



Markets, Metrics, and Madness: Counting Beans or Changing Markets

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Overview

- Partner Goals and Strategies
- Issues and Challenges
- Market Data: Appliances
- Market Data: Lighting
- 2003 Double Your Savings with ENERGY STAR Clothes Washer Campaign
- Conclusions
- Appendix: Assorted Market Data for Appliances and Lighting



Issues and Challenges

Issues and Challenges



1. Data Availability

- Market and market share data for program design and program impacts
- Can data be obtained and analyzed on a regular basis?
- Light bulb point-of-sale retail scanner data no longer available to syndicated data suppliers

2. Program Metrics

- Who defines?
- Should they be narrow or broad?
- How should they be — or do they need to be — aligned with other market actors?

Issues and Challenges



3. Market Transformation

- Do we have the staying power and dollars to change markets?
- Will resurgence of utility least-cost planning derail market transformation efforts?

4. Market Alignment

- Resolving and/or understanding different business models and goals of market actors

Issues and Challenges



5. Who leads and who follows in markets?

- ### 6. We have the attention of manufacturers and retailers. Where do we go from here?



Partner Goals and Strategies

Goals and Strategies DOE



- **Main Goals**
 - Attain energy and peak savings
 - Increase utility \$ savings for consumers
 - Increase number of partners
- **Strategies**
 - Develop/implement specifications
 - Increase brand awareness
 - Consider new products
- **Market**
 - National, but limited dollars for support

Goals and Strategies EPA



- **Main Goals**
 - Carbon savings
 - Brand recognition
- **Strategies**
 - Develop/implement specifications
 - Label new products
 - Increase brand awareness
 - Employ environmental messaging
 - Target products with high carbon savings
- **Market**
 - Select utilities, states, and regions

Goals and Strategies Utilities, States, and Regional Alliances



- **Main Goal**
 - Regulatory bodies mandate energy savings goals
- **Strategies**
 - Rebates and other incentives
 - Consumer education/messaging/advertising
 - ENERGY STAR market development and support
 - Leveraging market actors (e.g., manufacturers and retailers)
- **Market - Service territory**

Goals and Strategies Manufacturers and Retailers



- Main Goals
 - Market share
 - Profit
 - Shareholder value
 - Customer loyalty
- Strategies
 - Develop brand awareness/loyalty
 - Sell volume
 - Sell higher margin products
- Create market differentiation
- Increase customer satisfaction
- Show social/community responsibility
- Market - National

Data Sources

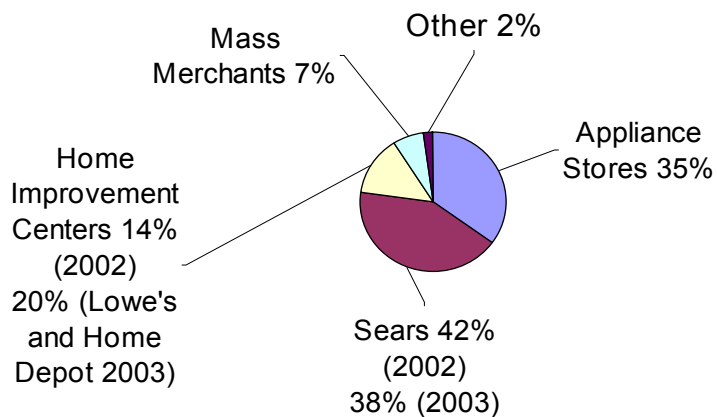


- Sales data from ENERGY STAR industry partners
- Trade publications
 - *HFN*
 - *Appliance Magazine*
- Syndicated data suppliers for data purchase
 - Triad
 - Vista
 - AC Nielson
- Industry trade organizations
 - AHAM
 - ARI
- Utility, state, regional data
 - Tracking studies
 - Market research
- Market analyst reports



