



CFL Market Overview

ENERGY STAR Lighting Partner Meeting

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Presented by

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CFL Market Profile



- Finalized February 2009
- Posted to www.energystar.gov

Agenda



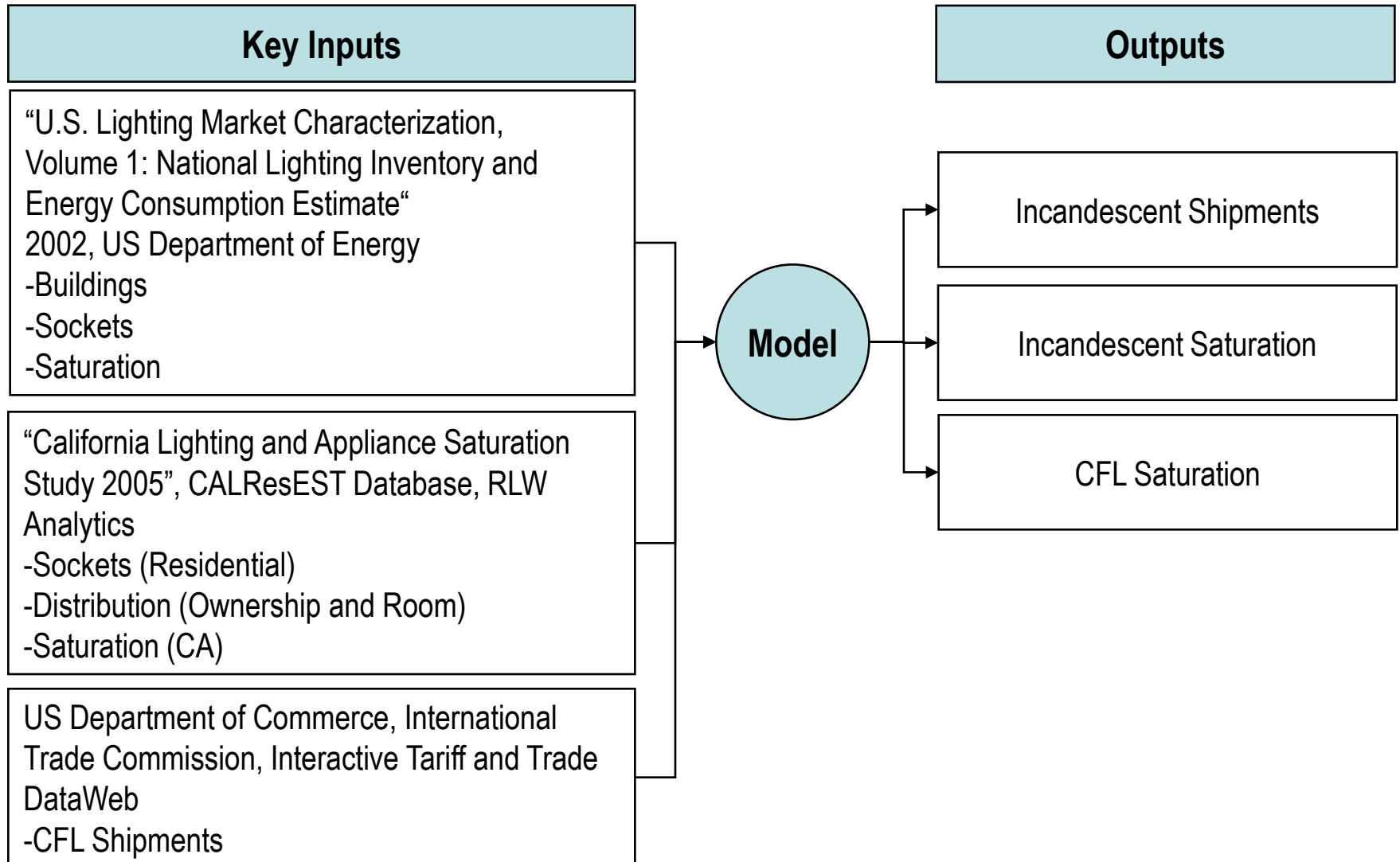
- Key insights from CFL market profile
- Implications for EEPS
- Methodology for analysis (Time permitting)

Key Insights from CFL Market Profile



- CFLs are still the most cost-effective and easiest ways of generating energy savings.
- The market is not transformed.
- Savings potential remains huge.
- Even where CFLs have been promoted intensively.
- You get what you pay for...more investment = more saturation/savings.

