



Counting the Ways: How Energy Efficiency Loves Market Transformation

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Market Transformation



Education & Marketing



Create Awareness



Product Availability



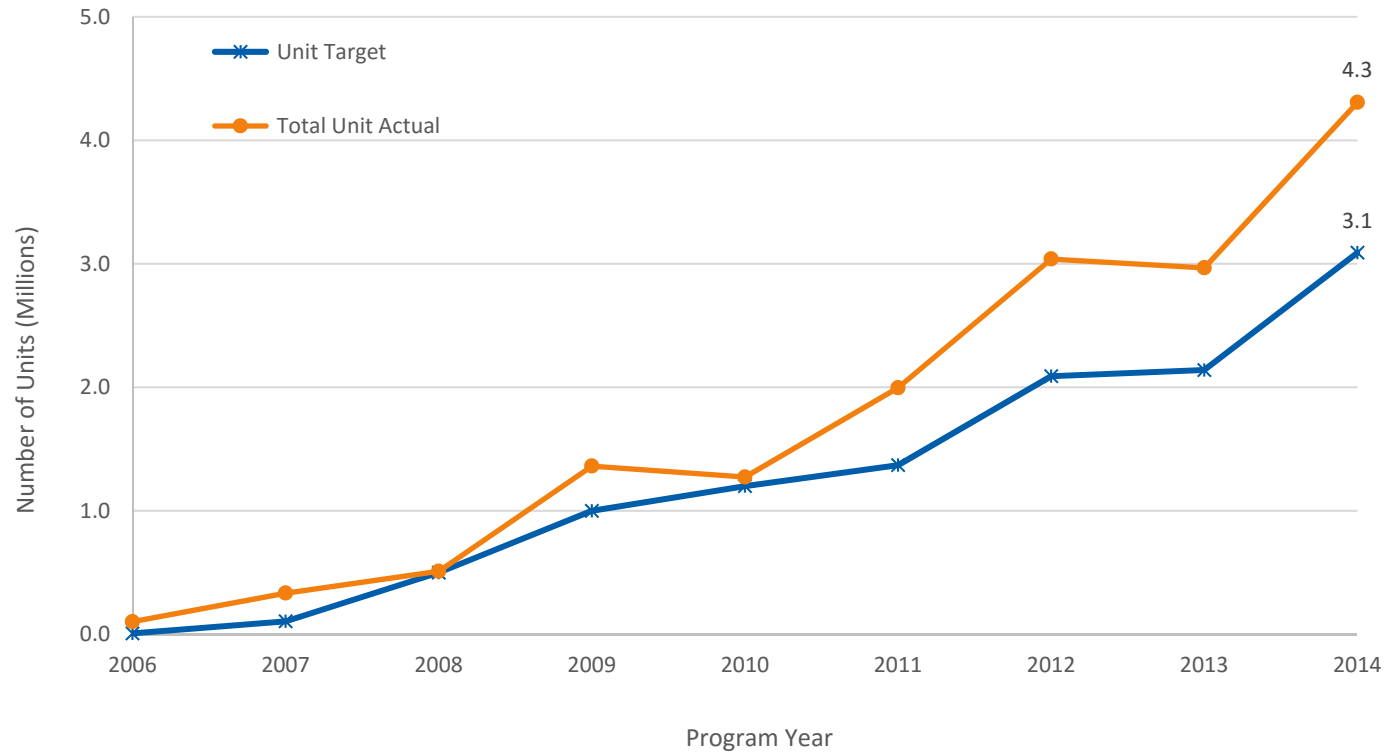
Before



After

Xcel Energy's Program

Sales Goals and Results



MEASURING MARKET TRANSFORMATION

