Discontinuing Residential CFL Incentive Programs: Lessons Learned from the Northwest

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KEMA

Overview

- Background
- Data Sources
- Findings
- Conclusions
- Recommendations
- Closing

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Northwest Energy Efficiency Alliance (NEEA)

- Encourages development and adoption of energy-efficient products and services
- Supported by utilities, Bonneville Power Administration, and Energy Trust of Oregon
- Serves ID, MT, OR, WA

NEEA Lighting Project History

Year(s)	Activities
1997-1999	• Addressed market barriers such as high first cost, lack of product availability; poor aesthetics, lack of consumer awareness
2000-2003	• Provided retailer education, salesperson training, advertising/marketing support
2004	• Continued retailer focus (primarily big box stores) • Coordinated with national campaigns • Supported CFL quality research and new product development
2005	• Provided upstream incentives to CFL manufacturers • Covered broad geographic area (including rural communities) • Included big box and other stores in promotion
2006-2007	• Continued to provide incentives to CFL manufacturers • Excluded large home improvement/some big box from promotion
2008	• Ceased active intervention in NW CFL market • Continued to monitor Northwest CFL market

NEEA Market Tracking Efforts

Activity	Frequency	Elements Tracked
Retail store shelf inventories	2005, 2006, 2008, 2009	• Presence/absence of CFLs; CFL price; number/diversity of models available; other elements by region, lamp style, store type
Interviews with CFL suppliers	2006, 2008, 2009	• Perspectives on market activity; current and future market trends
Interviews with utility program mgrs, retail store mgrs, NEEA project staff	Subset of these on annual basis	• Perspectives on market activity; current/ future market trends; program plans; CFL stocking patterns; satisfaction with NEEA promotions; other issues
Consumer telephone surveys	2004, 2005, 2006, 2010	• CFL awareness; purchase rate; installation behavior; satisfaction/perceptions of CFLs
Sales data reporting	Quarterly	• Promotional and non-promotional CFL sales by retail chain and store type
Market share estimation	Annually	• Northwest ES CFL market share of residential medium screw-base lamp sales

Central Questions

- **Did NEEA’s withdrawal of incentives for CFLs cause any changes in the Northwest residential market?**
  - If yes, what has changed and why?

