

Market Progress Evaluation Report **Executive Summary**
LightWise, No. 1

prepared by
The Gilmore Research Group
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NORTHWEST ENERGY EFFICIENCY ALLIANCE
www.nwalliance.org

529 SW Third Avenue, Suite 600
Portland, Oregon 97204
telephone: 503.827.8416 • 800.411.0834
fax: 503.827.8437

LightWise

Market Progress Evaluation Report #1

FINAL DRAFT

Prepared by:

The Gilmore Research Group

Edited by:

Heidi Hermenet

EXECUTIVE SUMMARY

This LightWise Market Progress Evaluation Report presents the findings of market research conducted by Gilmore Research Group on behalf of The Northwest Energy Efficiency Alliance (Alliance). This is the first in a series of ongoing evaluations of the LightWise program. This report brings together key findings from market research beginning in early 1996 and running through June 1998, including in-store audits, store and manufacturer records, program data, and surveys with retailers and consumers. Its purpose is to track the progress of LightWise, both where it has succeeded and where it needs improvement, in addition to monitoring the CFL market.

The goal of LightWise is to accelerate the awareness and use --among residential consumers -- of high efficiency light bulbs (compact fluorescent lights or CFLs) that meet Alliance standards. Greater consumer acceptance of CFLs matches the Alliance's desire to spur greater efficiency in lighting products and to transform the residential lighting market to one where high efficiency lights are more regularly used.

LightWise provides lighting manufacturers with financial incentives to:

- Stimulate the production of qualified CFLs and
- Lower the sales prices of the CFLs, making them more affordable to consumers.

If successful, these two effects will produce a cycle where increased demand leads to manufacturing efficiencies that in turn lowers prices and increases demand.

In this report, the following “measuring sticks” have been used to gauge the progress of the LightWise program and CFL market:

1. Product prices (including incentives) drop below pre-program levels for participating CFLs.
2. Shelf prices (without incentives) are \$10.00 or less.
3. Prices for non-participating CFLs drop below pre-program levels (indicating program CFL prices are pulling down non-program CFL prices).
4. The number of Northwest retailers stocking qualified CFLs year-round increases.
5. Retailers “regularize” program CFLs by stocking them in permanent, preferred shelf locations, and offering periodic in-store promotions rather than short-term “special sale” prices.
6. More qualified CFLs are shipped to and sold in the Northwest.
7. Consumer awareness of CFLs rises, consumer satisfaction is high, and consumers report they are likely to buy CFLs in the future.
8. The number of qualifying products expands.
9. Manufacturers expand manufacturing of qualified CFLs.

Key Findings

Table 1 presents program indicators of success and current program status of those indicators:

Table 1 <i>Indicators of Success for LightWise Program</i>	
Program Indicators	Program Status
1. Product prices (including incentives) drop below pre-program levels for participating CFLs. <i>(Note: Seven 1998 program CFLs were compared to nine 1996 non-program CFLs that had program model numbers.)</i>	<ul style="list-style-type: none"> • Prices have dropped. In April 1998, retail prices of program CFLs (including the \$4.50 incentive) ranged from \$12.50 to \$17.50. Pre-program prices (January 1996) ranged from \$15 to \$25. The average price dropped from \$19 for pre-program comparison CFLs to \$15 for the 1998 program CFLs. • Prices for participating CFLs during the life of the program have dropped as well – from an average of \$18 in November 1996 to \$15 in 1998.
2. Shelf prices (without incentives) are \$10.00 or less.	<ul style="list-style-type: none"> • Shelf prices for 4 of 7 program CFLs are below or just slightly above the \$10 goal. The other three bulbs are in the \$12 to \$13 range.
3. Prices for non-participating CFLs drop below pre-program levels.	<ul style="list-style-type: none"> • Prices for 7 of the 9 non-program CFLs dropped from January 1996 to April 1998 – on average, from almost \$19 down to \$16.
4. The number of Northwest retailers stocking qualified CFLs year-round increases.	<ul style="list-style-type: none"> • The number of Northwest retailers stocking qualified CFLs year-round increased from 30, prior to the program, to 250 in 1997. • However, the number dropped to 145 in 1998, largely due to the loss of a major manufacturer that was the only supplier to many small retail outlets. In addition, a retailer with multiple outlets went out of business, and another retailer had some financial troubles which limited CFL stocking. • In 1998, 80% of participating retailers had program product in stock compared to 84% in 1997.

