Compact Fluorescent Lights (CFLs) are Costly and Dangerous Can Cause Fires — Even Explosions!

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The latest recall:

The U.S. Consumer Product Safety Commission on May 12, 2011 issued a recall order for sixteen models of Telstar and Electra brand CFLs in twelve different wattages: "Hazard: The light bulbs can overheat, posing a fire hazard to consumers." The recall order involved 317,000 light bulbs.

Mercury—The danger is **far** greater than admitted.
CFLs Save Money?—The numbers are false!
CFL Bulb Life—Wildly exaggerated.
CFLs = Environmental Hazard.

COMPACT FLUORESCENT LIGHTS (CFLS) ARE COSTLY AND DANGEROUS CAN CAUSE FIRES — EVEN EXPLOSIONS!

by Edmund Contoski | June 28, 2011

FIRES AND EXPLOSIONS FROM CFLS

A compact fluorescent light (CFL) on the ceiling burst and started a fire in a home in Hornell, N.Y. December 23, 2010. "Those are the lights everybody's been telling us to use," said Joe Gerych, Steuben County Fire Inspector. "It blew up like a bomb. It spattered all over." Fire Chief Mike Robbins said the blaze destroyed the room where the fire started and everything in it, and the rest of the house suffered smoke and water damage. The Arkport Village Fire Department as well as the North Hornell Fire Department required about 15 minutes to put out the fire.[1]

"Bulb explodes without warning," reported NBCactionnews.com, May 21, 2010. "Tom and Nancy Heim were watching TV recently, when Tom decided to turn on the floor lamp next to his recliner chair. 'I heard this loud pop...I saw what I thought was smoke, coming out of the top of the floor lamp,' says Tom. Nancy suddenly found glass in her lap. She says, 'I did not see it. I just heard it, and I noticed I had glass on me.'"[2]

On February 23, 2011, TV News Channel 5 in Tennessee covered "a newly-released investigators' report that blames a February 12 fatal fire in Gallatin on one of those CFL bulbs." Ben Rose, an attorney for the rehabilitative facility in which Douglas Johnson, 45, perished, said, "This result is consistent with our own private investigation....We have heard reports of similar fires being initiated by CFLs across the country."[3]

Here are some examples from across the country:

> "GE Helical 13 Watt light bulb. After only 6 months of use. This bulb started making funny noises and flickering ... Finally, exploded on my kitchen table." – Charles of South Webster, OH January 30, 2010.[4]
>
> "My GE 20W Helical bulb in my 1/2 bathroom caught on fire on 5/3/10. The bulb snapped and glowed very brightly then caught on fire....The bulb was suppose[d] to last 5 years but it was only about a year or so old. I tried replacing it with a GE 26W bulb and the same thing happened immediately." – Chantelle of Danville, PA May 15, 2010.[5]
>
> "My 80 year old mother turned on her reading lamp and the bulb exploded and the lamp shade caught fire. She unplugged the lamp from the wall and the fire went out thank God." – M. of Lahaina, HI March 30, 2010.[6]
>
> "I turned on an overhead bathroom light bulb and heard a pop and it exploded falling into the bathroom sink. Nearly all of the flying glass went straight down so little damage

was done; however, I was very thankful it did not get in my eyes." – Patricia of Sammamish, WA October 20, 2010.[7]

"We purchased a 3-way light bulb this past year. [Special 3-way CFLs are made but cost more.] Last night the bulb started a fire in the lamp....Had we not been there our house might have burned down." – Tina of Redding, CT July 10, 2010.[8]

"I had a desk lamp CFL burn up right in front of me. Switched it on and tiny sparks were emanating like a Van de Graaff generator. Quickly switched it off; the plastic around the ballast was cracked and smoking" – Nisshin, November 30, 2008.[9]

"I had one of these CFL's in my garage socket, and it blew a component (not the glass corkscrew) and caught fire. Fortunately, I was standing four feet away at the time. I turned off the power and smothered the bulb with a towel."[10]

