



TREAD LIGHTLY

Carbon Taxes or Carbon Quotas?

We should start by immediately freezing CO₂ emissions and then beginning sharp reductions. Merely engaging in high-minded debates about theoretical future reductions while continuing to steadily increase emissions represents a self-delusional and reckless approach. In some ways, that approach is worse than doing nothing at all, because it lulls the gullible into thinking that something is actually being done when in fact it is not.
(Al Gore, 2006)

Introduction

One of the main obstacles in reducing greenhouse gas emissions is society's failure to responsibly account for carbon emissions in our economic transactions. While we pay for costs such as raw materials, manufacturing costs, labour and profits, and these are readily accounted for, several vital industrial inputs are largely ignored in our accounts. The inputs of energy and water are seriously undervalued; yet they are the publicly and environmentally subsidised powerhouse of the economy.

There is no significant cost disincentive for carbon emissions or water wastage. These costs are, in economic terms, externalised – i.e. they are kept external to the market economy.

The purpose of carbon taxes or carbon quotas is to “internalise” the environmental costs associated with the carbon emissions associated with energy use.

Alternatives: Carbon Taxes vs Carbon Quotas

We all know what taxes are. Carbon taxes would be imposed on major uses of energy, including electricity (the tax rate would depend on the source of such electricity), petrol and any other greenhouse emitting energy source. It would be possible to increase the rate every year to encourage lower and lower levels of carbon emissions. This is the approach currently promoted by Al Gore:

For the last fourteen years, I have advocated the elimination of all payroll taxes — including those for social security and unemployment compensation — and the replacement of that revenue in the form of pollution taxes — principally on CO₂. The overall level of taxation would remain exactly the same. It would be, in other words, a revenue neutral tax swap. But, instead of discouraging businesses from hiring more employees, it would discourage business from producing more pollution. (Al Gore, 2006).

The alternative approach, promoted by people such as the UK Minister for the Environment, David Miliband, and influential environmentalists such as George Monbiot, is to give every person an equal “carbon quota” which they can “spend” as they choose.

The lady in the Rolls-Royce car might still be driving around, but only after she has transferred a good deal of money to people who are poorer or more abstemious than she is. Economic justice is built into the system. . . What counts is that the country as a whole will not be exceeding its share of carbon dioxide. . . The market created by carbon rationing will automatically stimulate demand for low-carbon technologies, such as public transport and renewable energy (George Monbiot, *Heat*, 2006).

The carbon quota would be determined by the amount of greenhouse gas emissions the planet can safely absorb, and would be tradable as a commodity. If you reduce your carbon emissions below your assigned quota then you can sell the remainder to someone who is willing to pay to continue emitting greater amounts of carbon. The system would include both individual quotas and a national quota to be allocated (or sold) to industry, commerce and government agencies, etc. Initially the quota would be only marginally less than current emission levels, but over time (with annual reductions) the quota would be lowered to levels that ensure the 90% emission decrease required in most developed countries to maintain a liveable planet.

Both tax and quota methods would help to internalise the costs of carbon emissions and subsequent climate change – but they have considerably different overall impacts and potential for achieving the required reductions, as shown over the page:

Carbon Quota vs Carbon Tax

Issue	Carbon Quota	Carbon Tax	Comments
Keeps Climate Change visible and central	Yes	Partly	Climate change is at the core of the quota system (in why, how and when) whereas a carbon tax is just another tax or excise in the minds of many.
Has a clear ceiling or quota	Yes	No	While taxes can be increased to provide incentive for energy reduction, this has inflationary and equity issues greater than the Quota system
Promotes equity	Yes	No	Taxes can have tax-free thresholds, etc. but these are not tradeable and therefore do not promote equity the way that an equal personal quota does. Tax avoidance is a recognised accompaniment to taxes.
Provides clear signals to market regarding future reductions	Yes	Marginally	The tax could be established as an annually increasing tax, rather than a reducing quota. However, not as intuitive or obvious, nor as definite in its effect – taxes have much greater impact 'elasticity' than a quota.
Easy to implement technologically	Probably	Yes	Taxes already exist and only minor change required – the quota system would involve substantial technological additions, as for credit cards, etc. – central register required, additional trading procedures, etc.
Easy to implement politically	No	No	The quota system has the advantage that it deals with the issue head on – taxes are never popular and are often viewed as supporting the rich, etc.
Able to deal with the Peak Oil crisis	Yes	No	Taxes will largely push up the price of scarce commodity and increase inequality in energy usage. Quotas can provide a more sensible and staged reduction in use.
Encourages alternative energy development	Yes	Yes	The quotas are based on the types of energy used (this is built into the system). Taxes could similarly be calculated on the types of energy used. This would encourage a range of alternatives - however, the ability to trade quotas would provide additional market forces to develop and use alternative energy sources.

Under the (Miliband/Fleming) scheme, all UK citizens from the Queen down would be allocated an identical annual carbon allowance, stored as points on an electronic card similar to Air Miles or supermarket loyalty cards.

Points would be deducted at point of sale for every purchase of non-renewable energy. People who did not use their full allocation, such as families who do not own a car, would be able to sell their surplus carbon points into a central bank.

. . . To reduce total UK emissions, the overall number of points would shrink each year.

“instead of banning particular products, services or activities, or taxing them heavily, a personal carbon allowance enables citizens to make trade-offs . . .

“unlike taxes or attempts to ban products, personal carbon allowances regulate the outcome to be achieved, not the means of achieving it. Carbon trading fixes the outcome to be achieved, and leaves the price of carbon to adjust to the necessary level to change behaviour”.

(Rt. Hon David Miliband, UK Minister for the Environment, 19/7/06).