Table 1***Indicators of Success for LightWise Program***

Program Indicators	Program Status
5. Retailers “regularize” program CFLs by stocking them in permanent, preferred shelf locations and offering periodic in-store promotions rather than short-term “special sale” prices.	<ul style="list-style-type: none"> • The 1996 – 1998 retailer audits show that most retailers integrate program CFLs with non-program CFLs on regular shelf space as well as in special, end-of-aisle displays. • Significantly more CFLs are being stocked in preferred “eye-level” location. • In the 1998 retailer survey, 44% said they increased CFL shelf space (for CFLs of all kinds) over the same time last year, while just 3% said shelf space decreased. • 91% of the retailers said they regularly stock LightWise CFLs during peak lighting seasons.
6. More qualified CFLs are shipped to and sold in the Northwest.	<ul style="list-style-type: none"> • Prior to the program, few high-quality CFLs were shipped to retailers in the Northwest. LightWise shipped 134,156 in 1996, 203,998 units in 1997, and expects to ship 164,250 in 1998. A reduction from the original 1998 goal of 200,000 CFLs occurred due to late 1997 incentive invoices which reduced the 1998 budget. Note: The program assumes that the number of CFLs shipped, over time, closely matches the number of CFLs sold, since CFLs are not returned to the manufacturers.
7. Consumer awareness of CFLs rises, consumer satisfaction is high, and consumers report they are likely to buy CFLs in the future.	<ul style="list-style-type: none"> • Consumer awareness and use of CFLs appears to be on the rise, but awareness and satisfaction can still be improved. Findings from consumer surveys show that. . . . <ul style="list-style-type: none"> ➤ 60% of all homeowners are “aware” of CFLs ➤ 46% have at least one CFL installed in their home ➤ Over half (52%) are “very satisfied” overall with their CFLs (program and non-program CFL purchasers) ➤ Of the LightWise CFL purchasers, 74% are “very likely” to buy a CFL in the future.
8. The number of qualifying products expands.	<ul style="list-style-type: none"> • The number of qualifying CFLs has expanded from 6 in 1996, to 13 in 1997, to 17 in 1998.
9. Manufacturers expand manufacturing of qualified CFLs.	<ul style="list-style-type: none"> • Manufacturer commitment to high power factor CFLs is uncertain. The number of manufacturers participating in LightWise began at 2 in 1996 (Lights of America and Osram Sylvania), went up to 4 in 1997 (adding MaxLite and Enertron), and was reduced to 3 in 1998 (losing Osram Sylvania and Enertron but adding GE). Osram Sylvania left due their perception of high power factor CFLs as a “niche” market.

Additional key findings from the current market research are as follows:

Consumers

- Findings indicate that consumers who choose not to buy CFLs are basing their decision on perceived negative attributes of CFLs. Product improvements combined with skilled marketing can deal with public perceptions, if they are focused on certain key features of a product or service. When the discussion with consumers is about high price, light quality, and fit with fixtures, marketing efforts have the potential to be more successful.

Retailers

- Retailers who felt knowledgeable about CFLs now number 58% of those surveyed, compared to 43% last year, and 37% in 1996.
- Many retailers have incorporated CFLs into their regular ordering procedures. Ninety percent of the retailers surveyed believed that CFL sales will increase in the future.
 - Two-thirds of the stores surveyed had been program participants for all three years, and another 24% for two years. This finding suggests retailers place a high level of trust in the potential for LightWise CFLs to sell.
 - Retailers have experimented with pricing levels for CFLs, with annual swings of thirty percent or more not uncommon. Overall, prices for both LightWise and non-program CFLs are lower than in the baseline year of 1996. Using a simple ‘shopping basket’ measurement of non-program pricing, the aggregate cost of ten non-program, high power factor CFLs from different manufacturers was \$166.82 in 1996. In 1998, the same ten bulbs cost \$150.27, a reduction of 10%. LightWise CFL prices cluster around the \$10 target range set by the Alliance, with most bulbs below that price.
 - Overall, stores have made a large variety of both program and non-program CFLs available to customers, with good product placement, and lower prices than in previous years.

