

Renewable Energy Supplier Summit: Partnering for Results



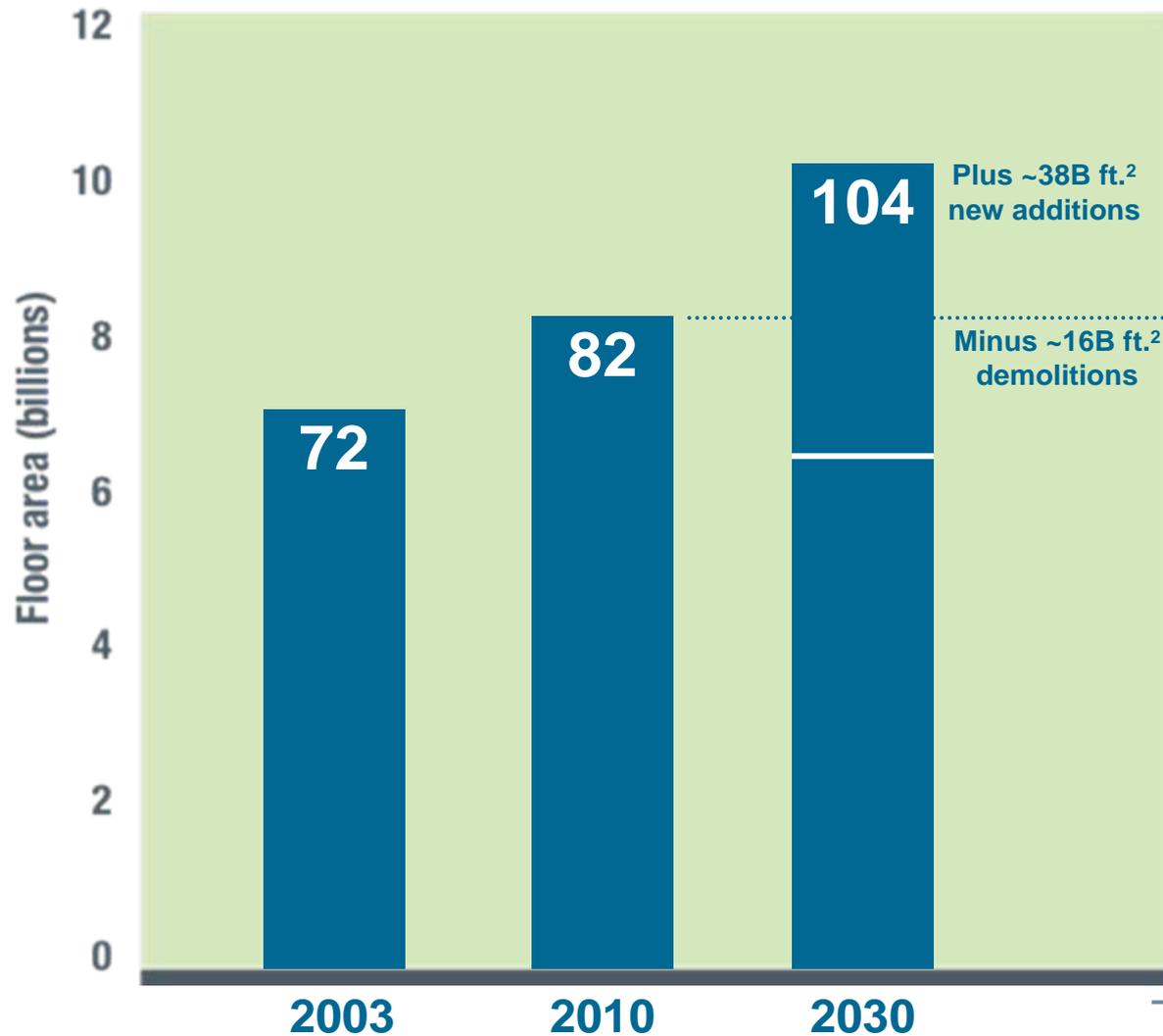
Renewable Energy Supplier Summit
Austin, Texas
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U.S. Department of Energy
Energy Efficiency and Renewable Energy

- 5 million commercial buildings, comprising more than 82 billion sq. ft. of floor space
- Commercial buildings account for:
 - 18% of U.S. energy
 - 18% of greenhouse gas emissions (~1,000 MMT of CO₂e)
 - slightly less than India's entire energy consumption and GHG emissions



