



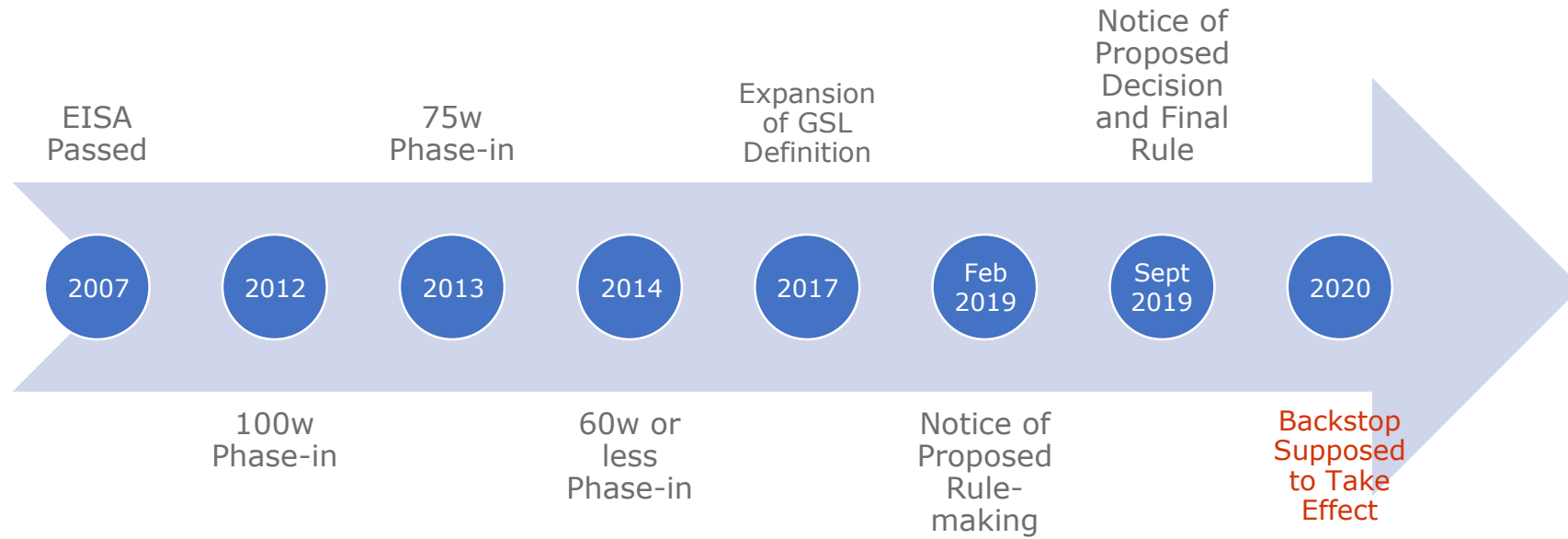
When To Turn the Lights Out: Navigating the Changing Landscape of Retail Lighting

SWEEP Energy Efficiency Workshop
November 8, 2019



EISA – The Good Old Days

EISA – Timeline





- What exactly did the recent 2019 DOE decisions say?
- What has been the response to DOE?
- What does the market for LEDs really look like?
- What is the implication for energy efficiency programs?



The background of the slide is a photograph of a mountain range. The mountains are covered in dense, multi-colored vegetation, likely lichen or moss, creating a vibrant, textured appearance. The colors range from deep greens and blues to bright yellows and oranges. A small, white snow patch is visible on the left side of the image. The text "EISA: SEPTEMBER 2019 DECISIONS" is overlaid in the center in a bold, red, sans-serif font.

EISA: SEPTEMBER 2019 DECISIONS



On September 5, 2019 DOE Issued Two Documents

Final Rule

Addresses the January 2017 DOE decision to expand the general service lamp (GSLs) definition to include previously exempt lamps

Largely follows the Notice of Proposed Rulemaking from February 2019

Notice of Proposed Determination

Addresses the entire backstop itself

Somewhat surprising



Takeaway 1: DOE rescinds the expanded definition of GSLs

DOE Logic

DOE states it does not have the authority to determine what is a GSL, and some of these lamps are covered by other legislation

