



## How Oil Conservation Hurts Governments

Posted by [Prof. Goose](#) on December 4, 2005 - 1:25pm

Topic: [Policy/Politics](#)

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[ED: Prof. Goose] This is a guest post by reader 'Rick.'

In thinking through the role of government responses to Peak Oil, and I've come to a realization that wasn't obvious to me: **Governments suffer financially when conservation occurs, because tax revenues drop.** This gives most governments a disincentive to push conservation.

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### Direct Tax Losses

Direct tax losses are the biggest effect. Direct taxes include royalties on oil leases, and federal, state, and local taxes on oil products. If people or businesses buy more efficient vehicles, they get more miles per gallon, and hence pay less tax per mile. There is an inverse 1:1 ratio between conservation success and taxes: **if consumption falls by 10%, taxes also fall by 10%.** Governments can, of course, raise tax rates to offset the decline in revenue--but if the oil price is high enough to spur conservation, it's probably politically impossible to raise fuel taxes.

### Indirect Tax Losses

Indirect tax effects are probably smaller than direct effects, but they are significant. Conservation is likely to result in less economic output than profligate energy use would offer, and governments will not get any taxes on the forgone economic activity. Effects might include lower employment and incomes, leading to less personal income tax and fewer sale taxes, as well as fewer corporate profits leading to lower corporate taxes.

Other effects occur as well. Stuart has done an interesting set of analyses between miles driven and gross domestic product (GDP). There's a very clear correlation: as GDP grows, businesses and individuals drive more. Likewise, when they drive more, GDP grows. So, conservation (by driving less) reduces GDP and economic growth, and that cuts tax revenue from several sources: income taxes, corporate taxes, sales taxes and fuel taxes.

### Efficient is better--but it still costs the government

Clearly, we want to keep increasing energy efficiency, so we get more output per BTU. But economic systems are complex, and efficiency comes at a cost. If people or businesses buy more efficient vehicles, they get more miles per gallon, and hence pay less in direct taxes per mile.

Indirect tax effects are more complex. Improved efficiency generally requires increased capital spending, and higher interest bills. Conservation efforts may have a positive ROI, but often at a tradeoff against higher widget production. With a fixed amount of capital available, increasing spending on energy efficiency means forgoing investments designed grow output like bigger plant

and equipment, more sales staff, or greater advertising expenditures. So output is efficient, but smaller, yielding less for the tax man. We may believe that smaller and more efficient is better-- but it costs the government money.

## Losers and winners

These effects occur worldwide. Ironically, the **losses hit hardest on progressive governments that raised taxes to spur conservation**. The higher the taxes on fuel, the more the government suffers when people and businesses conserve. The only exception is those governments who now subsidize fuel price--in Iran, for example, regular sells for 34¢ a gallon, and the government pays any costs above that. When people conserve, subsidy costs drop.

## What will governments do? 3 choices:

**Accepting a lower tax take** is difficult and probably unlikely, especially if there is a budget deficit.

**Increasing fuel taxes** is a logical step: it directly offsets the revenue-reducing effects of conservation, and it spurs further conservation. However, it is politically very difficult to enact new fuel taxes at a time when prices are already a source of public concern. I believe this is unlikely.

**Develop new taxes**, either vehicle-related or unrelated, is my guess for the most likely course of action. A pilot test for higher mileage taxes is running in the UK. London reduces traffic congestion by imposing car taxes on motorists who drive into the central city at peak times. The daily charge for driving in the "central zone" has now been raised to £8 (US\$13.71), and the zone will probably be expanding in size. It's a fairly intrusive system, with video cameras and plate recognition software used to impose fines on those who don't pay.

Governments are starting to figure out the taxation issues. The BBC reports from the UK:

"Charging people according to where, when and how far they drive is a big idea whose time has come. Last month, the British Transport Secretary, Alastair Darling, suggested something altogether more ambitious [than the London congestion charge]: a national [road pricing] system covering the whole country. Drivers would be charged a varying rate per mile, depending on what kind of road they took. Cars would be fitted with a "black box" to record their movements, probably linked to global positioning satellites (GPS). Mr. Darling described it as "a radically different approach", something that no other country in the world had done. ... All the same, there are strong pressures on governments to push ahead with road pricing. For one thing, some experts say, **revenues from fuel taxes have begun to decline as cars become more efficient.**"

[http://news.bbc.co.uk/2/hi/uk\\_news/4641089.stm](http://news.bbc.co.uk/2/hi/uk_news/4641089.stm)

And from *New Zealand Herald* 21 November 2005:

"The Ministry [of Transport] has highlighted to new Transport Minister David Parker a need to charge more for actual road use, rather than relying on blunter forms of raising revenue such as petrol tax and ratepayer contributions. It warns in a briefing paper for the new minister that better fuel efficiency from technological improvements to New

Zealand's vehicle fleet is starting to outstrip the growth in kilometres travelled. **"This will lead to a reduction in the level of fuel excise duty collected and is therefore likely to threaten the long-term viability of petrol excise as a primary method of paying for land transport activities,"** the briefing paper says.

... Motorists pay 62.9c in tax for each litre sold - 47.665c in petrol tax and 15.3c in goods and services tax - accounting for 46 per cent of the 136.9c price of 91-octane. Although petrol tax will rise with inflation in annual adjustments starting in April, the ministry's briefing paper says this will only delay an erosion in revenue..."

[http://www.nzherald.co.nz/section/9/story.cfm?c\\_id=9&objectid=10356223](http://www.nzherald.co.nz/section/9/story.cfm?c_id=9&objectid=10356223)

## Implications of the government's potential tax choices

**New mileage taxes** should be effective, because they provide an incentive to drive less miles while sating the tax appetite. This will cut fuel consumption, and reduce traffic congestion. It may have a tendency to spur people to keep their old inefficient vehicles, but drive them less. This cuts long-term road development needs.

**Higher fuel taxes** may have a slightly different effect: drivers win by burning less fuel, whether they reduce mileage or not. It could spur people to buy more fuel efficient vehicles, but drive them further. This may not reduce the needs for new roads.

**Non-transport taxes** are the worst choice for conservation, but make the most money for government. An additional tax, not related to mileage or fuel consumption, would fill government coffers, but provide no incentives to conserve. In this case, governments win by maximizing fuel tax revenue (prices stay lower, so no incentive to conserve) and they gain new taxes as well. Non-transport taxes may be easier to impose, because they can be less controversial.

What happens next? Watch as the plot develops.



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