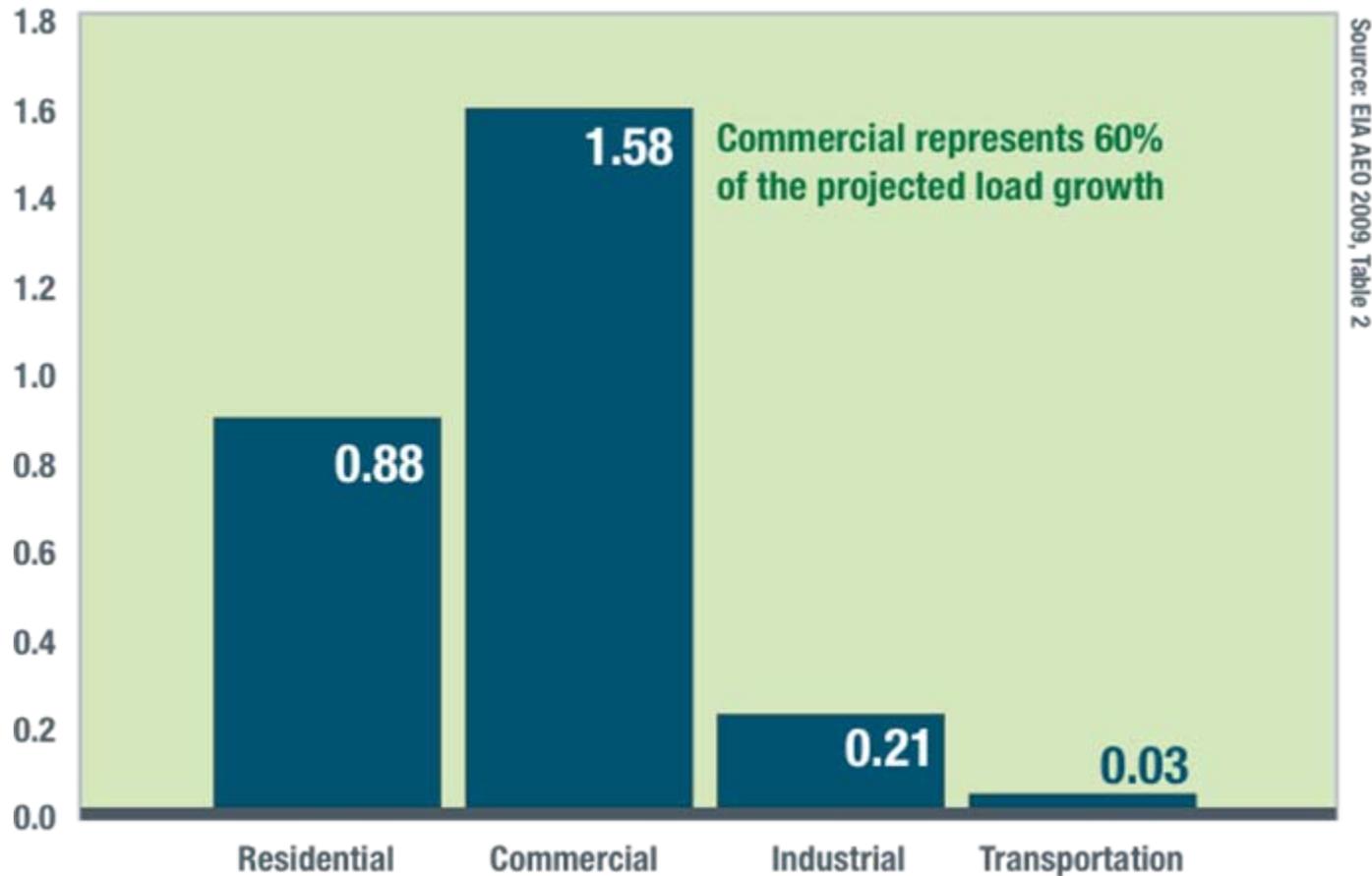
Commercial Square Footage Projections



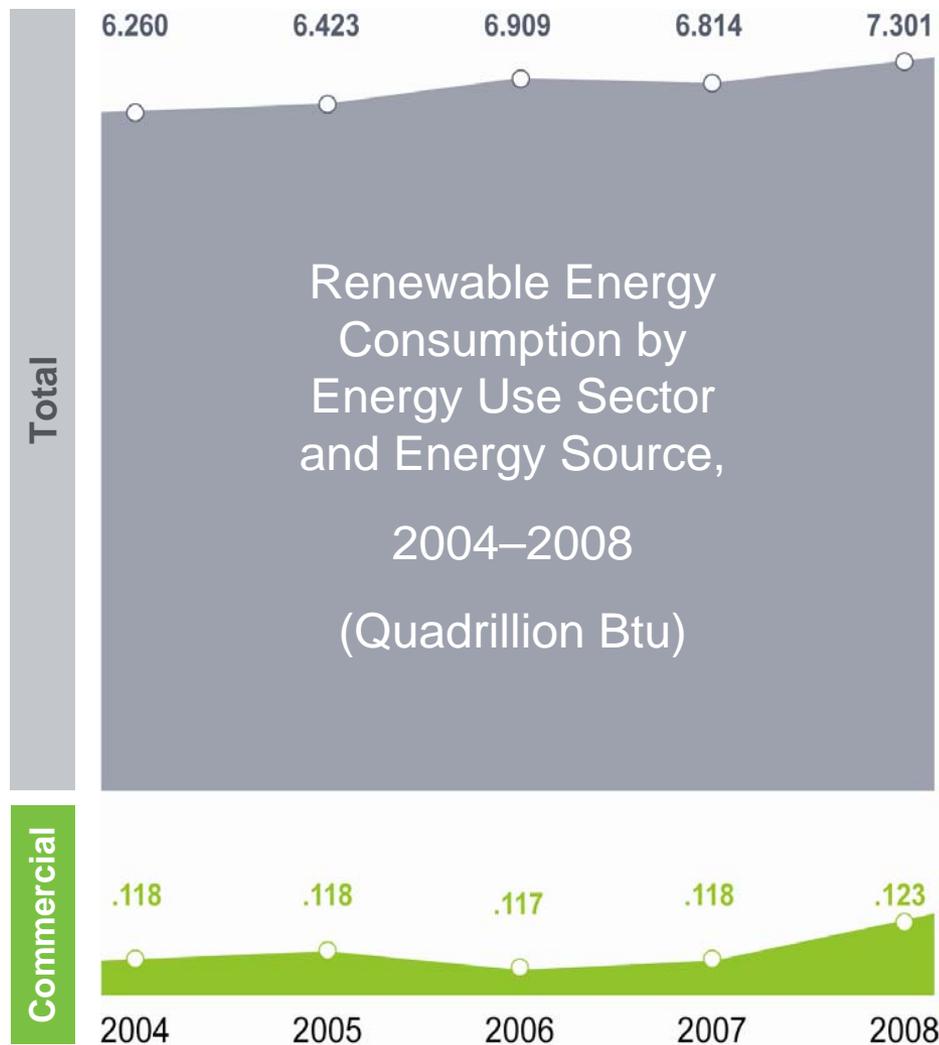
Source: EIA's *Annual Energy