"I heard a sizzling sound like bacon, looked in the direction of the sound and watch the CFL burst into flame with flames licking up onto the ceiling of my house."[11]

"I've had two burn through their base, leaving a hole large enough to stick my little finger in, and scorching the fixture. They are a fire hazard."[12]

"I've had TWO catch fire. I don't trust them. Plus they look silly."[13]

"I've had two CFLs explode on me. One in our bedroom overhead light.... I took a long time cleaning the bedspread and carpeting, because of fears of the mercury residue. Had another one explode in the family room."[14]

How was that bedspread cleaned? Was the person aware it must not be put in a washing machine, according to EPA, "because mercury may contaminate the machine and/or pollute sewage"? Was that person aware EPA also says never to use a vacuum cleaner to clean up a broken CFL on a carpet?[15] Vacuuming will disperse mercury into the air and contaminate the vacuum cleaner, which for all practical purposes is impossible to decontaminate.[16]

October 5, 2010 the U.S. Consumer Product Safety Commission reported: "Trisonic Compact Fluorescent Light Bulbs Recalled Due to Fire Hazard" because of four incidents. Its official notice states: "Hazard: light bulb can overheat and catch fire."[17] 124,000 light bulbs were involved in this recall.

THE *PROVEN* DANGERS OF MERCURY IN CFLS

Concerns about the toxic mercury in CFLs are downplayed by the bulbs advocates, but they shouldn't be. According to EPA and other sources, the safe limit is 300 nanograms per cubic meter. When a broken CFL was reported in Maine, the state's Department of Environmental Protection did the most extensive testing ever done to evaluate the health risk of CFLs. Its 160-

page report is shocking: "Mercury concentration in the study room air often exceeds the...300 nanograms per cubic meter (ng/m3) for some period of time, with short excursions over 25,000 ng/m3, sometimes over 50,000 ng/m3."[18]

The Maine report states that although following its recommended procedure for home cleanup "produces visibly clean flooring surfaces for both wood and carpets, all types of flooring surfaces tested can retain mercury sources even when visibly clean. Flooring surfaces, once visibly clean, can **emit mercury immediately at the source that can be greater than 50,000 ng/m^3".**

On December 2, 2010, Germany's Federal Environment Agency (UBA) reported mercury levels from broken CFLs *twenty times* higher than regulations allow in the surrounding air for up to five hours after breakage.[19] Based on a new method to measure mercury from broken CFLs, the New Jersey Department of Environmental Protection reports that only one-third of the mercury release occurs during the first 8 hours after breakage. *During the following two-week period, 17% to 40 percent of the mercury is released into the air.*[20] According to the Maine study, dangerous levels of mercury can remain in the air for days, weeks, or in at least one case, months. In the last case, the Maine DEP scientists found that mercury contamination from a CFL broken in a bedroom was still as high as 2,000 ng/m^3 three months after the accident, despite the fact that all cleanup recommendations were followed. In the end, the DEP ripped up approximately 8 by 10 feet of the carpet and disposed of it as toxic waste.

The Maine limit of 300 ng/m^3 is identical to the EPA reference concentration, which is the maximum allowable daily limit. It is based on various occupational studies of adults where tremor, fine motor deficits, electroencephalography (EEG) and autonomic nervous system abnormalities, and cognitive deficits were observed. This may not be sufficient to protect small children. The DEP report states:

> Mercury exposures have serious impacts on fetal and infant brain development. Elemental mercury can cross the placenta from a mother to fetus. For these reasons, acute peaks could be particularly problematic during pregnancy. Infants and toddlers have much more vulnerable brains....[M]ethylmercury exposure can produce devastating effects in the fetus, including cerebral palsy, blindness, deafness, and even death, while producing no or minimal effects in the mother....
>
> Neurotoxicants identified in adults may have different and more severe effects in developing organisms. Infants and toddlers also have a much higher rate of respiration than adults. Therefore they have a higher exposure to similar concentrations. They also are lower to the floor and therefore closer to the source of the exposure and presumably more apt to obtain a concentrated dose of mercury.
>
> Elderly and unhealthy individuals may already be at compromised health and be more susceptible to mercury effects than a healthy individual. For example, mercury does kidney damage which could exacerbate an already existing kidney disease.

