



# Association of Energy Engineers Certification and Training Meeting

**October 21, 2008**

**Bill Leahy - CT AEE**

**Certifications from AEE**

**Kevin Drew - CT GBC**

**Certifications from the US GBC**

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Visit our website: [www.aeecenter.org](http://www.aeecenter.org)

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## Who Is AEE?

**The Association of Energy Engineers (AEE)**, a nonprofit organization of 9,000 members in 77 countries, is your source for information on the field of energy efficiency, utility deregulation, facility management, plant engineering, and environmental compliance.

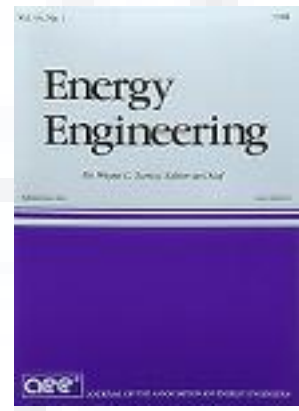
AEE has a full array of information outreach programs from technical seminars, conferences, books, job listings, and certification programs.

The strength of AEE is highlighted by a strong membership base and recognized certification programs. The Association's network of 60 local chapters meet to discuss regional issues. AEE's roster of corporate members is a veritable "Who's Who" from the commercial, industrial, institutional, governmental, energy services, and utility sectors.



# Individual Membership

By joining AEE, you have access to a variety of programs which includes discounts on training programs, subscriptions to leading-edge technical publications, available in hard copy and on-line (*Energy Engineering Journal*, *Strategic Planning for Energy and the Environment*, *Cogeneration & Distributed Generation*, *AEE Energy Insight*), discounts on conferences and professional services, as well as industry networking opportunities.





# Divisions/Councils

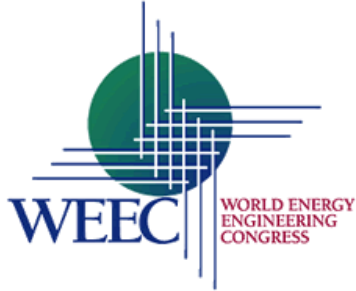
AEE divisions offer another opportunity to meet the growing needs of professionals in the specialized areas of business, industry, and government.

Divisions include: *Alternative & Renewable Energy Development Institute*, *Environmental Engineers & Managers Institute* (EEMI), the *Facility Managers Institute* (FMI), *Energy Services Marketing Society* (ESMS), *Cogeneration & Distributed Generation Institute* (CI), and the *Council on Women in Energy & Environmental Leadership* (CWEEL).





## Conferences/Expos



### **World Energy Engineering Congress (WEEC)**

October 1-3, 2008 / Gaylord Resort and Convention Center  
Washington D.C.



### **GLOBALCON**

April 1-2, 2009 / Atlantic City Convention Center  
Atlantic City, NJ



### **West Coast Energy Management Congress (WCEMC)**

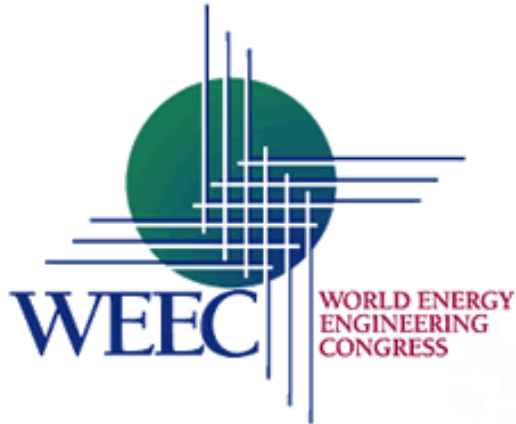
June 10-11, 2009 / Long Beach Convention Center Long  
Beach, CA



## Conferences/Expos

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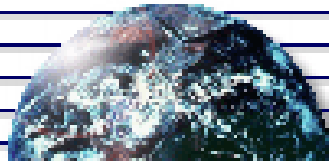
The WEEC celebrates its 31<sup>st</sup> year as the most important energy event of national scope for end users and energy professional in all areas of the energy field. It is the one comprehensive forum where participants can fully assess the "big picture" and see exactly how the economic and market forces, new technologies, regulatory

developments, and industry trends all merge to shape their critical decisions on their organizations' energy and economic future.

The WEEC features a large, multi-track conference agenda, a full line-up of seminars on a variety of current topics, and a comprehensive exposition of the market's most promising new technologies with special technology workshops held in the exhibit hall.

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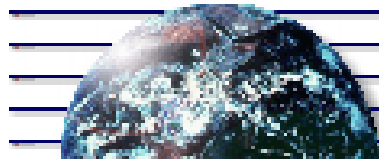


# Seminars

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With all AEE seminars, you'll earn *Continuing Education Units (CEU)* and *Professional Development Hours (PDH)* credit which can be applied toward training requirements for P.E. license renewal in most states, as well as toward maintaining all AEE professional certifications. We are pleased to offer you the following ways to gain the professional training you need:

- Live Seminars
  - In-House Seminars
  - Realtime Online Seminars
  - “24/7” Online University
  - Self-Paced Seminars
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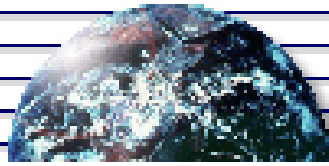


# Seminars

**Live Seminars:** We hold a variety of professional seminars and certification training courses across the U.S. throughout the calendar year.

