

What is the Real Cost of Gasoline?

Why do good caring people drive around gas guzzling SUV's? Why does the United States, with 5% of the earth population, consume over 25% of its energy resources? My proposal to you is that we do this not because we are very selfish & uncaring, but mainly because we do not pay the *Real* or *Total* price of energy. "If gasoline is cheap enough to drive a big roomy SUV on my salary, then it's affordable" (period). However, the earth-shaking finding is that the real cost of gasoline is close to five times what we pay at the pump.

The External Costs of petroleum (gasoline) are those not paid at the pump. External Costs associated with petroleum consumption may include pollution, global warming, urban sprawl, roadways, military projection for world energy assets, and even the rapid extinction rates. The Total Cost of petroleum is the External Cost plus the average gas pump price. The calculations are very complex and fluctuate widely with every varied application. Yet, understanding of the Total Cost of petroleum is too important for us to delay until a definitive answer arrives someday, if ever.

One of the most thorough resources for the Total Cost of Gasoline remains the 1998 project report, "The Real Price of Gasoline", by the International Center for Technology Assessment (CTA). It is updated here mainly for inflation. External cost of petroleum ranges widely from \$873 to \$2684 billion for 2010 in USA, or approximately \$6 to \$19 per gallon. The Total Cost of gasoline calculates to about 3 to 6 times that which we currently pay at the pump. More simply, we are directly paying for only about 1/4th of the Total Cost of Energy. (We and our children will pay the rest of the Total Cost later on and dearly.)

The biggest players in the calculation of the External Cost of gasoline are: (1) Environment, Health & Social Cost, (2) Subsidized Parking, (3) Military/Police Protection of petroleum resources, (4) Roadway construction & maintenance, and lastly (5) Tax break subsidies. Within the first category, "Sprawl" stands out like a sore thumb for having tremendous far-reaching costs that we otherwise would avoid with more dense, urban living. City dwellers generally have a "smaller footprint" and utilize more efficient transportation. Also pollution, its resulting health costs and global warming are major factors. Probably the global warming cost is still grossly underestimated, as derived from the 1998 CTA report, which did not have the benefit of recent findings on accelerated climate change. (Updated calculation results are summarized on a spreadsheet, "External Cost of Gasoline," available on ece-e.com ... *Energy Policy*.) The Total Cost of other non-renewable energies is probably similarly close to 4 to 5 times what we pay for directly, but that's another analysis.

Then, what does the Total Cost of Energy mean to us? Let me hazard to offer my take. First, our culture will continue to consume "cheap" energy resources wastefully as long as they remain cheap in reference to their Total Costs, (until it's too late). Second, the painful, "politically incorrect" inevitable conclusion is that our country must eventually pay much higher energy prices, in order to make enough progress to preserve our decent quality of life. As an example, the other industrialized countries, like Europe & Japan, pay 2 to 3 times the price for petroleum (& over 10 times the gas tax) and are invariably far better at using it efficiently, compared to the USA. Third, because no one wants to pay higher taxes, we need and actually have alternatives that are appealing, (even if not to the extremely powerful fossil fuel industry). One such alternative may be termed a "Green Neutral Tax Reform," or simply the "Green Tax Rebate." Very briefly, it would gradually increase non-renewable energy taxes and return 100% of it to the citizens by reducing other taxes, (and improve benefits to low income individuals). We need to "think outside of the box" in such ways to find truly effective solutions in these crucial times. Otherwise, these "radical" solutions may seem merely academic or too expensive. That is, until we gain a better understanding of the Total or Real Cost of Energy.

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