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Impact and delay of the phase out of inefficient light bulbs policy

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Plan

- The 2009/244/CE regulation
- The éco21 and éco-social program
- Data collection and methods used to estimate the savings
- Results

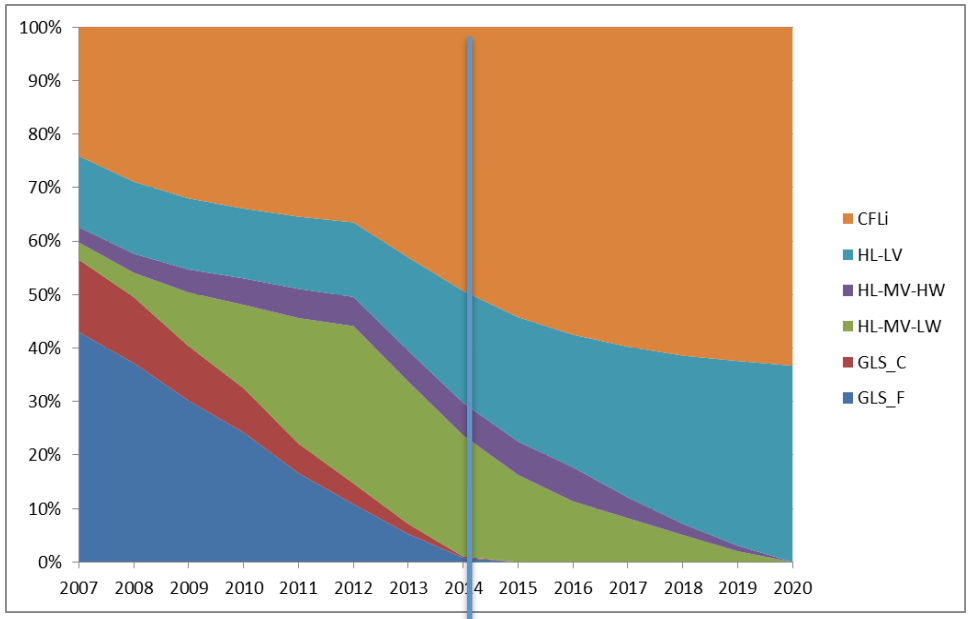
The 2009/244/CE

- Ban of incandescent bulbs
- Achieve 39 TWh/year of savings
- Six steps (five of them already imp

Source : lansingmiteaparty.wordpress.com

The 2009/244/CE

Scenario reproduced from data contained in the Annex 8-6: Main economic and environmental data for the scenario “Option 2 Clear B Slow” in the Preparatory Studies for Eco-design Requirements (Toth 2008)



Shares of lighting technologies in 2014 according to scenario “Option 2 Clear B Slow”

	GLS-F/GLS-C	HL-MV-LW	HL-MV-HW	HL-LV	CFLi	
2014	1%	23%	6%	21%	49%	100%

The program

Several subprograms, among them :

Éco21 is an EE program for
Geneva-Switzerland
population ~ 470’000
electricity consumption ~ 3 TWh/an)

The aim of the program is to reduce
125 GWh/an by 2015

éco-social

The University of Geneva is in charge of the evalution of the program

The (sub)program éco-social

éco-social

éco-social is addressing mainly low to
medium income households in Geneva

The program started at the end of 2009
At the end of 2014, it had reached close to 8000 households

éco-social obtained, through 14 campaigns,
3 GWh/year of savings

More than 80’000 light lamps replaced

Data collection and methods used to estimate the savings

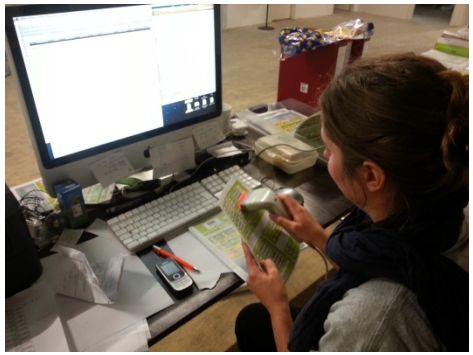
Additionality : Isolate the impact of the éco-social program from other initiatives