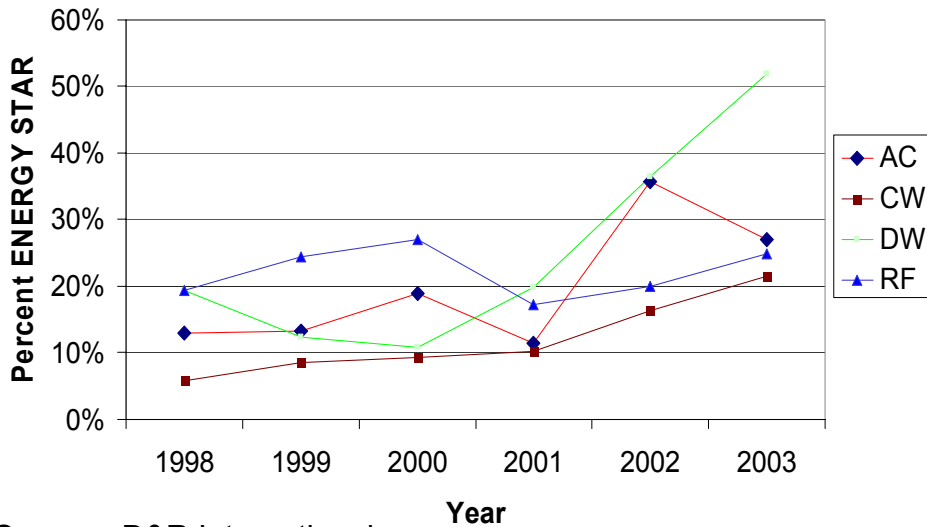
Market Data: Appliances

Appliance Market Share Retailer Type



Source: Home Furnishing News June 23, 2003 (2002 Data)
Associated Press, February 19, 2004 (2003 Data)

ENERGY STAR Appliances National Market Penetration

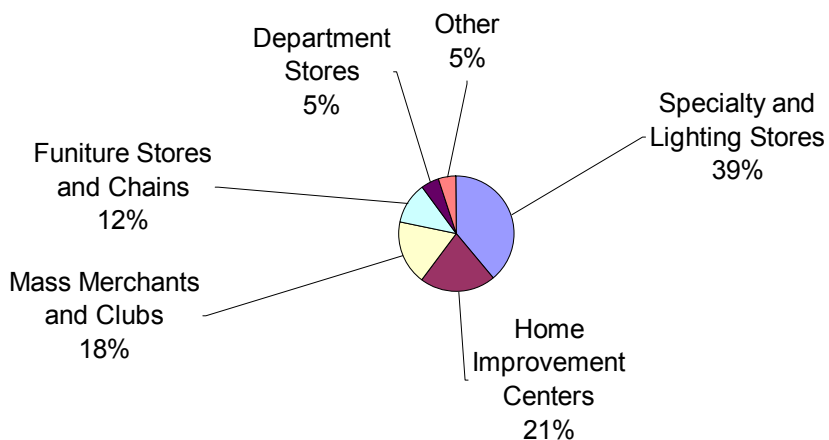


Source: D&R International



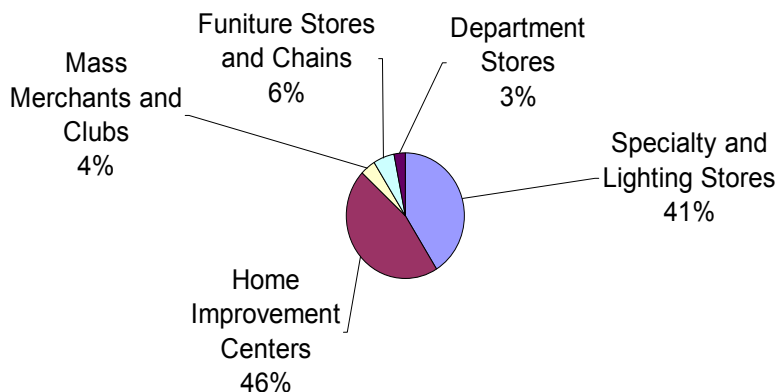
Market Data:
Lighting

Light Bulbs Market Share Retailer Type



Source: Home Furnishing News, June 3, 2003

Fixtures Market Share Retailer Type



Source: Home Furnishing News, June 3, 2003

Top Ten Lighting Fixture Retailers (2002)



