Instead of a Gas Tax, How About a Carbon Tax?

Can the United States fashion a tax with all the virtues but none of the flaws of a stiff tax on gasoline? With one simple measure, can we trim $50 billion a year from the federal deficit while helping the environment, without squeezing an extra 50 cents a gallon from motorists who drive long distances to work and can't afford new fuel-efficient cars?

Yes, we can. We can do it by taxing all fossil fuels—coal, petroleum and natural gas. Since these fuels supply 90 percent of America's energy, or five times as much as gasoline alone, a fossil fuels tax would be shared throughout the economy. A tax on all fuels, equivalent to just 10 cents per gallon of gasoline, could raise $50 billion each year. Such a tax would help balance the budget while providing incentives to make America more fuel-efficient, but without the regional or sectoral conflicts that a new gasoline tax might provoke.

One variant of a fuels tax could be pegged to each fuel's contribution to the greenhouse effect—the buildup of carbon dioxide that is gradually heating the Earth's atmosphere. Petroleum products emit 40 percent more CO2 per unit of fuel than natural gas, and coal 70 percent more, so each gallon of oil or pound of coal would be taxed proportionately more than a corresponding unit of natural gas. Moreover, since coal emits the most toxic smoke when burned, and natural gas the least, a carbon tax would also be in line with each fuel's responsibility for acid rain and other pollutants.

Fifty billion dollars per year, matching the expected revenue from a 50-cent-a-gallon tax on gasoline alone, could be derived from a carbon-based tax on all fossil fuels in the following manner: $10 billion would come from a 10-cent-a-gallon levy on gasoline; $17 billion from surcharges of one-half to one cent per kilowatt-hour on power generation, primarily coal-fired; $8 billion from taxing natural gas used by industry, offices and homes; and $15 billion from truck and jet fuel, petrochemicals, home heating oil, coal used in steel-making and other sources.

Compared with a gasoline tax, which targets only one fuel—petroleum products—impact sectors of the economy, a carbon tax would be broadly based and therefore more resilient and equitable. There is little chance of crippling sensitive sectors such as the auto industry or farm states, undermining the economy at large and reducing taxable income. No one group would bear more than a fraction of the total burden. Indeed, since the wealthy consume a greater share of electricity and "intermediate energy" from manufactured goods than gasoline, a carbon tax would be less regressive than a gas tax.

Moreover, taxing all fuels is more logically compelling than singling out automobiles while ignoring smokestacks and furnaces. Without the punitive nature of a gasoline-only tax, positive features such as energy efficiency can be emphasized. Opportunities for conservation would abound, particularly in the price-sensitive industrial sector, even without the stimulus of a 50-cent gasoline levy.

The strongest objections to the carbon tax may be expected from customers of all-coal utilities, who would face 10 to 15 percent increases in electricity rates. Yet the real price of coal-fired power has fallen 8 percent in the 1980s, providing a cushion for a fuels tax that begins to redress atmospheric damage from coal-burning. And utilities could soften the blow by offering rebates and other incentives for energy-saving lights and appliances, and by pursuing investments in efficient power generation.

No tax is a panacea, and no one wants to curb disposable income and slow the economy. But a carbon-based fossil fuels tax that fights pollution without discriminating against any one region, class or economic sector may be the least stressful option for cutting the deficit. Policy-makers struggling to achieve fiscal and social balance would do well to give it a careful look.