Saturation Estimates Grounded in Reality



Shipments and Market Share



- Dramatic growth until 2007; plateaued in 2008; uncertain going forward

- Cumulative CFL purchases now impacting incandescent market

- Market is not transformed:

3 out of 4 units shipped still incandescent

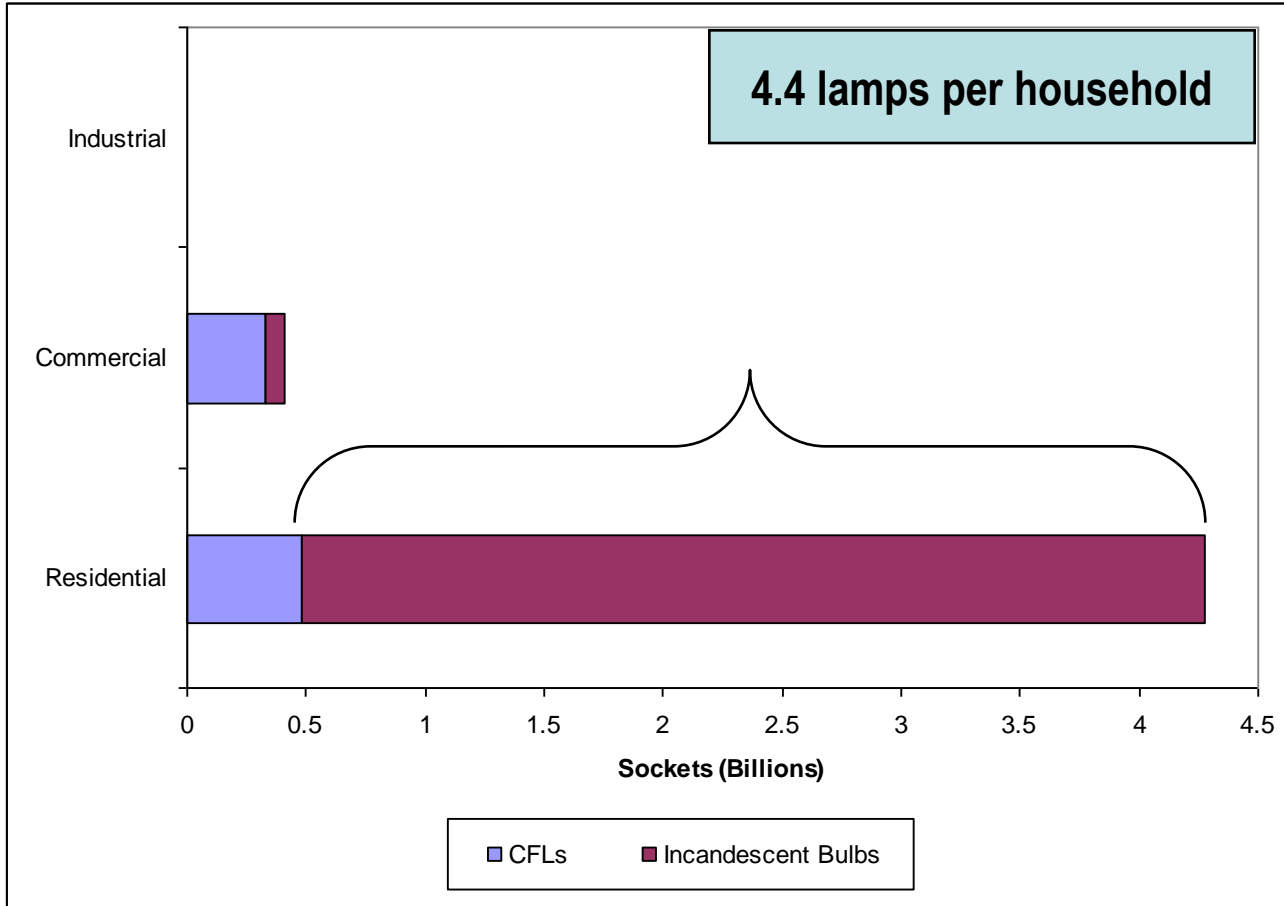
Recession impacted sales—price may still be a barrier

Sources:

CFL Shipments – Department of Commerce

Incandescent Shipments – D&R, based on Navigant Lighting Study, RECS, DOC

National Socket Saturation

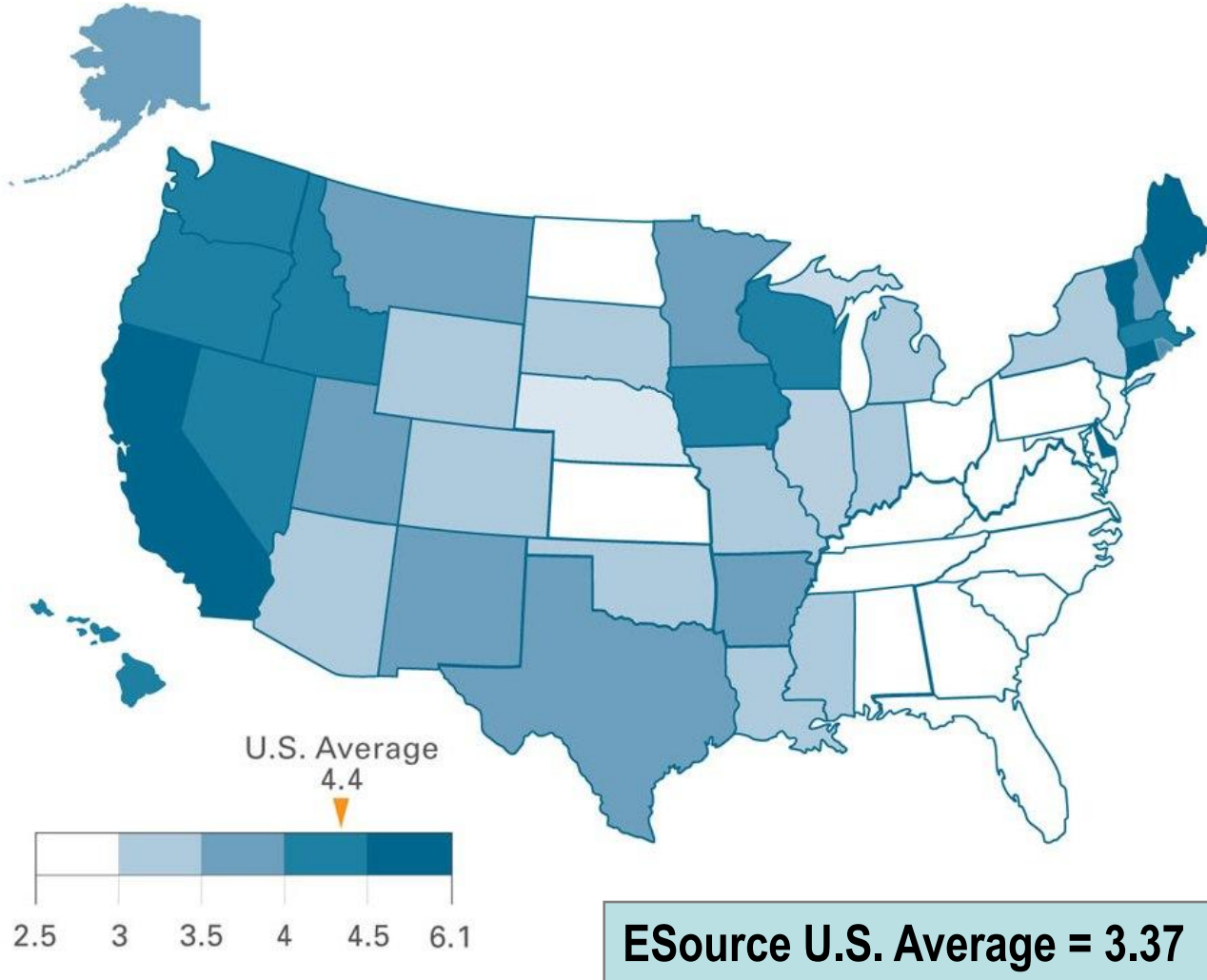


- Commercial and Industrial nearly saturated
- Future is in residential, 89% of sockets still have incandescent
- Will 9 years to fill sockets at 2007 (400 million) shipment levels

