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Ban The Bulb? Not A Bright Idea

NEW LIGHTING STANDARDS AMOUNT TO A MANDATORY CONVERSION TO COMPACT FLUORESCENT LAMPS. IS THIS A SMART WAY TO SAVE ENERGY?

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by Jonathan Rauch

Can you believe those paternalistic, socialistic, elitistic Europeans? They're banning incandescent lighting, starting last month with 100-watt bulbs. Consumers are reportedly stockpiling incandescents, but E.U. officials profess no concern. "I have no doubt," wrote European Union Energy Commissioner Andris Piebalgs, in a breezy blog post, "that once Europeans start using the modern alternatives to the inefficient lightbulbs, they will start to enjoy the advantages they have to offer."

Thank goodness such a thing could never happen here. Right? Wrong. In 2007, that paternalistic, socialistic, elitistic president, George W. Bush, signed an energy bill requiring most nonspecialty household lightbulbs to use 25 to 30 percent less energy, starting with 100-watt bulbs in 2012 and extending down to 40 watts by 2014.

As of today, ordinary incandescent bulbs can't meet the standard. Lighting experts say the future belongs to light-emitting diodes, but those remain in development. By default, therefore, the new lighting standards amount to a mandatory conversion to compact fluorescent lamps (CFLs, in the jargon).

Is this a smart way to save some energy? Or, rather, an example of ham-handed environmental grandstanding?

Europhobia aside, there is a case for the phaseout. Incandescents are famously wasteful, emitting much more heat than light. Though cheap to buy, they are expensive to run. Unfortunately, consumers may place too little value on future savings, rejecting a costly but efficient fluorescent even though it would more than pay for itself over time.

Moreover, lightbulbs are low-hanging fruit on the conservation tree. Unlike, say, an air conditioner or a furnace, they are quick and easy to replace. Savings flow instantly. Compact fluorescents may be imperfect, but the new mandate will drive down their prices while stimulating technological advances. Everybody wins.

That case has its points. Nonetheless, I'm going to vote for No. 2: ham-handed environmental grandstanding.

It is true that consumers can and often do undervalue energy efficiency, if only because electricity prices do not fully reflect environmental costs. And efficiency standards for household appliances have proven their worth. "Appliance standards may be the single most successful energy policy," says Alan Sanstad, an energy analyst with Lawrence Berkeley National Laboratory. "They work. Unambiguously. The technologies have gotten much more energy-efficient, while continuing to improve in other respects."

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But replacing your incandescent bulbs with fluorescents is not the same as replacing your low-efficiency refrigerator with a high-efficiency one, because consumers do not regard fluorescents as a perfect, or often even acceptable, substitute. As someone who has recently made a good-faith effort to switch, I can tell you that fluorescents deserve their not-ready-for-prime-time reputation. They are slow to come on and slower to reach full brightness. They come in weird, ugly shapes, typically reject dimmers, and don't even fit in half the places where I need to put them. Their reliability is spotty. And they contain toxic mercury, making breakage and disposal problematic. That's before considering their light, which is mediocre at best and ghoulish at worst.

Compact fluorescents, Sanstad points out, have been on the market for decades. "There's a lot of consumer resistance to them, which is not apparently going away. Tremendous government encouragement of CFLs has gone on for a long time, and it has been an uphill battle" -- a fact reflected all too well in a baleful *New York Times* headline just last month: "As CFL Sales Fall, More Incentives Urged."

In short, the compact fluorescent lamp, at least in its currently commonplace incarnations, is a lousy product. Consumers who reject it are not necessarily numskulls. Many if not most are exercising a very understandable preference.

It is certainly true that incandescents are inefficient. But you can always find some product Y that is more efficient than another product X, and that is no reason to ban X. Flat-panel televisions are notorious energy hogs. Cathode-ray TVs are much more efficient, and cheaper, to boot. Why not ban flat-panels? The answer, of course, is that they provide a more aesthetically pleasing experience. So we let people "waste" electricity on them.

By contrast, look at what the incandescent phaseout is saying: Never mind that you might be willing to raise your summertime thermostat a notch or two in exchange for keeping incandescent bulbs; you still can't have them. Never mind that your house is full of other potential energy savings; it's CFLs for you.

Suppose, for argument's sake, that compact fluorescents were every bit as good as incandescents. Would the phaseout then make sense?

Not necessarily. Fluorescents, though much-longer-lived and cheaper to run, are also much more expensive than incandescents, and it is not crazy for people to prefer keeping their money in the bank. Moreover, the energy savings we are talking about, seen in context, are smaller than the publicity might lead you to believe.

"If every American home replaced just one lightbulb with an ENERGY STAR-qualified bulb," gushes the government's Energy Star website, "we would save ... more than \$600 million in annual energy costs and prevent greenhouse gases equivalent to the emissions of more than 800,000 cars." What that sentence omits is that this would be the equivalent of removing three cars out of every 1,000 and reducing energy spending by about five-ten-thousandths. Similarly, advocates who tout the incandescent phaseout as reducing America's energy bills by up to \$18 billion annually do not mention that the reduction amounts to less than 2 percent.

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Then there is the problem of what Jerry Taylor, an energy analyst at the Cato Institute, calls the rebound effect. Downsizing cars makes driving cheaper, so people do more of it, offsetting some of the

gains. Similarly, fluorescents make keeping the lights on cheaper, with the same likely effect.

The Competitive Enterprise Institute's Sam Kazman notes that in the 1980s a town in Iowa gave out 18,000 free fluorescents in an effort to conserve electricity. "Despite the fact that over half of the town's households participated, electricity use actually rose by 8 percent. Once people realized they could keep their lights on at lower cost, they kept them on longer." Having told the public that compact fluorescents cost practically nothing to run and last practically forever, how could we expect people *not* to leave them on? (I know I do.) For that matter, the hype about ultra-efficient lighting will make many people feel more complacent about running their air conditioning and deferring weather-stripping.

To predict a 100 percent rebound effect would be a stretch. But it is naive to assume that the wattage specification on the lightbulb box will translate into comparable energy savings in actual use. Still, the phaseout might make sense if the alternatives were worse.

But in fact the alternatives are better. Any economist will tell you that a much better idea is to tax energy use or carbon emissions. Instead of causing a rebound effect by driving energy prices down, energy taxes drive prices up. You get more bang for the buck -- and, also worthwhile, more freedom.

"If your problem is carbon," says Adele Morris, an environmental and energy economist at the Brookings Institution, "then put a price on carbon and leave everybody alone to make their own choices." One wonders when conservatives will notice that their jihad against taxation paves the way for command-and-control regulations, such as lightbulb bans, that reduce prosperity and freedom a good deal more.

Carbon taxes are a political nonstarter, you say? Then cap overall carbon emissions and let emitters trade within those caps to find the most-efficient reductions. Cap-and-trade is not only politically imaginable but fairly likely to happen by 2012, when the lightbulb mandate takes effect.

In the context of cap-and-trade, the incandescent phaseout makes even less sense. "Depending on how the cap-and-trade program is structured," says Morris, "these provisions might have zero environmental benefit over the cap-and-trade itself." Lower electricity use would create emissions credits that utilities could sell to other polluters. I would be giving up the warm glow of incandescent lighting so that some factory could pour more gunk into the air. That is not the kind of policy-making that is likely to endear Washington to voters.

It will be interesting to see what happens when Americans discover that their lightbulbs are being taken from them -- in an election year, no less. Look for heat in 2012. Perhaps more heat than light.

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