

# Afternoon Sessions

- Market Trends
- LEED® EB O&M Overview
- Manufacturing/Distributor Trends
  - Materials & Resources
- Program Implementation
- RIT Case Study/Panel Discussion

# Panelists

- Mr. Terry Walker – Building Services Manager, Rochester Institute of Technology
- Mr. Dan Burgmaster – Sales Manager, xpedx Upstate NY
- Mr. Paul Ferruzza – Regional Vice President, Rochester Midland Corporation
- Mr. Jim Bruno – Marketing Manager, Rochester Midland Corporation

# Market Trends

- EcoMarkets 2008 Survey Results
- TerraChoice Environmental Marketing
- Responses from 336 procurement professionals in the United States and Canada between October 2007 and March 2008

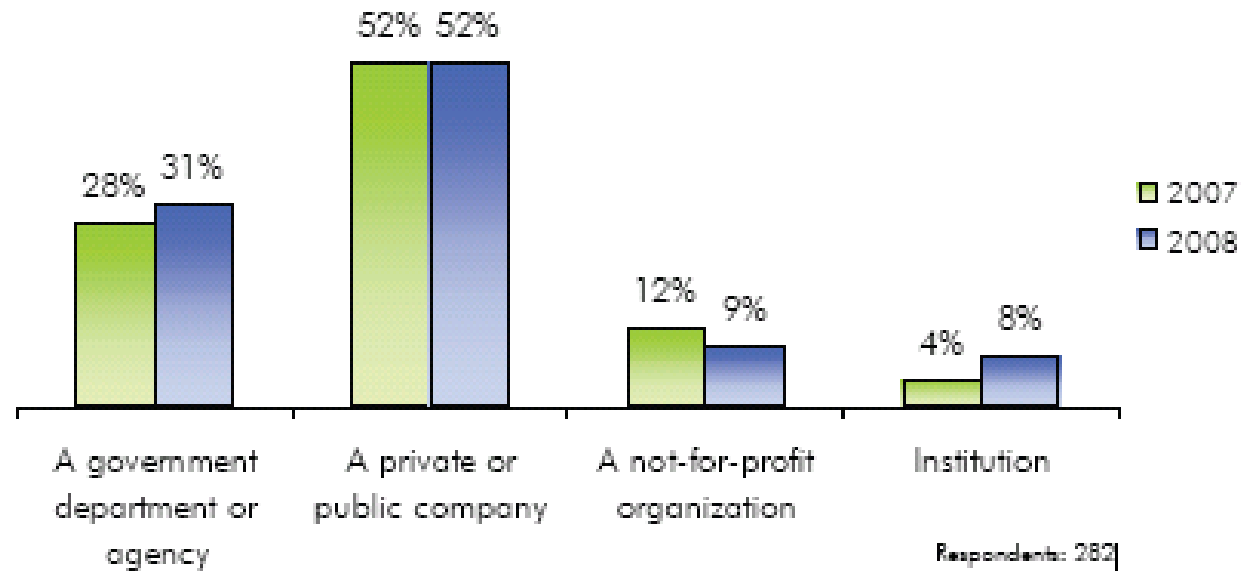