The law intent on eliminating incandescents flies in the face of the Maine DEP safety recommendation that "homeowners consider not utilizing fluorescent lamps in situations where they could easily be broken, in bedrooms used by infants, small children, or pregnant women, or over carpets in rooms frequented by infants, small children and pregnant women."

On May 3, 2009 *The Times* of London reported: "A survey of published specialist literature and reports by state media show hundreds of workers at Chinese-owned factories have been poisoned by mercury over the past decade." At the Nanhai Feiyang lighting factory, 68 out of 72 CFL workers were so badly poisoned they required hospitalization. At a CFL factory in Jinzhou, 121 out of 123 employees had excessive mercury levels. At a CFL factory in Anyang, 35% of workers suffered mercury poisoning, and industrial discharge containing the toxin went straight into the water supply. Workers making CFLs in 18 light bulb factories near Shanghai were found to have elevated levels of mercury. Doctors and local health officials in the cities of Foshan and Guangzhou report workers is CFL factories have "dangerously high levels of mercury in their bodies and many have required hospital treatment."

EPA's *Mercury and Hazardous Chemicals in Schools: A Manual for Students in Southeast Asia* states:

> Just as there are no safe uses of mercury and mercury-containing equipment in schools, there are no safe uses for these products in homes, either. Tell your parents about the toxic effects of mercury, and encourage them to remove all mercury products from your home.[21]

That EPA manual was published in 2008—*after* the 2007 law de facto banning incandescents. Why then does Congress still insist upon forcing CFLs into the homes of Americans?

OTHER HAZARDOUS CHEMICALS IN CFLS

Rick Delair of the Edison Tech Center writes: "CFL bulbs contain many nasty toxic substances. You likely know of the mercury they contain already, but they also have things like lead (stabilizer in the plastic ballast housings), arsenic in the electronic parts, phenol in circuit boards, cyanide to process metals for parts, toxic phosphors, and the list goes on and on! They can't be tossed in the trash can, and have to be saved and recycled (expensive!) when they burn out. Incandescents are not only easily recycled, but can be discarded in the trash—the glass and metals used are inert."[22]

In recognition of the problems of fires and exploding CFLs, Armorlite is marketing a product with a package labeled "A Safer CFL." It is a CFL inside what looks like the shell of an incandescent bulb made with some special coating. Notice that is says a "*safer* CFL"—not that it is "safe," just "safer." In other words, less dangerous. The package states: "We do not make any claims or provisions that mercury or glass cannot escape coating."

Though Armorlite claims its product contains lesser amounts of mercury and lead than some CFLs, it contains additional hazardous substances Delair doesn't mention: cadmium, hexavalent

chromium, and polybromated biphenyls (PBBs). Why not let people buy incandescents, which don't have any of these?

The new Armorlite product has not solved other CFL problems either. Its package states: "Do not use in luminaries controlled by a dimmer, electronic timers, 3-way socket or photocells, illuminated switches, totally enclosed luminaries, or where directly exposed to weather. Do not use with emergency fixtures or emergency lights. This CFL may interfere with other products like radios, cordless phones and others." Incandescents have none of these problems.

