



Northeast Energy Efficiency Partnerships



The Race to the Finish!

A Residential Lighting Market Brief Webinar

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August 9th, 2016, 1-1:30pm EST

**THIS WEBINAR IS BEING RECORDED AND WILL BE
AVAILABLE ONLINE AT NEEP.ORG**



About NEEP

Mission

Accelerate energy efficiency as an essential part of demand-side solutions that enable a sustainable regional energy system

Approach

Overcome barriers and transform markets via ***Collaboration, Education and Enterprise***

Vision

Region embraces **next generation energy efficiency** as a core strategy to meet energy needs in a carbon-constrained world



One of six regional energy efficiency organizations (REEOs) funded by the US Department of Energy (US DOE) to link regions to US DOE guidance, products and programs

Housekeeping

- Webinar recording and slides will be **posted** at neep.org and sent to attendees
- Will take **questions** as time permits at end of presentation. Please send questions through [gotowebinar](http://gotowebinar.com) as you have them
- All lines will remain **muted**
- Please complete the **survey** at end of webinar

Just out of the Primaries...

- NEEP's State of the Market: A Residential Lighting Brief
- This Webinar:
 - Approaching Market Transformation
 - Smart Questions about Smart Lighting
 - Strategies for Victory
- Read the report.



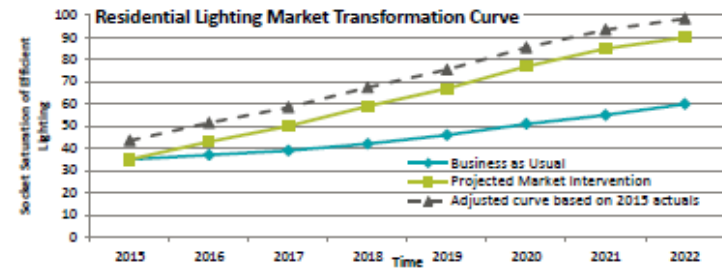
The State of the Market: A Residential Lighting Brief

Northeast Energy Efficiency Partnerships, July 2016

Introduction

Northeast Energy Efficiency Partnerships (NEEP) has been tracking the residential lighting market for several years and has provided analysis in many reports.¹ As the transformation of this complex market gains traction, we find the conversation and need for new information narrowing to one key topic: LEDs. While CFLs continue to play a role in residences and amongst Northeast and Mid-Atlantic program administrators, the LED has transitioned into the starring role of the residential lighting show.

In mid-2016, NEEP's State of the Market Brief focused on updating regional residential lighting progress towards market transformation; looking also at the latest and greatest in technologies, program approaches, and trends in the LED lighting space. As can be gleaned from the curve presented below, the Northeast and Mid-Atlantic region is tracking ahead of the projections put forward in the 2015 Residential Lighting Strategy Update.²