# Market Trends



# Market Trends

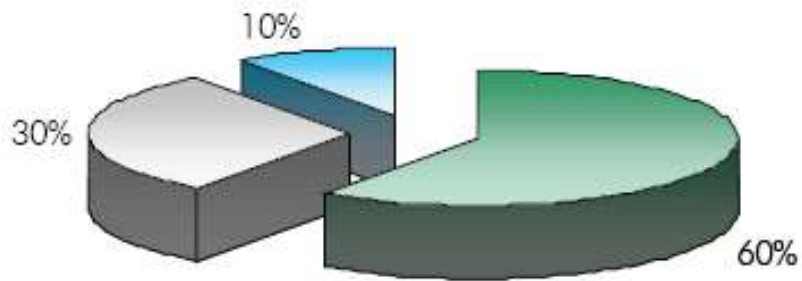
## Organization Type



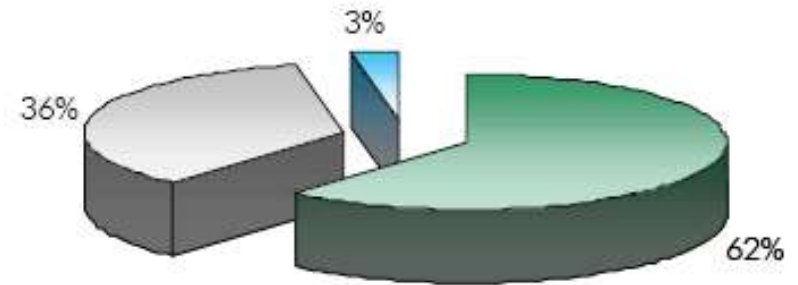
# Market Trends

## *The Prevalence of 'Green' Purchasing Policies at our Respondents' Organizations*

2007



2008

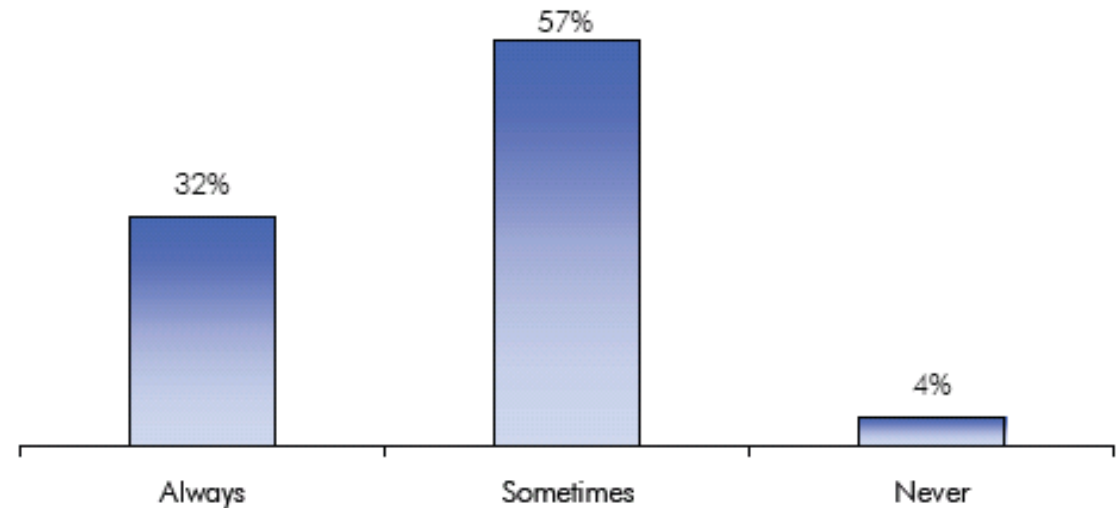


- Yes, we have a 'green' purchasing policy
- No, we do not have a 'green' purchasing policy
- I don't know

# Market Trends

## **Percentage of Purchasers Who Include Environmental Performance Considerations in Product Specifications**

Asked in 2008 Only.



Does not include "I don't know"

# Market Trends

## Relative Importance of Purchasing Factors

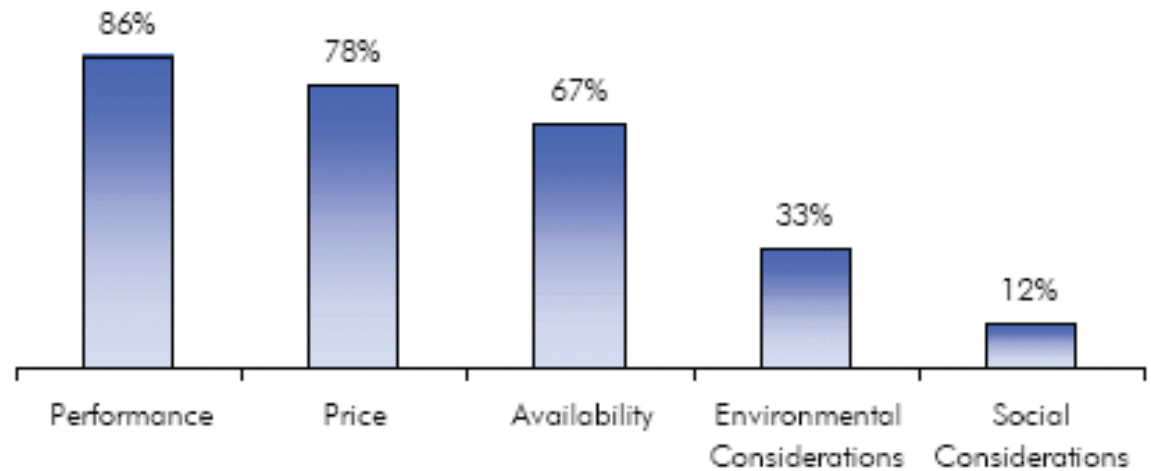
Scale of 1 (Least Important) to 6 (Most Important)