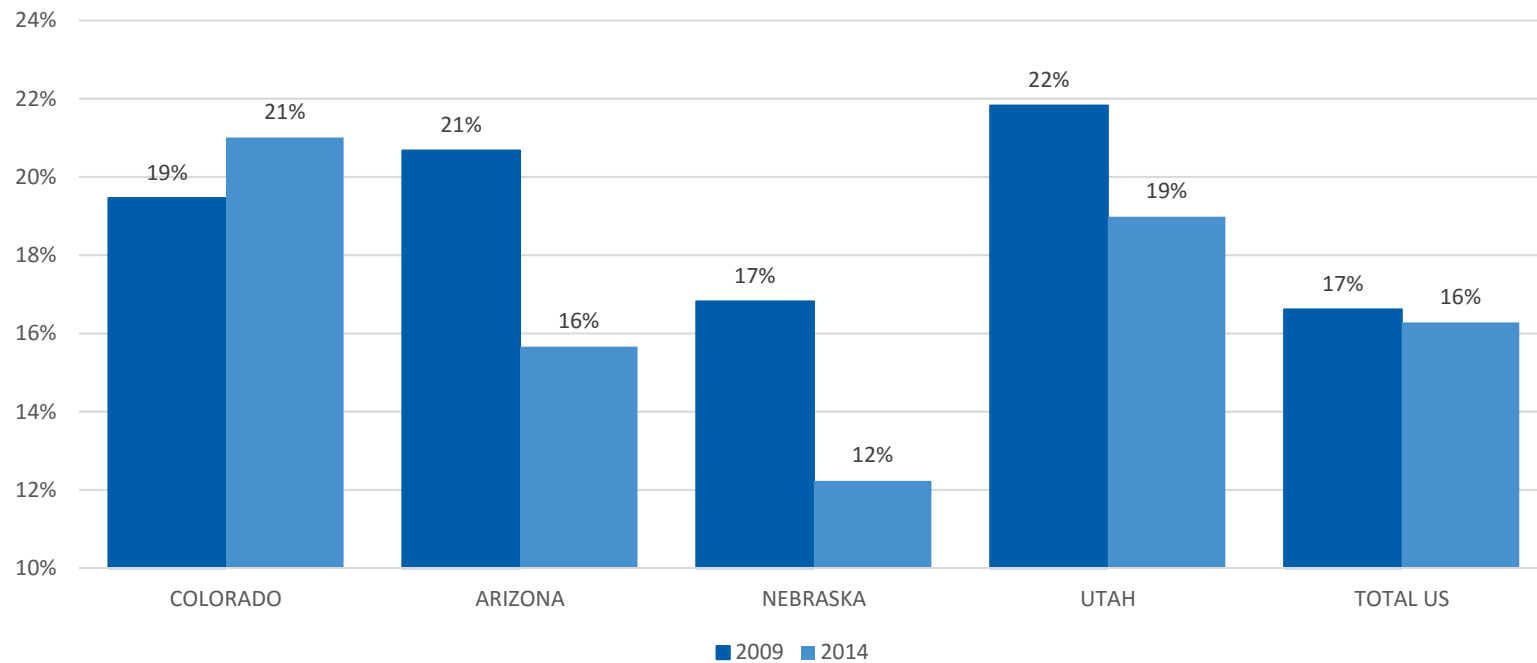
Consumer Awareness, Use & Satisfaction



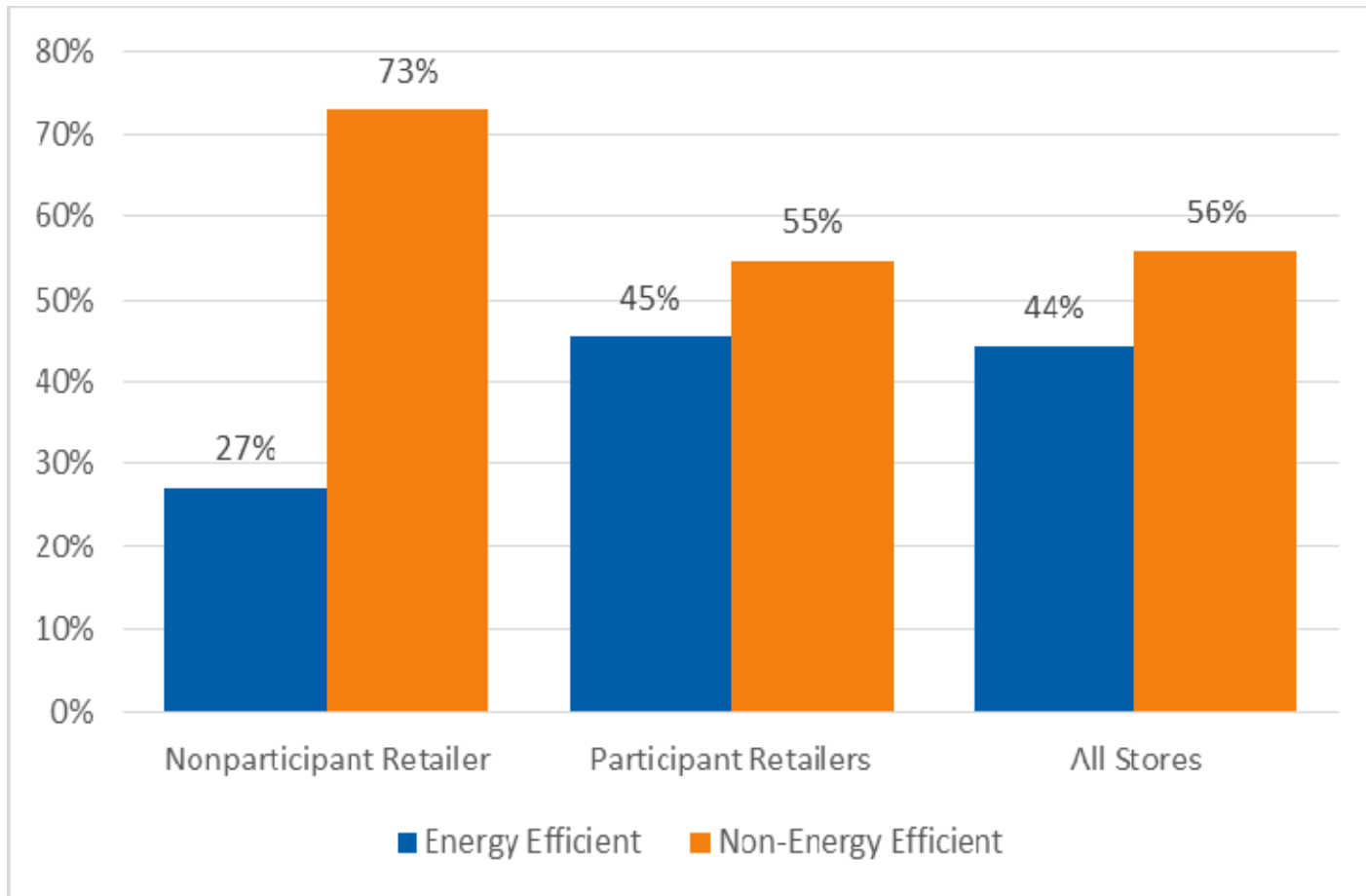
Indicator	2009	2015
Customers very familiar with CFLs	43%	68%
CFL penetration (at least one CFL installed)	65%	99%
CFL saturation (% of all sockets with CFLs)	16%	31%
Recent CFL purchases	45%	73%
Satisfaction with CFLs (9-10 on 0-10 scale)	37%	55%

