



International Facility Management Association



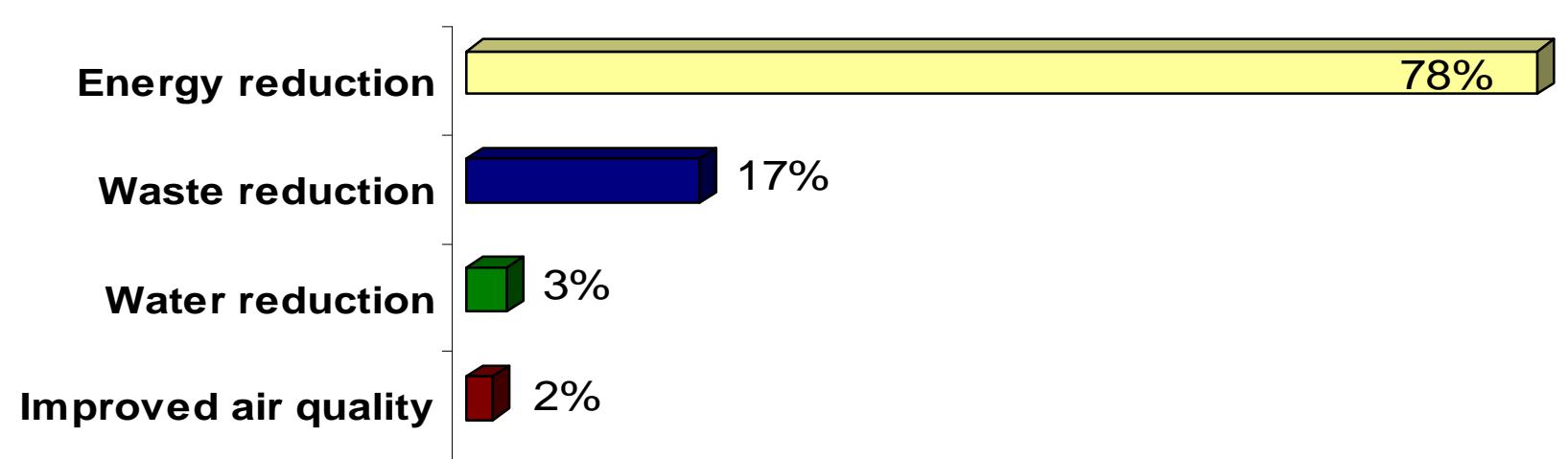
IFMA Energy Efficiency Research

Shari Epstein
Director of Research

International Facility Management Association



IFMA members manage more than 37 billion square feet. Where could IFMA members make the biggest impact in improving the environment?