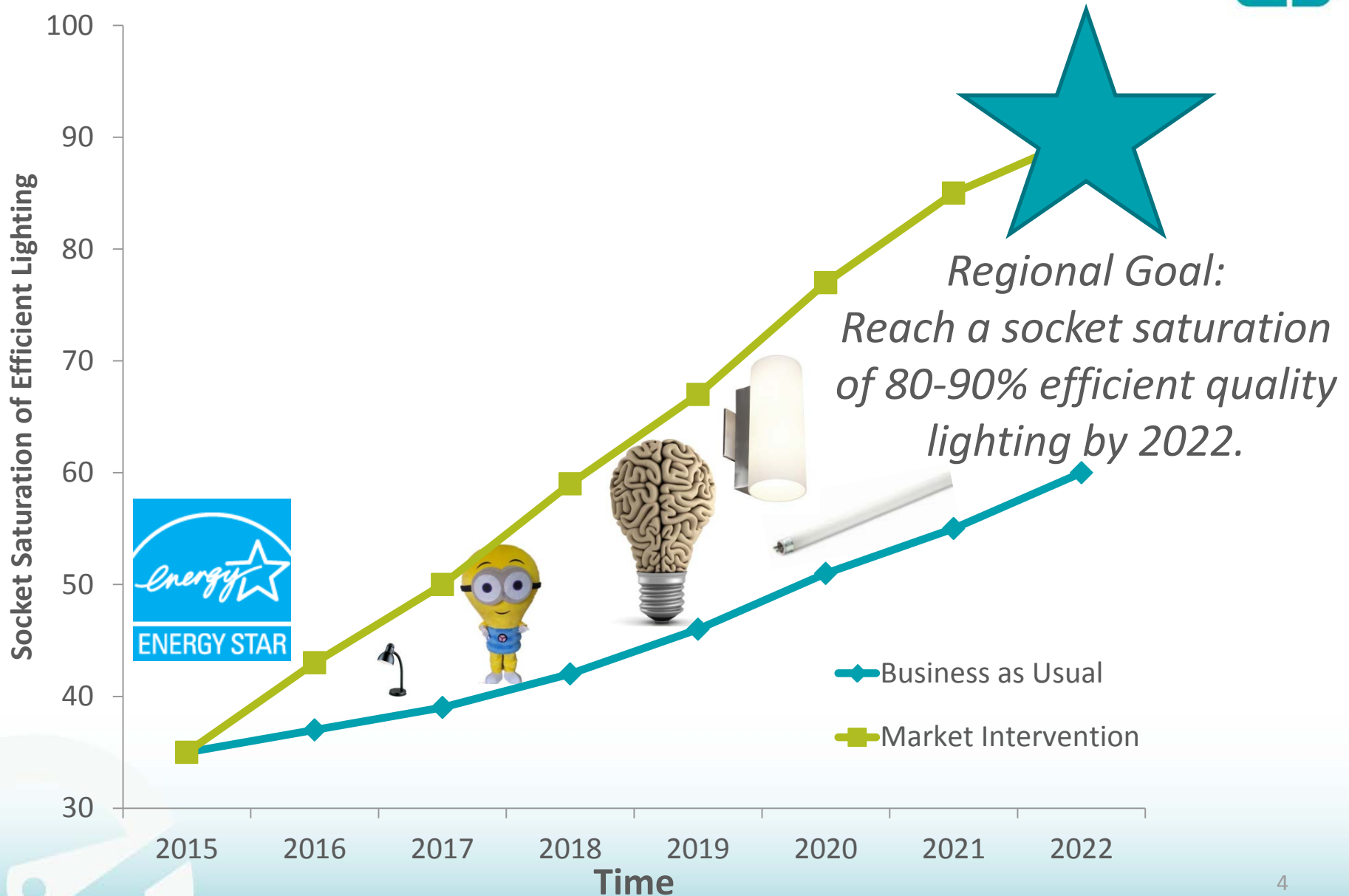
When 2015 socket saturation information started to become available, we found that what we had projected as efficient lighting socket saturation for 2016 was actually achieved in 2015. If transformation continues along the same trend line as initially predicted, the region could reach the goal of 80-90 percent efficient lighting 1-2 years ahead of schedule. As this brief will discuss, the pace of advancement is largely based on advances in the LED market.

Extra, Extra: New Lower Lifetime LEDs Certify to ENERGY STAR Lamps 2.0!

With the finalized Version 2.0 Lamps Specification released by ENERGY STAR in late 2015,³ stakeholders across the country eagerly awaited the availability of new products to meet the new specification. Since the newly-set efficacy levels were very stringent, no CFLs from the current list will meet the new specification. For the omnidirectional product category, ENERGY STAR and stakeholders worked hard to establish criteria that would maximize the quality, efficiency, and affordability of LEDs.



Remember this?