Outlook 2009*, Table 5.

Commercial Building
Energy Alliances

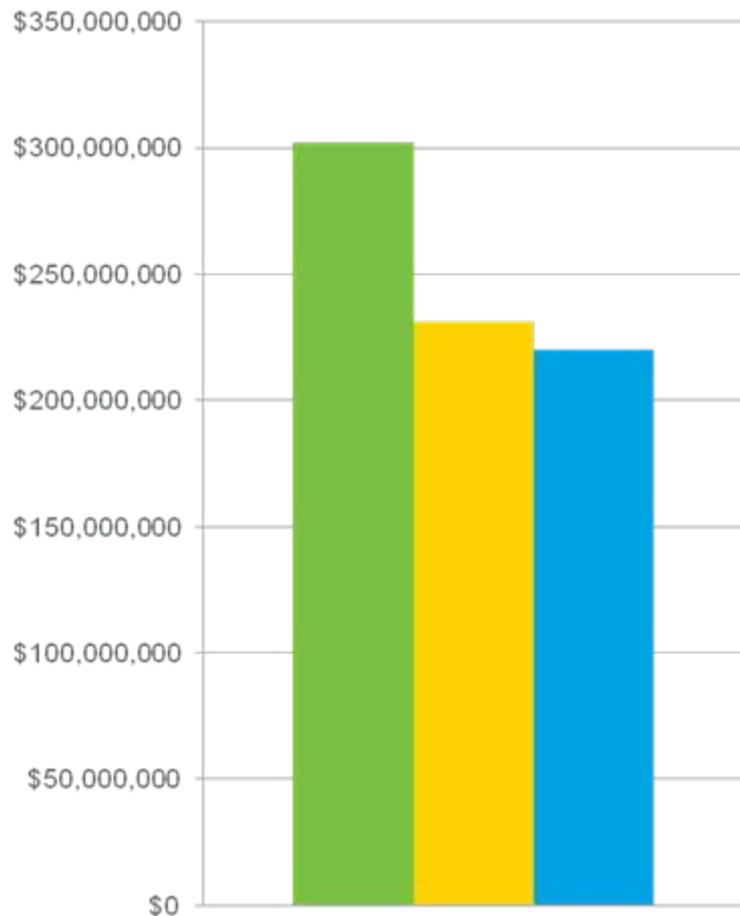
2010 to 2030, by End-Use Sector (*site quad*)