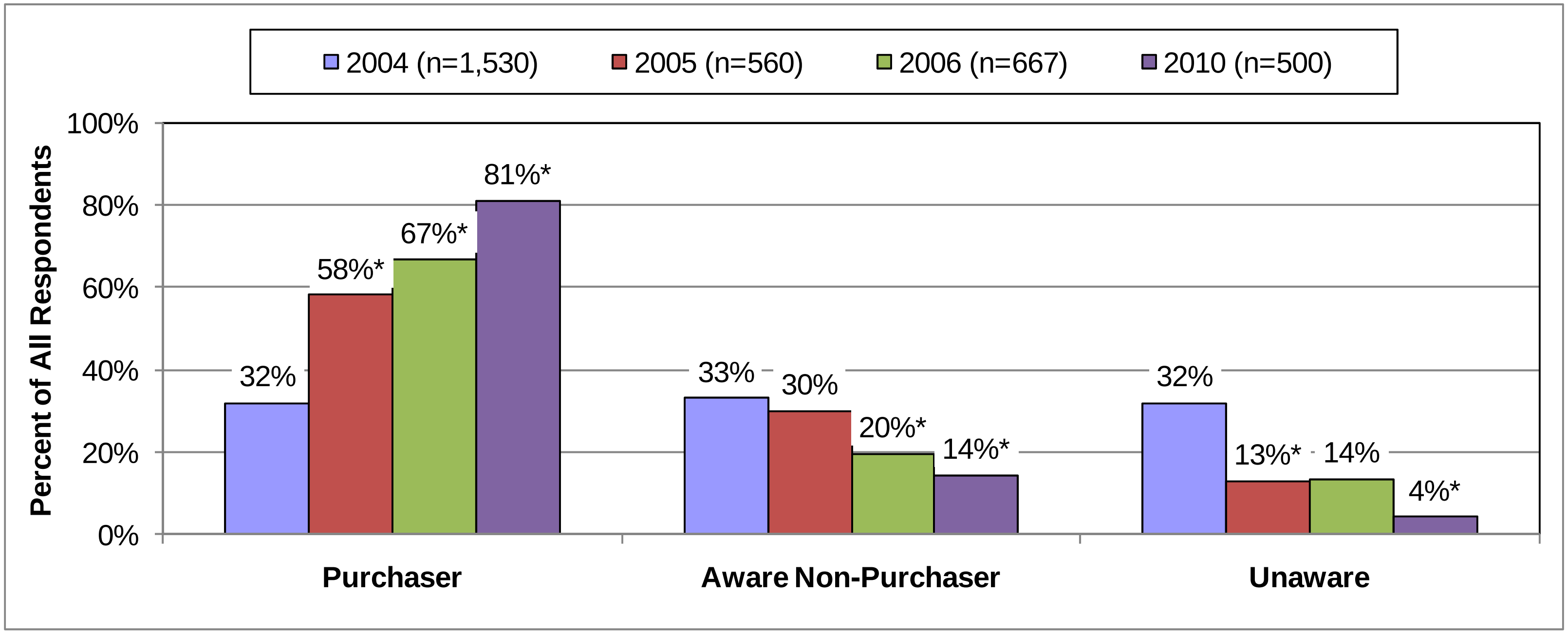
Data Sources

- **Consumer telephone surveys**
  – Representative samples of NW consumers
- **Retail store shelf surveys**
  – Representative samples of retail stores selling residential lamps in the NW(by geography, store type)
- **Sales data**
  – Actual and estimated CFL sales data obtained from Northwest retailers
- **Supplier interviews**
  – Conducted with manufacturers and retailers active in NW market

CFL Awareness and Purchases

- CFL awareness and purchase rates continue to increase
  - 81% of NW consumers have purchased CFLs