IFMA Trends Report



http://www.ifma.org/tools/research/forecast_rpts/2007.pdf

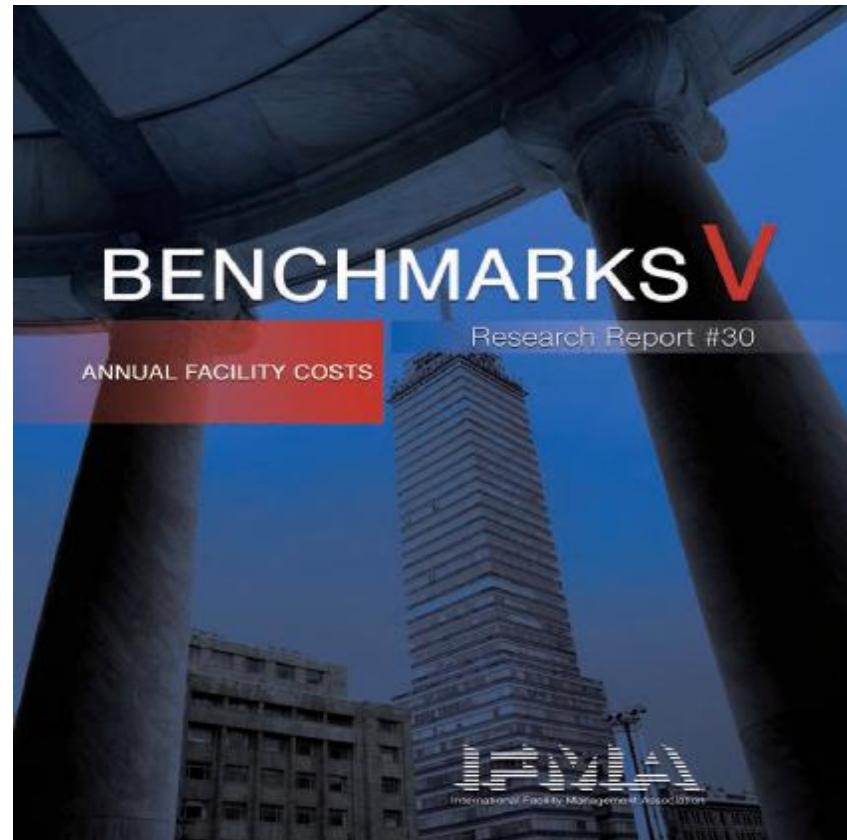


IFMA's Trends Report Findings

- Ø Demand is escalating for environmentally friendly high performance buildings.
- Ø Companies that are not incorporating sustainable practices will be at a competitive disadvantage.
- Ø Difficult to quantify value (ROI), show business case, although the number of built projects and case studies continues to grow.
- Ø Imperative to develop and maintain technical skills expertise, for operational expertise is critical to building performance.
- Ø Important to perform commissioning and retro-commissioning to ensure that “you’ve gotten what you’ve paid for.”



Benchmarks V Annual Facility Costs Report



Benchmarks V Findings

- Ø Data gathered in 2007 representing facility costs from 2006
- Ø Report based upon 1,032 buildings across US and Canada
- Ø Utility cost is up 19% compared to 2005
- Ø Average electricity consumption, measured in kBtUs per square foot —dropped from 93 to 81
- Ø Average gas consumption remained constant at 35 kBtUs per square foot.



Energy Efficiency Indicator 2008



http://www.ifma.org/tools/research/surveys/2008_energyeffindex.pdf



Energy Efficiency Indicator Study

- Ø Conducted March 2008
- Ø 338 facility manager respondents
- Ø Majority manage facilities greater than 500,000 square feet
- Ø 74% manage office space
- Ø 78% private sector/22% public sector

Selected Findings

- Ø 75% Expect to make energy efficiency improvements with capital funding
- Ø 40% Believe government/utility incentives influence their energy efficiency decisions
- Ø 88% Will consider energy efficiency as a priority in any future construction/retrofits
- Ø The majority will tolerate an average payback of 4 years on energy efficiency investments

