



ENERGY STAR®: Benchmarking and the 10% Challenge

US EPA Presentation to the CEE Workshop
Increasing Energy Savings in Existing
Commercial Office Buildings

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C&I Utility Partnerships

www.energystar.gov

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ENERGY STAR C&I Strategy

- Value proposition / market segmentation
- Continuous improvement management practices
- Benchmarking
- Whole-building improvements
- Rebenchmarking / measuring & tracking
- Recognition

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Commercial Real Estate Partners



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Challenge Extends Strategy



California Home Wednesday, June 21, 2006

Welcome to California

[DIS Home Page](#)
[Green California Home](#)
[Governor's Green Action Team](#)
[Green Buildings](#)
[Environmentally Preferable Purchasing](#)

GREEN CALIFORNIA Energy Star Challenge
Sustainable • Energy Efficient • Green Buildings • Green Buying

California Supports the ENERGY STAR Challenge!

The State of California is committed to leading by example in reducing electricity demand in state facilities, and in designing, operating and re-engineering its buildings to make them the most resource-efficient, energy-efficient and healthful.

- Working with independent agencies such as the California Public Utilities Commission, California Energy Commission, California State University System, University of California System, California Community Colleges System, K-12 school districts, and the legislative and judicial branches of government, to promote benchmarking, commissioning and retrofitting public and commercial buildings in a collaborative effort.
- Implementing standards created by the U.S. Green Building Council for the design and construction of new buildings and also using ENERGY STAR tools for new building design, commodity procurement and energy benchmarking, and
- Joining the US EPA in recognizing California organizations that achieve significant energy efficiency improvements.

Read more about the Energy Star Challenge and how to "Build a Better World 10 Percent at a Time!"

ENERGY STAR

We value the feedback of those we serve. Please contact us with your questions or comments via e-mail at: asen@dis.ca.gov

My CA The Site

GOVERNOR Schwarzenegger
Click to Visit His Home Page

Victoria Drake

- Green Building Basics
- US Green Building Council
- Best Practices Guide for Commercial Buildings

Flex Your Power e-newsletter

CALIFORNIA'S ENERGY EFFICIENCY RESOURCE

HEADLINES 6/14/06

- Flex Your Power Presents Energy Conservation Summit With Governor Schwarzenegger on June 30 in Southern California
- PS Releases Guidance on Commercial Building Tax Deduction
- Energy Efficiency Resources for California Cities Now Available Online
- New EPA Program Helps

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ENERGY STAR 10% Challenges



- National call to action
- Buildings owners and operators:
 - Set at least 10% goal
 - Benchmark and take action to improve
- Participation since 2005 launch
 - 28 states
 - Over 20 major industry associations

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Benchmarking



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Energy Performance Rating



Is 10 MPG high or low for an automobile?



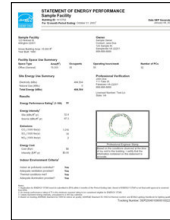
Fuel Efficiency
MPG



Is 90 kBtu/SF/YR high or low for an office building?



Energy Efficiency Rating
1 - 100



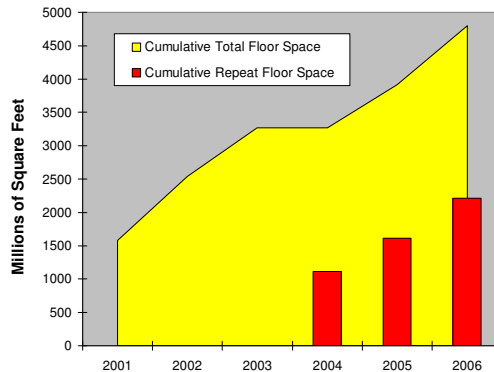
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Market Reach: Cumulative Ratings



Trends:

- Almost 5 billion cumulative square feet rated through 2006
- This reflects a 27 percent increase in cumulative square footage between the end of 2005 and year end 2006



Note:

- New energy rules/algorithms introduced in 2004; apply to the benchmarking data for 2004 and subsequent years. All other years reflect benchmarking data under the old energy rules/algorithms.

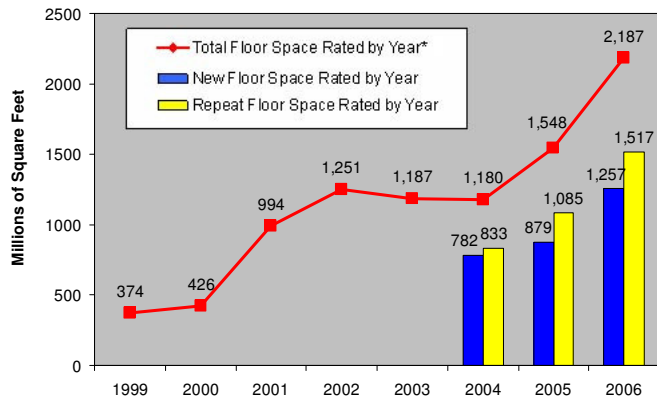
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Repeat Ratings for Continuous Improvement



Trends:

- In 2006, ~2.2 billion square feet rated; 1.5 billion represents rebenchmarking buildings



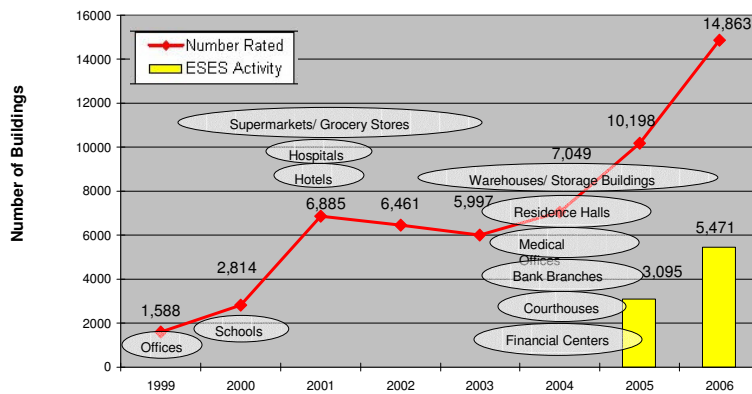
* Total is not the sum of new and repeat floorspace. It reflects unique benchmarked floorspace.

