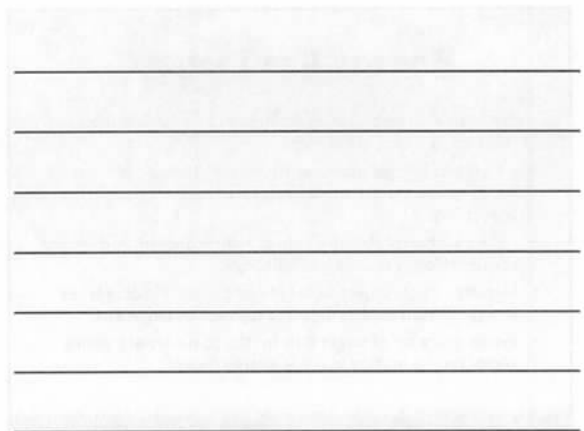
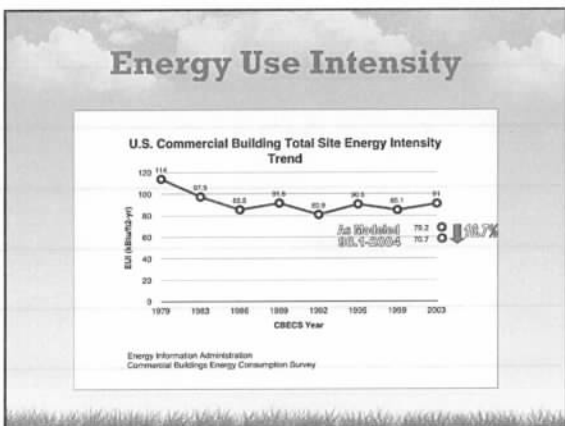
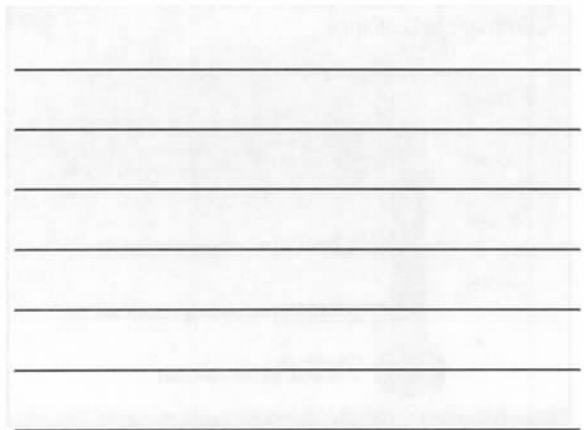
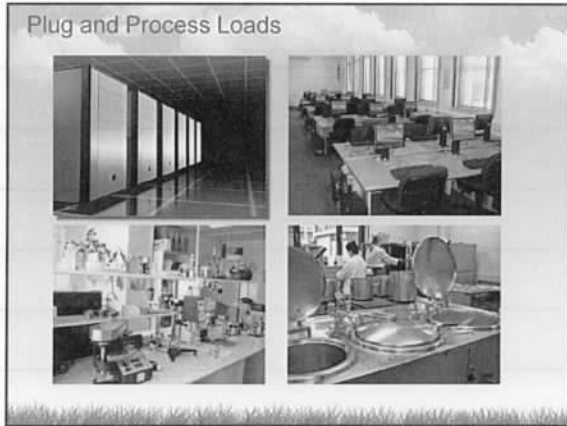


### Research Promotion

- Hit the \$2,075,000 mark, making this the third year in a row to reach the fundraising goal
- ASHRAE's Research program has supported more than 700 projects in the last 50 years, addressing areas such as:
  - Indoor air quality
  - Refrigeration
  - Energy efficiency
- Affects you, friends and family
  - Chlorine in indoor swimming pools and asthma
  - IAQ Hospitals - Surgical
  - Frozen food shelf life
- Thank you!






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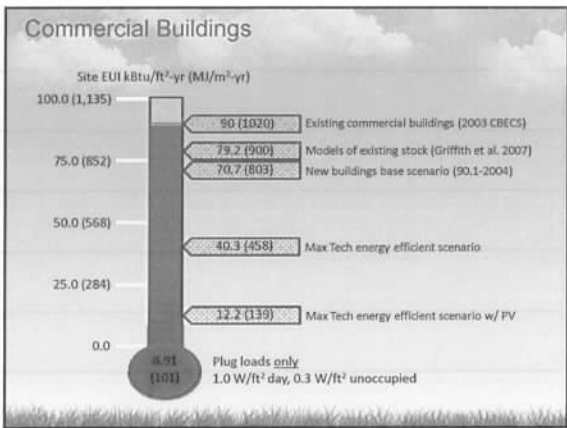
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### Energy Use Targets

- Establish a single objective definition of energy use intensity (EUI) for commercial buildings
- Determine a single objective baseline EUI for commercial buildings from which to measure relative energy use reductions
- Develop a comprehensive plan to reduce unregulated energy consumption in commercial buildings
- Identify a single objective set of commercial building types and simulation models for establishment of target EUI
- Produce one set of target EUIs for the commercial building sector for use in state building energy codes

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### 2010 Standards

- Standards 62.1, *Ventilation for Acceptable Indoor Air Quality*
- Standard 62.2, *Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings*
- Standard 90.1, *Energy Standard for Buildings Except Low-Rise Residential Buildings*
  - More than 30 percent energy savings can be achieved using the recently published 2010 version of Standard 90.1 vs. the 2004 standard
  - Without plug loads, site energy savings are 32.6 percent and energy cost savings 30.1 percent. Including plug loads, the site energy savings are estimated at 25.5 percent and energy cost savings 24 percent.

