

Do We Tax Energy Enough?

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Overview

- “Energy Independence” is economically meaningless in today’s global economy.
- The economics of energy subsidies
- Energy taxes

Energy Independence

- The US imports more than 60 percent of oil, 40 percent comes from OPEC nations
- We heavily subsidize domestic production of fossil fuels (\$10 billion 5-year cost)
 - Tax credit for nonconventional oil
 - Generous depreciation for intangible drilling expenses
 - Generous depletion allowances for oil and gas.

Energy Independence

- But:
 - Oil is a generic commodity with a set world price
 - A disruption that affects world prices will equally affect domestic prices, both for oil, and for substitutes
 - Alternative customers exist: we have purchased no oil from Iran since 1991, but they are the world's 4th largest exporter.
 - Using up domestic reserves makes us more susceptible to disruptions in the future.
 - Between 1995 and 2005, the percentage of our energy drawn from petroleum has climbed from 38 percent to 40 percent.
 - Our production is a drop in the barrel: a recent study found that U.S. production incentives lowered the world price of oil by ½ of one percent.

Energy Subsidies

- We have a number of subsidies for alternatives
 - Biggest is tax credit for alcohol fuels (5 year cost \$12.7 billion)
 - Section 48 credit for solar, geothermal and coal burning power facilities
 - Section 45 for wind, biomass and renewables.
 - Their combined 5-year cost about \$4 billion

Energy Subsidies

- The subsidies clearly play political favorites.
- Methods are limited in scale. All of US corn production would produce enough ethanol to replace 12 percent of gasoline and reduce greenhouse gases by only 3 percent.
- Other methods (nuclear perhaps) may be more cost effective, especially if scaled up.
- Ethanol's price would still be highly responsive to changes in the world price of oil.

Energy Taxes

- A carbon tax would drive up the cost of fuels considered “bad” and encourage the search for alternatives by driving up prices. It would do so, however, without playing political favorites.
- The revenue would make room to reduce other taxes, and significantly undo the economic harm from the tax.

Energy Taxes

- A carbon tax of \$15 per metric ton would
 - Collect about \$80 billion per year
 - Increase the price of gasoline by 13 cents per gallon
 - Increase the price of electricity from natural gas by 0.6 cents per kWh.
 - Increase the price of electricity from coal by 1.4 cents per kWh
 - Allow for a revenue neutral 28 percent reduction in corporate taxes.
 - This would reduce the reliance on carbon based fuels, as opposed to current subsidies for domestic production.

Conclusions

- U.S. energy policy is intellectually indefensible.
- Scrapping everything and enacting a carbon tax would be an easy way to set things right.