Global warming: so, what can I do?

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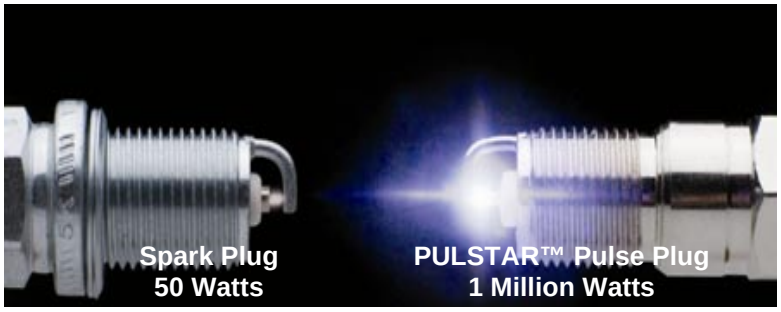
We are barraged with headlines of global warming, dependence on foreign oil, and gasoline headed for four dollars per gallon. Higher fuel prices and greener thinking are a permanent part of our future. Conflicting viewpoints and expensive solutions can make us feel helpless and confused. What can we do to help besides spending $10,000 extra on a hybrid vehicle or turning our home heating thermostats down to a bone-chilling temperature? The answer may be closer than you think.

The President recently signed a new energy bill aimed at reducing our dependence on foreign oil and reducing greenhouse gases. The major provisions in the bill will not take effect until the year 2020. The new law, among other things, encourages the conversion from incandescent to fluorescent light bulbs, but does nothing to address the growing fleet of 250 million existing vehicles in North America. These older, more fuel-thirsty cars, SUVs and light-duty trucks, if outfitted with a fuel savings device, can actually do more to reduce greenhouse gases in the next four years than the new legislation will do in the next thirty.

The century old incandescent light bulb is being replaced by the new fluorescent bulb. This fluorescent tube, twisted into the shape of a bulb, has been around for 25 years, but has only recently found its stride in the new energy efficiency market. Ironically, there is a correlation between the fluorescent light bulb and an electrical device similar to a spark plug called a “pulse plug.” This new plug is revolutionary and markedly superior to current spark plug technology. What makes pulse plugs different from spark plugs is pulse plugs contain a capacitor that electronically compresses electrical energy much like a camera

flash compresses light. The result is more energy available to the spark. The enhanced spark creates a more precise fuel burn yielding better fuel economy and performance from the engine.



Pulse plugs compress electrical energy much like a camera flash compresses light.

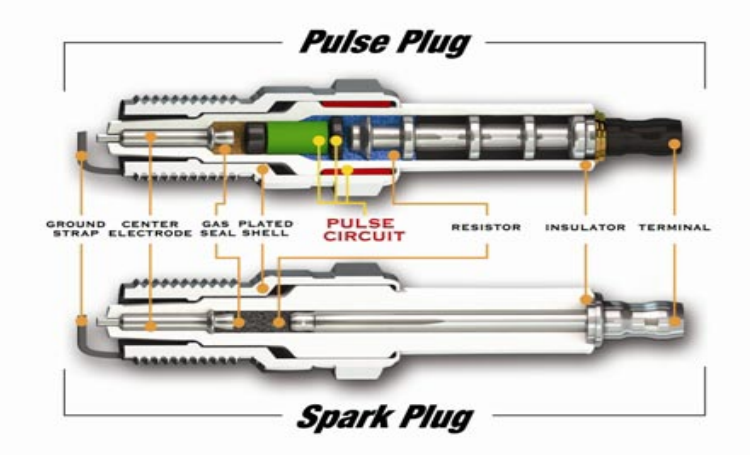
The light bulb and spark plug share some common history: They are both electrical devices developed in the late 19th-century. Two billion of each are sold per year, and in recent years, enhancements to their design may provide the answer for what consumers can do to reduce fuel consumption while saving money on electric bills and enjoying better performance from our vehicles.

A BRIGHT IDEA!

	INCANDESCENT	FLORESCENT	SPARK PLUG	PULSE PLUG
Energy (peak watts)	60	13	50	1,000,000
Average Cost	$0.60	$3	$6	$25
Annual Savings (dollars)	$0	$8	$0	$108
CO_2 Savings/yr. (metric tons)	0	.03	0	.05
Life (hours or miles)	1,000 hours	7,500 hours	50,000 miles	50,000 miles
Number units sold annually	2 billion	150 million	2 billion	1 million
Advantages	Low cost	Long life	Low cost	Engine performance
Disadvantages	Energy usage	Cost	Low power	New to market

Century-old technologies give way to a new efficiency.

The pulse plug, on the market for only one year, is already replacing the spark plug. It was originally designed for car enthusiasts looking for more performance. Developed by Albuquerque-based Enerpulse, Inc., the pulse plug (brand named PULSTAR™) increases engine output (torque) by 4 to12 percent, making it the most cost effective performance enhancement available on the market.



People who buy pulse plugs for performance only use the high performance features less than 2% of the time. The remainder of time is spent driving under normal conditions and notice that the performance enhancement they bought gets converted to fuel economy the other 98% of the time.

Each year, two billion spark plugs are sold globally. In North America, 400 million spark plugs are sold just in the automotive aftermarket. Spark plugs have to be replaced approximately every four years. While replacing worn out spark plugs may restore the vehicle to its original fuel economy standard, it will not improve engine performance or actual fuel economy.

Independent tests conducted at certified labs demonstrate that pulse plugs improve engine performance and fuel economy by an average of 6%. If, during the normal replacement cycle, PULSTAR™ replaced spark plugs, 250 million existing cars per year could reduce fuel consumption by an average of 6% or 22.5 billion gallons (536 million barrels). Since each gallon of gasoline (6.3 lbs/gallon) generates almost 20 pounds of carbon dioxide, a potential contributor to global warming, pulse plugs alone could actually reduce this greenhouse gas by 450 billion pounds (200 million metric tons) within four years. Extrapolated to

the worldwide replacement of spark plugs, pulse plugs could potentially reduce CO_2 emissions by an estimated 1 billion metric tons per year.

According to the U.S. government, “If every American home replaced just one light bulb with a fluorescent light bulb, we would save enough energy to light more than 3 million homes for a year, more than $600 million in annual energy costs, and prevent greenhouse gases equivalent to the emissions of more than 800,000 cars.”

The answer for consumers can be simple and cost effective. If you want to reduce your dependence on foreign oil, help stop the melting of the North Pole or simply save some money, here is an easy “clean dozen” solution:

1. Install at least 6 fluorescent light bulbs in your home.
2. Install pulse plugs on your next spark plug change (average of 6 plugs).

Total cost for the “clean dozen” will be about $175, which you will recoup in the first year. For the next three years, you will actually save about $156 per year, yielding a 356% return on investment – much better return than the stock market these days! Additionally, you will reduce CO_2 by a whopping .35 metric tons a year!