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### Green Building Standard



- Published in January 2010
- Serves as benchmark for sustainable green buildings – does not apply to all buildings
- Addresses energy, impact on the atmosphere, sustainable sites, water use, materials and resources and IEQ
- Jurisdictional compliance option for International Green Construction Code

[www.ashrae.org/greenstandard](http://www.ashrae.org/greenstandard)

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### What's Your Building EQ?

- As Designed Pilot launched in March 2010
- Pilot will address office buildings only
- Full launch of In Operation rating targeted for second quarter 2011
- Research project to expand building types to be rated has been proposed
- BEAP and BEMP certifications now available



[www.buildingeq.com](http://www.buildingeq.com)

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### Performance Measurement Protocols

- Original document catalogs protocols for six performance categories: energy, water, thermal comfort, indoor air quality, lighting and acoustics.
- Developed with CIBSE and USGBC
- Follow-up companion book focuses on best practices
  - Will provide flow charts, worksheets and how-to guidance on measurement for continuous improvement.
  - Will provide a tool for the commissioning process
  - Publication targeted for January 2012



[www.ashrae.org/bookstore](http://www.ashrae.org/bookstore)

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### Advanced Energy Guidance

- Circulation of 30% series guides is 290,000+ copies
- Available for free download
- 50% Series in progress
  - 50% beyond 90.1-2004
  - 50% AEDG for Small-Medium Office available May 2011
  - 50% AEDG for K-12 Schools available October 2011
  - 50% AEDG for Mid-Big Box Retail available January 2012
  - 50% AEDG for Large Hospital available May 2012



[www.ashrae.org/freeaedg](http://www.ashrae.org/freeaedg)

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### Existing Building Guidance

- Three part series developed with BOMA, AIA, USGBC, IESNA, GSA
- First guide in series provides business case for energy improvements – published 2010
- Second guide in series provides technical guidance to building managers and facility engineers – publication targeted for September 2011
- Third guide will address operation and maintenance – no publication targeted



[www.ashrae.org/bookstore](http://www.ashrae.org/bookstore)

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### Certification

*ASHRAE certification provides members with benefit of professional designations that showcase their body of knowledge to the industry*



- More than 1,400 applicants for certification
- Current programs
  - Healthcare Facility Design Professional
  - High Performance Building Design Professional
  - Operations and Performance Management Professional
  - Commissioning Process Management Professional
  - Building Energy Modeling Professional
  - Building Energy Assessment Professional

[www.ashrae.org/certification](http://www.ashrae.org/certification)

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### Education

*ALI seminars provide professional development through in-depth information that is timely, practical and advanced beyond a fundamental level*



- 12 online, instructor-led, real-time courses offered this spring
- Reflecting industry trends and member interest, courses relate to energy savings and IAQ
- Two courses related to high-performance building

[www.ashrae.org/onlinecourses](http://www.ashrae.org/onlinecourses)

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### eLearning

- Now a fully owned ASHRAE enterprise – ideal for both individual and corporate training needs
- Better course delivery
- Better functionality
- Better records keeping
- Better ways to find courses
- Written and reviewed by respected experts in the industry

[www.ashrae-elearning.org](http://www.ashrae-elearning.org)

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## Government Affairs



- Federal Building Personnel Training Act of 2010
- Working to establish consortium to advise U.S. Department of Energy on high-performance building (HPB) issues
- Briefings on HPB buildings, energy efficient schools, disaster preparedness

[www.ashrae.org/governmentaffairs](http://www.ashrae.org/governmentaffairs)

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## Scholarships

- More students and more schools than ever eligible for ASHRAE scholarships
- Two new scholarships available to high school seniors to be applied to their freshman year of college – May 1 application deadline



[www.ashrae.org/scholarships](http://www.ashrae.org/scholarships)

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## Engineers Week 2011

ASHRAE – Lead Engineering Society  
Raytheon – Corporate Sponsor

- K-12 resources available free to members to encourage students' love of science, technology, engineering and math
- Outstanding support by chapters hosting numerous events
- ASHRAE President Bellenger hosted a luncheon in Atlanta as part of Introduce a Girl to Engineering



[www.ashrae.org/new](http://www.ashrae.org/new)

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**Join Us!**



- 2011 Annual Conference
  - June 25-29
  - Montreal
  - technical program to present a mix of papers and sessions on many applications-oriented sessions
  - Virtual Conference
  - [www.ashrae.org/montreal](http://www.ashrae.org/montreal)

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**How you can help**

Contribute to ASHRAE's worldwide best practices databank of innovative and successful technologies to better serve the HVAC&R community

[www.ashrae.org/volunteer](http://www.ashrae.org/volunteer)

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