Market Shares

CFLs as a Percent of Total Light Bulb Sales



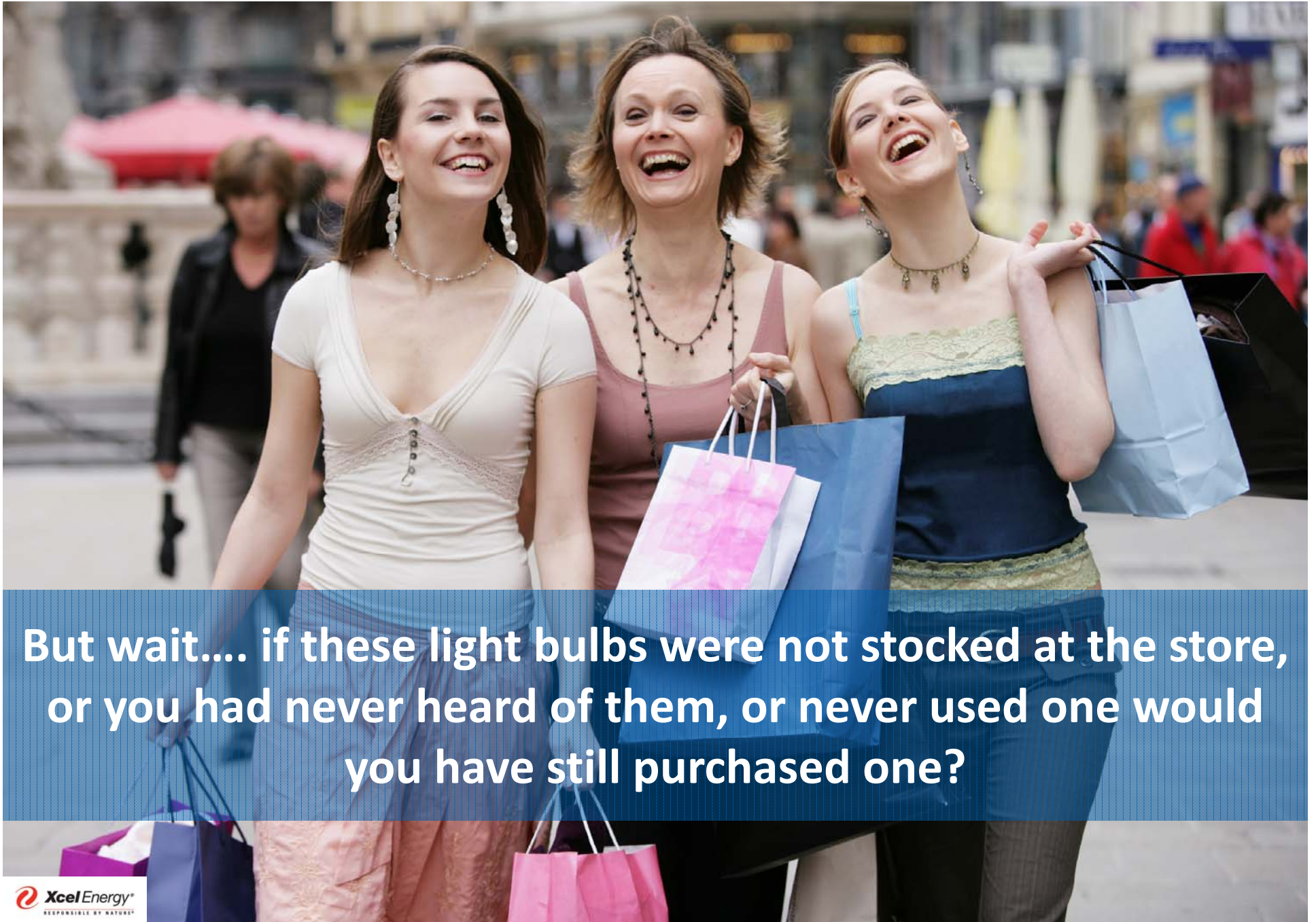
Efficient Stocking



How Do You Count The Savings?

