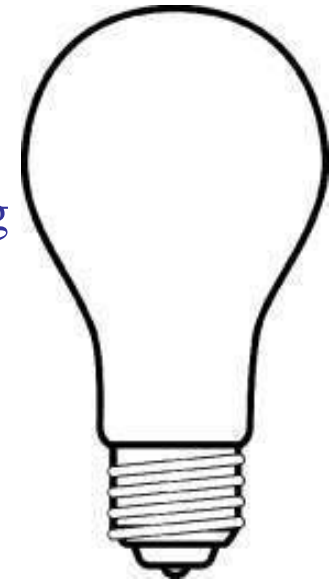


Lighting: A Market in Transition

Joseph G. Howley

Manager - Industry Relations and Environmental Marketing

GE Lighting



Chairman - NEMA Lamp Section

Immediate Past Chairman – NEMA Lighting Division

Chairman - Electroederation Lamp Committee - Canada

April 11, 2011

2011 Market Transformation Symposium

The Transformation has already started

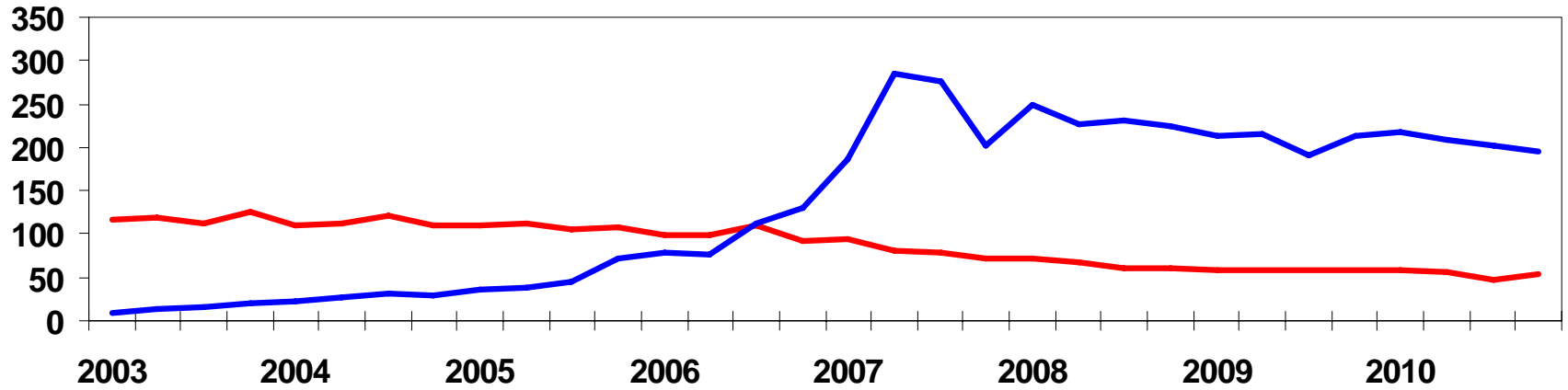
2007 National Media attention on Climate Change highlighted changing to CFLs as one easy action to take. Many Did!

Incandescent Light Bulbs

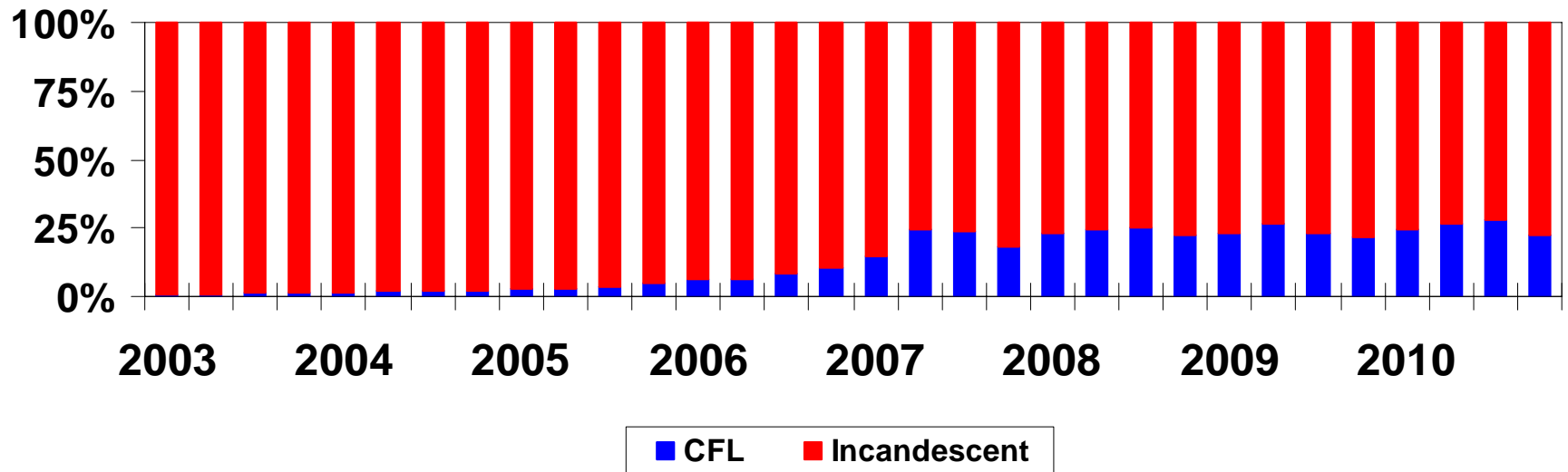
Compact Fluorescent Lamps



Sales Index (Avg. Qtr. 2006 = 100)



Market Penetration (in %)