Lighting Fixture Retailers	2002	
	Market Share	Dollars
Home Depot	24%	\$1,147.07
Lowe's	12%	\$589.60
Lighting One	5%	\$245.50
Wal-Mart Stores	5%	\$219.90
Lamps Plus	3%	\$141.75
J.C. Penney	2%	\$113.74
Target	2%	\$99.20
Sears	1%	\$72.40
TJX Cos.	1%	\$71.20
Kmart	1%	\$62.50

Dollars in millions. Total market is \$4,829.05 million.

Source: Home Furnishing News, June 3, 2003



Case Study: 2003 Double Your Savings with ENERGY STAR Clothes Washer Campaign

Campaign Elements



- April 15, 2003 to July 15, 2003
- Included
 - 9 manufacturers
 - Over 150 electric and water utilities
 - 16 states
- Utilities and states
 - Represented 18 million households
 - Supported 2,400 store fronts
- \$50 manufacturer rebate
- \$50 utility/state rebate
- Coordinated rebate fulfillment

Results



- 68,963 clothes washer coupons redeemed
- 18 million kWh/year saved
- 900,000 therms/year saved
- 525 million gallons water/year saved
- \$4.3 million/year in energy bill savings

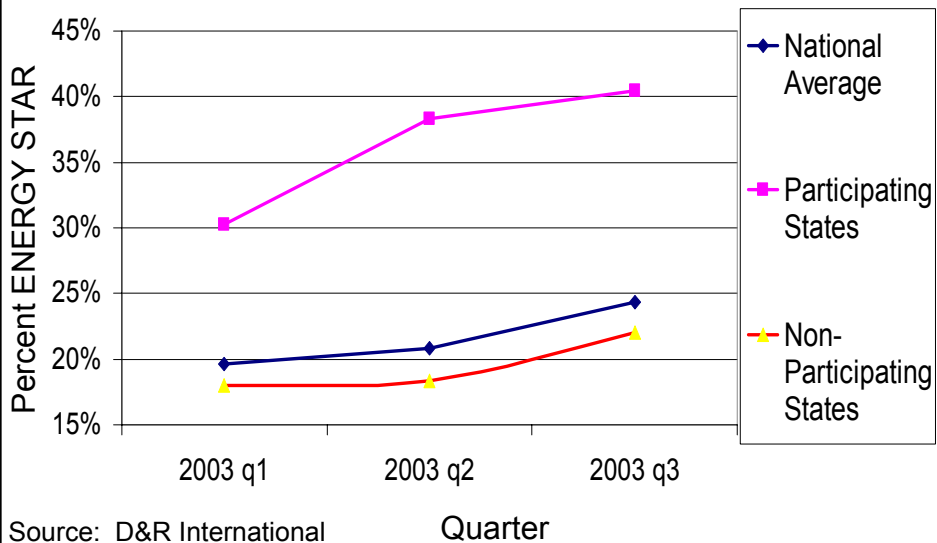
Results for Selected Participating States - Market Penetration Change



State	Q1 2003	Q3 2003	% Increase Q1 to Q3
Massachusetts	30.77%	42.20%	37.15%
Minnesota	33.19%	45.24%	36.32%
New York	21.48%	30.17%	40.45%
Oregon	38.21%	50.65%	32.56%
Wisconsin	30.84%	46.25%	49.98%
Vermont	39.04%	61.78%	58.25%