What it means

“Specialty” styles remain exempt: reflectors, globes, and candelabras

Restores exemptions for rough service and 3-way lamps



Takeaway 2: The EISA 2020 Backstop does not apply

DOE Logic	What it means
<p>DOE argues that the backstop only applies if the Secretary of Energy determines that DOE should amend the energy conservation standards for GSLs but fails to do so by the January 1, 2017 deadline.</p> <p>Argues DOE didn't have budget to make a determination in 2017, so backstop does not apply</p> <p>The NOPD serves as the determination, and states the EISA Phase 1 standards do not need to be amended (so no 45 l/w)</p>	<p>There will be no "ban" on sales of lamps failing to meet the 45 lumen/watt backstop requirement</p> <p>Manufacturers and retailers will be able to continue to sell halogen lamps for all styles, and incandescent lamps for the exempt styles</p>



Takeaway 3: Federal preemption bars states from establishing their own efficiency standards

DOE Logic	What it means
<p>Federal efficiency standards take precedence over state standards in cases where the federal government has either set a standard or explicitly ruled that a standard is not justified</p> <p>States can petition for exemptions to these rules</p> <p>CA and NV received exemptions, but they no longer apply since the backstop does not apply</p>	<p>States will not be able to enact and enforce 45 l/w standards</p> <p>Lawsuits...</p>

Our Interpretation



- DOE largely followed NOPR and manufacturer interest
- Rejected about 60,000 comments from ASAP, ACEEE, program administrators, states, environmental groups
 - Argued it wasn't backsliding
 - Argued it wasn't costing consumers money, LED market share increasing anyway
- Some of the arguments were a bit of a "stretch"
 - Use of the "fleet average" approach
 - Discussion on costs to manufacturer efficient incandescents

“It reads like when my two young children are looking for any reason to get what they want

-From one reviewer





RESPONSE TO EISA



“ DOE’s Light Bulb Standards Rollback Will Cost Americans \$14 Billion Each Year ”

“ It makes zero sense to eliminate energy-saving light bulb standards that will save households money on electricity bills and cut climate change emissions... ...Instead, the Trump administration is siding with manufacturers that want to keep selling outdated, energy-wasting light bulbs. ”



- General reaction
 - Business as usual
 - Will continue to manufacture and sell all lamp options



“*Thanks to DOE we get to keep our jobs!*”

Manufacturer and Retailer Reactions



“ Finally the government did something that helps me ”

“ EISA goes away, the halogen comes back, Hallelujah ”

“ It’s like Groundhog day: DOE saw its shadow, it’s six more years of programs ”

“ What the government wanted to happen is happening anyway, so why outlaw something that is going away ”



- Sense that consumers are the winners
 - Would have been an initial price increase on lamps without incentives
- LED only and higher quality manufacturers support DOE decision
 - Concern that backstop would have led to a “race to the bottom” of poor-quality lamps
 - Use the incentives to improve quality
- Trying to steer customers to LEDs
 - Inefficient lamps given less prominent shelf space, less interesting packaging, and larger pack sizes (higher priced)



- Will follow the DOE ruling as the law
- Only exception is in CA, where they had already curtailed sales of halogens and incandescents
- NEMA was in Washington, DC during Partner meeting discussing challenges of state standards





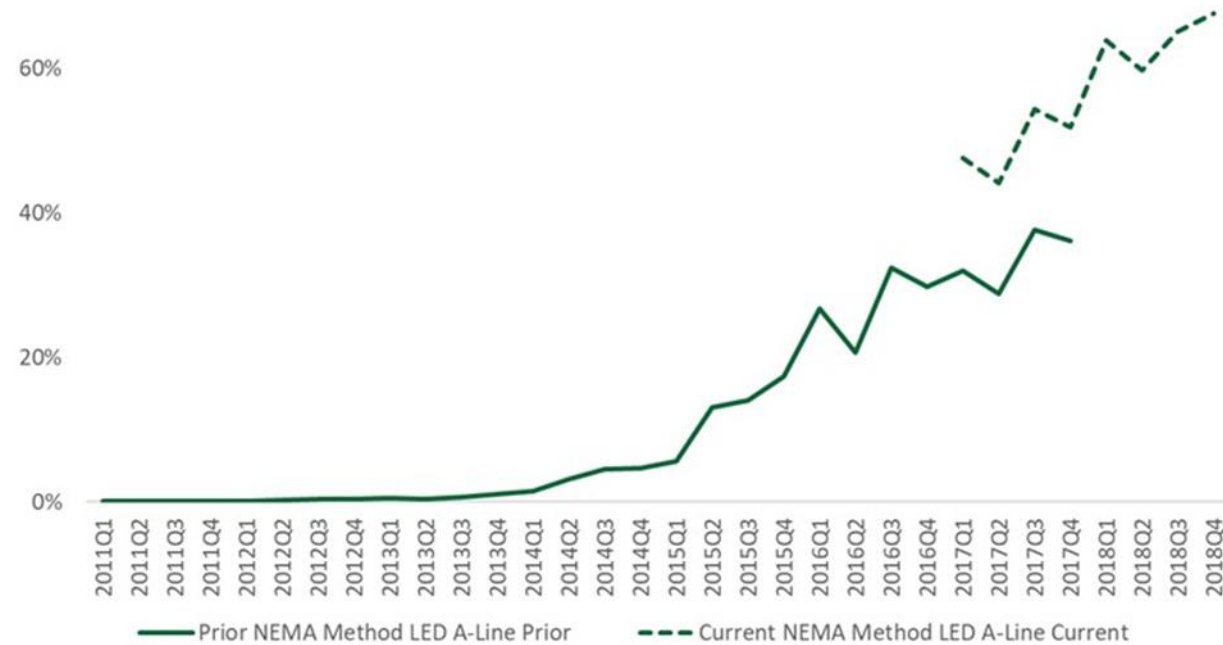
WHAT IS THE STATE OF THE CURRENT LED MARKET?