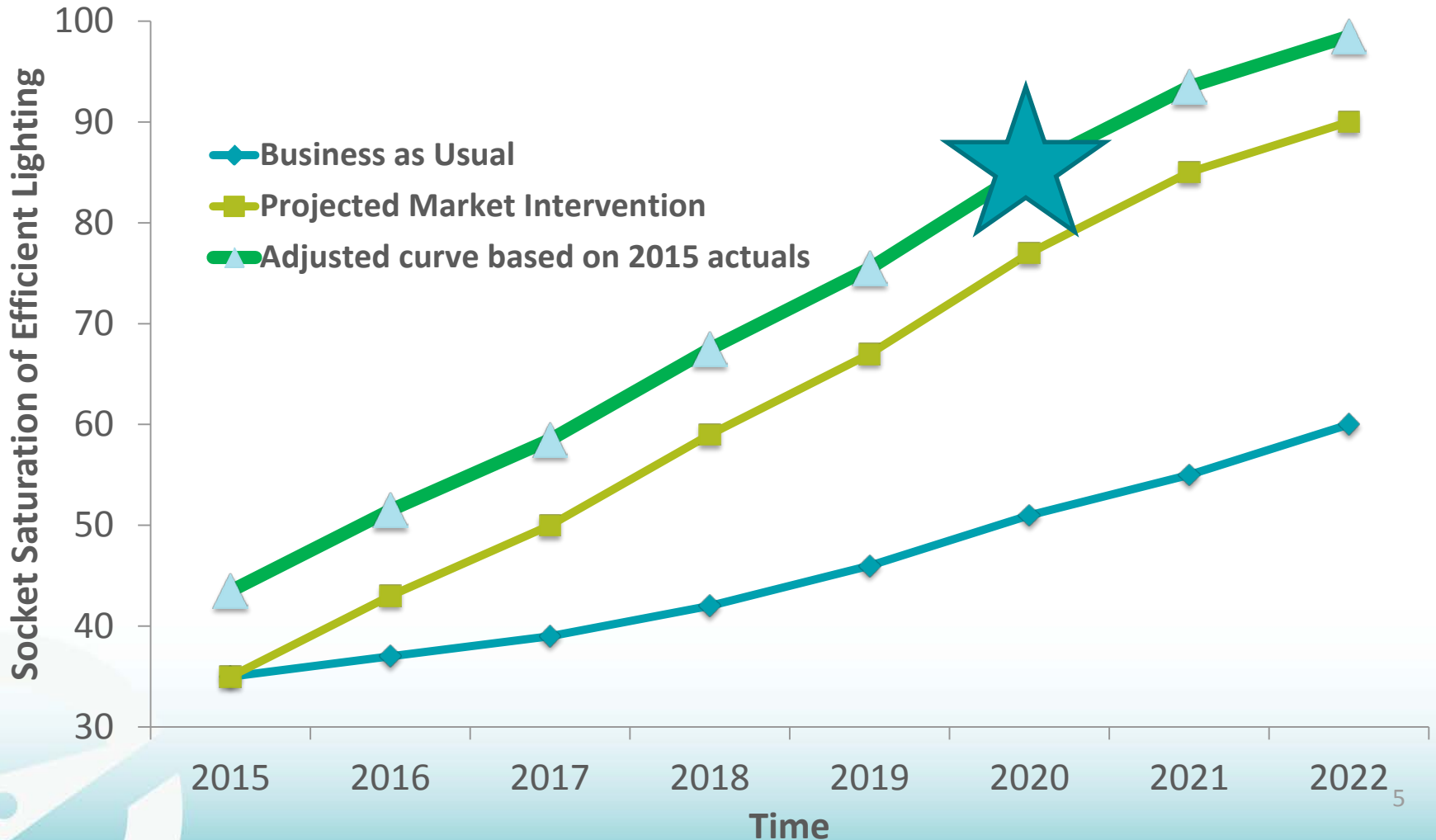


Region is On Track to “Break PR”