Manufacturers

- Another indicator of market change is the large number of non-program CFLs available in the marketplace. In 1998, store audits listed nearly 100 different models of non-program CFLs.

Barriers

Based on the research findings, it appears that the foundation of market transformation has been laid, and the recent introduction of similar programs in California suggests that the program results are attractive to others. Notwithstanding, research findings also indicate that several areas need to be addressed to truly achieve market transformation. These include:

- The program has not been successfully implemented in Idaho and Montana. From stocking levels to retailer and consumer awareness, these two states fall far behind Oregon and Washington.
- The largest barriers remain CFL price and customer unfamiliarity with the product. Absent funding for an extensive marketing campaign, it is essential that LightWise consider innovative marketing methods to sway the consumer.
- Only one manufacturer (LOA) is performing in the program successfully. Competition among participating manufacturers is needed to transform the market for residential CFLs.
- The retailers interviewed were dissatisfied with marketing materials, manufacturing representatives, and levels of support provided them by LightWise and participating manufacturers.
- Less than half (46%) of consumers who had used a CFL in the past had one installed in their home at the time of the interview and 70% had purchased CFLs only once. Satisfaction levels were measured on eight CFL attributes, and CFLs failed to surpass the 50% ‘very satisfied’ level on four of them. Messages aimed at the consumer need to focus more on those attributes where CFLs measure up to expectations, and re-shape consumer expectations for those attributes where CFLs fall short.
- No indicators suggesting sustainability of the program at current or increased levels are apparent.

Recommendations

Results suggest that there are several areas where program improvements would encourage the manufacture, distribution, and sales of LightWise compact fluorescent light bulbs.

- **Since product longevity is the primary benefit ascribed to CFL usage, a high priority should be placed on remedying failure rates in the future** (e.g., provide a rating system and information on failure rates). The research showed a higher than expected number of bulb failures, which in most cases led to consumers not repeating the purchase.
- **To achieve regional market transformation goals, additional effort should be placed on securing relationships with Idaho and Montana retailers.** Of the potential retailers, Albertsons has the greatest leverage power.
- **Consider revising the LightWise technical specifications for power factor and THD.** These changes may encourage additional manufacturers to participate in the program, and allow a much larger number of CFL products to qualify, in addition to increasing the rural distribution of CFLs. Since CFLs with a lower power factor cost less to manufacture, this change would also result in lower retail prices for LightWise CFLs.
- **Optimal CFL home applications should be highlighted in marketing materials (e.g., LightWise stickers or POP) to draw consumer attention with the intention of leaving a targeted and lasting impression.** By not explicitly recommending the optimal CFL home application, the LightWise program may be implicitly advocating CFLs as a candidate for every residential fixture.
- **The program should consider in-store product demonstrations for retailers and consumers.** Findings indicate that both retailers and consumers would like to see product demonstrations. These demonstrations may include information about CFLs in general, the LightWise program, as well as additional marketing materials obtained from retailers and manufacturers.

- **The program should continue its efforts to influence the potential ENERGY STAR[®] specifications for CFLs, even if it means reviewing its own manufacturing specification requirements.** ENERGY STAR[®] is currently evaluating technical and program specifications for CFLs. Although the retailer interviews showed that many were unaware of ENERGY STAR[®], those who knew of the program were overwhelmingly in favor of such an association. With LightWise scheduled to be phased out in one year, affiliation with ENERGY STAR[®] would reduce the possibility of CFLs becoming an orphan product.
- **The LightWise program should consider acknowledging retailer participation.** The enthusiastic and on-going participation of retailers is one of the building blocks of the program, and one that needs to be acknowledged sincerely—and frequently. Rewards should be simple, meaningful, and consistent, and express the program’s appreciation.