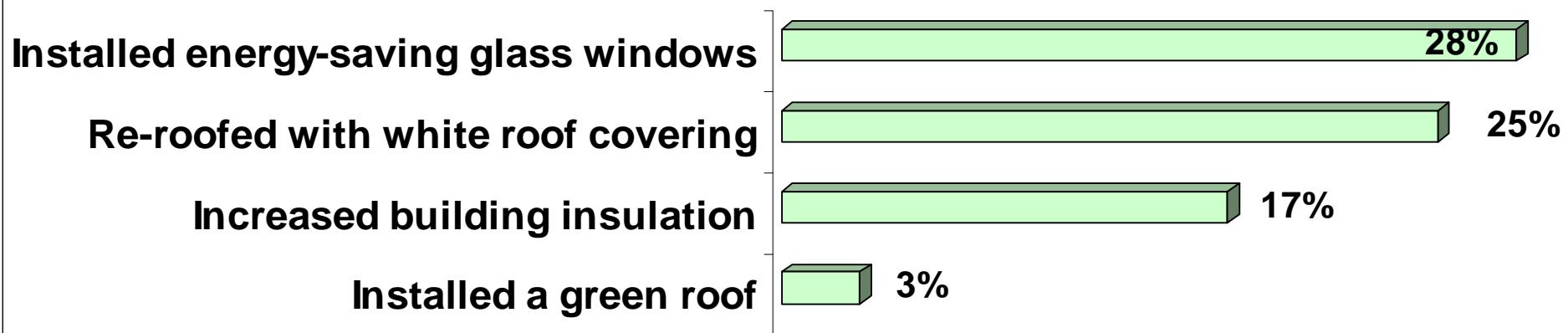


Equipment Related Measures Adopted

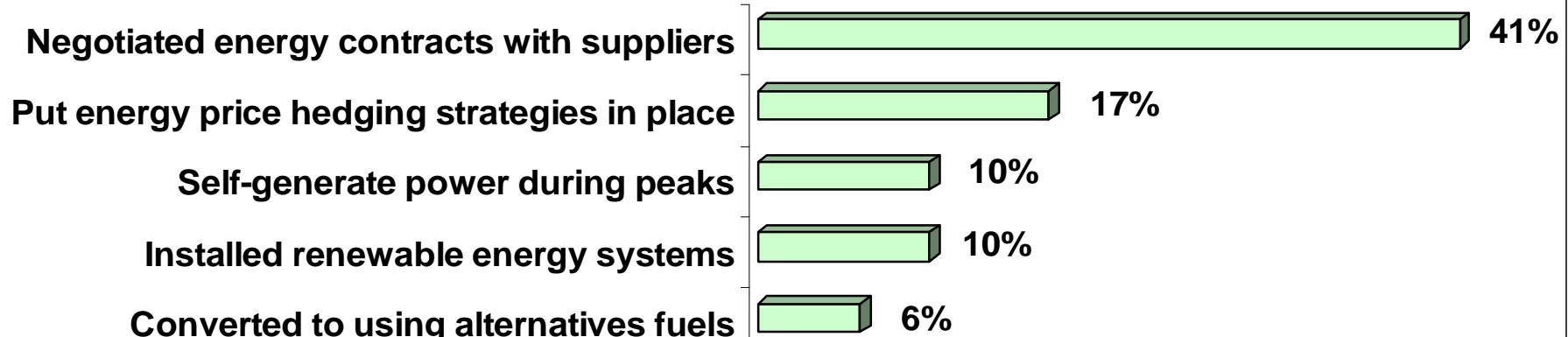
- Ø 75% Adjusted HVAC controls
- Ø 53% Upgraded existing building management system
- Ø 53% Installed variable speed/frequency drives
- Ø 45% Replaced inefficient equipment before the end of useful life
- Ø 27% Installed building management system where one did not exist
- Ø 12% Captured waste energy (heat, steam)