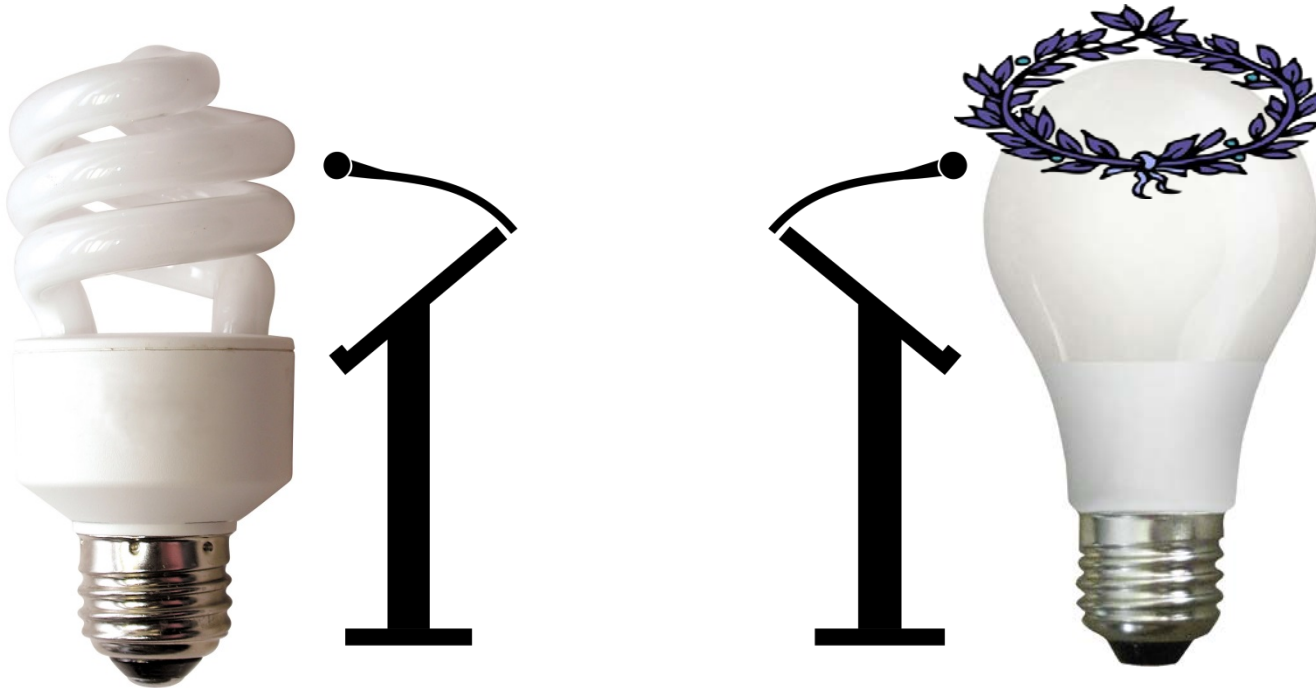


- Racing ahead, the region could reach the goal 1-2 years early

Residential Lighting Market Transformation Curve



How? The Debates are Over: LEDs Won!