Source: D&R International

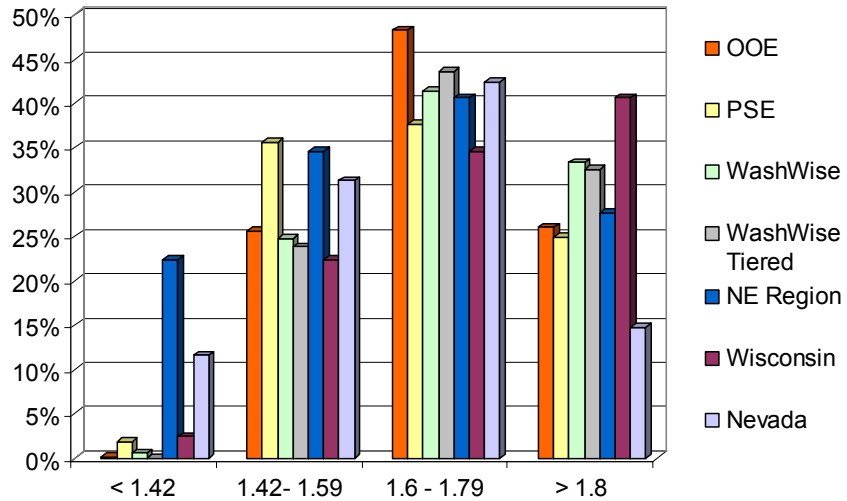
ENERGY STAR Clothes Washer Market Penetration



Source: D&R International

Quarter

Modified Energy Factor Tier Analysis Summary



Source: Portland Energy Conservation, Inc.



Conclusions

Conclusions



1. ENERGY STAR and energy efficiency have come a long way in the last 5 years, with market success and working relationships with non-traditional partners.
2. Next steps in market penetration are predicated on metric alignment and availability and sharing of market data for mutual benefit.

Conclusions



3. Policy alignment is important.
 - Savings goals can lead to dependence on rebates.
 - Move to market share as markets mature, but need to determine quantitative savings.
4. Consistent long-term funding will lead to changes in markets for energy efficiency goods and services.

Conclusions



5. ENERGY STAR must continue to challenge and support industry regarding product and equipment innovation.

- Most products become commodities over time.
- Innovation leads to continued interest in ENERGY STAR; continued savings opportunities; and continued margins, profits, and shareholder equity.

Appendix



Assorted Market Data: Appliances and Lighting



Market Data: Appliances

Manufacturer Market Share Dishwashers/Clothes Washers (2002)



- | | | | |
|------------------------------|-----|------------------------------|-----|
| • Dishwashers | | • Clothes Washers | |
| – Whirlpool | 35% | – Whirlpool | 51% |
| – GE | 34% | – Maytag | 23% |
| – Maytag | 16% | – GE | 18% |
| – Electrolux
(Frigidaire) | 15% | – Electrolux
(Frigidaire) | 8% |

Source: Appliance Magazine, September 2003

Manufacturer Market Share Refrigerators (2002)



- GE 36%
- Whirlpool 26%
- Electrolux (Frigidaire) 23%
- Maytag (Admiral) 13%
- Haier 2%

Source: Appliance Magazine, September 2003

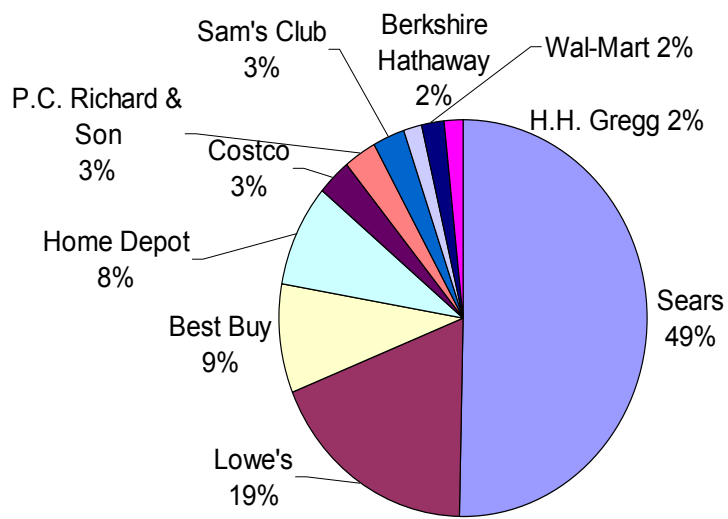
Manufacturer Market Share Room Air Conditioners (2002)