# Market Trends

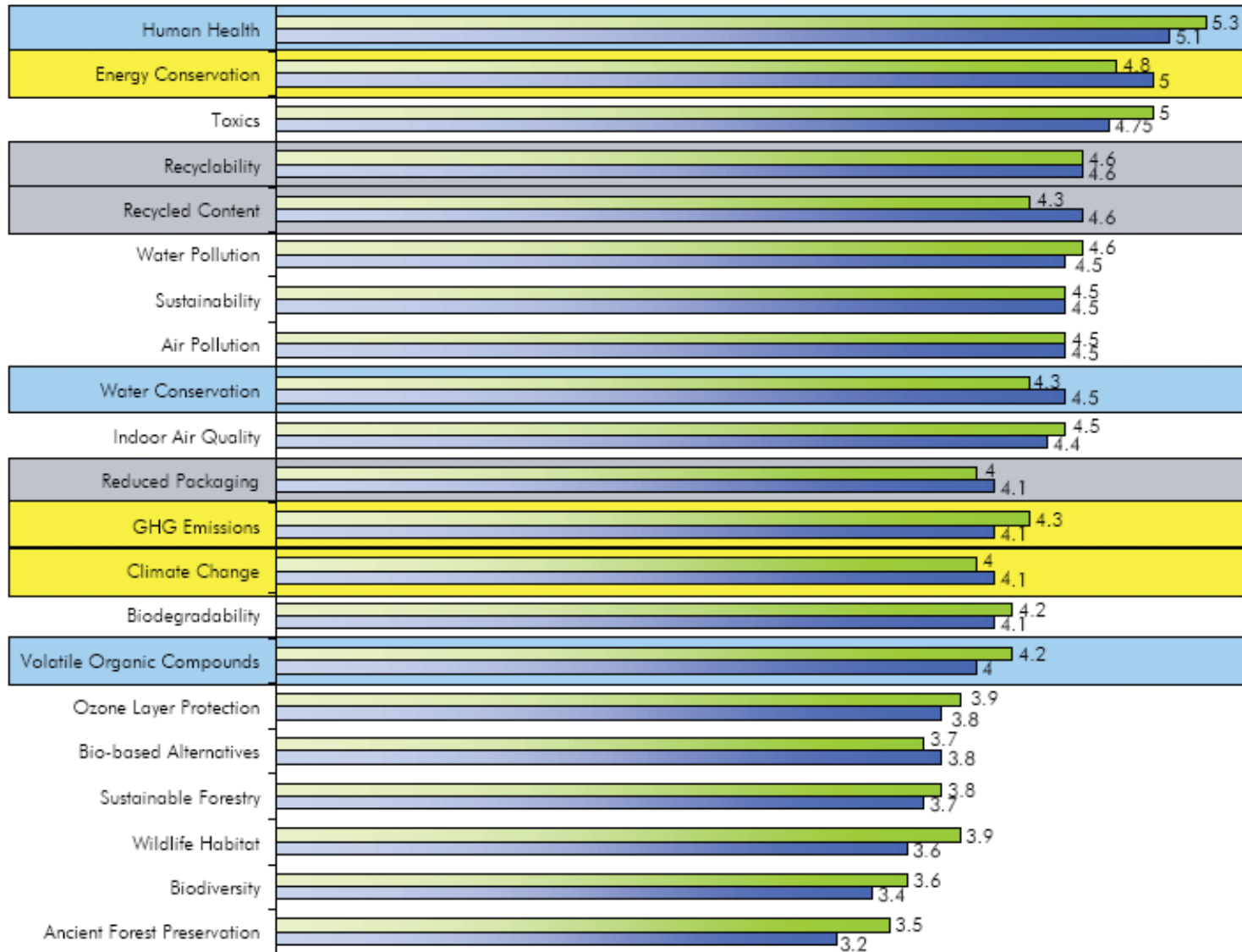
81% of respondents use a best-value approach to purchasing - an approach that allows purchasers to weigh several factors - not just price - in their decisions.

