



Ford Saves \$1.2 Million and Reduces CO2 Emissions by Around 20,000 Tons by Turning Computers Off

by Michael Graham Richard, Ottawa, Canada on 03.23.10

SCIENCE & TECHNOLOGY (ELECTRONICS)



Ford's HQ in Dearborn, Michigan. Photo: [Wikipedia](#), CC

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We've written many times about easy power management strategies for computers. Whether it is for your computer at home or for thousands of computers in an office building, there's no reason not to take advantage of power-saving settings. Everybody wins: you get a smaller electricity bill, and less pollution is produced by power plants. The most recent example of putting this in practice comes from Ford. By centrally controlling the power settings on the company's computers, they are saving an estimated \$1.2 million annually and keeping between 16,000 and 25,000 metric tons of CO2 out of the atmosphere.

This is Basic, All Companies Should Do the Same

In the past, up to 60% of Ford employees using computers didn't shut down their computers at the end of the day (I wouldn't be surprised if something very similar is happening at lots of companies without a clear policy about IT energy efficiency).

The cost savings and reduced carbon footprint are obtained by developing "Power Profiles" for each PC in the company. With its power profile enabled, each PC monitors its usage patterns and determines when it can be turned off. If the user is working late, he or she will be alerted of the approaching power down and given the opportunity to

delay it. In addition, the PC is able to detect when a Microsoft Office product is active and is able to save open documents before shutting down in case the user is not present.

According to 1E Inc, the company that helped Ford with this project, "In the U.S. alone, over \$2.8 billion of PC power is being wasted every year." Crazy. Wasteful. A drain on the economy.

Energy-Saving Tips for Employees and Customers

Ford also had some tips for its employees and customers. Very basic stuff, but it doesn't hurt to go over it once more:

- Change incandescent light bulbs to ENERGY STAR rated compact fluorescent lamps (CFL) or LEDs
 - CFLs are 50-80 percent more efficient than incandescent bulbs.
 - ENERGY STAR qualified residential LED lighting uses at least 75 percent less energy, lasts 25 times longer than incandescent lighting and provides optimal light color.
- Use a programmable thermostat to save energy while asleep or away from home.
 - The average household spends \$2,200 a year on energy.
 - Properly set programmable thermostats can save \$180 a year.
- Enable power management settings on computers and monitors so they go into "sleep mode" when away or not in use.
 - To maximize power savings, EPA recommends setting computers to enter system standby or hibernate after 30 to 60 minutes of inactivity. <
 - To save even more, set monitors to enter sleep mode after 5 to 20 minutes of inactivity. The lower the setting, the more energy you save.
- Make purchases of ENERGY STAR-qualified products, such as home electronics, office products and/or appliances.
 - A refrigerator from the 1970s uses four times more energy than an ENERGY STAR rated model.
 - In the average home, 75 percent of all electricity used to power consumer electronics is consumed after the products are turned off. ENERGY STAR labeled consumer electronics save energy and money without sacrificing performance, features, or reliability.
- Make sure homes are well sealed and insulated.
 - Sealing and insulating the "envelope" or "shell" of a home — its outer walls, ceiling, windows, doors, and floors — is often the most cost effective way to improve energy efficiency and comfort
 - Proper home sealing and insulating can save up to 20 percent on heating and cooling costs.

Don't Forget the Cars

Of course, Ford's biggest impact on the planet comes from the fuel that its vehicles burn and the manufacturing of cars. I'm happy to see that they've been downsizing engines, bringing smaller European cars to the US (the Ford Fiesta), and working on electric vehicles (f.ex. the [Electric Ford Focus](#) and the [electric Transit Connect utility van](#)), but they need to speed things up further and make a bigger push for electrification (they should at least try to match [Nissan's LEAF production numbers](#)).

What we need is not vehicles that have 20-30% better fuel economy. We need vehicles that are a few orders of magnitude more benign (and then keep going). They need to be much more efficient, powered by clean energy, built

in zero-waste factories that are also powered by clean energy, and they need to be easily recyclable. That's the target, Ford.

(We'll also need more walkable and bikable cities and neighborhoods, better transit, and fewer subsidies to cars, but that's not really the business that Ford is in...)

Via [Ford](#)