- LG Electronics 28%
- Fedders 22%
- Haier 12%
- Electrolux (Frigidaire) 11%
- Whirlpool 11%
- Sharp 4%
- Goodman (Amana) 3%
- Friedrich 3%
- Matsushita 2%
- Samsung 2%
- Carrier 2%

Source: Appliance Magazine, September 2003

Appliance Market Share Top Retailers



Source: Home Furnishing News, June 23, 2003



Market Data: Lighting

Light Bulbs at a Glance Typical Home (2002)



- 5 billion lighting sockets in U.S. homes
- 45 bulbs in use
- 15 bulbs in storage
- 1.6 bulbs/fixture
- 3.3 hours/day average use per bulb
- 55% standard incandescents

Source: Home Furnishing News, June 3, 2003

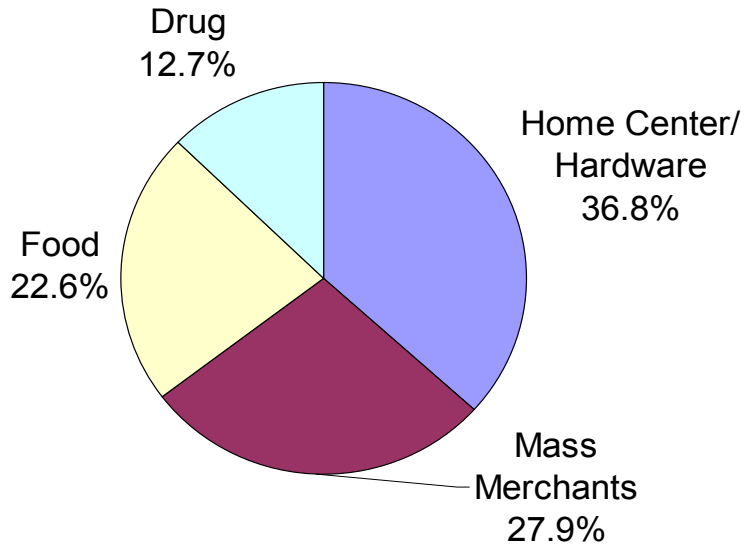
Lighting Fixtures at a Glance Typical Home (2002)



- 28 lighting fixtures
- 3.3 hours/day average use per fixture
- Most common fixtures:
 - Enclosed (20%)
 - Table/desk/floor (19%)
 - Built-in/bare (15%)
- 61% of home renovations include lighting
- Bedroom and kitchen have most fixtures
- 50% of remodeling jobs involve new fixtures in bedrooms, bathrooms, and kitchens

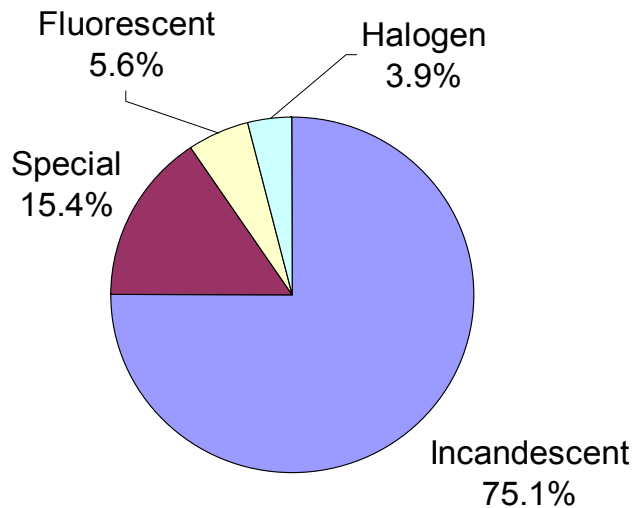
Source: Home Furnishing News, June 3, 2003

Light Bulbs Market Share Distribution Channel



Source: Home Furnishing News, June 3, 2003

Light Bulb Sales by Type



Source: Home Furnishing News, June 3, 2003