Source: D&R – CFL Market Model

-Based on Navigant Lighting Study, RECS, CBECS

State Residential Saturation

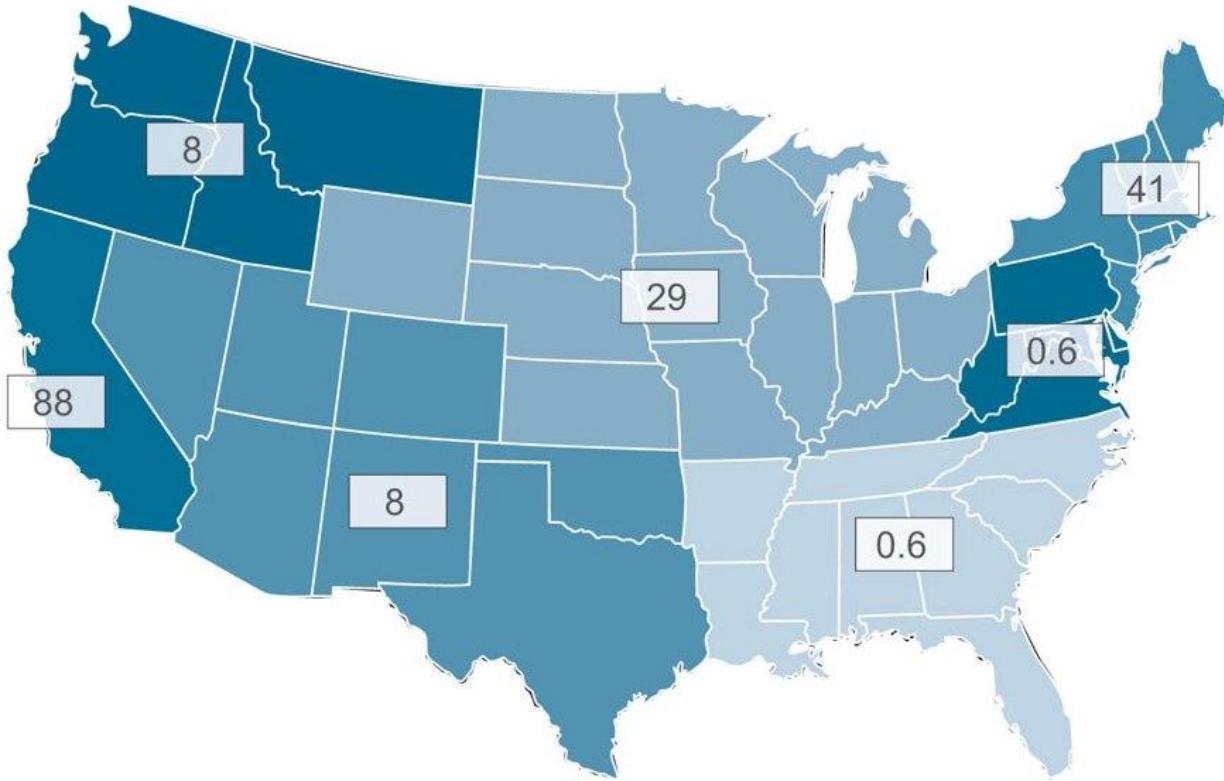


- Investment in promotion does translate into higher saturation
- Lots of remaining opportunity, even in states with highest saturations

Source: Survey, ESource – “Who’s Buying CFLs? Who’s Not Buying Them? Findings from a Large-Scale, Nationwide Survey”, 2008 ACEEE Summer Study on Energy Efficiency in Buildings (34,750 households surveyed)

EEPS Regional Spending 2008

(\$ Millions)



- 2006
 - 24 Programs
 - \$50 million
- 2008
 - 71 Programs
 - \$175 million

- Large investments in CFL promotion generate higher saturation

Source: D&R, based on communication with EEPS.