## Factors *Always* Considered by Respondents Who Use a Best-Value Approach to Purchasing



# Market Trends

**Relative Importance of Environmental Issues**  
Scale of 1 (Least Important) to 6 (Most Important)



2007  
2008

## Lessons for Marketers

- Speak "recyclability" and "recycled content" (not reduced packaging)
- Emphasize "energy conservation" (not 'GHG emissions' or climate change')
- Talk about "human health" (not 'indoor air quality' or 'VOCs')

# Market Trends

The issues of **energy conservation** and **recycled content** in products **became more important** to purchasers between 2007 and 2008.

- Financial Impact
- Environmental Impact
- Human Health Still Leading Importance

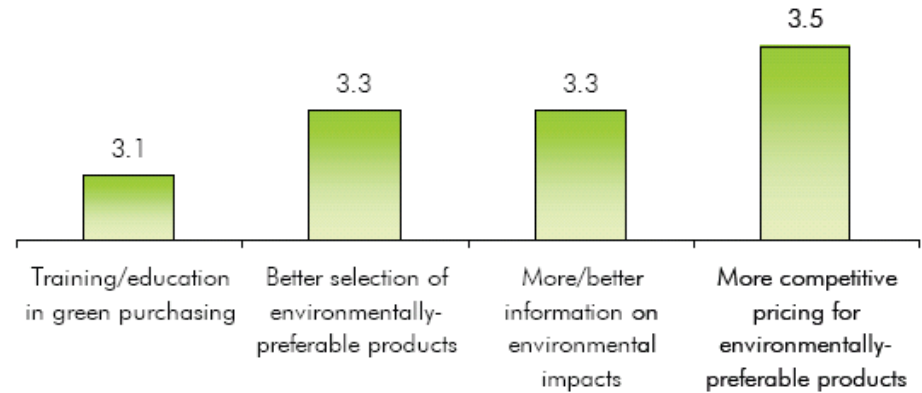
# Market Trends

Buyers feel that green-purchasing **training and education** would help stimulate more green procurement.

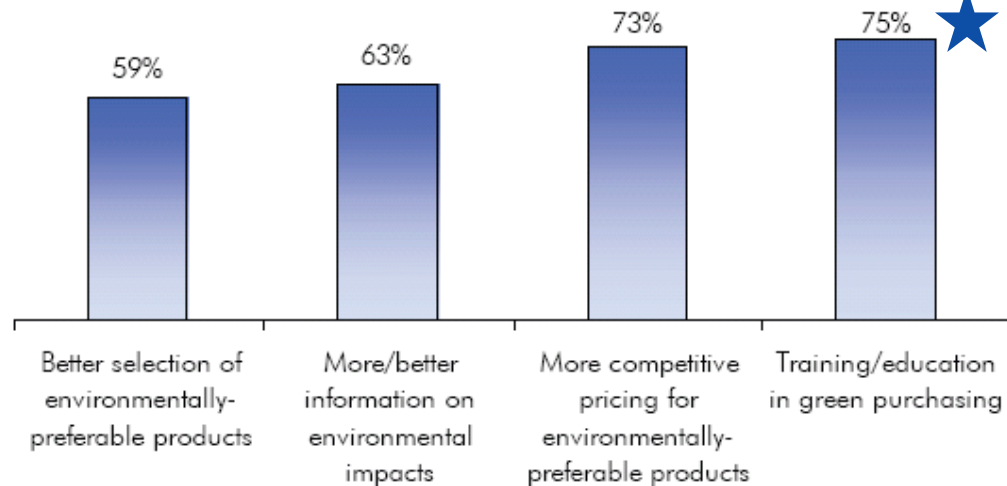
## Approaches That Would Help Organizations Do More 'Green' Purchasing

2007

Five point rating scale



2008



# Market Trends

## Greenwashing

The act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service.



### The Six Sins of Greenwashing™



In an effort to describe, understand, and quantify the proliferation of greenwashing, TerraChoice Environmental Marketing conducted a research study of six category-leading big box stores in 2007.

