

# Global Lighting Association: NEMA (United States) update

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# Topics covered

-  Initiative on Phasing-in of Efficient Lighting
-  Minimum Performance Requirements for Quality Standards for LEDs
-  National Program on Safe Disposal of Fluorescent Lamps

# Incandescent lamp phase out

Phase out of incandescent lamps around the world - December 2011 Status

	2009	2010	2011	2012	2013	2014	2015	2016	
<b>Europe</b>									
European Union		100W	75W	60W	40W-15W		halogen available	efficiency level B	
Switzerland		100W	75W	60W	40W-15W		halogen available	efficiency level B	
Turkey				Aligned with EU			halogen available	efficiency level B	
<b>North America</b>									
British Columbia			75W, 100W		40W, 60W		halogen available		
California			100W	75W	40W, 60W		halogen available		
USA (except CA)				100W	75W	40W, 60W	halogen available		
Canada (except BC)						75W, 100W	40W, 60W	halogen available	
<b>Latin America</b>									
Cuba			banned all incandescent filament lamps including halogen in 2005						
Argentina			ban of all incandescent lamps $\geq 25W$ but not including halogen						
Colombia			$\geq 150W$	$\geq 75W$	$\geq 60W$		halogen available		
Mexico				100W	75W	40W, 60W	halogen available		
Brazil				$\geq 100W$	$\geq 80W$	$\geq 40W$	$\geq 25W$	halogen available	
<b>Asia</b>									
Malaysia			$\geq 100W$	all other wattages		ban of all filament lamps in favor of CFLs and LEDs			
Russia			$\geq 100W$			halogen available			
Israel			$\geq 60W$			halogen available			
ROK				150W - 70W		70W-25W	minimum standard 20 lm/W		
Taiwan				Min. requirements for consumer lamps: 22lm/W for $\geq 100W$ , 20lm/W for $\geq 60W$ , 18lm/W for $\geq 40W$ , 15lm/W for $\geq 25W$					
China				$\geq 100W$		$\geq 60W$		$\geq 15W$	
Japan			gradual voluntary transition by major lamp companies to high efficacy lighting - no mandatory regulations in place						
Philippines			no government mandated ban at this time, Bill to require a minimum of 15 lm/W efficacy introduced in the Philippines Senate						
India			Some voluntary programs, but no mandatory standards for lamps rated at 100W or below						
<b>Oceania</b>									
Australia		Traditional incandescent phased out in 2008, halogen available							
New Zealand		Intention was to phase out traditional incandescent lamps the same way as Australia, but government elected in 2008 did not proceed							

Prepared by Pekka Hakkarainen Dec 2011

Color code: Phase out event or period  
 Higher efficacy filament lamps allowed  
 No filament lamps allowed

In the U.S., over 50% of consumers are aware of incandescent phase out (OSI, 2011)

- 100W A-lamp not manufactured or imported starting 1 Jan 2012.
- There is some anecdotal evidence of consumer stockpiling
- Canada delayed phase out by two years

## Phasing in of efficient lighting

- 💡 EISA 2007 initiated phasing out of standard incandescent lamps and defined standards for incandescent reflector lamps.
  - DOE does not have authorization to enforce the standards in FY2012 or FY 21013
- 💡 After 1 January 2013, 75W A19 lamp will not be manufactured or imported.
- 💡 PAR lamp standards came into effect 19 July 2012.
- 💡 New DOE rulemaking in process for ER, BR lamps and stricter standards for PAR lamps.

# Quality standards for LEDs

- 💡 **No federal requirements for SSL devices**
  - DOE has initiated a rulemaking for the test procedures for LEDs
  - Industry has concerns that this would lead to performance requirements by 2015
- 💡 **EPA Energy Star version 1.0**
  - Technology neutral requirements for lamps
  - Draft version 1 was published in the spring
  - Minimum efficacy 45-60 lm/W depending on lamp type

# Recycling

- 💡 No uniform national program exists.
- 💡 Manufacturers, the Federal Government and prominent NGOs promote lamp recycling.
- 💡 Large generators (*i.e.*, commercial/industrial) are required under Federal Hazardous Waste laws to recycle lamps - done through private contracts with recyclers. [Enforcement is spotty.]
- 💡 Households have many options to recycle CFLs through retail chains (*e.g.*, Lowes, Home Depot), mail back programs, local Household Hazardous Wwaste facilities, etc. Access varies according to State, and between rural and urban locations.
- 💡 Three states have enacted laws requiring manufacturers to fund statewide lamp recycling programs. Scope of the laws vary, but principal focus is the residential/consumer sector.