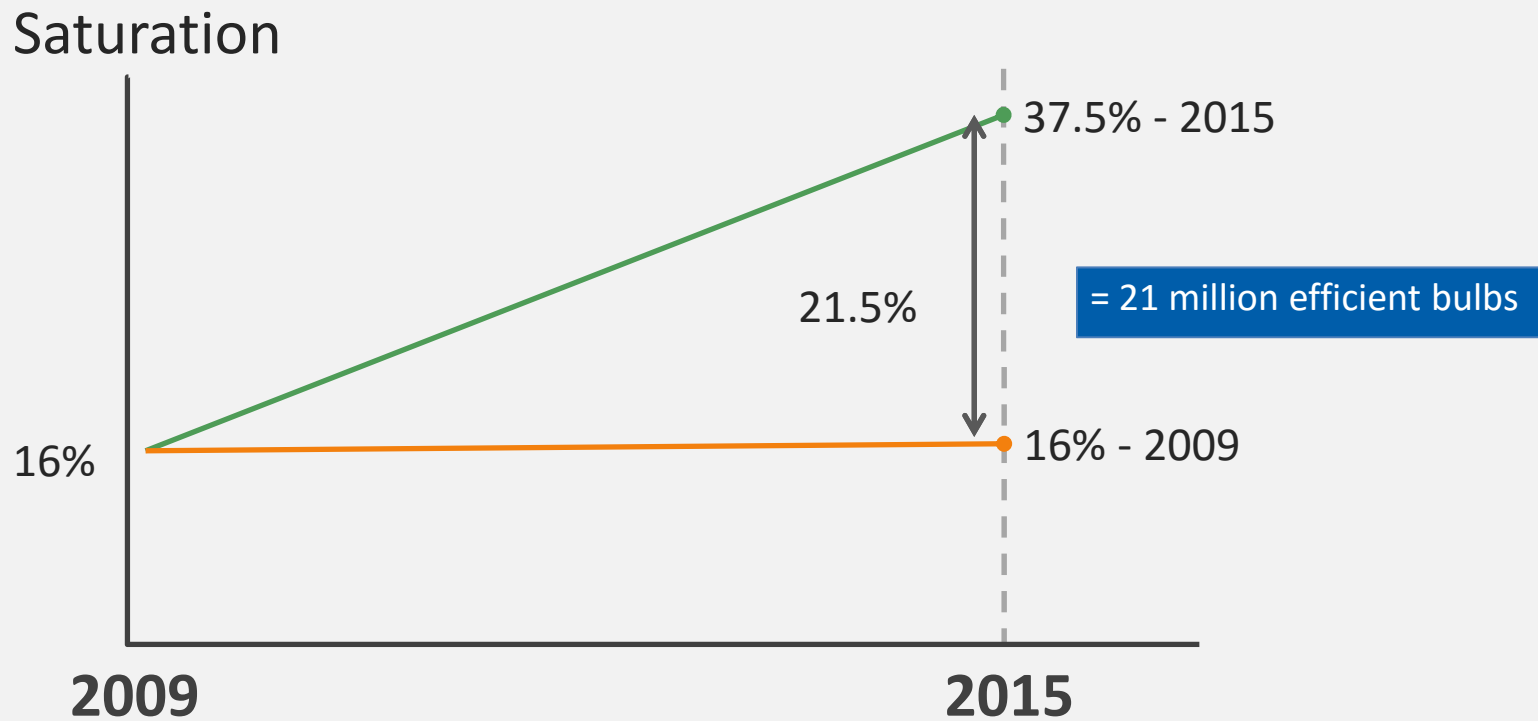
Traditional Attribution

Dear Shopper: If those light bulbs were not discounted by your utility, would you have still purchased one?



But wait.... if these light bulbs were not stocked at the store, or you had never heard of them, or never used one would you have still purchased one?