The World According to NEMA



- LEDs clearly dominate

A-line LED Shipment Share Over Time per NEMA
(Prior and Current Calculation Methods)





What about lamps that were exempt
under EISA Phase One?

CREED LightTracker Data Sources



- CREED combines POS and Panel data to provide the best available picture of lighting sales, while calibrating to secondary data sources

POS Data



~40% of total market

+

Panel Data



~60% of total market

=

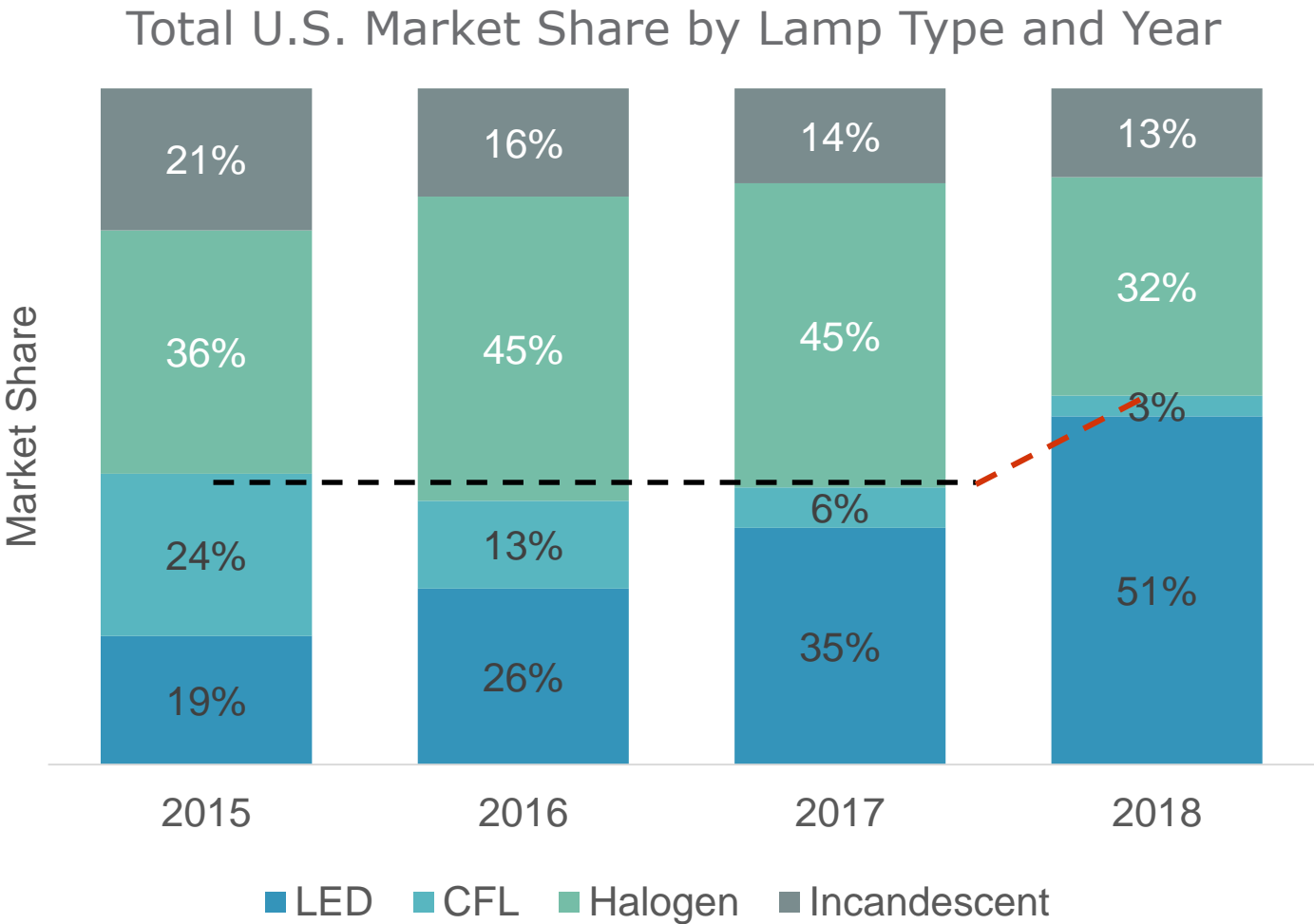