Growth in Buildings Rated



Trends:

- ~15,000 buildings benchmarked in 2006
- ENERGY STAR Exchange Services (ESES) clearly contribute to increases in benchmarking; automated activity represents 37 percent of buildings rated this year



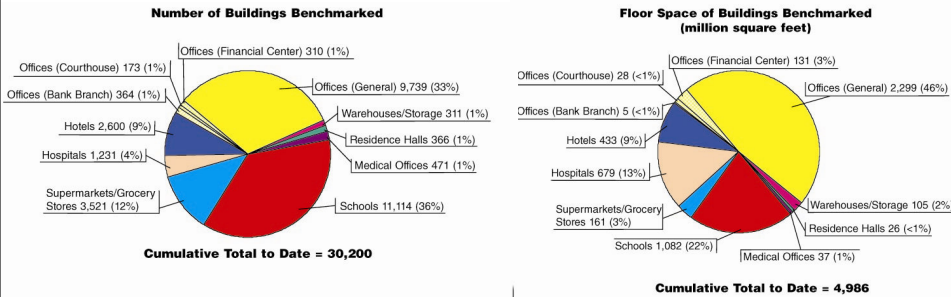
○ = The beginning of benchmark availability for the space type.

Where is Benchmarking Occurring?



Trends:

- More than 30,000 buildings, representing almost 5 billion square feet, rated to date
- Schools represent most activity followed by office buildings

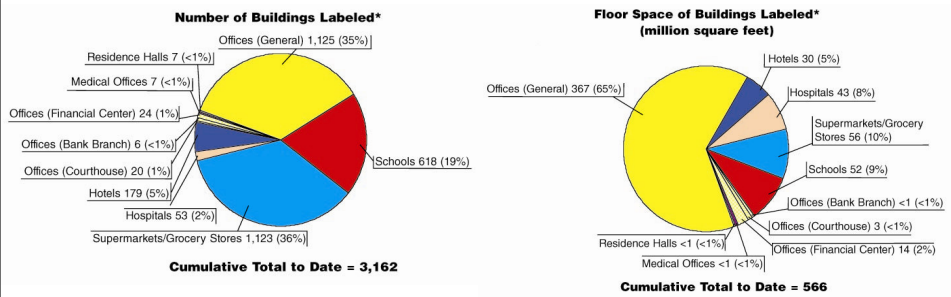


Who is Earning the ENERGY STAR?



Trends:

- 566 million sq. ft. of floor space qualified for the ENERGY STAR through November 2006; more than 3,200 buildings now labeled to date
- More offices and supermarkets have labeled than any other space type; almost 600 Food Lion stores have qualified for the ENERGY STAR
- More than 800 buildings have labeled in 2006; repeat label activity remains steady, accounting for 31 percent of the labels earned this year



* Through November 30, 2006; not all new space types have qualified for a label.

Capture of Eligible Market



- Offices: 25%
- Schools: 16%
- Supermarkets: 29%
- Hospitals (Acute Care): 39%
- Hotels: 15%

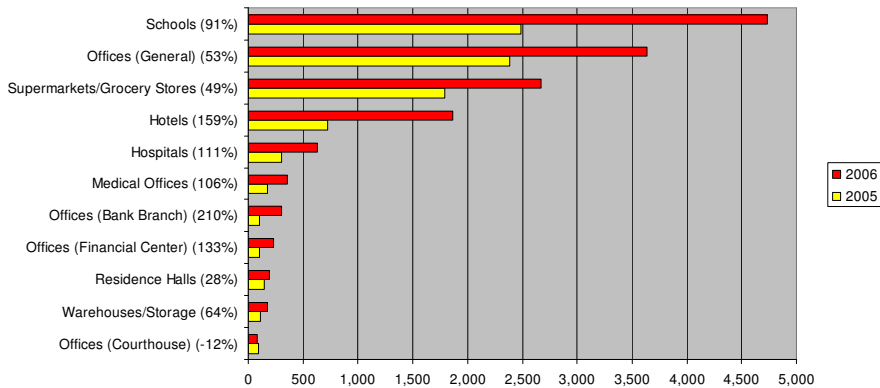
Note: Percent rated based on square footage

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Increased Benchmarking Activity For Key Space Types Reflect ENERGY STAR Challenge Efforts*



- ENERGY STAR Challenge activities have also impacted benchmarking increases; school associations particularly active as almost 4,800 schools have benchmarked in 2006 with more than 3,000 schools benchmarking for the first time
- BOMA increasing presence of ENERGY STAR in real estate market; BOMA BEEP training sessions highlight ENERGY STAR and benchmarking



* Bars in chart reflect number of buildings benchmarked. Percentages reflect increase in activity between 2005 and 2006 for January – November time period.

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CEE Members and the ENERGY STAR Platform



- Leveraging 10% Challenge and other national efforts to drive participation in CEE member programs
- Making benchmarking a standard business practice
- Aligning with the whole-building performance model

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