FALSE INFORMATION ON CFL COSTS AND BULB LIFE

Utility companies are spending hundreds of millions of dollars to subsidize consumer purchases of CFLs, but the benefits are "less than expected," according to the Wall Street Journal. One reason is that the bulbs are burning out faster than expected. When Pacific Gas & Electric began the program, "it figured the useful life of each bulb would be 9.4 years. Now, with experience, it has cut its estimate to 6.3 years, which limits the energy savings." PG&E had overstated bulb life by 49 percent! As a result of this and other factors, the energy savings were a whopping 73 percent less than the 1.7 billion kilowatt hours projected by PG&E.[23]

Cost comparisons between CFLs and incandescents are misleading for reasons beside falling far short of their advertised bulb life and energy savings. In California, for example, the average cost of CFLs subsidized by the utility companies is $1.30 compared to $4 for unsubsidized bulbs. But that cost comparison doesn't include the fact the utility companies use ratepayer funds to subsidize the bulbs. The state also subsidizes the bulbs with rewards and incentives to the utilities. PG&E collected $104 million of this money. So the taxpayers as well as the ratepayers are paying in ways that aren't included in the claims about how much money is saved with CFLs.[24.]

CFLs often don't fit existing light fixtures, such as small-base lamps, candelabras and chandeliers, which will have to be replaced. But the costs of replacements are not included in the calculations that CFLs will save money. Say goodbye to those candelabras—even the expensive ones—as well as the aesthetic satisfaction they may give. That counts for zero in the government's calculations.

When a CFL is switched on, it provides as little as half of its rated output and can take up to three minutes to reach efficient operation, though the observer will not notice the difference. So all those short on-and-off periods include operating the bulbs at far less than the efficiency claimed for them, and they shorten bulb life, too. A study by H. Sterling Burnett, Senior Fellow at the National Center for Policy Analysis, and co-author Amanda Berg concludes: "Applications in which lighting is used only briefly (such as closets, bathrooms, motion detectors and so forth) will cause CFL bulbs to burn out as quickly as regular incandescent bulbs."[25]

The U.S. Department of Energy found that CFLs often grow dimmer over time. It found that after only 40 percent of their rated service life, one-fourth of CFLs no longer produced the full

amount of light. In tests conducted by *The Times* of London, 11-watt CFLs produced only 58% of the light of an equivalent 60-watt incandescent—even after a 10-minute warm-up to allow the CFLs to reach maximum output.[26] So the consumer gets less light than he expected, and the energy efficiency drops, too. And the cost estimates of the savings from CFLs are overstated because the customer is shortchanged on the amount of illumination he is paying for.

CFLs also will not operate at low temperatures, making them unsuitable for outdoor applications. Most say so right on the packaging. Safety experts say outdoor lighting is one of the most effective steps a person can take for home or business security, and motion detector lights have grown increasingly popular. So legislating incandescents out of existence will decrease safety. The same will be true of the disappearance of timers, which many people use to turn lights on and off when they are away, giving the appearance of someone being home and thereby discouraging break-ins. And the cost of throwing out timers and dimmers is not included in the costs of CFLs, nor is the cost of buying the more expensive CFLs specially made for those purposes, when they are available. The same is true for ceiling fans and garage door openers, where ordinary CFLs cannot be used because of vibration, and special CFLs for this purpose are far more expensive. On May 2, 2011, the rare stores in Minneapolis in which I found these special CFLs had them priced at $11.49 each. Again, these costs are not included in comparisons that claim to show how much money will be saved by buying CFLs.

On May 15, 2007 Michael Scott, a Cleveland Plain Dealer reporter, wrote that General Electric announced "by 2010 it will offer incandescent bulbs twice as efficient as those sold today and four times as efficient by 2012."[27] The first part has already proven true since 2,000-hour rated bulbs appeared on the market in 2010. As a result, the claims that CFL bulbs last "x" number of times longer than incandescents should have reduced the "x" by half. Instead, we continue to hear repetition of the comparisons made years ago of CFLs to 1,000-hour incandescents (or even 750-hour ones of a few years earlier) rather than the 2,000 hour ones that are now readily available. Nor have the claims about CFLs been adjusted for the fact it has been demonstrated over and over and over again that CFLs fall far short of their predicted bulb life.