Total
Market
Sales

=

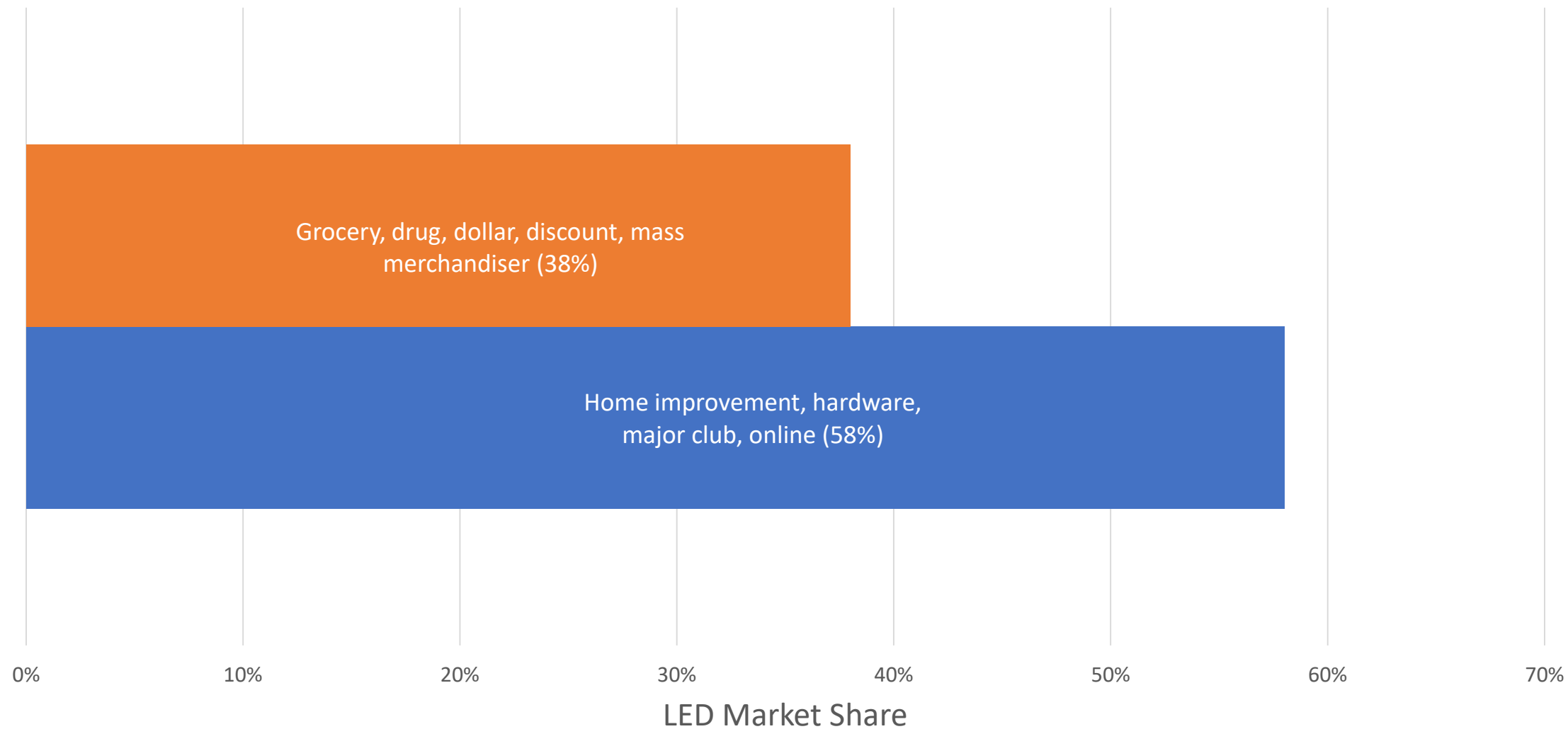
100% of total market



- Efficient Lamps Surpass Inefficient Sales In 2018



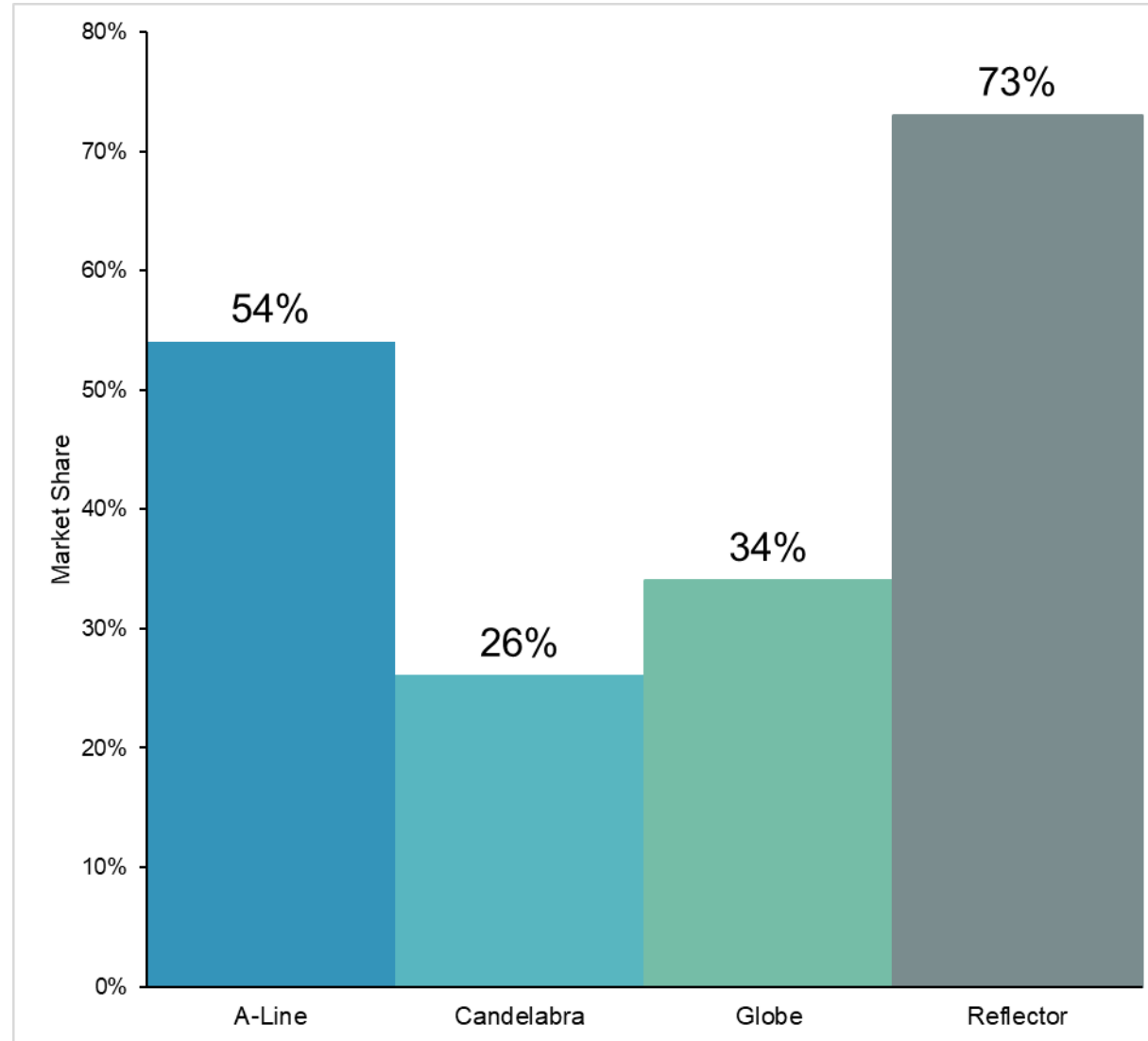
Total U.S. LED Market Share by Channel (2018)