Measure Efficient Lighting in Homes



Customer Name



First

Last

Address

City

ZIP

Audit Start

Audit End

Removal Start

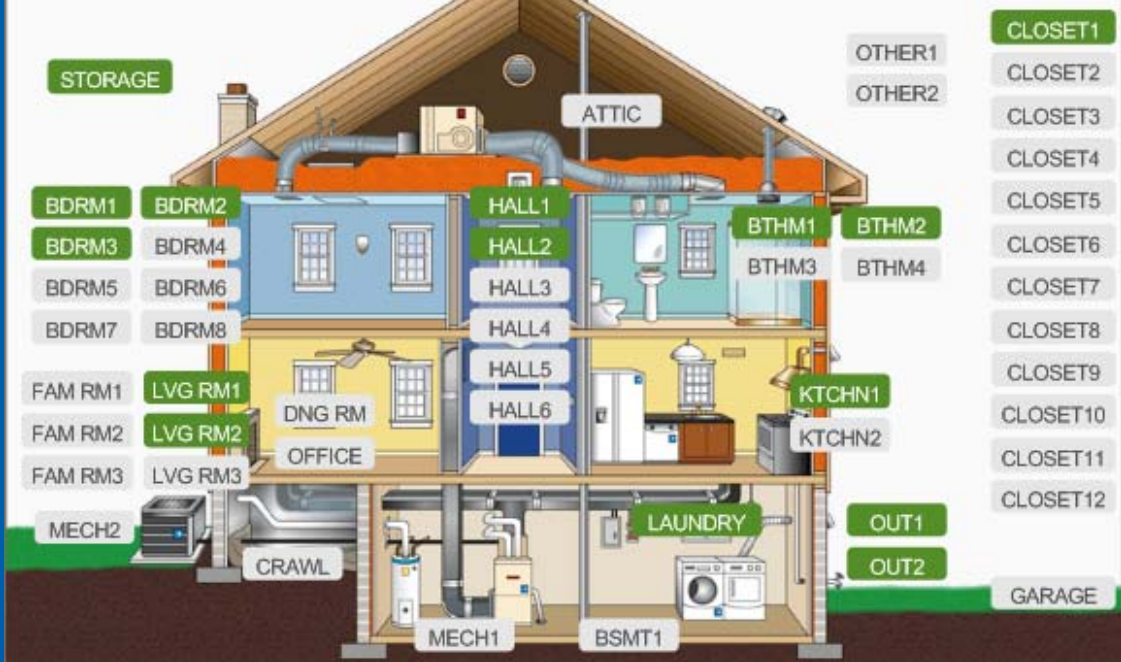
Removal End

Cadmus ID

Site Details

Incentive/Photos/Notes

Initial Interview **Meters** Room Inventory Mechanical

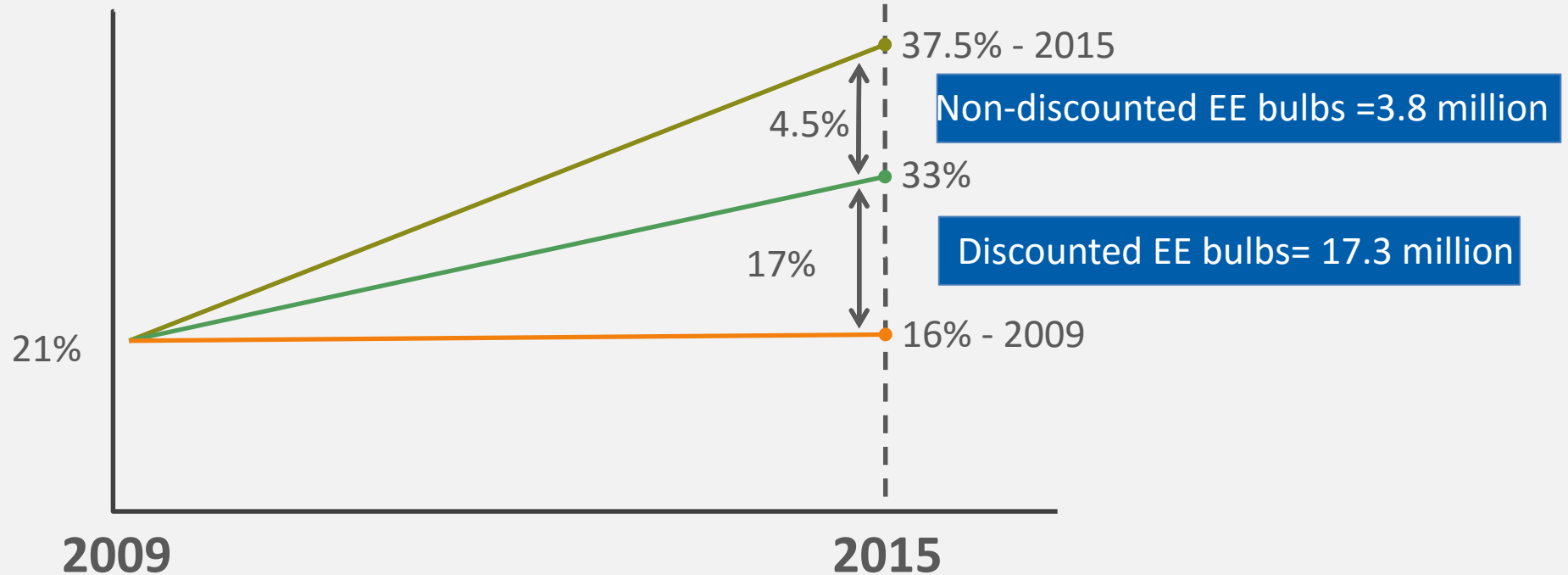