CFL Awareness and Purchase Rates, 2004—2010

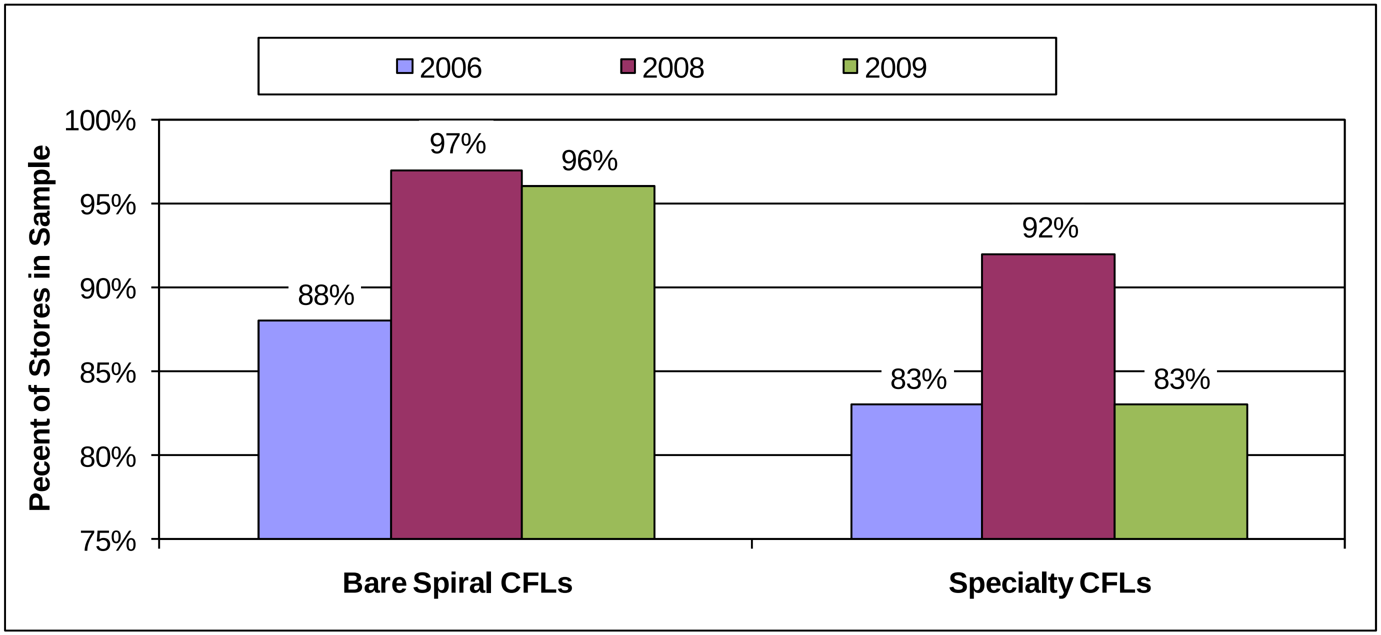


Source: KEMA, 2010. * Difference from prior study period (w/in respondent group) is statistically significant.)

CFL Availability

- No change in % of stores carrying bare spiral CFLs between 2008 and 2009
- Slight drop in % of stores carrying specialty CFLs
  - Driven by decrease in non-metro, non big box

Percent of Stores Carrying CFLs, 2006—2009

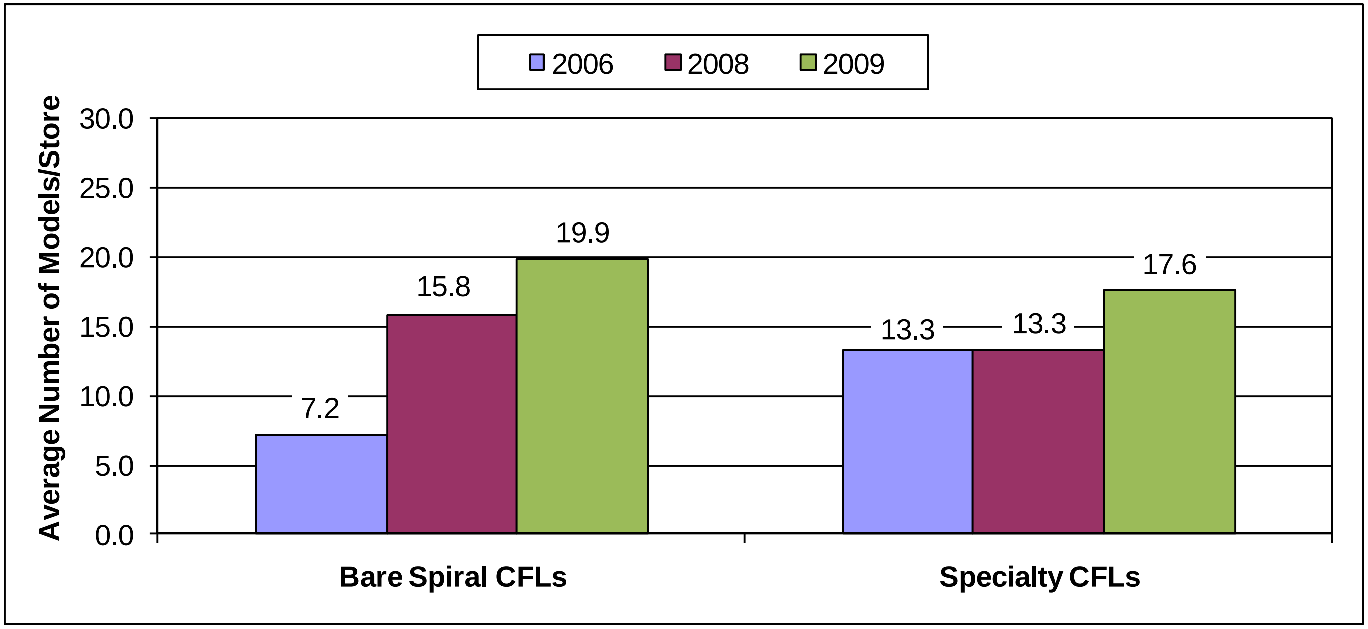


Source: KEMA, 2010.