LED Market Share of A-Lines and Specialty Bulbs

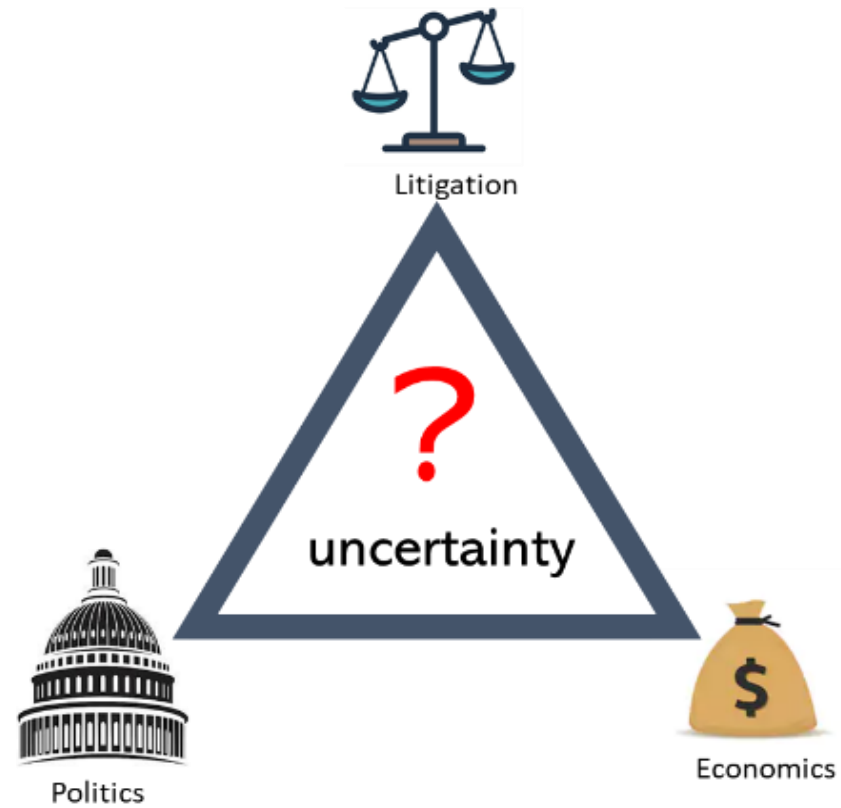


2018 U.S. LED Market Share of A-Line and Specialty Lamps



WHAT IS THE IMPLICATION FOR PROGRAMS?