Armorlite claims a bulb life of 10,000 hours, or nine years, based on 3 hours of use per day, but the warranty is for only two years. So much for all the B.S. about how CFLs last so many thousands of hours longer than incandescents. If the bulb fails in two years, you can get a replacement from the company. The package states: "This replacement is the sole remedy available and LIABILITY FOR INCIDENTAL OR CONSEQENTIAL DAMAGES IS HEREBY EXCLUDED," except for some states which do not allow such exclusion. So if your house burns down, all you are likely to get is a new bulb. Big deal. And to get it you have to have saved your proof of purchase and your register receipt for two years and mail them together with the broken bulb to the company's Florida address. The warranty explicitly states: "Do not return to the store."

The advocates of CFLs complain that 90 percent of the energy from incandescents is wasted because it is given off as heat while only 10 percent gives illumination. It seems to have eluded these people that the heat can be a resource to be utilized, rather than wasted. A study by the Mackinac Center for Public Policy states: "The heat of incandescent lights — more than 341 Btu

per bulb per hour — can help to warm a room. Therefore, if the cost of electricity is low relative to the cost of home heating fuel, there may be an economic case for changing to incandescent bulbs in colder seasons."[28] The extent to which the heat from incandescents reduces home heating bills in the winter—and CFLs cause higher heating bills—is not included in cost comparisons. Nor from my own experience in Minnesota do air conditioning costs resulting from summer use of incandescents come anywhere close to their winter savings on heating. My home heating costs over the winter are consistently a multiple of my air conditioning costs in the summer. In fact, my heating cost for a single winter month can easily exceed my total electric bills for the entire summer, including electricity used for purposes other than air conditioning.

CFLs emit a high percentage of ultraviolet rays. UV can damage oil paintings, acrylic paintings, photographs, upholstery fabrics, furniture and flooring finishes.[29, 30, 31, 32] It can not only fade the colors in upholstery fabrics but actually weaken the fibers. Vu1, a high tech lighting company, states: "Many light fixtures and lamp shades are made of—or incorporate—plastics. UV has a tendency to attack plastic."[33] Its website shows a picture of a premium lampshade whose plastic liner was discolored, brittle and shattered in several places from the UV of a CFL. Shouldn't UV damage be factored into all those claims that CFLs will save you money?

If businesses used shabby, misleading, false cost figures to sell a product not promoted by the government, the government would jump all over them. Instead, government officials themselves frequently quote the false information in their campaign to promote CFLs.

Recycling Costs, Health and Environmental Dangers

Lisa Brosseau, an associate professor in environmental science, says many people store used CFLs in the packages in which they were sold and later transport them that way to recycling centers. She states:

> "The recent University of Minnesota study I conducted with my team of researchers found that these packages do not contain mercury vapor below permissible workplace exposure levels, as defined by state and federal authorities...and represent a real health and safety concern to those involved in [CFL] storage, transport and disposal, as well as a legal hazard for any businesses that do not adhere to these stipulations."[34, 35]

Since an estimated 400 to 620 million CFLs are discarded annually, certainly a significant number of burned-out ones will accidentally be broken when handling and transporting them for disposal.

The Brosseau study found: "The only package that kept mercury vapor emissions below permissible exposure levels, as defined by state and federal authorities, was a double box with a zip closure foil-plastic laminate bag between the cardboard layers."[36] Who is going to pay for these, and shouldn't the cost be included in all those comparisons of how cheap CFLs are compared to incandescent bulbs? Incandescents don't need them. Dr. Brosseau says the "law requires" this special protection if CFLs "are transported by the Unites States postal service or a

common carrier or collected via curbside programs and mail-back businesses." A situation has now been created where huge numbers of Americans are violating the law every day, and compliance would be very expensive for curbside recycling programs and further downgrade CFL cost effectiveness.