Building Design-Related Measures Adopted



Energy Supply-Related Measures Adopted



IFMA Green Practices 2008

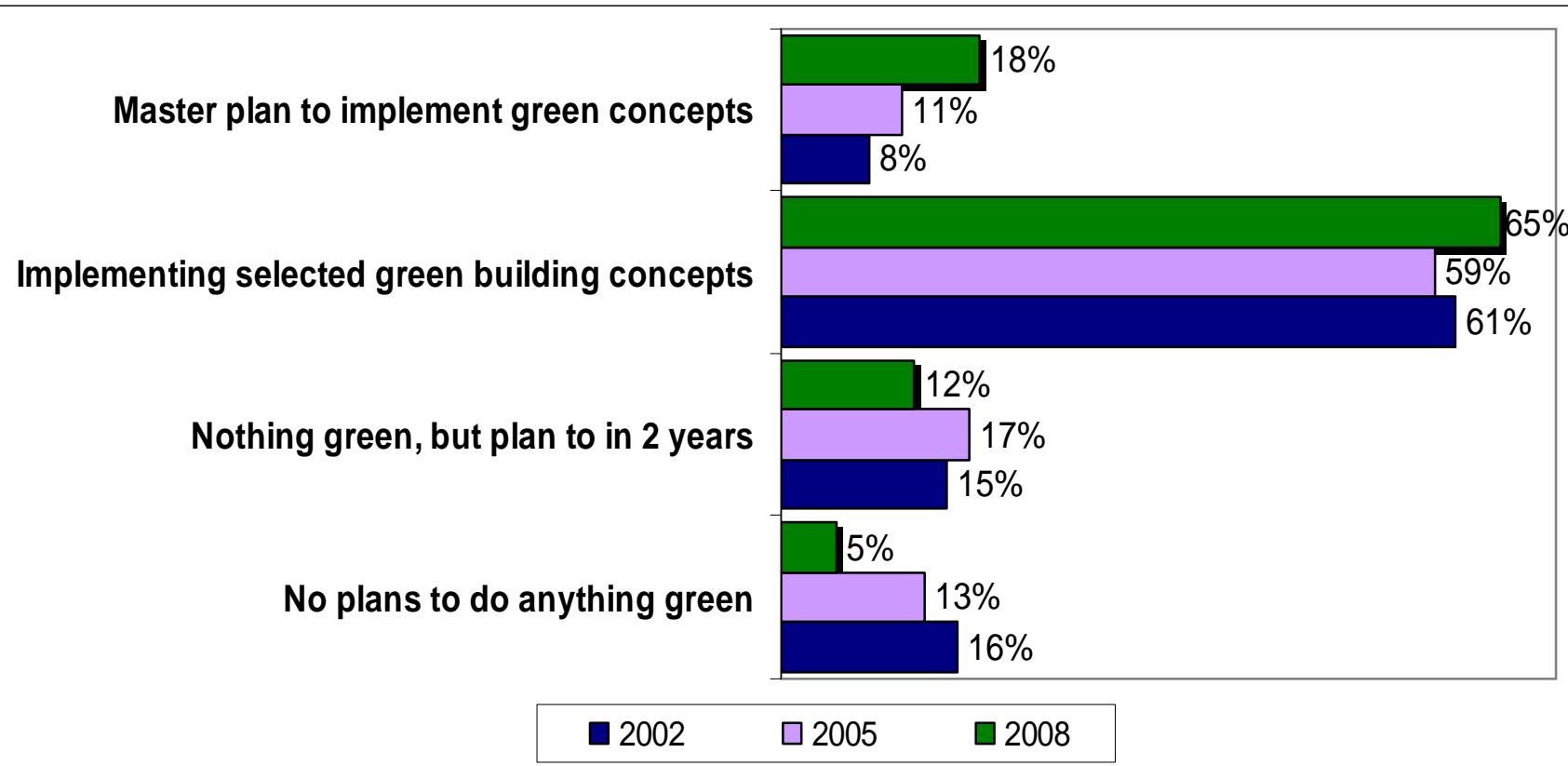


Green Practices Study

- ØConducted September 2008
- Ø500+ respondents
- Ø42% government sector
- Ø70% owned properties
- ØAverage age of building = 33 years



