

Renewable Energy Supplier Summit Technology Identification and Screening



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Commercial Building
Energy Alliances

- Are striving for significant energy-efficiency improvements
- Require new technologies to help meet efficiency goals
- Seek help identifying new technologies that will help meet efficiency goals



- Casts a wide net ... of interest to the partners
- Systematically screens technologies
- Presents recommendations for potential action
- Sample outcomes:
 - Technology demonstrations
 - Technology specifications
 - Best Practices
 - Information sharing
 - No action



Mini LED 100 μm in diameter as seen through microscope

1. Partners' suppliers and developers nominate technologies
2. DOE team applies screening criteria and presents results/recommendations to CBEA subcommittees
3. CBEA selects target technologies for further action

- Technologies nominated via the CBEA Web site:
commercialbuildings.energy.gov/alliances

Click on link “submit descriptions of new technologies”

- Information requested:
 - *Product/technology description*
 - *Novel features and advantages*
 - *Scope of application*
 - *Energy savings to be achieved OR energy produced*
 - *Performance metrics*
 - *Product maturity*
 - *Technology cost*
 - *Name of contact*

CBEA Technology Screen Web Access

U.S. DEPARTMENT OF **ENERGY** | Energy Efficiency & Renewable Energy

Building Technologies Program

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About Commercial Building Energy Alliances

- Retailer Energy Alliance
- Commercial Real Estate Energy Alliance
- Hospital Energy Alliance
- Suppliers
- Resources

Quick Links

- Commercial Building Initiative

Commercial Building Energy Alliances

The U.S. Department of Energy's (DOE) Commercial Building Energy Alliances (CBEAs) are driven and managed by key industry partners whose goal is to transform the energy efficiency of commercial buildings. The alliances play a critical role in working toward the objectives of the [Commercial Building Initiative](#) (CBI). Here you will find an overview of the alliances and how they operate.

- [Retailer Energy Alliance](#)**
Retailers committed to reducing the energy costs, greenhouse gas emissions, and overall operating risks of retail business.
- [Commercial Real Estate Energy Alliance](#)**
Portfolio owners and operators who promote research, technology, and best practices that will improve the energy efficiency of commercial real estate buildings.
- [Hospital Energy Alliance](#)**
Leading health care companies and industry organizations working to reduce facility expenses and provide a more comfortable environment through energy-efficient hospitals.

Commercial Building Partnerships

Members of any CBEA can also reply to solicitations to become [Commercial Building Partners](#), which involves committing to work with DOE's technical assistance to construct at least one new building and retrofit at least one existing building. New buildings should achieve at least a 50% improvement in efficiency; existing buildings should achieve at least a 30% improvement, relative to [ASHRAE/IESNA Standard 90.1-2004](#).

Suppliers play a critical role in providing energy-saving technologies and strategies. Learn more about how [suppliers](#) can participate with the alliances and [submit descriptions of new technologies](#).

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Four-step sequential screening process:

- Screen 1: Applicability—building types and ages
- Screen 2: Technology Status—current applications, feasibility/risk, and technology embodiment
- Screen 3: Cost and Benefits—energy savings, cost effectiveness, and non-energy impacts
- Screen 4: Program Fit and Suitability—potential alliance impact

- 1st Round of Screening: Feb.–Dec. '09
- Resulting technology categories
 - Lighting
 - Daylighting and Lighting Controls
 - Interior LED Lighting
 - Display LED Lighting
 - Modulating HVAC & Refrigeration Systems
 - HVAC and Whole Building Monitoring and Controls
 - HVAC Filter Technology
 - Kitchen Ventilation
- Coordination with subcommittees

- Technologies generally available now; few still in development
- Incremental improvements; nothing revolutionary
- More suitable for retail than other buildings, reflecting initial focus of CBEA

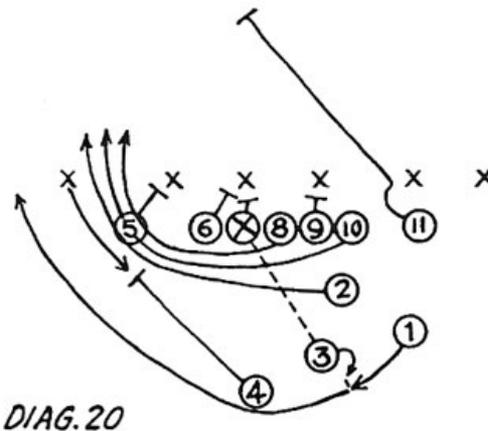


http://spaic.in/yahoo_site_admin/assets/images/Microscope.260234336.jpg

- Technologies for multi-story commercial buildings (Real Estate, Hospital, and Higher Education Energy Alliances)
- Technologies for new construction
- Technologies still in development
- *More radical departures from current technology*



- Refine criteria
- Additional product evaluations
- Expand applications across alliances
- Get more information to alliance members



<http://www.directsnapfootball.com/wp-content/uploads/2007/01/aj-20.jpg>

- **Participate!** Nominate your products through Web site
- Notes:
 - This is not a competition
 - Nominated product information is shared with the alliance members
 - Nominated product use is not endorsed or discouraged by DOE
- For further information:

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