The survey results revealed that the practice is pervasive. The results also prompted us to isolate and categorize the Six Sins of Greenwashing:

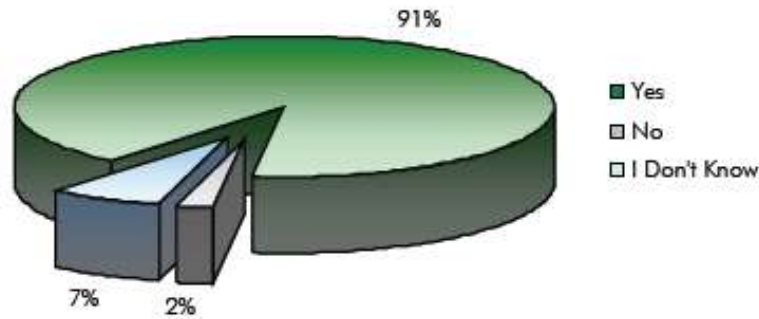
1. *Sin of the Hidden Trade-off*: Products that are said to be green based on limited environmental attributes, and without consideration for other, potentially negative qualities.
2. *Sin of No Proof*: Environmental claims that cannot be easily substantiated with supporting information.
3. *Sin of Vagueness*: Environmental claims that are poorly defined or overly broad.
4. *Sin of Irrelevance*: Environmental claims that may be truthful but are unrelated to the product.
5. *Sin of Fibbing*: Environmental claims that are simply false.
6. *Sin of the Lesser of Two Evils*: Environmental claims that may be true within the product category, but that may distract from the greater negative impacts of the category as a whole.

Download 'The Six Sins of Greenwashing™' at  
[www.terrachoice.com/greenwashing](http://www.terrachoice.com/greenwashing)

