

Ban a double edged sword in the name of environmental protection

A recent EU ban on the sale of incandescent lightbulbs has gotten mixed responses. Some say that the benefit attained with less energy demand does not offset the pollution associated with the manufacture and disposal of CFL and fluorescent lights.

The EU recently agreed to a ban on the sale of incandescent light bulbs which most people simply know as regular light bulbs. The ban comes after a report made by the International energy agency in 2006. The purpose of this report was to find ways to reduce energy use and CO2 emissions and therefore protect the environment says Kevin Shaw, a Scottish lighting designer. Shaw, who is the chairman of PLDA committee on eco friendly design, was here in Iceland last week and gave a lecture for the Light technical society in Iceland about the incandescent phase out. He came here on the initiative of Halldor Steinsen, lighting designer with Epal who has Kevin Shaw as a tutor for his master thesis in architectural lighting design at KTH in Stockholm.

The conclusion of the above mentioned report was that incandescent light bulbs were bad since they used so much energy but CFL and fluorescent lights were good because they needed less, Kevan explains. He thinks however that the drawbacks of CFLs and fluorescent lights are significant and outweigh the benefits. I think that the main reason for this ban of incandescent light bulbs is that it is a good way for politicians and governments to show that they are doing something about the environment and reducing CO2 emissions, he says with emphasis. Kevan thinks that this ban is a double edged sword, especially for a country like Iceland which generates its energy in a relatively environmentally friendly fashion.

The problem is that everyone has only been looking at the benefits of the CFL but not its drawbacks says Shaw. He explains that making a CFL takes quite a bit of material and energy. Every CFL is ca 80gr of materials while an incandescent is about 10gr of materials. Secondly, CFL and fluorescent lights contain hazardous materials, most notably mercury. Calculations show that if you switch out every Incandescent light bulb in the EU27 with a CFL you will get an additional 1,7 tons of mercury to deal with every year, says Shaw.

To prevent the mercury from entering the environment he says it is necessary to have recycling procedures for these light bulbs. Only one country has set up an acceptable method to collect such light bulbs and that is Sweden. They manage to collect about 70% of these light bulbs. Sweden however export the light bulbs over to Denmark and Norway for recycling he says and adds that there is little to be recovered from recycling these light bulbs. If you throw them in the trash which will certainly happen to a degree it is almost certain that they will end up in a landfill. From there we will have mercury seeping into the environment.

Kevan Shaw thinks that since almost no CO2 is brought into environment in Iceland from generating energy it is necessary for Icelandic government to consider carefully those rules from the EU intended to save energy but could mean something altogether different and worse for Iceland. What needs to be done is to properly research the environmental impact of switching from incandescent to CFL in Iceland says Shaw who met with Icelandic leading industrial and environmental industry officials to inform them about this view. Iceland as part of the European economic area has so far agreed to most of EU regulation. The regulation that bans the incandescent light bulb has not yet been approved by Iceland but is under review at the industrial ministry.

Shaw thinks it is the right time to seek an exemption from this regulation and points to the case of New Zealand where they did not agree to this ban unlike their neighbours in Australia. New Zealand has normally followed Australia and adopted all rules and regulations about import and export that their big neighbour has set. New Zealand is in a similar position to Iceland with a relatively green energy industry. The government there could not justify to the public the possibly negative impacts of a ban or reducing consumer choice says Shaw.