Attitude Towards Green Building Concepts



Who's Driving Sustainability

ØInternal

- § Facility Management 88%
- § Employees 20%
- § C-Suite 16%

ØExternal

- § Customers 67%
- § Government 45%
- § Grant Providers 14%

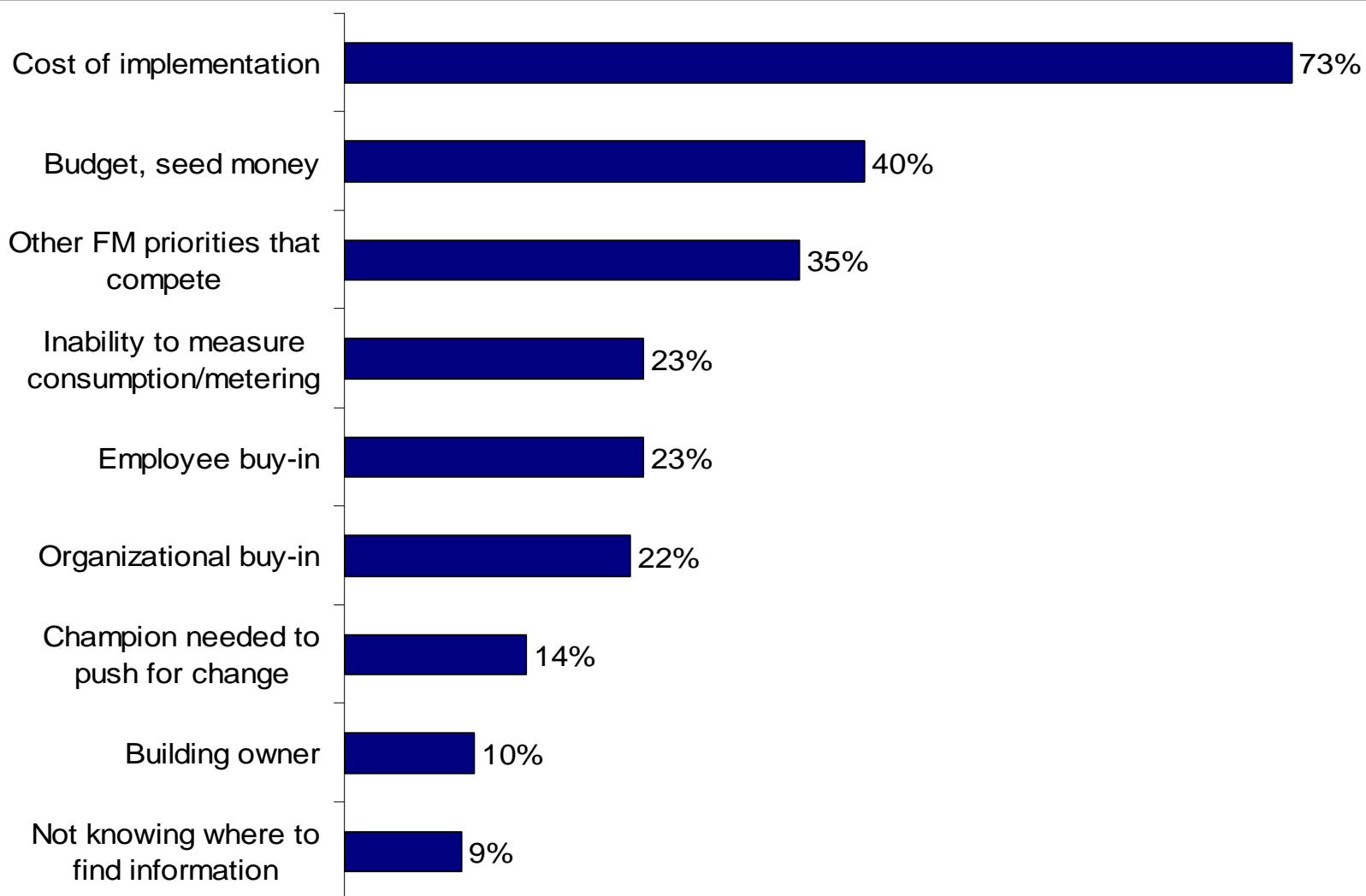


Sustainable Energy Practices

- 74% Adjusted operating hours of HVAC
- 67% Retrofitted/Upgraded lighting
- 67% Installed lighting sensors
- 65% Installed energy efficient replacements
- 63% Set back thermostat
- 35% Negotiated with energy suppliers
- 34% Increased energy consumption monitoring
- 19% Re-commissioned building systems
- 18% Installed energy-saving glass
- 13% Using alternative/renewable energy sources



Barriers to Addressing Energy Issues



Energy Star and LEED



9% Energy Star rated



23% Working toward
LEED certification

Challenges Encountered

Financial Challenges	73%
Balancing Sustainable Initiatives with FM Duties	54%
Educating Employees	46%
Obtaining Buy-In from Management	30%
Costly and Cumbersome Accreditations	20%
Limitations to What Can Be Done - Tenant	18%
Sourcing Sustainable Products	15%
Finding Knowledgeable Consultants	10%
Inability to Provide Generally Accepted Financial Indicators to C-Level	10%



Questions?