Regulation is affecting gradually the baseline

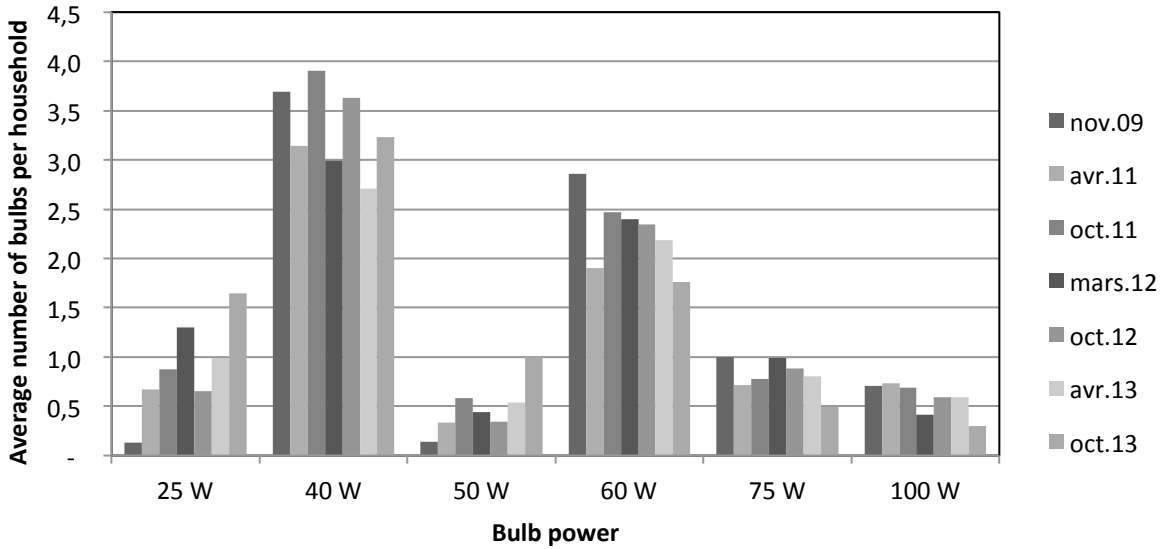
Combined ex ante and ex post

Data collection and methods used to estimate the savings

Campaign	simple engineering ex-ante	enhanced engineering ex-post individual meter readings	enhanced engineering ex-post load profiles
1	x	x	x
2	x	x	x
3	x	x	
4	x		
5	x		x
6	x		
7	x		
8	x		x



Evolution of the stock of inefficient light bulbs



Number of removed inefficient light bulbs per households decreasing (but slightly)

Average power per removed inefficient light bulbs also decreasing (but slightly)

Evolution of the stock of inefficient light bulbs

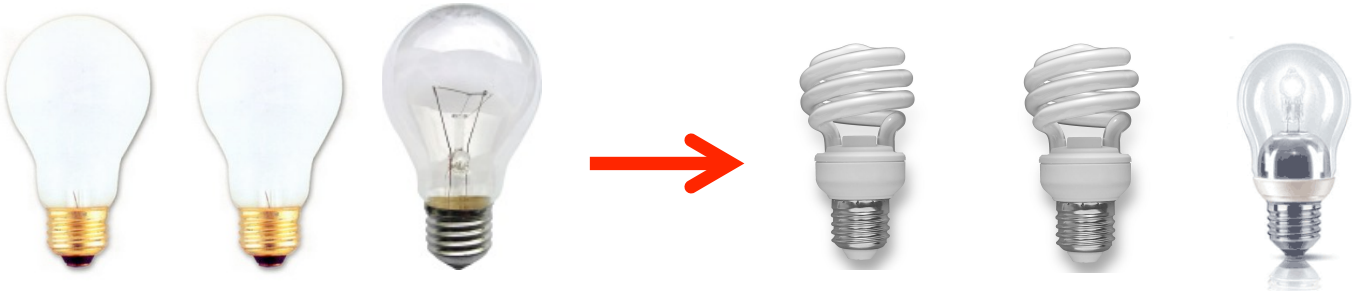
Shares of lighting technologies in 2014 (without CFL), according to scenario “Option 2 Clear B Slow” and the “éco-social” survey

	GLS-F/GLS-C	HL-MV-LW	HL-MV-HW	HL-LV	
Scenario	2%	45%	12%	41%	100%
éco-social	55%	44%	2%	0%	100%

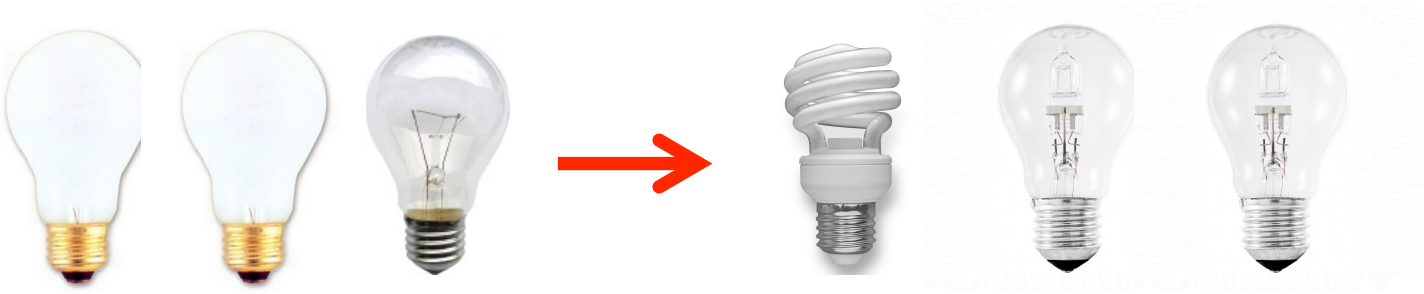
Still a lot of incandescent lamps

Evolution of the stock of inefficient light bulbs

What it was expected



What we are observing



Why still a lot of incandescent bulbs?

Underestimation of the impact of reserve stock in households

Mean time life expectancy is not the maximum life time expectancy
Rectangular law of survival

'life expectancy' is a misleading summary of survival

Cambridge University

Why halogen become the replacing choice?

Price effect

	Halogen	CFL
Cost	2-4 Fr.	3-20 Fr.

Distrust in CFL

EU delays ban on halogen bulbs (Guardian , 20 Apr 15) Ban on inefficient bulbs is delayed two years after lobbyists argue that LED alternatives are not ready to replace them, reports ENDS Europe.

EU member states have voted to postpone a ban on inefficient halogen light bulbs by two years – to 2018

Consequences

-The rest of incandescent lamps will be replaced mainly by the halogens

-The savings will be postponed (longer life expectancy for halogens)

	Incandescent	Halogen
lifetime	1000 h	2000 h

Questions ?

Impact of Policy measures