The legal requirement cited by Dr. Brosseau also eliminates the mail-back replacement warranties of CFL manufacturers, which are a major inducement for people to buy these unreliable bulbs. To ignore the requirement would subject violators to penalties of the law, which would surely exceed the value of a replacement bulb. The cost of the acceptable shipping container and the postage/shipping charge must also be paid by the consumer returning the product. The result is that probably nobody is ever going to return a malfunctioning or broken bulb to the manufacturer. It's not worth it. And I would wager that many disappointed customers will not consider it worth their time and gas to deliver a failed bulb to a recycling collection point either. Even if government inspected everyone's trash—think of the cost of that!—to prevent people from "smuggling" CFLs into their discards, I suspect we would see an increase of CFLs in *other* people's trash or strewn along roads.

And shouldn't the consumers cost—not to mention the inconvenience—of transporting burned-out bulbs to recycling collection points be included in the cost of CFLs? Incandescent bulbs don't require such trips; they can simply be tossed into regular trash, a procedure widely prohibited for CFLs by state and local ordinances to prevent contamination of landfills with mercury.

What about the industrial cost of recycling, which amounts to about 50 cents per CFL bulb? That's another cost that isn't included in cost comparisons with incandescents, but it should be because it's a cost that incandescents don't have.

Only about 2 percent of CFLs are recycled. The rest are disposed of improperly, usually ending up in landfills, thus creating future environmental problems. It is ironic that advocates of Big Government typically argue that free-market solutions sacrifice long-term environmental interests for short-term financial gains while government is far sighted. But the CFLs the government is telling people to buy now for financial savings will result in mercury pollution turning up in landfills in future decades. The cost of preventive measures now, or landfill clean-up measures later, are not included in tally of all the money and energy people are told will be saved by buying CFLs.

WHAT ABOUT LEDS?

LEDs (light-emitting diodes) are frequently cited as the next generation of lighting technology, supplanting CFLs. Many people believe their very high cost ($20-$55) will come down, and many recommend them even at today's prices because of CFL shortcomings and the belief LEDs have no environmental problems. However, recent LED research at the University of California at Irvine found the lead content was over 8 times the regulatory limit, and the nickel content was over two and one-half times. Under California's environmental law, most LEDs would

qualify as hazardous waste, though California does not currently classify them as toxic and disposes of them in landfills. The study was based on LED multicolored Christmas lights, traffic lights, and automobile headlights and brake lights.

A recent news release from the university about this study states:

> Those light-emitting diodes marketed as safe, environmentally preferable alternatives to traditional lightbulbs actually contain lead, arsenic and a dozen other potentially hazardous substances, according to newly published research.
>
> "We find the low-intensity red LEDs exhibit significant cancer and noncancer potentials due to the high content of arsenic and lead," the team wrote in the January 2011 issue of *Environmental Science & Technology....*Results from the larger lighting products will be published later, but according to Ogunseitan [who headed the study] "it's more of the same."
>
> Lead, arsenic and many additional metals discovered in the bulbs or their related parts have been linked in hundreds of studies to different cancers, neurological damage, kidney disease, hypertension, skin rashes and other illnesses. The copper used in some LEDs also poses an ecological threat to fish, rivers and lakes....
>
> Risks are present in all parts of the lights and at every stage during production, use and disposal, the study found. Consumers, manufacturers and first responders to accident scenes ought to be aware of this, Ogunseitan said....Crews dispatched to clean up car crashes or broken traffic fixtures should don protective gear and handle the material as hazardous waste.[37]

OTHER PROBLEMS

Reducing the use of fossil fuels and lowering carbon dioxide emissions are given as reasons, besides cost, for switching to CFLs. But at least 85 percent of the CFLs are produced in China, with India in second place by a wide margin over any other country. Why is it that those who champion CFLs as a "green" solution for saving energy never consider the fossil fuel energy required to ship them 8,000 miles from China or India across the ocean to the U.S.?