CFL Diversity

- Increase in average number of spiral/specialty CFL models per store between 2008 and 2009
  - Metro stores drove increase for bare spirals
  - Non-metro stores drove increase for specialty

Average Number of CFL Models per Store, 2006—2009

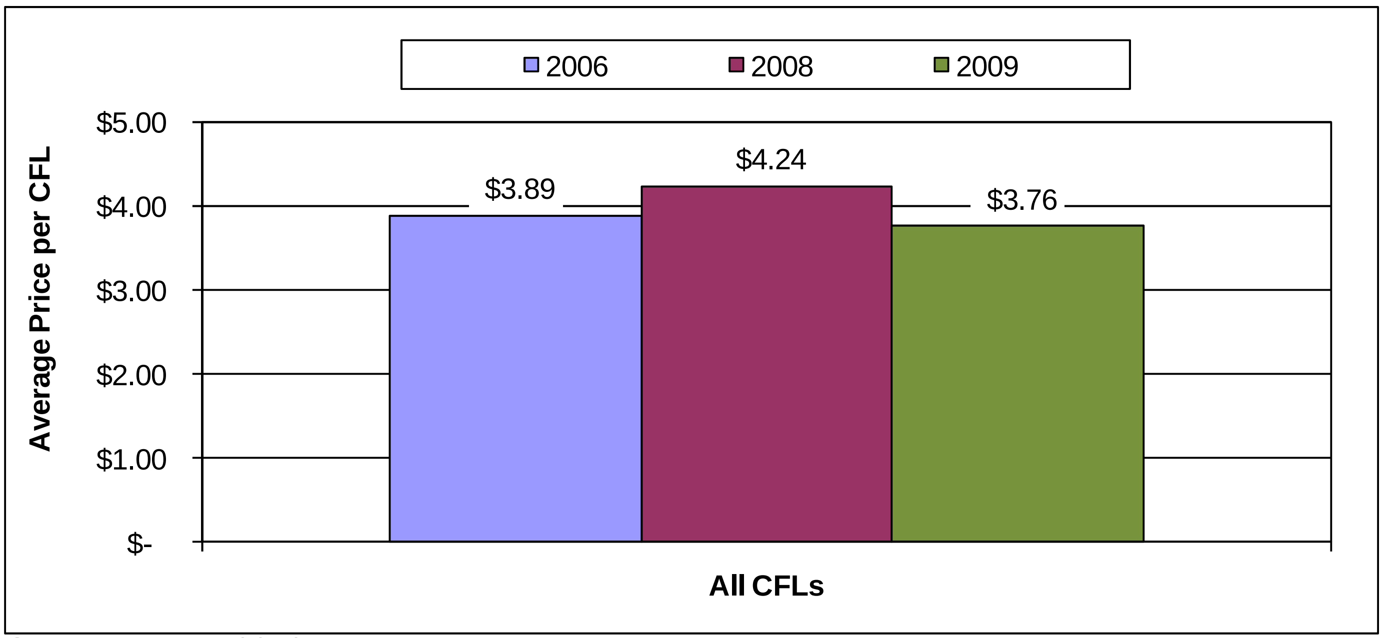


Source: KEMA, 2010.