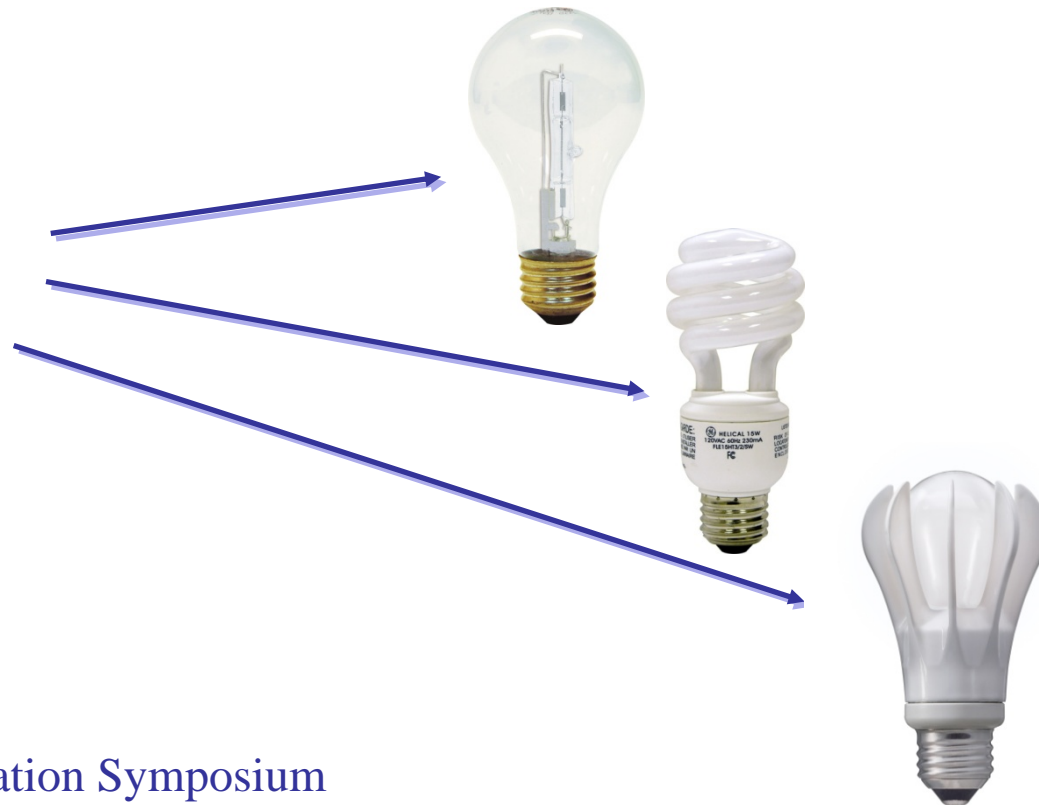
Source: NEMA Unit Sales Data

The Transformation will accelerate

2007 Energy Independence and Security Act sets minimum efficiency levels for standard household Light Bulbs.

Incandescent Light Bulb

Halogen, CFL, and LED Bulbs



LUMEN COALITION

m **L**ighting **U**nderstanding for a **M**ore **E**fficient **N**ation

m **C**oalition of **A**dvocates, **M**anufacturers, **G**overnment **A**gencies, **R**etailers, **T**rade **A**ssociations, **U**tilities, **E**fficiency **A**lliances, **T**echnical **A**ssociations

m **G**oals:

- **Increase Public Awareness of Transition**
- **Curb Public Misunderstanding**
- **Increase awareness of new lighting products**
- **Address Consumer Dissatisfaction**

The 5 Ls of Lighting

The Consumer's Guide to Choosing Energy-Efficient Lighting

NEMA

Where will I use this light bulb?

Dimmability	The package shows if the bulb is made for a dimmable fixture
Usage	The package shows if the bulb is for indoor or outdoor use

How bright do I need this light bulb to shine?

More Lumens = Brighter

Lumens are shown on the package label

60 watt Incandescent ~ 800 Lumens
100 watt Incandescent ~ 1600 Lumens

What are my light bulb options?

Incandescent	Halogen (Energy-efficient incandescent)	CFL	LED
			
Clear Frosted	Clear Frosted	Open Covered	
Energy/Cost Savings (Compared to incandescent)	~28%	~75%	~75%+

How do I read the Lighting Facts label?

Brightness	The amount of light a bulb emits, expressed in lumens
Energy Cost	The average cost to run a bulb for one year
Life	The average life of a bulb, expressed in years
Light Appearance	How warm (yellowish white) or cool (bluish white) the light appears
Energy Used	The amount of electrical power the bulb uses, expressed in watts
<i>CFL Label Only</i>	
Mercury	The bulb contains a small amount of mercury. Recycling is recommended. epa.gov/cfl

There are new energy-efficiency standards for lighting.

Which incandescent bulbs will no longer be made?



Current Wattage	Date (not made after)
100w	January 1, 2012
75w	January 1, 2013
60w & 40w	January 1, 2014

The law requires increased efficiency. It does not ban incandescents or mandate CFLs.

Household Transformation



A typical 2000 sq. ft. house contains about 16 standard light bulbs between 40 and 100 w.

<u>Year</u>	<u>No.</u>	<u>Inc.</u>	<u>Halogen</u>	<u>CFL</u>	<u>LED</u>
2012:	4	100 w	72 w	26 w	
2013:	3	75 w	53 w	20 w	
2014:	7	60 w	43 w	13 w	12 w
2014:	2	40 w	29 w	10 w	9 w

Lighting: A Market in Transition

Ave. electricity cost
reduction when all
standards are
implemented

~ **\$70 per yr.**

if ½ Halogen &
½ CFL/LED based on
3 hours per day and
11 cents per kWh



Lighting: A Market in Transition

Questions?