On February 15, 2010 a TV station reported a fire in Hinsdale, Illinois from a CFL plugged into a dimmer. Channel 2 CBS reporter Anne State said the producer of the news program tried to find a CFL that could be used with dimmers but discovered they were "very hard to find and cost more."[38]

On April 30, 2008 the Cumberland Times-News reported the Rick Jenkins family lost everything in a fire caused by a CFL connected to a dimmer switch. Many types of CFLs include package warnings not to connect them to dimmer switches. "I don't read light bulbs," said Jenkins. "I wouldn't think I'd ever have to."[39]

Many CFL advocates will no doubt say, "Serves those people right for not reading the package." What kind of society are we creating when if you commit the "crime" of not reading a regulation you can lose your house? Far more serious crimes—actual felonies—are committed every day with far less punishment, very often nothing more than probation. And what about the people who *can't* read the regulations even if they wanted to. The U.S. Dept. of Education reported January 2009 that 32 million U.S. adults lack the basic literary skill to read a newspaper or the instructions on a bottle of pills.[40, 41]

Is it realistic to depend on them reading the warnings on CFLs? And if they don't, they might lose their homes? Wouldn't it just be better to remove the threat of this danger by simply letting people buy incandescent bulbs?

IS GOVERNMENT REALLY SMARTER THAN THE CONSUMERS?

Statists believe government can determine people's economic interactions better than the people themselves. In short, they believe government economic planning is superior to the free market. Politicians are always looking for ways to demonstrate this to justify the statist ideological conviction and retain the political power to force it on the public. From low-flow toilets to ethanol subsidies and mandates, to creating the housing bubble that collapsed (taking the rest of the economy with it), and everything in between, they have a consistent record of failure. Now it's CFLs. People are being forced to switch from a reliable, economical, environmentally safe product to one which is none of these—and a health and safety hazard to boot.

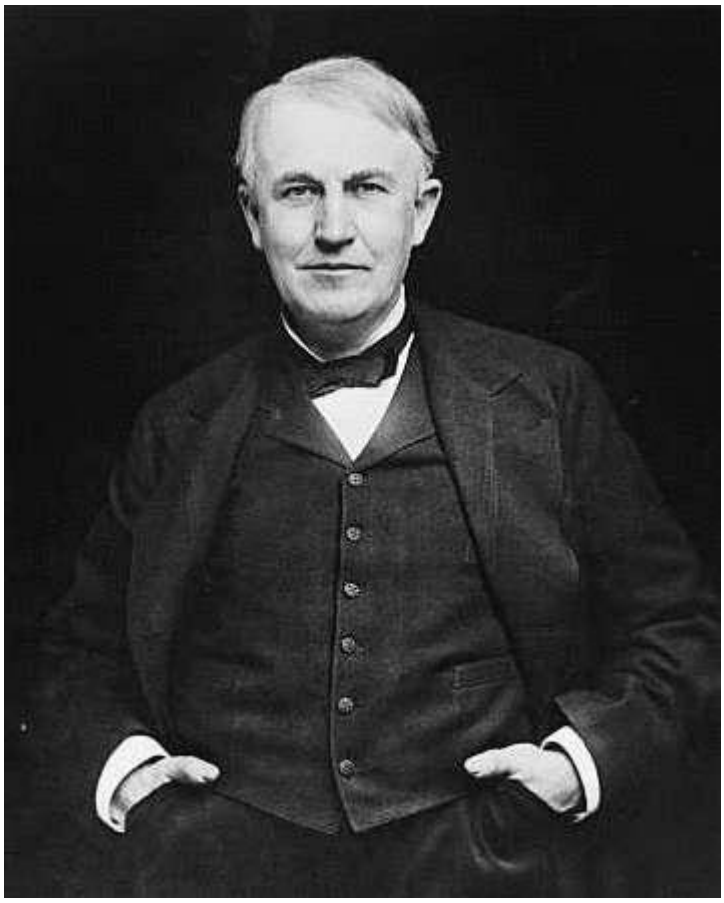
The politicians who passed the law phasing out incandescents wanted a trophy they could hold up to the voting public and say, "See, we gave you something better than what a free market could give you. We advanced society." Instead of a trophy of success, they have a monument to the failure of their ideology and their ignorance of economics. Politics is no substitute for economics. It can only produce an uneconomic result: if the result were economic, it wouldn't require government coercion—and society would be better off. I write my books and articles to demonstrate this.