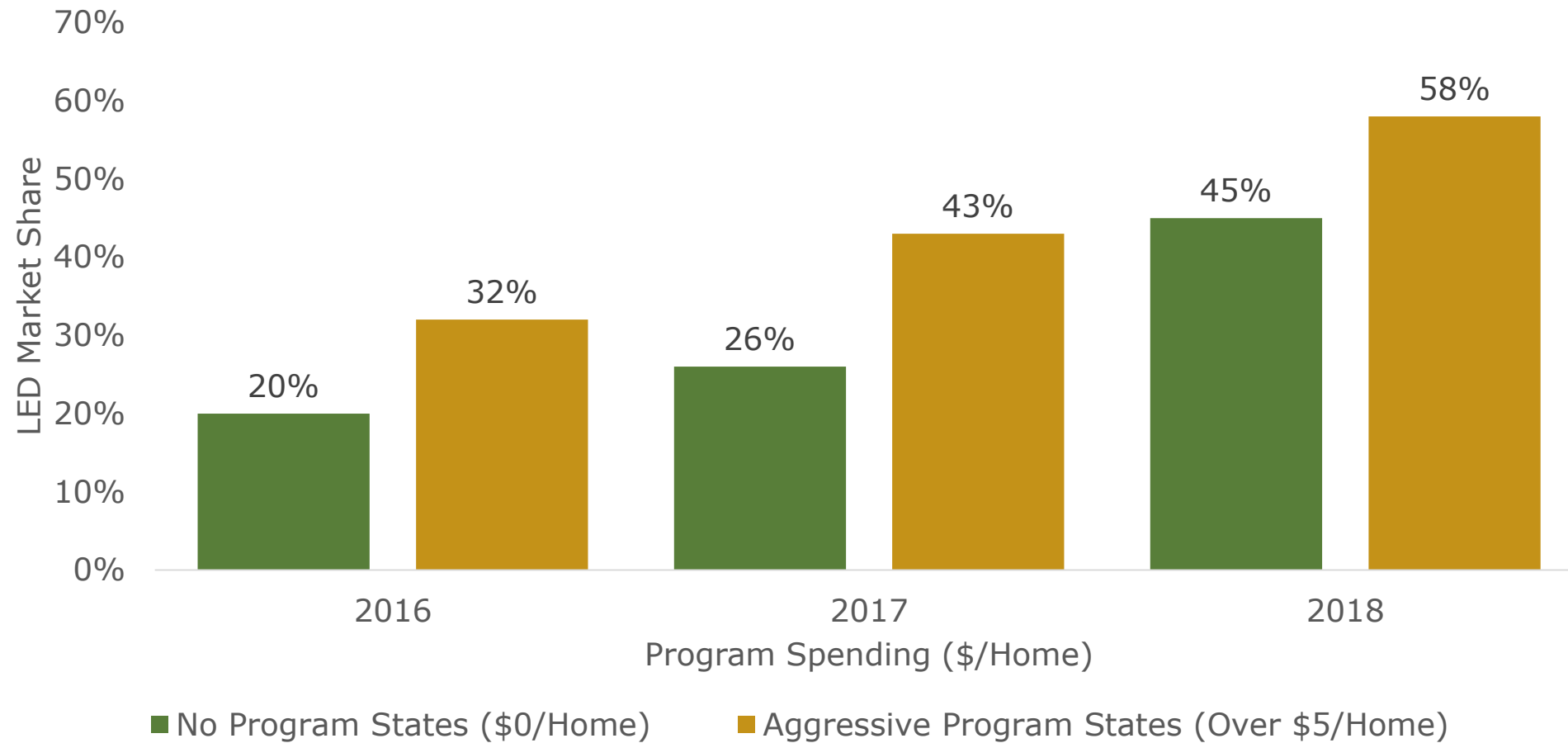
Future of Lighting: It's a Complex Web





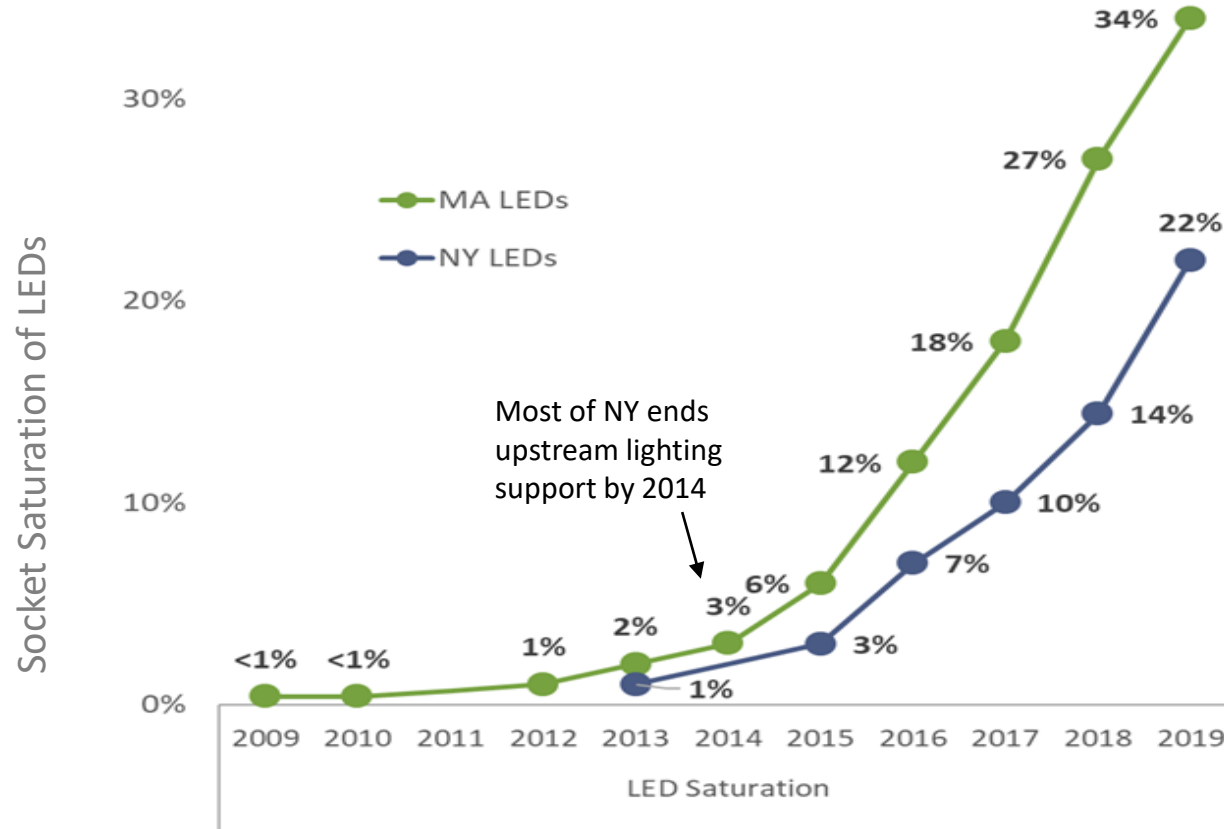
So it is time to end programs,
continue with business as usual, or
somewhere in-between?