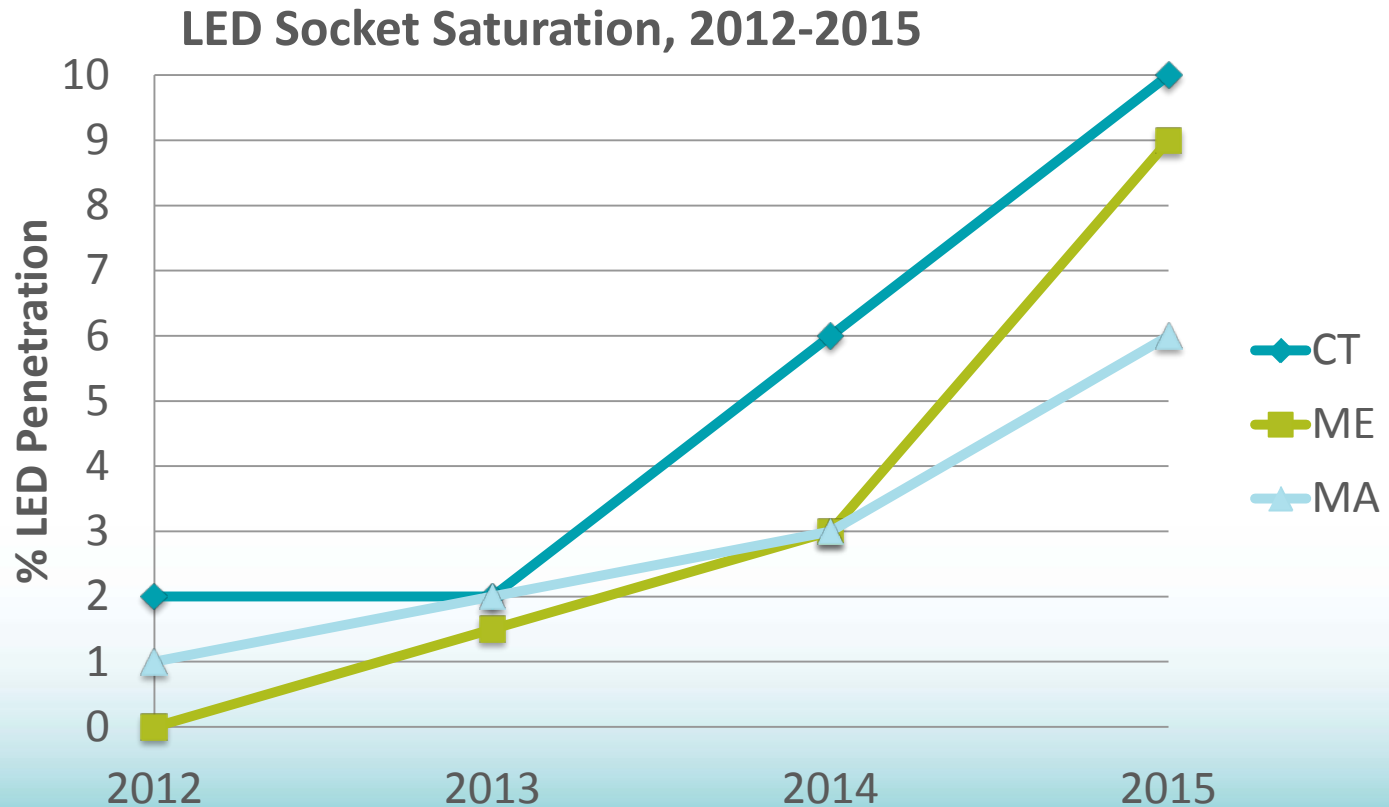
Heavy debate schedule (up against NFL)

- Customer Uptake
- ENERGY STAR Lamps 2.0
- Efficiency Program Promotion
 - EISA 2009