CFL Affordability

- Slight drop in CFL price between 2008 and 2009
  - Greater drop in non big box vs. big box; still cheaper in big box
  - Greater price drop in non-metro vs. metro; 2009 prices similar between metro/non-metro

Average Northwest CFL Price, 2006—2009

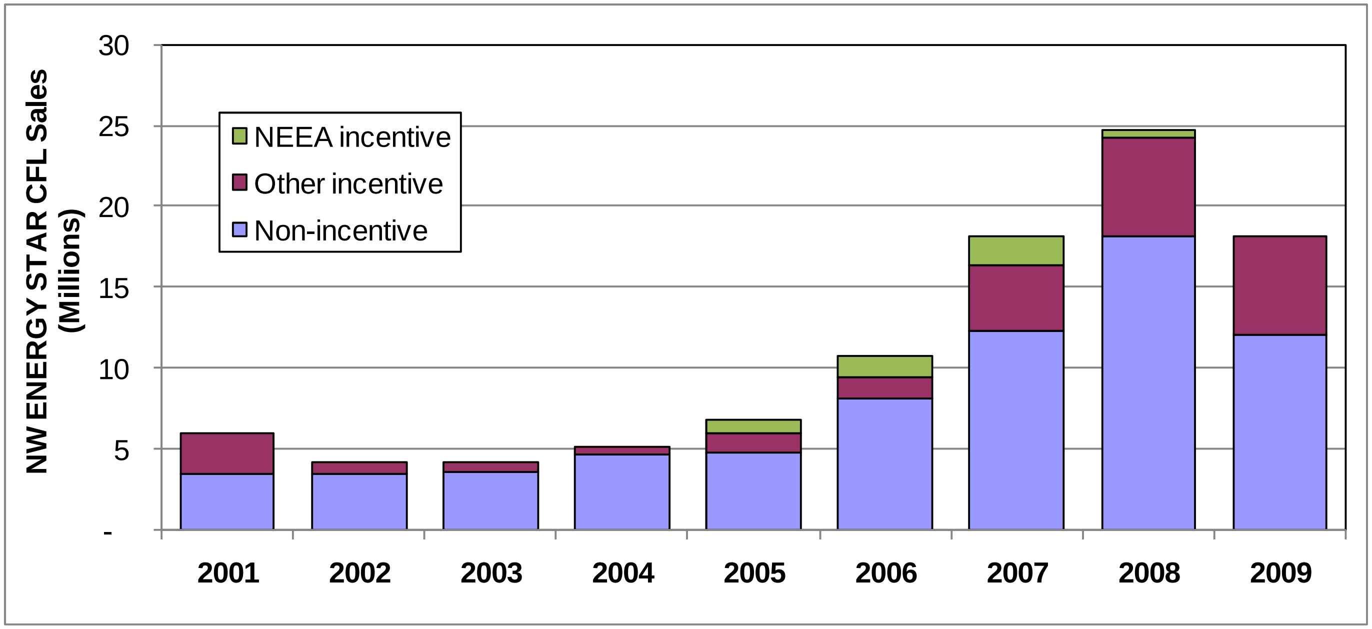


Source: KEMA, 2010.

CFL Sales

- 18.2 million CFLs sold in 2009
  - 26% decrease in sales between 2008 and 2009
- 34% drop in CFLs sold without utility incentives compared to 7% drop in CFLs w/utility incentives

