Afternoon Sessions

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

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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

Organization Size
Number of employees

- Less than 100: 42% (2007), 26% (2008)
- 100-499: 15% (2007), 16% (2008)
- Greater than 5000: 17% (2007), 29% (2008)
Market Trends

Organization Type

- A government department or agency: 28% (2007), 31% (2008)
- A private or public company: 52% (2007), 52% (2008)
- A not-for-profit organization: 12% (2007), 9% (2008)
- Institution: 4% (2007), 8% (2008)

Respondents: 282
Market Trends

The Prevalence of ‘Green’ Purchasing Policies at our Respondents’ Organizations

2007

- 30% (Yes, we have a ‘green’ purchasing policy)
- 60% (No, we do not have a ‘green’ purchasing policy)
- 10% (I don’t know)

2008

- 62% (Yes, we have a ‘green’ purchasing policy)
- 36% (No, we do not have a ‘green’ purchasing policy)
- 3% (I don’t know)
Market Trends

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

*Asked in 2008 Only.*

- **Always:** 32%
- **Sometimes:** 57%
- **Never:** 4%

Does not include “I don’t know”
Market Trends

Relative Importance of Purchasing Factors
Scale of 1 (Least Important) to 6 (Most Important)

- Availability: Not Asked in 2007
- Other Considerations: 3.3 (2007), 2.9 (2008)
- International Trade Restrictions: 2.8 (2007), 2.6 (2008)
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.
Market Trends

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

- Human Health
- Energy Conservation
- Toxics
- Recyclability
- Recycled Content
- Water Pollution
- Sustainability
- Air Pollution
- Water Conservation
- Indoor Air Quality
- Reduced Packaging
- GHG Emissions
- Climate Change
- Biodegradability
- Volatile Organic Compounds
- Ozone Layer Protection
- Bio-based Alternatives
- Sustainable Forestry
- Wildlife Habitat
- Biodiversity
- Ancient Forest Preservation

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

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

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

Buyers feel that green-purchasing **training and education** would help stimulate more green procurement.
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.terраchoice.com/greenwashing
Market Trends

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

- 91% Yes
- 7% No
- 2% I Don't Know

How the Problem of Greenwashing Should be Addressed

- 58% Better use of eco-labels
- 56% New regulation
- 78% Better enforcement of existing guidelines
- 84% Education of buyers
- 51% Education of marketers
- 6% Other

Respondents: 282
Market Trends

Purchasers’ Top Ten: Most used eco-labels

- EcoLogo: 19% (2007), 27% (2008)
- Green Seal: 21% (2007), 26% (2008)
- FSC: 18% (2007), 23% (2008)
- Greenguard: N/A (2007), 6% (2008)
- Sustainable Forestry Initiative: 8% (2007), 12% (2008)
- SPF: 7% (2007), 10% (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-H2O (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
Manufacturers/Distributors

Trends

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

“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%.”
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