Customers are Voting LED



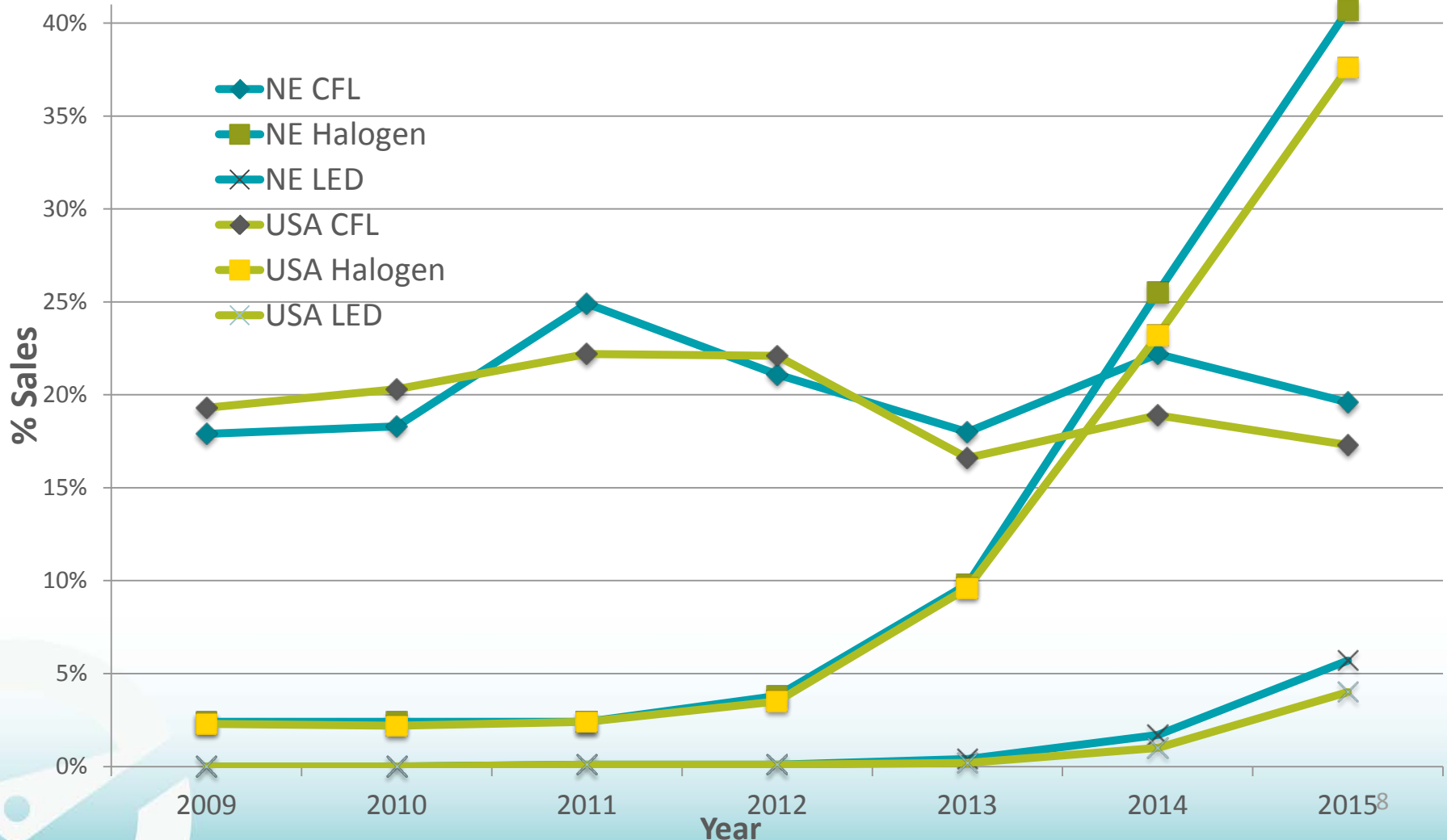
- 2015 Socket Saturation results are in:
 - Connecticut
 - Maine
 - Massachusetts