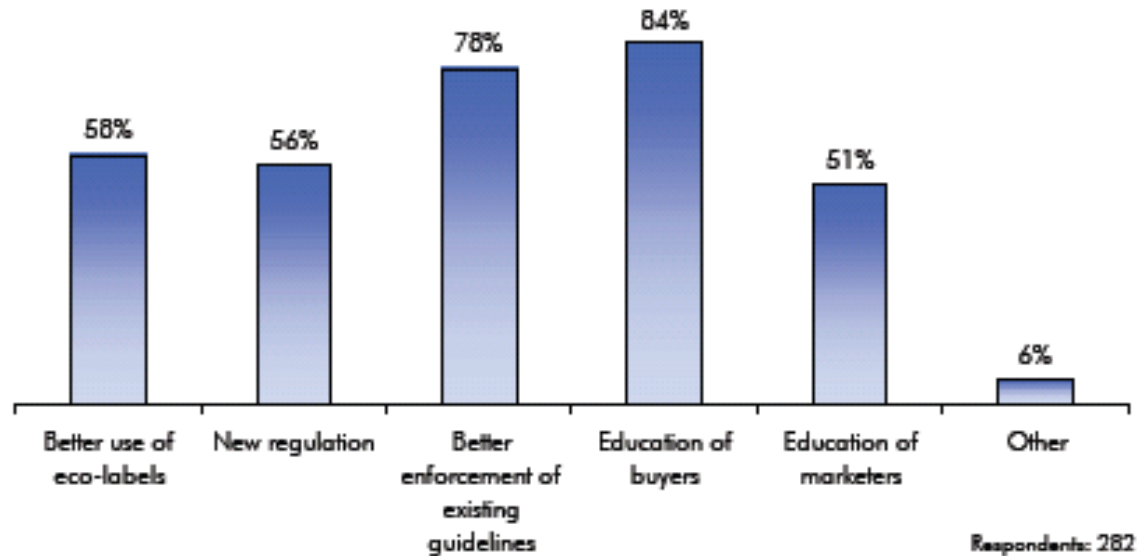


# Market Trends

## Whether or not Purchasers Feel Greenwashing is a Problem that Needs to be Addressed



## How the Problem of Greenwashing Should be Addressed



Respondents: 282

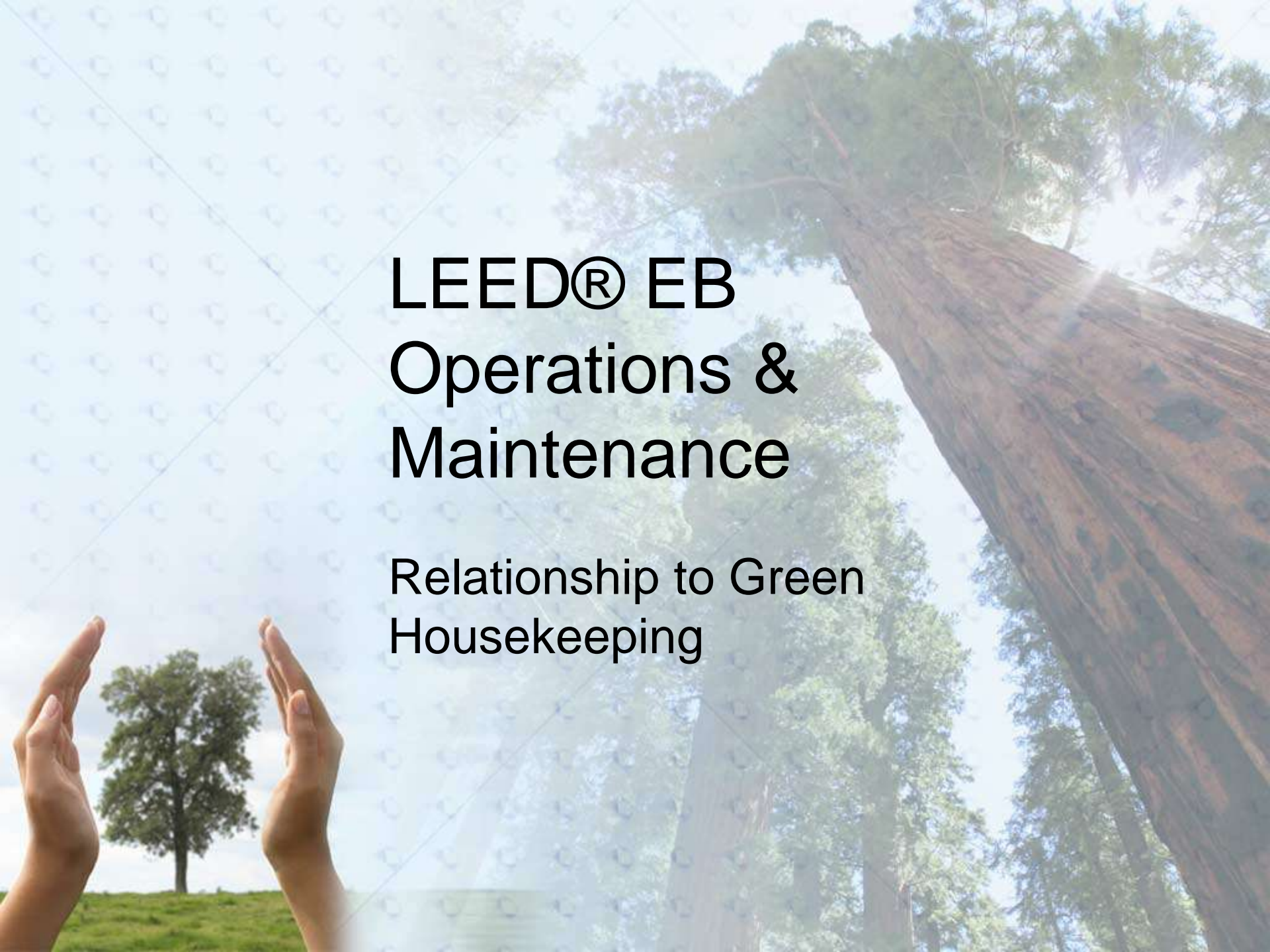
# Market Trends

## Purchasers' Top Ten: Most used eco-labels



■ 2007  
■ 2008

- Focus on Health, Environmental, Financial Impacts



# LEED® EB Operations & Maintenance

Relationship to Green  
Housekeeping

# US Green Building Council

- LEED® Existing Building Operations & Maintenance
- Certification based on voluntary performance standards for sustainable operations of a building
- Framework to maximize operational efficiency while minimizing environmental impact of a building



# LEED® EB Operations & Maintenance

- Four Levels of Certification
  - Certified: 34 – 42 points
  - Silver: 43 – 50 points
  - Gold: 51 – 67 points
  - Platinum: 68 – 92 points
- Categories
  - Sustainable Sites (up to 12 points)
  - Water Efficiency (up to 10 points)
  - Energy & Atmosphere (up to 30 points)
  - Materials & Resources (up to 14 points)
  - Indoor Environmental Quality (up to 19 points)
  - Innovation in Operations (up to 7 points)