The Big Government advocates are as ignorant of history as they are of economics. How did Edison's carbon-filament bulb lead to the worldwide popularity of incandescent lights for well over a century? Was it because government shoveled subsidies of taxpayer money to Edison to develop it and make it economic? Or because government passed laws requiring people to buy those bulbs? No, Edison developed the bulb on his own, and it had to prove itself to consumers. It had to be better for them—in their judgment, not that of politicians—than the competition from kerosene lamps or Welsbach gas burners.

And how did kerosene lamps achieve their popularity over the coal oil and whale oil lamps which had been in use long before kerosene came on the market? It was because buyers—not government—found kerosene an excellent product, and John D. Rockefeller's business efficiency

and revolutionizing of the petroleum industry enabled him to sell it for less than competing oils. (Rockefeller became the richest man in America by selling kerosene, not gasoline, which came later.)

Now we are being forced to buy CFLs—judged inferior by many people, whose choices are overridden by the "superior" wisdom of arrogant, ignorant politicians—and costing far more than incandescents. We are going in the wrong direction, led by people who don't know what they are doing, who have no understanding of the nature of human progress—that it results from the exercise of individual rights, not government obliteration of them. Free markets allow for the exercise of those rights. CFLs are a metaphor for America gone wrong.



"Are you all really that stupid?"[42]

Edmund Contoski is the author of MAKERS AND TAKERS: **How Wealth and Progress are Made and How They are Taken Away or Prevented and** THE TROJAN PROJECT, **a Novel of Intrigue about Restoring America.** www.amlibpub.com.

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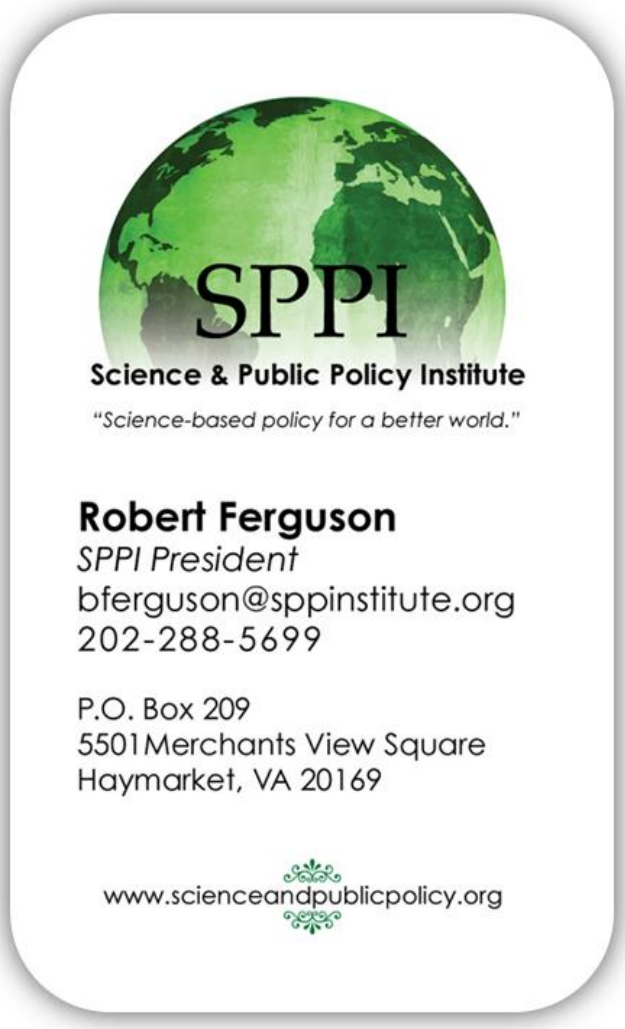
Cover photo of broken CFL bulb from healthfreedoms.org.