



## Tradable Energy Quotas (TEQs)

Posted by [Chris Vernon](#) on August 6, 2006 - 7:31am in [The Oil Drum: Europe](#)

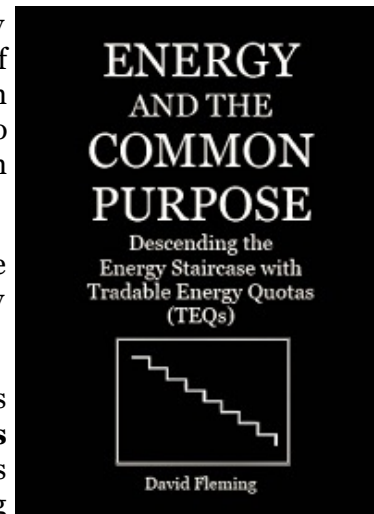
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Looking forward it is clear that the business-as-usual energy policy is “*not fit for purpose*”. The current system is proving itself inadequate when faced with twin challenges of fossil fuel depletion and climate change. The energy markets are likely to respond to future shortages with profiteering, grossly inequitable allocation and globally destabilising financial flows.

A rationing system is required which can both facilitate equitable allocation of the diminishing resource whilst simultaneously reducing the carbon dioxide released.

Formulated by Dr David Fleming and first published in 1996 as Domestic Tradable Quotas (DTQs), **Tradable Energy Quotas** known as TEQs (pronounced “tex”) are just such a system. TEQs are an electronic rationing system that includes everyone, bringing citizens, industry and Government together in a single scheme with a common purpose. The structure of this scheme is detailed in Fleming’s excellent short book (available at [www.teqs.net](http://www.teqs.net)) detailed below.



Below is an overview of TEQs written for TOD by David Fleming, he will be reading your comments.

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## Tradable Energy Quotas (TEQs)

Tradable Energy Quotas are an electronic rationing system to reduce dependency on oil, gas and coal, in order (a) to cut the carbon emissions that cause climate change, and (b) to distribute access to these fuels equitably at a time of deepening energy shortages. All adults have an equal (electronic) ration of “carbon units” or “energy units” which are tradable; non-domestic users buy units on the market, into which they are issued by weekly tender. A year’s supply of units is in the market at all times, topped up each week. There is a “Carbon Budget” which determines (subject to formal monthly revision) how many units will be released week-by-week over the next twenty years. The scheme enables everyone to plan ahead to reduce their fossil-fuel dependency, to achieve deep structural change in the whole political economy, and to bring forward the development of renewable sources of energy.

TEQs are “quantity-constrained”, not “price-constrained”. That is, it is the limit set by the Carbon Budget - not a high price - that does the work of reducing energy demand. There are no intrinsic reasons why the price of carbon units should be high; in a successful scheme, the demand for fuel would be reduced (tending to keep down the price of fuel) and the economy would be well-adapted to the Carbon Budget (tending to keep down the price of units); there is a reasonable expectation that the total energy price (the price of the fuel plus the price of units) would be lower than without a TEQs scheme. The expectation of lower energy prices applies

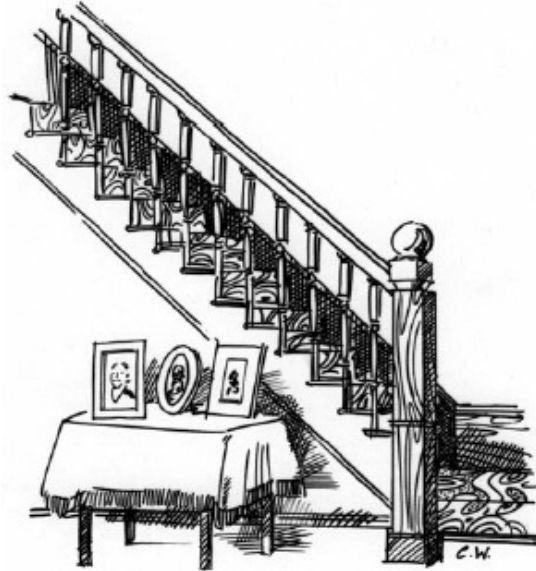
The Oil Drum: Europe | Tradable Energy Quotas (TEQs) <http://europe.theoil Drum.com/story/2006/8/4/163554/8625>  
especially at times of oil and gas scarcities, when TEQs-rationing will be the essential condition for fair and affordable access to fuel.

Each scheme is set up as a national scheme, with its own Carbon Budget, but each national scheme could be within a wider multinational framework.

TEQs are an economy-wide scheme for all users, including firms, institutions and the government itself. Applications of the principle for individuals only, excluding the rest of the economy, would be impossibly complex. If the energy-loop from original producer to final user were broken, the rating system (which sets the quantity of carbon units in the energy that is purchased) would break down. The existence of two markets - one for individuals based on unit prices, and one for everyone else using some other mechanism - would produce two prices with black market brokering between them. The need to distinguish between individual uses and commercial uses (e.g. midwives' or part-time window-cleaners' needs to travel to their clients) would lead to arbitrary decisions and encourage fraud. An integrated scheme covering the whole economy is self-regulating, and largely automated, requiring minimal administrative action by participants. An individuals-only scheme, of the kind described as "Personal Carbon Allowances", if it ever reached the point of implementation, would break down with such effect that it could be expected to rule out an effective carbon-rationing scheme of any kind for the foreseeable future.

As explained in the book and on the website (below) TEQs are based on the principles of "Lean Thinking", and especially on those of "flow" and "pull". The system is clearly the responsibility of energy users - industry and consumers - rather than of remote managers and taxation accountants. Everyone participating in it knows that by certain times ahead - 10, 20 years - they will have to be living and working within a defined, and much reduced limit on their consumption of fossil fuels. They will invent their own solutions; they will take advice; they will refer to guidelines and standards; they will follow the promptings of their neighbours; they will join together in local schemes which can do much more to improve energy-efficiency than any household can manage on its own. But they will not depend on regulations to tell them what to do. That does not mean that there will be no regulations; no doubt some will still be needed, but they will be ancillary, peripheral to the system, and not the motor which drives it along. That is, the system is set up in such a way that participants will have good, passionate reasons to achieve far more than they could ever have imagined is possible. The energy flows in the economy are made visible and explicit; the invention and ingenuity of everyone involved is stimulated and pulled along from observation to action.

See David Fleming, *Energy and the Common Purpose: Descending the Energy Staircase with Tradable Energy Quotas (TEQs)*, London: The Lean Economy Connection, (2005), ISBN 0-9550849-1-1, price £5. Also at [www.teqs.net](http://www.teqs.net)



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