# LEED® EB Operations & Maintenance

- Relationship to Green Housekeeping
  - Green Cleaning Policy a Prerequisite
  - Green Cleaning Up to 9 Points
  - Other Housekeeping Activities Up to 5 Points
  - 14 of 34 points towards certification (41%)



# LEED® EB Operations & Maintenance

- Green Cleaning
  - Green Cleaning Policy (Required)
  - EQ 3.1 – High Performance Cleaning Program (1 Point)
  - EQ 3.2-3.3 – Custodial Effectiveness Assessment (APPA Guidelines) – (1-2 Points)
  - EQ 3.4-3.6 – Purchase of Sustainable Cleaning Products and Materials (1-3 Points)
    - Cleaning Products
    - Disinfectants
    - Metal Polishes
    - Floor Finishes, Strippers
    - Disposable Janitorial Paper Products
    - Hand Soaps

# LEED® EB Operations & Maintenance

- Green Cleaning, Cont.
  - EQ 3.7 – Sustainable Cleaning Equipment (1 Point)
    - Vacuum cleaners, autoscrubbers, carpet extractors, floor equipment, etc.
  - EQ 3.8 – Entryway Systems (1 Point)
    - Grills, grates, mats, etc.
  - EQ 3.9 – Indoor Integrated Pest Management (IPM) – (1 Point)



# LEED® EB Operations & Maintenance

- Green Housekeeping - Additional Points
  - SS Credit 2 – Building Exterior and Hardscape Management (1 Point)
    - Maintenance equipment, snow/ice removal, cleaning of exterior, paints/sealants, etc.
  - SS Credit 3 - Integrated Pest Management, Erosion Control, Landscape Management Plan (1 Point)
    - Environmentally sensitive plan for sites natural components

# LEED® EB Operations & Maintenance

- Green Housekeeping - Additional Points, Cont.
  - MR Credit 6 – Waste Stream Audit (1 Point)
  - MR 7.1 – 7.2 – Ongoing Consumables (1-2 Points)
    - Battery Recycling
    - Reuse, Recycle, Compost Ongoing Consumable Waste Stream



# USGBC - LEED ® EB O&M

- Examples of Additional Credit Areas
  - Alternative Commuting Transportation
  - Water Performance Measurements
  - Cooling Tower Water Management
  - Energy Efficiency Performance
  - On Site & Off Site Renewable Energy
  - Reduced Mercury in Lamps
  - Reduced Particulates in Air Distribution
  - Occupant Controlled Lighting
  - Thermal Comfort Monitoring



# USGBC - LEED ® EB O&M

- **Summary**

- Sustainable choices for your facility
- Improve energy efficiency
- Improve worker health and cleaning processes
- Increase environmental commitment
- Improve operations and realize financial savings





# Manufacturer & Distributor Trends

Rochester Midland  
Corporation  
xpedx Upstate NY

# Manufacturer/Distributor Trends

- Focus on Sustainability
  - Health
  - Environment
  - Financial
- Evaluation, Support, Training, Implementation, Measurement
- Support in Product Consolidation, Process Improvements and Assistance in Attaining LEED EB Certification

# Manufacturer/Distributor Trends

- Sustainable Cleaners – New Technology and Resource Reduction
  - Biobased Derivatives
  - Hydrogen Peroxide
  - Biological Cleaners
  - Closed System, Portion Controlled Concentrates
  - Recyclable Packaging
  - Packaging Made from Recycled Content

# Equipment Stewardship

## Auto Scrubbers

- **Reduce water-use** in the cleaning process by new technologies. Super concentrates, Foam and ec-H<sub>2</sub>O (Electrically Converted Water)
- **Re-use cleaning solutions**
  - Extended scrub technologies will dramatically increase productivity, conserve water usage and lower waste water disposals costs
- **Recycle detergent packaging**
- **Battery powered equipment must have gel batteries**
- **Use ergonomically designed power equipment to minimize vibration, noise and user fatigue**

# **Equipment Stewardship**

## **Vacuum Cleaners/Carpet Extractors**

- Vacuum units certified by Carpet & Rug Institute (CRI) “Green Label Testing Program”
- Carpet extraction equipment certified by CRI “Seal of Approval”
- Units that operate with sound level less than 70 dBA