Customers are Voting LED

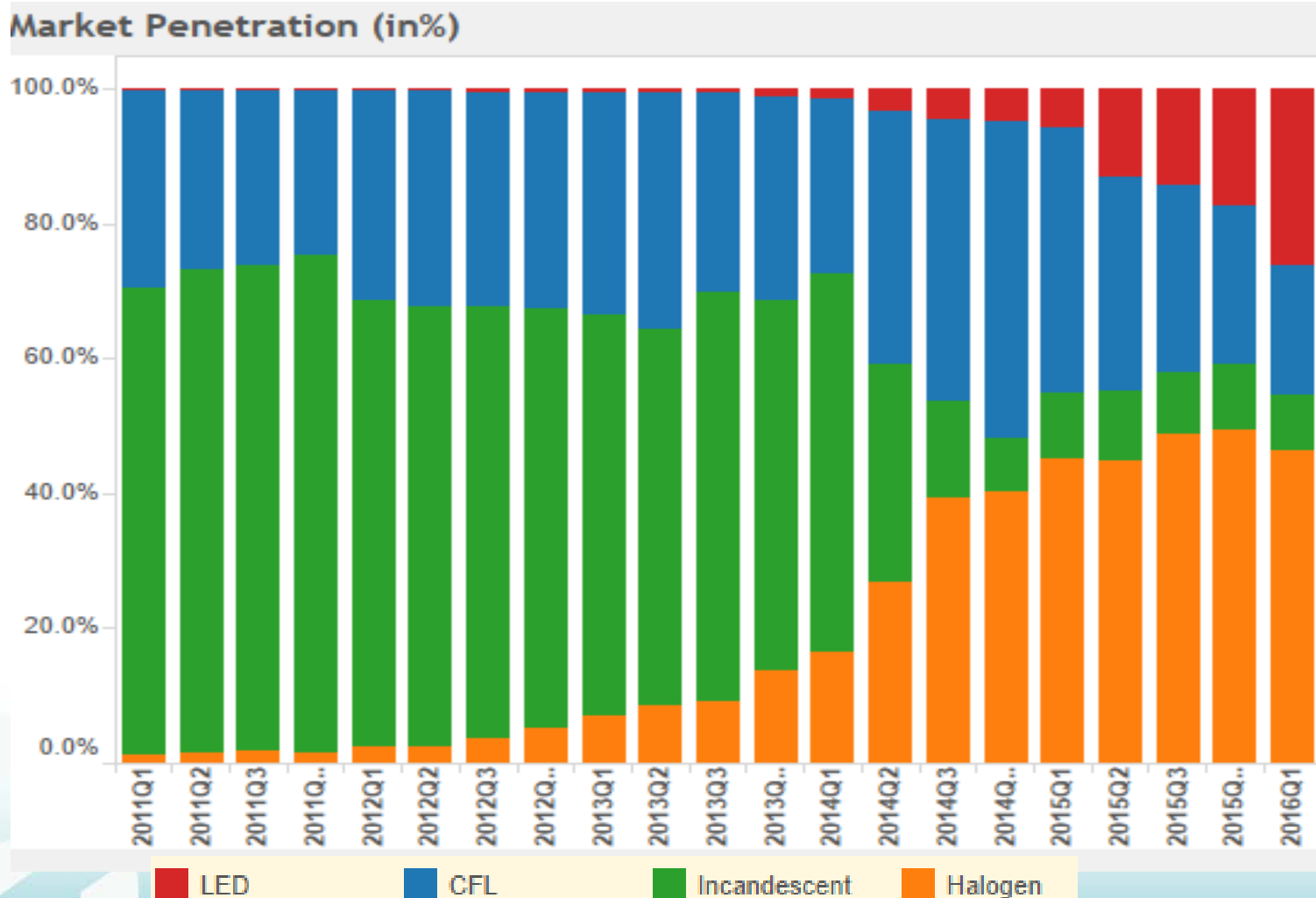


- Sales Data from LightTracker, Northeast vs. USA



Customers are Voting LED

- Shipping Date from NEMA

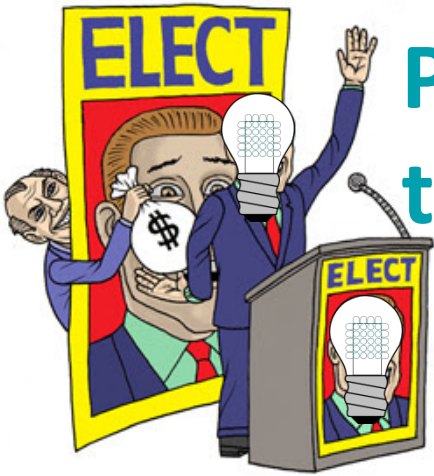


ENERGY STAR Lamps 2.0: Marathon to Certification



- Testing is long, but lamp 2.0 population is finally growing since finalized at end of 2015
- Nearly 400 A-style LEDs certified to Version 2.0, many of which are 15,000 hour lifetimes (below)
 - 14 manufacturers

Wattage Equivalency	40W	60W	75W	100W	Total
Number Certifying (in publication, late July)	20	28	7	10	65
As of 8/4	24	33	9	18	84
As of this morning	26	35	11	18	90