Install Tech Removal Tech

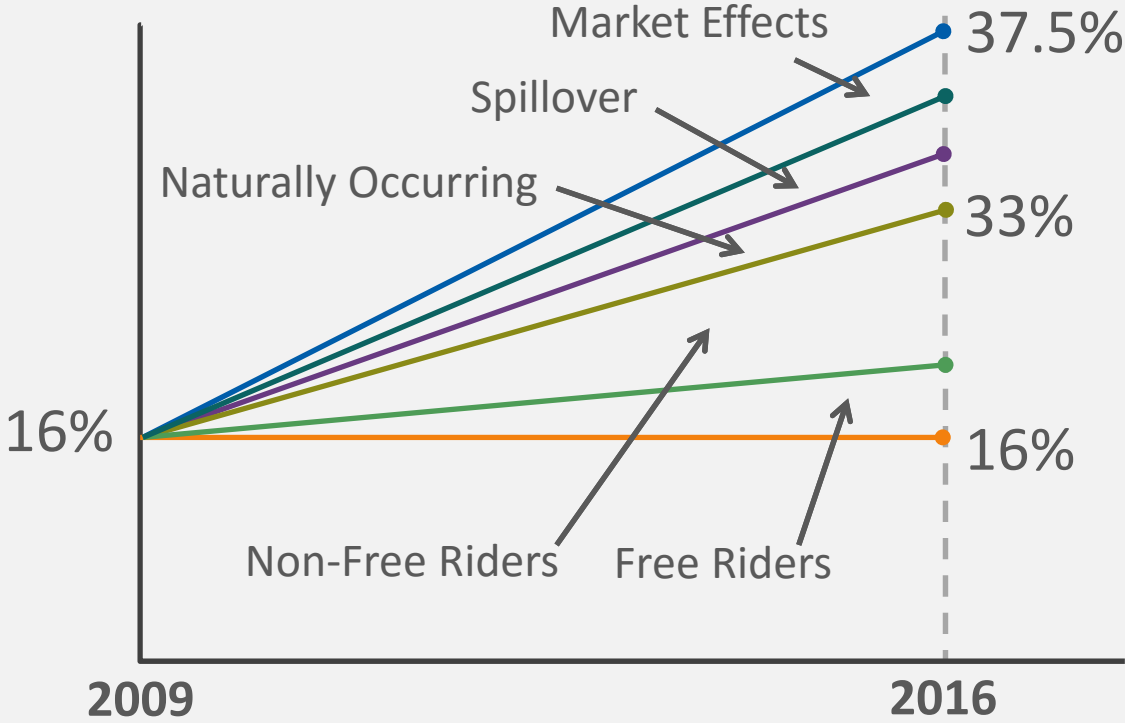


Add in Program Accounting

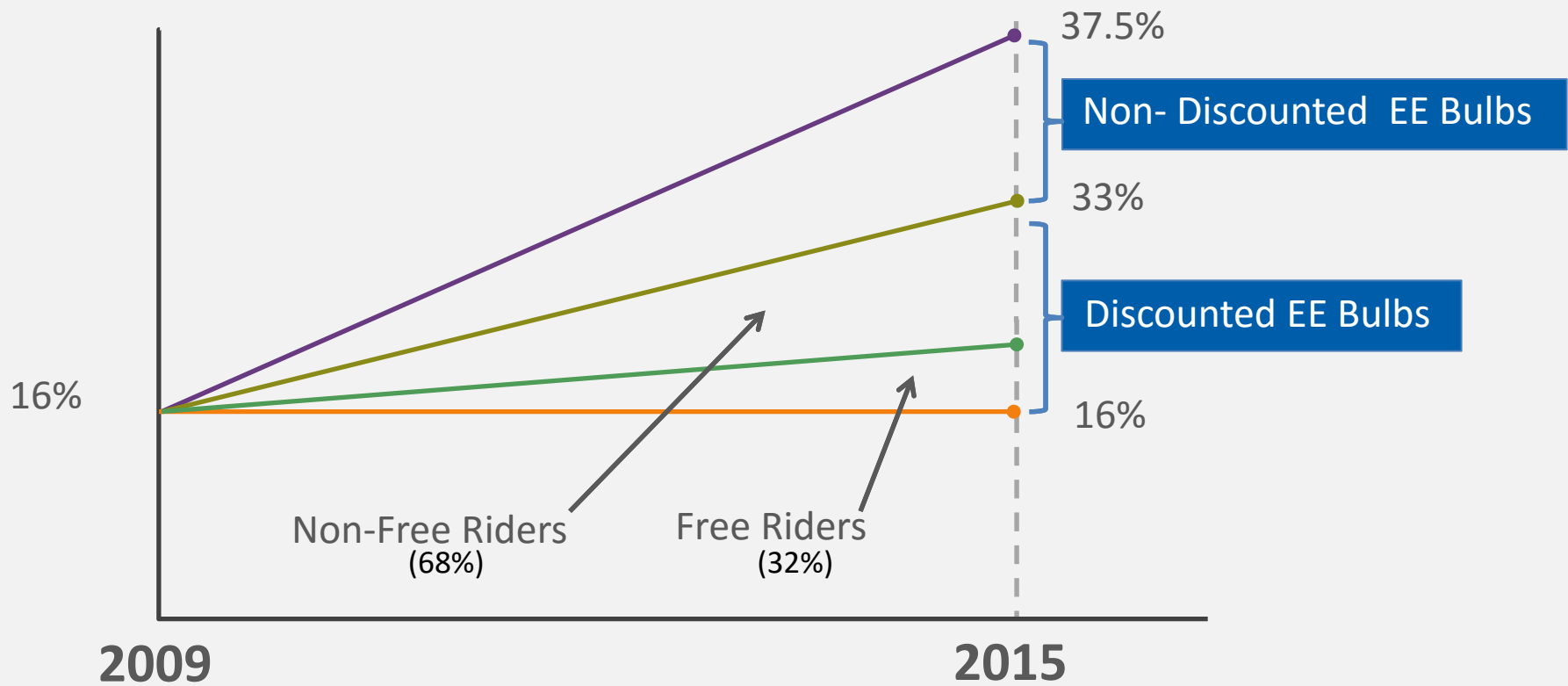
Efficient Light Bulb Saturation



Full Attribution



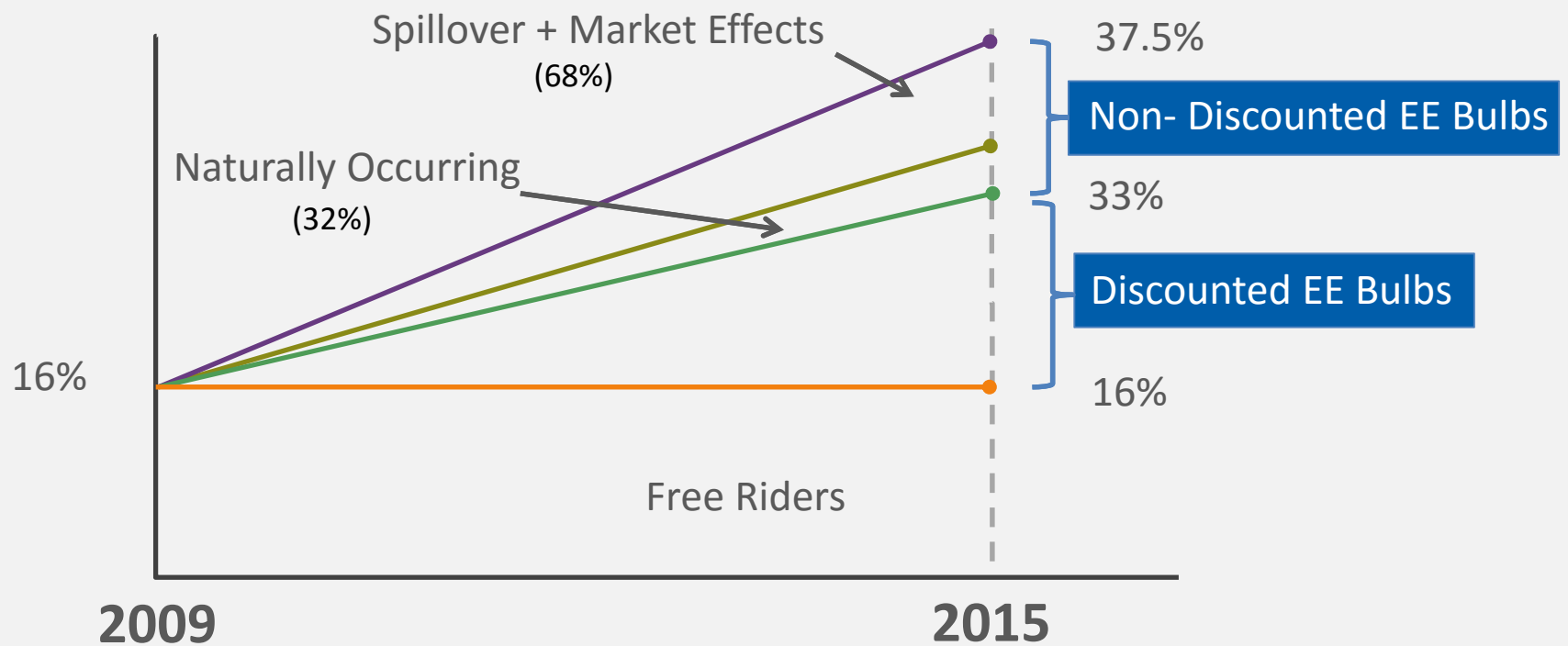
Attribute Program Discounted EE Bulbs



**Free riders –
would have purchased same light bulb
without program discount**

Does not result in “program” savings

Proportion Naturally Occurring \approx Proportion Free Ridership



Spillover & Market Effects

- **Spillover (Short Term)**
Program Awareness
- **Market Effects (Long Term)**
Market Changes
 - Consumer education
 - Increased program stocking
 - Retailer sales knowledge