# Equipment Stewardship

## Carpet Extraction Process

- Carpet Extractors- Select units with 3 stage vacuum motors to insure maximum water recovery
- Dry time is critical, make sure Air Handlers are on and use floor dryers
- Mold grows in warm (68 to 86 degrees) dark places. Mold can form in as little as 48 hours. Once mold forms the carpet itself becomes a food source
- Implement carpet care training programs



# Manufacturer/Distributor Trends

- Sustainable Towels/Tissue
  - Kimberly-Clark (KC) has received GreenSeal™ certification on 8 towel/tissue products
  - KC's primary position is source reduction throughout supply chain
  - Development of KC "Green Meter" to determine environmental and sustainability impact comparison of like towel and tissue products

# Manufacturer/Distributor Trends

- Sustainable Towels/Tissue
  - SCA Tissue earned GreenSeal certification on its Tork Brand
  - Makes Tork Brand largest away from home sanitary paper product in North America to earn certification by both GreenSeal and EcoLogo



# Manufacturer/Distributor Trends

- Hand/Skin Care
  - GreenSeal or EcoLogo certified hand soaps
  - Use of biobased ingredients
  - Biodegradable formulas are proven effective, yet mild enough for general handwashing
  - Variety of dispensing options including touch free dispensers



# Manufacturer/Distributor Trends

- Facility & Cleaning Process Evaluation
  - Set Realistic Objectives
  - Benchmark Current Process
    - Building Audits
      - Identify areas of concern, process and product improvements
    - Hazardous Material Analysis

# Manufacturer/Distributor Trends

- Training & Support
  - Workers
    - Explain why choices are made – building occupant and custodial staff health and safety
    - Show process in using new products and equipment
  - Publicize efforts throughout workplace and community

*“Monroe County has saved approximately \$25,000 during the first year of this partnership by switching from conventional cleaners to green products”*

*“Concentrated green cleaners have enabled the County to decrease its annual use of 13,000 cleaning bottles to 630!”  
(nearly .7 tons plastic saved)*

*“...the dispensing system has reduced product usage by 30%.”*

# Manufacturer/Distributor Trends

- Implement & Measure Results
  - Productivity
  - Absenteeism
  - Cleaning Effectiveness (APPA Guidelines)
  - Source Reduction
  - Health/Safety
  - Financial
- Reevaluate and set new goals





# Case Studies

Implementing Sustainable Green  
Housekeeping at Rochester  
Institute of Technology

Sustainable Choices at Rutgers  
and Whole Foods

# RIT Facility Management Services

- Why Did We Change?
  - Reduction and Consolidation of Cleaning Products
    - From 16 cleaners to 4 primary cleaners
    - Move from RTU's to concentrates
    - Cost in use reduction
    - Easier selection, training
  - Good for workers, students, faculty health
    - Eliminate use of harsh acids and bleach
  - RIT commitment to leadership in environmental programs

# RIT Facilities Management Services

- Changes in Facilities Management
  - Portion Controlled Concentrated Cleaning Products
  - Low Maintenance Floor Care
  - Ride-On Equipment
    - Time, Labor, Effectiveness
  - Increased Recycling Programs
  - Paper Products Meeting EPA Comprehensive Procurement Guidelines
    - Bathroom Tissue – 20-60% Post Consumer Recovered Fiber
    - Paper Towels – 40-60% Post Consumer Recovered Fiber

# RIT Facilities Management Services

- Implementation
  - Top down decision
  - Partnership with Distributor and Manufacturer on equipment use, product application, and process
  - 3 Training Modules Annually
    - Each employee trained as a Certified Green Housekeeper
  - Communication with staff critical
  - Promote efforts within internal newsletters, Imagine RIT, press releases

# RIT Facilities Management Services

- Challenges
  - Custodial staff most affected by new systems and products
    - Do new products work as well?
    - Inform staff more resident time for cleaning products may be required
  - Continual communication and training necessary for them to adopt and use new system most effectively



# RIT Facilities Management Services

- Measuring Results
  - Financial Benefit
  - Safer Materials
  - Less Risk for Workers
  - Custodial staff pleased with performance and RIT's choice for safer materials for them



# Questions & Answers