Commercial Building
Energy Alliances



- Projected growth in commercial sector
- Administration aims to double renewable energy generating capacity (excluding conventional hydropower) by 2012



President's 2011 Proposed Investment in Renewables R&D

\$4.7 billion in clean energy technology investments at DOE

- Solar Energy
- Energy-efficient building technologies
- Biofuels

- High incremental first costs for technologies and products
- Consumer concerns about quality and reliability (and warranties when purchased in bulk)
- Lack of detailed business case for investments
- Dearth of customizable best practices and strategies on design, controls, installation, and commissioning

EISA 2007

- *established Net-Zero Energy Commercial Building Initiative*

American Recovery and Reinvestment Act of 2009

- *\$16.8 billion for energy efficiency and renewable energy*

Executive Order 13514

- *requires federal buildings to meet sustainability targets*

American Clean Energy and Security Act (in Senate)

- *would require increased stringency of ASHRAE 90.1: 30% now; 50% by 2016*
- *would establish incentive-based retrofit program for energy savings*

Net-Zero Energy Commercial Building Initiative: Transforming the Built Environment

- Goal is enabling market-ready, net-zero energy commercial buildings by 2025
- Building systems R&D, design tools and modeling, technology specifications needed to achieve high performance buildings
- Public-private partnerships promoting best practices and accelerated commercialization of advanced building technologies

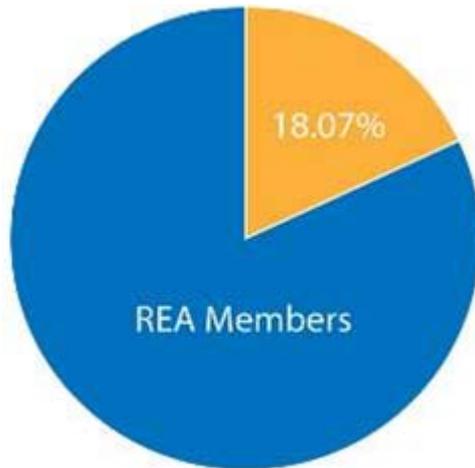
Informal associations among building owners and operators who want to reduce energy consumption

Goals

- Share best practices, energy-use measurement, and benchmarking
- Accelerate the deployment of advanced technologies through tech screening and performance specifications
- Drive down costs by working with manufacturers and suppliers on the collective need for energy-efficient products and technologies: [Supplier Summits](#)

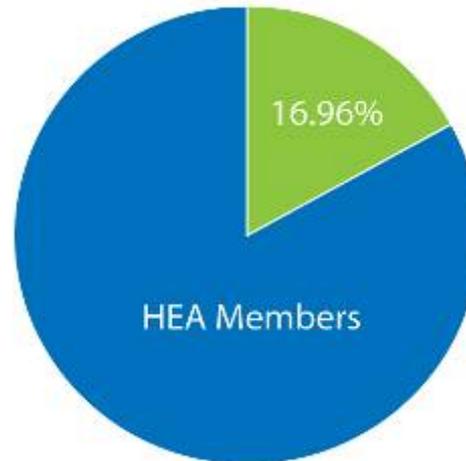
Market Share of Alliance Members (as of February 2010)

Retailer Energy Alliance



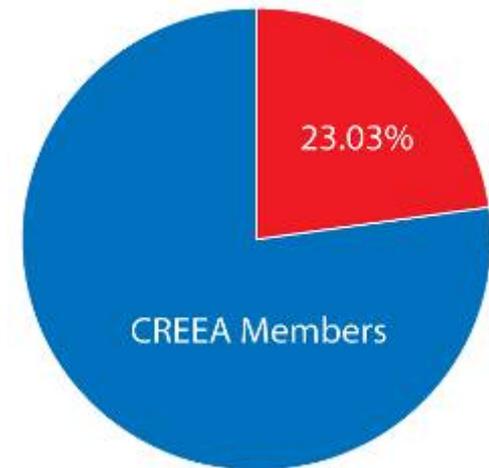
- 46 member companies
- 2.548 billion sq. ft.

Hospital Energy Alliance



- 34 member companies
- 323 million sq. ft.

Commercial Real Estate Energy Alliance



- 51 member companies
- 5.856 billion sq. ft.

- Identify the current role of renewable energy in the CBEAs and goals for renewables in the years ahead
- Identify and address Alliance member's challenges to implementing renewable energy technology
- Enable one-on-one dialogue between Alliance members and suppliers on renewable products and services
- Highlight current and upcoming CBEA activities

Commercial building owners and operators know what they are looking for from the next great renewable energy technology ... **do you?**



Thanks!

U.S. DEPARTMENT OF
ENERGY

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