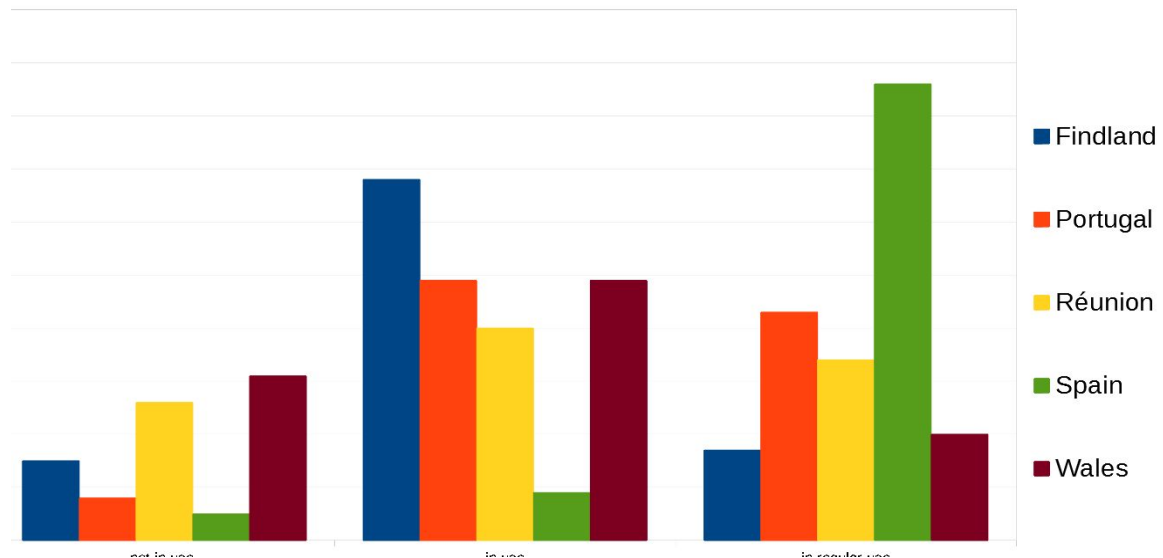


For the Erasmus project we have done a poll about thing that we already do or could do to deal with the environmental problem. It was sent to five countries Finland, Portugal, Réunion, Spain and Wales. This pool aim at measure if the Sustainable Development Goals are reached, or at least if people are changing their ways of consumption. This process is very important for us because we are facing a major and alarming climate change. From the Meadows report published in 1972, to the creation of the GIEC in 1988, to Greta Thunberg nowadays climate change is a big threat. We choose to work on the question about bulbs and particularly if people used to replaced incandescent bulbs with compact fluorescent bulbs or not. We have made a graph with the answers of each locations and we can see that in general the most of people already use fluorescent bulbs to replace incandescent ones.

FIGURE 1: THE PERCENTAGE OF PEOPLE THAT REPLACE INCANDESCENT BULBS WITH COMPACT FLUORESCENT BULBS (CFL)



We'll take the example of Réunion and Finland and study them, we can see that Réunion is one of the location that answered the most not in use 25%, but at the same time almost the 2/3 of responds are in use or in regular use.

The figures for Finland are also pretty interesting, people that answered not in use and in regular use are almost the same amount, around 15% but there a lot more people that answered just in use (almost 70%).

So we can imagine that the use of fluorescent bulbs is increasing however there still have a regular use of incandescent bulbs.

#### What advantages and what makes people change their bulbs?

The European Union aim at reduce the amount of energy needed to for households since 2009, in fact changing the laws to forbid incandescent bulbs use is part of this approach. Also government give households financial help to encourage them to buy incandescent lamps.

Here is the goal of european union and how they achieved it

date	permitted bulb wattage
06/2009	≥ 100 W
12/2009	≥ 75 W
06/2010	≥ 60 W
08/2011	≥ 40 W
12/2012	≥ 25

In France lighting represent almost 10% of the electricity bill and change your bulbs can help to reduce it. In 2012 the incandescent bulbs were banned and new bulbs called low consumption light (lampes basse consommation ou LBC) were promoted , inside we can find the fluorescent bulbs that the question is about.

Here are some of the different characteristics of both bulbs:

	Fluorescent bulb	Incandescent bulb
The price	A bit higher	1 to 5 euros *
Consumption	Divided by 5	High
Lifespan	6000-10 000 hours	1000 hours
Power needed	low	High
Heat released	low	High (95% of the energy become heat)

\*: french prices

We now understand why government promote fluorescent bulb over incandescent bulb, even though fluorescent bulb are a bit more expensive they are a way more cost-effective than incandescent bulb and are part of the ecological transition process. Even though laws forbid it and government try to ban it incandescent bulbs are still sold in some countries, even if the drawbacks for incandescent bulbs use are intense and that the benefits for fluorescent bulbs use are numerous some people still use incandescent bulbs. In fact changing the type of light bulb is a personal choice, an ecological approach that can be influenced by the advantages and disadvantages of each type of light bulb. We encourage you to change your bulb: it will be good for your economy and for the planet !

Thus we understand why most of people use fluorescent bulbs according to this graph, however the process is still running and should be totally achieved in the next 3 years. The graph gives us an idea of the progress of the process but the number of answer are not representative of the country's progress or way of consume, we must therefore take these results with a grain of salt.

LOPEZ CLARISSE  
PICCINO HUGO