Incandescent ban highlights issue of forced obsolescence

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The mad scramble [1] to obtain incandescent bulbs ahead of the EU ban [2] highlights a controversial practice—the forced obsolescence of old technologies. R&D, combined with market forces, often collude to bury legacy tech. But should government speed up this process? How important is consumer choice? Is this “arcane” concept trumped by the march of technological progress?

A year ago, I covered the interagency conflict [3] between the EPA and the DOE. The EPA had unilaterally expanded the Energy Star Residential Light Fixture (RLF) criteria to include legacy technologies (including incandescent light bulbs). The new criteria allowed the use of motion sensors, which served as a crutch for inferior tech. Because Energy Star was a joint venture (and the EPA had acted unilaterally), the DOE felt snubbed.

In an attempt to remove a “competitive disadvantage,” the EPA gave older technologies a competitive *ad*vantage. The EPA’s Lighting Program Manager, Alex Baker, claimed the RLF Program has “maintained a

technology-neutral approach." But in reality, this "technology-neutral approach" amounted to forced technological equality (or "affirmative action for light bulbs," as a reader quipped). By artificially "leveling the playing field," the EPA privileged one technology at the expense of another; i.e., all technologies are equal, but some are more equal than others.

Just as government shouldn't prop up legacy technologies, nor should they take the opposite approach—ban them. The European Union and the US government have taken the latter approach. To be sure, the legislation covers the manufacture and importation of such bulbs, not their sale—hence, the rush to buy up remaining stock. The first phase of the EU's ban, covering 100 W bulbs, went into effect September 1st. 75 W will get the ax in 2010, followed by 60 W in 2011, and closing out with 40/25 W in 2012.

The ban has proved to be massively unpopular. In one poll [4], 64% of Austrians found the legislation "nonsensical." Holger Krahmer, a Member of the European Parliament (MEP) from Germany's FDP party, declared [5] the ban "light bulb socialism." Czech President Vaclav Klaus is apparently urging consumers [6] to buy up incadenscent bulbs in droves. And the public is responding—with their wallets. Der Spiegel reports a huge increase in incandescent sales across Germany. For 100 W bulbs, sales rose by 80-150%. Clearly, the market has decided against CFL's.

CFL's are four-times more efficient than incandescents (20% vs. 5%, respectively). Yet, in the court of public opinion, they haven't fared so well. Critics point to its unnatural, bluish light, time to achieve full brightness (3 minutes [7]), and dimming issues. An independent study [8] found that 25% of CFL's no longer met their rated output after 40% of their rated service life. Certain CFL's emit a headache-inducing buzzing sound. And the environmental benefits are dubious—CFL's contain mercury. One UK commentator noted [9] that, "it seems strange suddenly to force people to use a product about which so many consumers are unhappy."

The US has similar legislation in place. The Energy Independence and Security Act of 2007 [10] will achieve the same results as the EU ban—just on a later timetable. The 100 W bulb is the first to go, meeting its untimely demise in 2012. By 2014, incandescents will be completely eliminated. What happened to consumer choice? Fair competition? The Germans have clearly voted with their wallets, and there will be similar hoarding on this side of the Atlantic. For every stat "proving" CFL's technological superiority, there's someone who prefers incandescents for intangible, aesthetic reasons.

Very often, the touted "superiority" of new technologies is nothing but smoke and mirrors. For that reason alone, we shouldn't impose arbitrary obsolescence of legacy tech. But let's be frank—most consumers look at cost, and cost alone, in determining their lighting needs. And incandescent bulbs are, by far, the cheapest option. The only winner in this scenario (as in every case of forced obsolescence) is the CFL manufacturer. That's a lousy reason to pass any legislation, let alone one that restricts consumer choice.

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