**In-House Seminars:** Most of our live seminars can also be presented on an in-house basis at your location. For companies, in-house training is a cost effective, targeted, and team building tool.

**Realtime Seminars:** AEE now offers realtime interactive online seminars on a variety of subjects. This exciting new format allows you to participate live from your office, home, or anywhere you have access to the internet and a phone.



# Seminars

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**“24/7” Online University:** AEE's exciting new 24/7 online seminars offer you another way to take high-quality professional courses and earn continuing education credit without the need to travel or be out of the office. When you register for a 24/7 online course, the seminar material is available to you online for a full 30 days to access and utilize at your convenience. Once you have finished the course material and successfully completed an online examination, you can print your own Certificate of Completion. All you need to participate is access to the Internet.

**Self-Paced Online Seminars:** We have customized several seminars to allow you to take advantage of at-home study utilizing the power of the internet. These courses enable you to learn at your pace while providing you the opportunity to interact with the course instructor and classmates via regularly scheduled chat sessions.

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# CERTIFICATIONS

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- Certifications are a part of total quality management. When an individual becomes certified in a designated field, his/her professional achievement is recognized in the eyes of colleagues, government agencies, present and prospective employers, and clients.
  - A standard of professional competence is established and is recognized throughout the industry.
  - Through continuing education, certifications assure a high level of competence in constantly changing fields.
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# CERTIFICATION PROCESS

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Along with individuals completing an application they must also include the following:

- Experience in the field. Each program specifies the minimum experience levels required.
- Employee or client verification
- Documented education or professional registration
- Professional references to verify experience and qualifications

All individuals must also pass a written examination.

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# CERTIFICATION PROGRAMS

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- **CEM - Certified Energy Manager**



AEE's first and most widely recognized certification.

Used by many corporation and government agencies as a prerequisite for job positions related to energy management.

Individual recognized as having a comprehensive understanding of energy issues and technology

A fee of \$200 must be paid at the time the CEM application is submitted.

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# CEM Certification Topics

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4 hour exam

- **Codes and Standards\***
  - **Energy Accounting and Economics\***
  - **Energy Auditing and Instrumentation\***
  - Electrical Systems
  - Mechanical Systems
  - Motors and Drives
  - Utility and Process Systems
  - Building Envelope
  - Cogeneration Systems
  - Procurement of Fuels
  - Energy Management Systems/ Building Automation
  - Controls
  - Thermal Energy Storage Systems
  - Lighting
  - Boilers and Steam Systems
  - Maintenance
  - Alternative Financing
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- **\* Mandatory**
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# CERTIFICATION PROGRAMS

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- **CBCP – Certified Building Commissioning Professional**

*The dual purpose of recognizing the most qualified professionals in this growing area the energy industry, and raising the overall professional standards within the building commissioning field.*



The four-hour CBCP exam is given in conjunction with the "Fundamentals of Building Commissioning"

Certification application and examination: \$200

Registration fee for optional seminar: \$1150 for AEE members / \$1250 for non-members

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- **CMVP - Certified Measurement & Verification Professional**



*Jointly developed by AEE and the International Performance Measurement & Verification Protocol (IPMVP)*

Recognizes individuals in this growing area of the energy industry, as well as raises overall professionals standards within the measurement and verification field.

- Certification application and examination: \$400
  - Fundamentals of M&V Seminar registration fee: \$1 150 for AEE members / \$1250 for non-members
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- **CEP- Certified Energy Procurement Professional**



Recognizes individuals who have developed specialized expertise on both the purchasing and selling sides of the energy marketplace.

This certification also requires that individuals complete a three-day training program.

- **DGCP- Distributed Generation Certified Professional**



Requires a comprehensive knowledge of the principles, practices, and laws which apply to the field distributed generation and on-site power generation.

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## Other Certification Programs:

- BEP** -- Certified Business Energy Professional
  - CGD** – Certified GeoExchange Designer
  - GBE** – Certified Green Building Engineer
  - CIAQP** – Certified Indoor Air Quality Professional
  - CLEP** – Certified Lighting Efficiency Professional
  - CPQ** – Certified Power Quality Professional
  - CSDP** – Certified Sustainable Development Professional
  - CRM** – Certified Carbon Reduction Manager *(New!)*
  - CEA** – Certified Energy Auditor *(New!)*
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# Other Training

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- LEED Accredited Professional
    - US Green Building Council
    - Kevin Drew - CT GBC
  - Building Operator Certification
  - Sustainable Energy Studies @ Eastern
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