Program vs. Non-Program States



Source: CREED LightTracker National Sales Data





Risk of Terminating Programs Too Early



Source: NMR Group, Inc. 2018-19 MA Residential Lighting Market Assessment Study

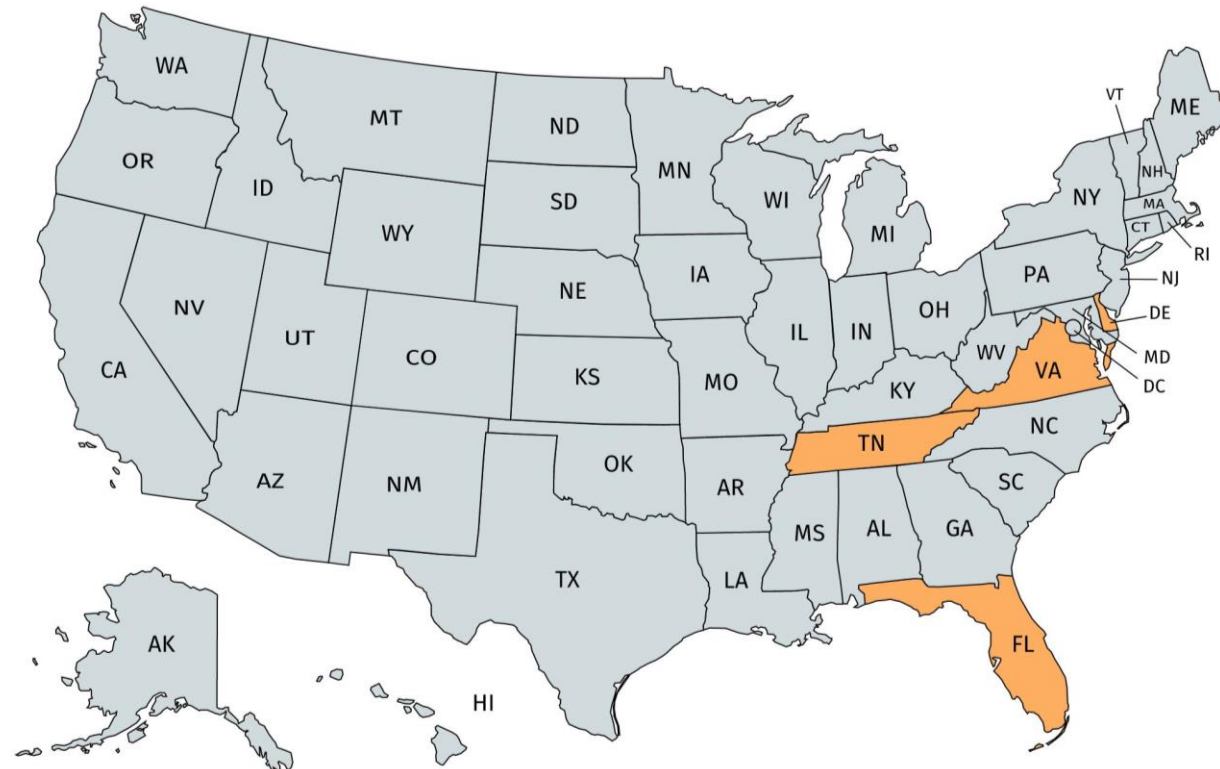


Somewhere in between...

-  Expect lower NTG
-  Lower volume sales
-  Carefully select channels and lamp styles
-  And maybe reduced lifetime and hours of use



- Easier to turn off a program than on a program
- If planning to shut down program, consider monitoring for backsliding





- What's next???





Questions?





For more information

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