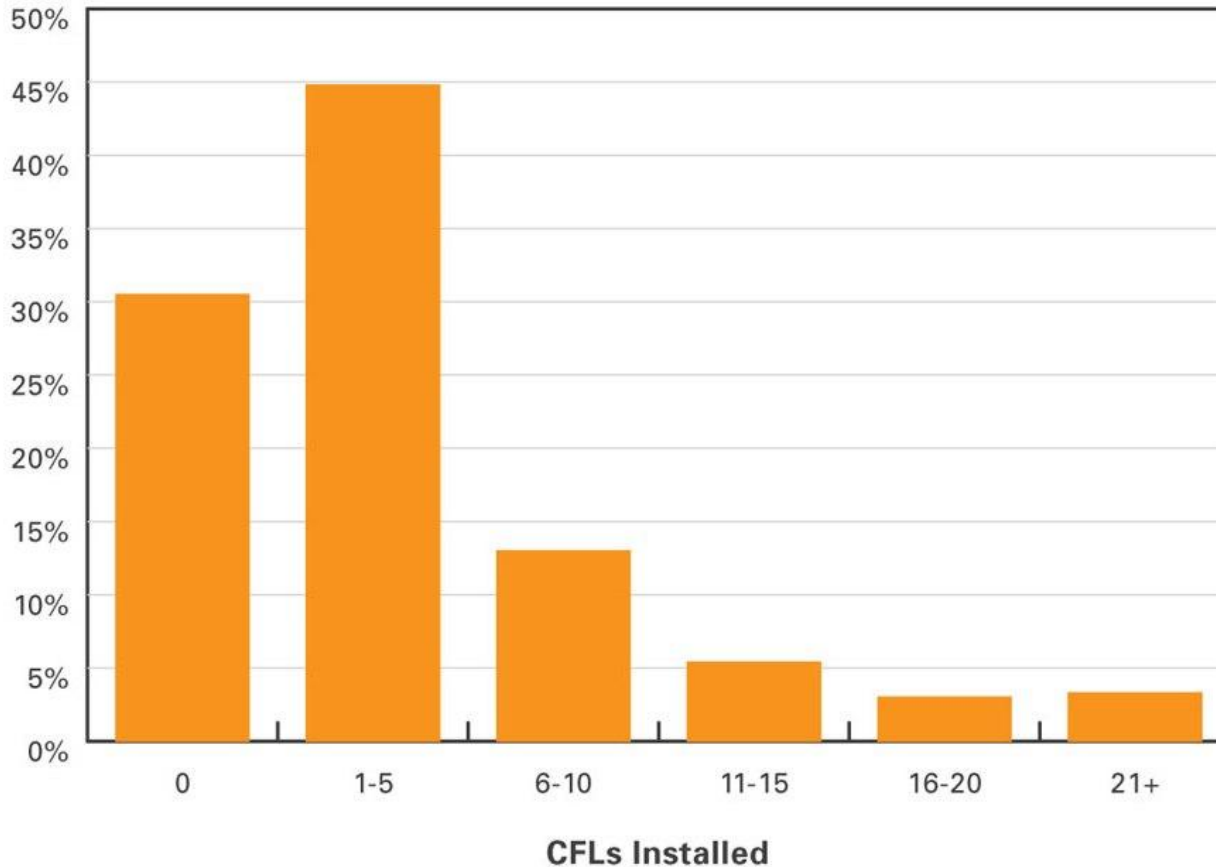
CFLs Have Delivered for EEPS



EEPS	Percent of DSM Program Savings from CFL Programs
NYSERDA	84%
Wisconsin Focus on Energy	64%
Pacific Gas and Electric	62%

Source: D&R, based on communication with EEPS.

National Residential Saturation



- Despite recent market growth, residential saturation is still low
- 75% of homes have 5 or fewer CFLs.
- 30% have no CFLs.
- Homes have ~35 sockets that could take CFLs.

Source: D&R – CFL Market Model

-Based on Navigant Lighting Study, RECS, CLASS 2005

Household Placement and Usage



Room	CFL Distribution	CFL Saturation
Bedroom	24%	36%
Bathroom	19%	19%
Kitchen	11%	16%
Living Room	13%	12%
Whole House	100%	11%