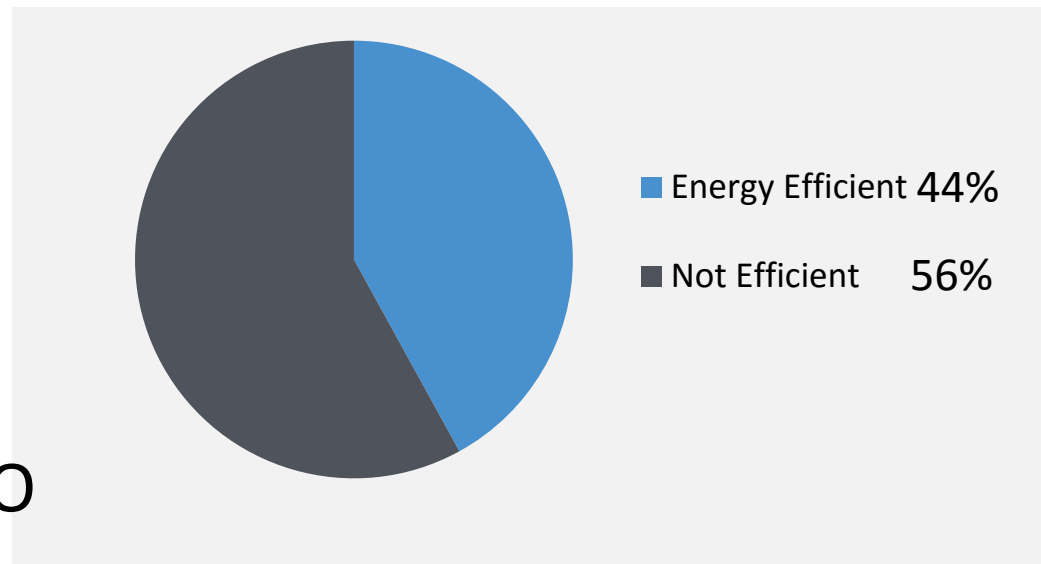
Spillover & Market Effects

- **Attribution:**

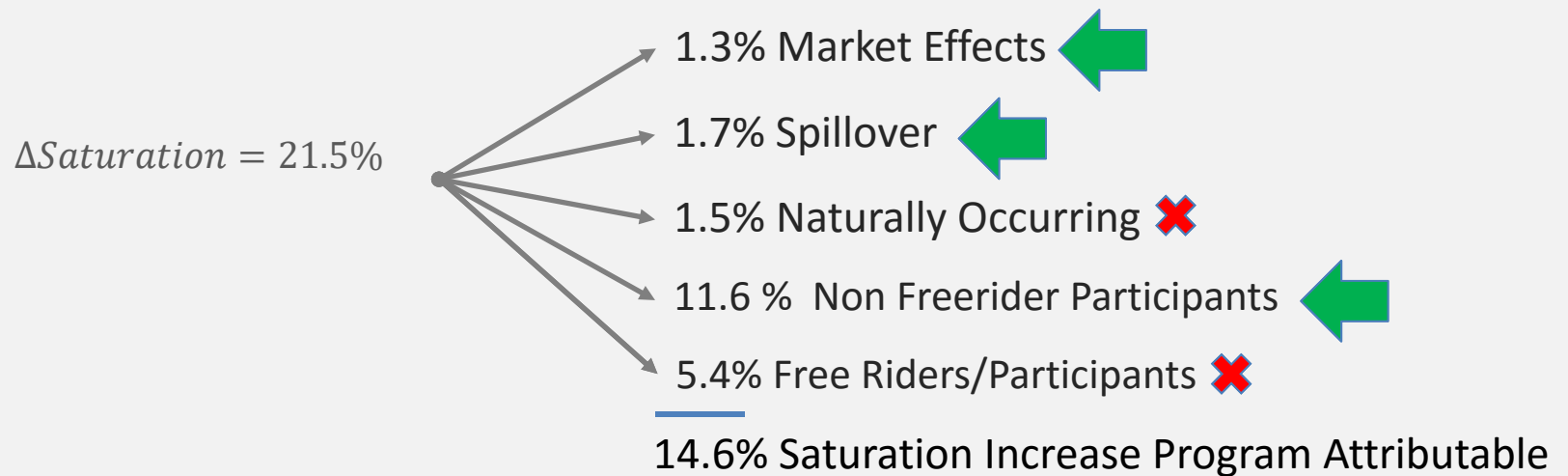
Market Indicator

– Energy-efficient
Bulb Stocking

– 44%/56% = ME/SO



Attribution



Program Impacts:

17.3 million bulbs discounted resulted in about 14.3 million program-induced installations
NTG=0.83



CADMUS

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