

**Commercial Building Energy Alliances (CBEAs)
Renewable Energy Supplier Summit
Austin, Texas
February 23, 2010
EXECUTIVE SUMMARY**

Overview

On February 23, 2010, the U.S. Department of Energy's (DOE) Commercial Building Energy Alliances (retailer, hospital, commercial real estate, and higher education) hosted a Renewable Energy Supplier Summit in Austin, Texas. This summit represented DOE's initial effort to bring together building owners, operators, and suppliers around a specific focus on integrating renewable energy technologies in buildings to reduce dependence on traditional, hydrocarbon-based sources of electricity.

Mission and Goals

Supplier summit participants supported the CBEA mission to transform the sources of energy used to power commercial buildings throughout the United States with a timely emphasis on retrofitting existing buildings. The goals of the summit were to:

- Give building owners/operators the opportunity to communicate their renewable energy challenges and needs directly to suppliers of these technologies and related services.
- Challenge suppliers to find innovative, cost-effective, market-ready ways to meet owners'/operators' needs.
- Promote continuous technology improvement and commercialization to transform the built environment.
- Encourage public and private partnerships to identify challenges and solutions more quickly and work together to speed them to market.

Accomplishments

The opening presentations represented various perspectives on the role of renewable energy across building sectors:

- Welcome: David Wagman, Chairman, Renewable Energy World Conference Committee
- CBEAs: Brian Holuj, DOE
- Retailer: Dustin Lilya, SUPERVALU INC.
- Commercial Real Estate: Mike Groppi, Grubb & Ellis Company
- Hospital: Corey Zarecki, Gundersen Lutheran Health System
- Higher Education: Larry Eisenberg, Los Angeles Community College District

Next, a panel discussion focused on challenges to renewable energy integration, with each topic featuring first a brief presentation by a sector representative on the panel, followed by responses and comments from the panel members. Discussion was then opened to the audience for comments and questions. Participants discussed key points and challenges/barriers, as well as possible opportunities and solutions. Overarching themes included the increased need for technology solutions and openness to new ideas from suppliers.

Following the panel discussion and a lunch sponsored by Deere & Company, a “speed-dating” activity connected suppliers with alliance members in a one-on-one setting. Suppliers who registered for this activity had the opportunity to network briefly with representatives from companies, facilities, and institutions represented within the four CBEAs. The program concluded with a report from Dave Hunt (Pacific Northwest National Laboratory) on technology screening.

Panel Discussion Highlights

Organizational barriers

Panel presenter: James Darrish, The Westfield Group

Key ideas:

- Champions within the organization are the key to success, with the ideal being a dedicated group at the executive level charged with the ability to be transformative.
- This group must be incentivized for long-term results.
- Consequences must be clear if goals are not reached; negative consequences must be identified and carried out.

Early adopter challenges

Panel presenter: Dave Jeffers, Deere & Company

Key ideas:

- Seemingly “amazing” technologies must actually function at their promised levels; this is too often not the case. Therefore, technology verification is crucial; DOE and the national labs can help with this.
- Maintenance costs, zoning, and net metering are three significant challenges that early adopters must conquer; for example, “going bigger” on a specific technology may require unanticipated rezoning.
- Monitoring is key, with the realization that renewable energy applications may take much longer than other technologies to achieve hoped-for results.

Financing

Panel presenter: Corey Zarecki, Gundersen Lutheran Health System

Key ideas:

- Incentives are necessary for acceptable paybacks to be reached, but nonprofit hospitals are excluded from incentives, and this is a major concern.
- Finding partners is therefore key, especially for nonprofits within CBEA sectors, such as hospitals or public universities.
- R&D funds can also be crucial, but, again, if an institution does not have a tax liability, R&D tax credits are not pertinent; working with utilities may mitigate some of these challenges, but the rates may not be attractive enough.

- Property Assessed Clean Energy (PACE) financing, which is funding targeted to accelerating building retrofitting, may be useful in overcoming traditional barriers to financing energy efficiency, particularly with wind and solar technology applications.

Technical expertise of employees

Panel presenter: David Thomas, Austin Convention Center Department

Key ideas:

- Little training is currently available; building owners/managers must be very systematic in the approach to all technology uses, or problems are inevitable.
- For example, one energy-efficiency technology—LEDs (light-emitting diodes)—demands more “IT-like” expertise than “electrical” experience, so managers need to keep up with the demands of new technologies and applications to understand installation and O&M needs.
- Regarding renewable energy, little information is currently available that can be used in training for installation and O&M.
- Suppliers are encouraged to get involved with national associations in which facility managers are members/participants in order to more effectively disseminate information on their products and technologies, especially in the area of renewable energy.

Codes and regulatory issues

Panel presenter: Dustin Lilya, SUPERVALU INC.

Key ideas:

- Much work needs to be done in the area of codes and regulations to move renewable energy technologies and applications into the mainstream; new regulations are needed, as current regulations do not fit renewable energy realities.
- Strategies such as carbon trading, net metering, or purchasing solar RE credits are more valuable in some areas of the country (e.g., Massachusetts) than in others.
- Many utilities won’t allow net metering; they do not permit any energy to be returned to the grid; this is an issue that needs to be addressed by industries.
- “We have one foot on the brake and one on the accelerator in terms of codes and regulations. We should begin to certify states as RE-friendly or unfriendly.” (Dave Jeffers, Deere & Company)

Design and construction constraints

Panel presenter: James Darrish, The Westfield Group

Key ideas:

- The most crucial requirement in addressing design and building constraints is understanding how you are paying for energy.
- Understanding such aspects as demand and time of use are just two of the many nuances a facility operator must manage.
- Roof issues are also very important; many new technologies offer a longer life than the roof they may be installed on; this must be analyzed and comprehensively addressed.
- Finding competent experts in such areas as roofing is key, especially regarding electrical issues and proper waterproofing; fire and electrocution are real risks that must be mitigated.

Technology Identification and Screening

Hunt described how the project screens technologies of interest to Commercial Building Energy Alliance members and Commercial Building Partners. Technologies are examined for applicability, technology status, performance, and cost and maintenance benefits; the national laboratories then present recommendations for potential action (e.g., a technology demonstration or procurement). Technologies may be nominated through the CBEA Web site at http://apps1.eere.energy.gov/buildings/alliances/cfm/tech_strategy.cfm.