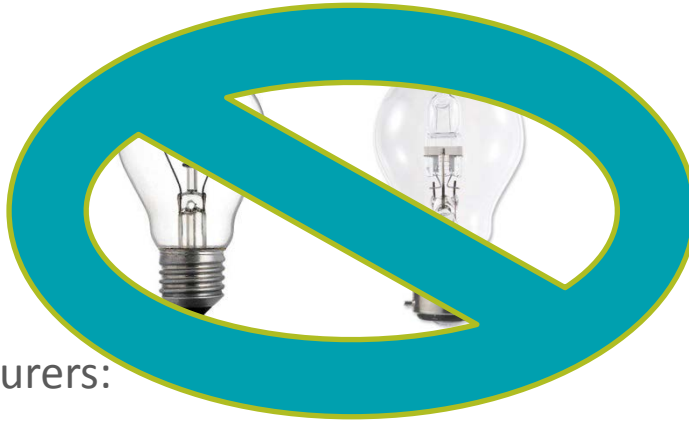
Program Administrators Helping to Finance the LED Campaign



State	Planned 2015 Retail LED %	Actual % of LEDs through program in Q1, 2016	% LED Planned for all 2016
CT	50%	68%	65%
DC	34%	60%	66%
MA	49%	61.6%	75%
NH	59%	75.5%-88.5%	51%-84% ^{xii}
NY (PSEG LI)	41%	65%	63%
RI	27%	63.8%	75% ^{xi}
VT	48%	78.1%	96.5%

Tokyo, err, I mean EISA 2020!

As proposed, legal in Jan 1, 2020
In stores:



For manufacturers:



Once legacy products sell through, this is what can be expected for each wattage equivalent (at current efficacies):

- 40W
- 60W
- 75W
- 100W
- 125W
- 150W+



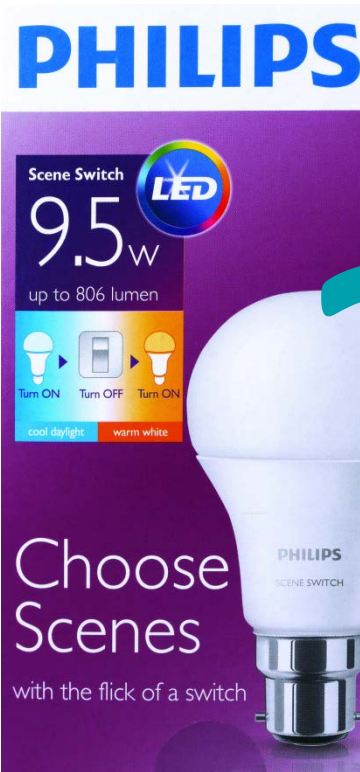
“We have our best minds on this...”



“We have our best minds on this...”



Dumber



- Basic control (hub & app)
- Color tuning (hub & app)
- Tuning for specific application
- Advanced functionality: app, no hub needed

Smarter



Energy Savings?
Demand Response?
Equity?
Cost effective?

Lamp Intelligence Continuum



Concluding Strategies for Gold:

1. PA should **continue to support** cost-effective ENERGY STAR residential lighting products
2. PAs transition portfolios towards **specialty/fixture LEDs**
3. PAs target LEDs in **Hard-to-Reach** Markets
4. PAs consider promotion of ENERGY STAR **smart lighting products**
5. PAs explore opportunities in residential **linear products**
6. Regional collaboration on residential lighting **research**
7. Regional coordination on **data collection and sharing**
8. Regional discussions on **savings calculation inputs** to ensure appropriate attribution

Watch the Games, Live!

In-Person Workshop, Tuesday, Sept 20th



- Registration is open
- 3 days of workshops!
 - 9/20: Res Lighting
 - 9/21: Home Energy Management Systems
 - 9/22: EM&V 2.0

Time	Program
10:00	Welcome and Introductions
10:15	Ish Bulb, revisited
11:10	BREAK
11:30	“Specialty” products deep dive
12:15	LUNCH
1:15	Are we breaking up? The Future of Residential Lighting
2:30	BREAK
2:50	Smart Lighting: New Opportunities for Multiple Benefits
3:50	Wrap up
4:00	Adjourn – Thank you!

Conclusion and Next steps

- Brief and webinar will be posted at neep.org
- We look forward to seeing you in CT at the 9/20 Workshop
 - Interested in Workshop Sponsorship? Contact [Lucie Carriou](#)
- Job listing for DLC: [DLC Program Specialist](#)



Let's go lighting!





QUESTIONS?

THANK YOU!

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