center Niagara Falls](#), which is itself trying to become more energy efficient. At our [closing plenary](#), the Center's manager Jill Scicchitano gave a presentation on the steps the Center is taking, including many of the same culture change measures that attendees had discussed during the conference.

We are beginning our planning for the 2011 conference. Watch the ACEEE Web site for details as they emerge.