Estimated ENERGY STAR CFL Sales in the Northwest, 2001—2009

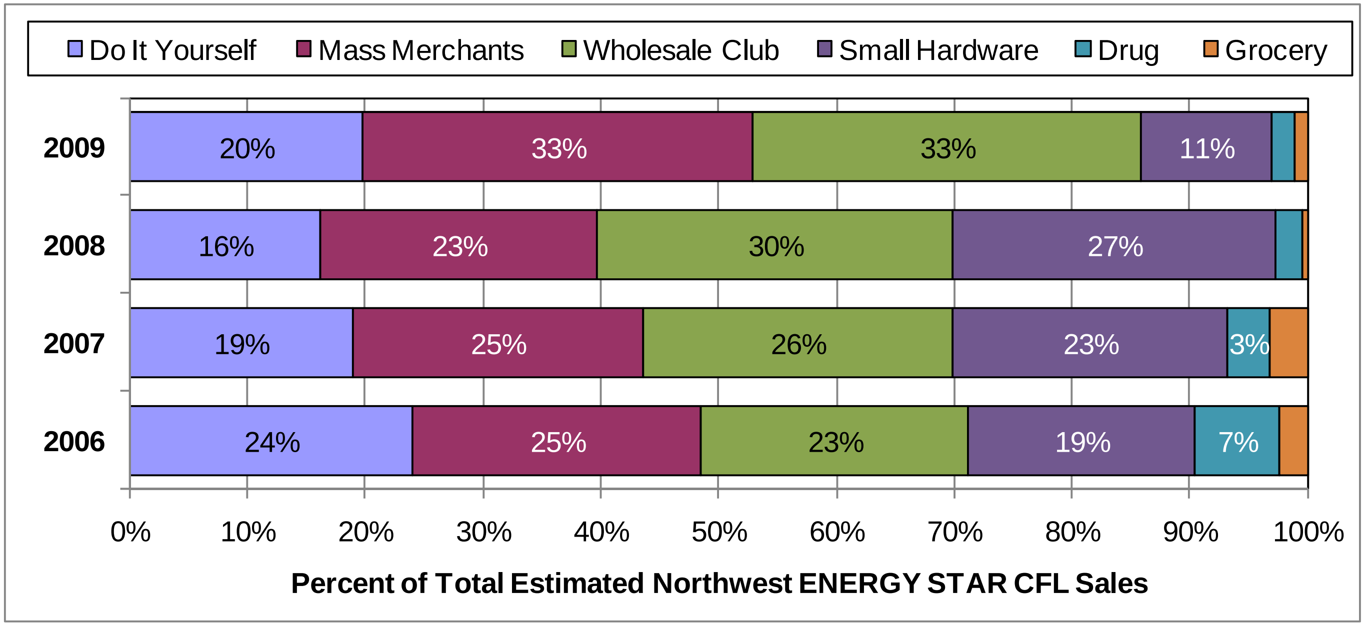


Source: KEMA, 2010.

CFL Sales

- After remaining constant for 3 years, big box market share went up 22% from 2008 to 2009
  - Non big box market share declined by 53%
  - Market share shifted toward mass merchants (+43%) and away from small hardware (-59%)

Estimated ENERGY STAR CFL Sales in the Northwest by Store Type, 2006—2009



Source: KEMA, 2010.

Conclusions

- Decreased overall CFL sales
  - No evidence that changes in availability, diversity, price caused decline
  - Suppliers blame the weak economy
- Could represent leveling off or slight decline in CFL market
  - Purchase and storage rates increasing; sales may continue to decline because consumers feel they already have enough CFLs
  - Only 10% of consumers have no CFLs

Conclusions

- Sales of utility-discounted CFLs affected less than sales of non-promotional CFLs
  - Utility incentive sales represented increased % of total CFL sales in 2009
- Majority of incentives directed to big box
  - Consumers purchasing more CFLs in big box stores than non big box stores
  - Sales declined in non big box stores (particularly small hardware)

Recommendations

1. Establish CFL program market transformation goals and metrics <u>early</u>
2. Monitor lighting market for promising emerging products; develop next generation of programs <u>early</u>
3. Undertake rigorous market tracking efforts
4. Continue market tracking efforts after CFL programs are eliminated, scaled back, or substantially altered

Recommendations

5. Continue relationships with CFL suppliers after CFL incentives are discontinued
6. Consider efforts to educate consumers regarding the full range of CFL installation potential in their homes

Thank You!

- Thank you for your attention…
- And thank you to my co-authors!
  – Anu Teja, NEEA
  – Tami Rasmussen, EcoNorthwest

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