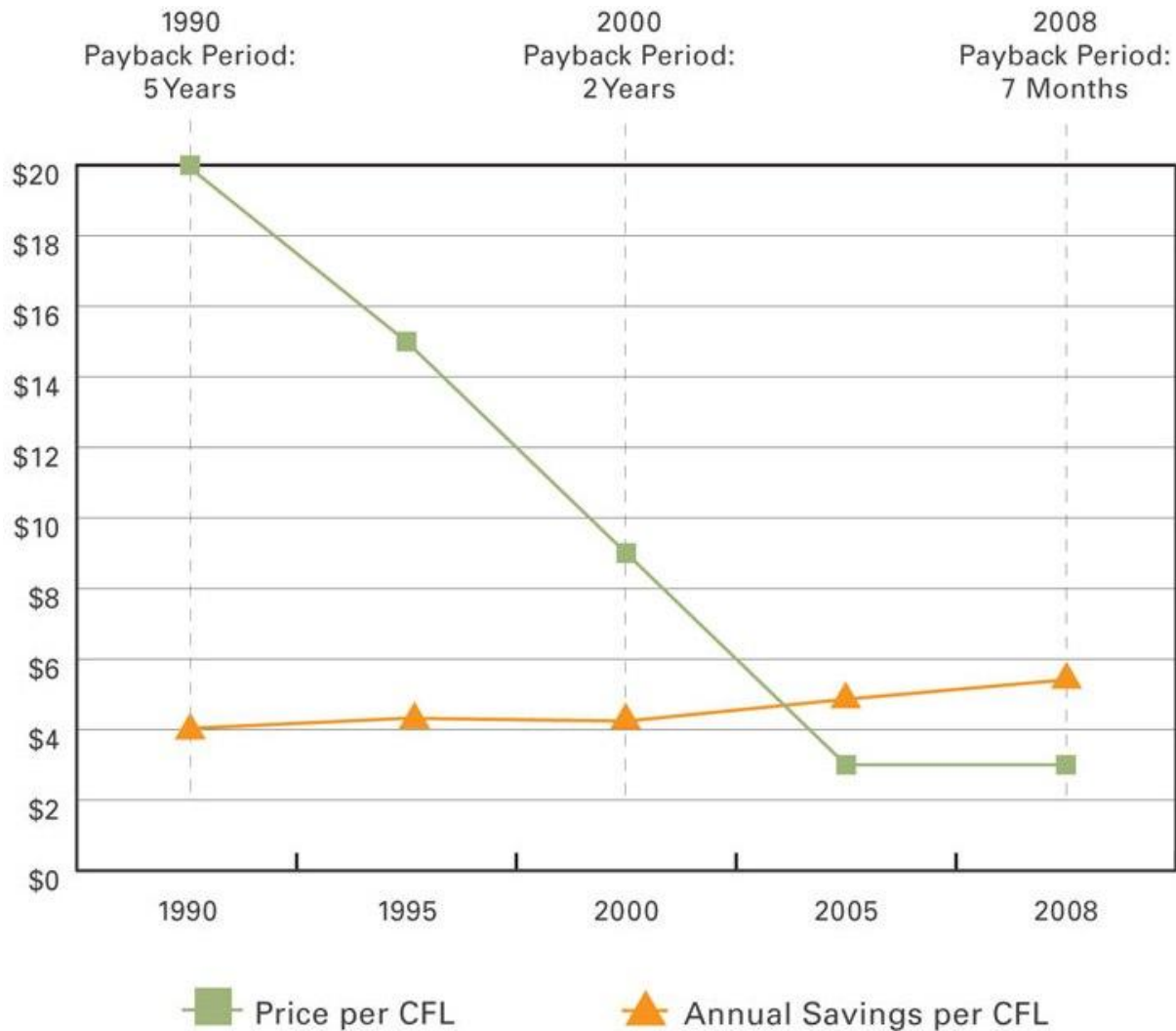
Room	Hours Of Use Per Day
Kitchen	3.0
Dining Room	2.5
Living Room	2.5
Bedroom	1.1
Weighted Average	1.9

- **Bulb failure seems to guide replacement.**
- New criteria for Candelabra screw bulbs may lift saturation number in dining rooms

Source: D&R – CFL Market Model

Baseline distribution from CLASS 2005

CFL Savings



Source: 1990, 1995, 2000, 2005 Prices - Bradley Steele, 2007 ACEEE Symposium on Market Transformation
2008 Prices and Annual Savings - D&R

CFL Savings



Product	Return (%)
CFL	1400%
Dishwasher	714%
Refrigerator	324%
Clothes Washer	268%
Room AC	130%

Source: D&R International

Consumer Perception



Perception of CFL Light Quality Versus Incandescent Light Quality					
	Percentage of Respondents (%)				
	Age 18-34	Age 35-54	Age 55+	Men	Women
Same or Better	82	79	76	79	82

Source: Survey, ESource – “Who’s Buying CFLs? Who’s Not Buying Them? Findings from a Large-Scale, Nationwide Survey”, 2008 ACEEE Summer Study on Energy Efficiency in Buildings (34,750 households surveyed)

Key Insights



- CFLs are still the most cost-effective and easiest ways of generating energy savings.
- The market is not transformed.
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Parting Thoughts



- Is there a case to be made for dramatically increasing and frontloading CFL investment?
- How much savings/emissions reductions do we forego by relying on failure to drive replacement?
- How much savings can EEPS claim if they successfully accelerate replacement (e.g. reaching full saturation in 3 years instead of 9)?
- Will EISA reduce claimable savings after phase-in?

Credits



- Market Research: Toby Swope
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