

Your own tonnes of carbon

Personal carbon allowance is an idea whose time is coming soon. Setting greenhouse gas emissions targets relative to countries' population is the "only equitable ultimate solution" in the long run, Yvo de Boer, Head of the UN climate change secretariat, has said at the current global climate talks. Eventually, every individual on the planet will have to be allocated the same amount of greenhouse gases – so energy use disparities between countries will gradually lessen.

Personal Carbon Allowances are the application of this concept on a national level, but no country has yet implemented them. However, Ireland may be about to do so, and in the UK, the Climate Change Bill also envisages the possibility. But the systems being considered - Personal Carbon Allowances (in the UK) and Cap-&Share (in Ireland) - use different approaches. Both set a cap on fossil fuel use, create a permit system and place a price on direct and embedded fossil fuels so that the market can help to drive the decarbonisation of the economy – but how do they compare?

Personal carbon allowances

BY DR TINA FAWCETT, UK ENERGY RESEARCH CENTRE

Personal carbon allowances (PCA), is a radical policy which proposes a cap-and-trade system in which emissions rights are allocated to individual energy end-users. The key principles on which it is based – equal per capita rights to emit carbon within a reducing carbon cap – have recently been endorsed by Angela Merkel, the German Chancellor, as an international solution to climate change (an idea long championed by Aubrey Mayer as Contraction-and-Convergence).

PCA has attracted political attention in the UK and is being tried out by communities on a voluntary basis, so, what would a policy of PCA entail, and what are the prospects for its adoption in the UK?

PCA would cover all the direct energy used by individuals within their household and for personal travel and thereby would account for up to half of the carbon emissions from energy use in the UK (where international air travel is included).

All adults would be allocated an equal per capita allowance, which would reduce annually, with reductions announced well in advance. These allowances would be tradable. Every time a person paid an energy bill, filled up the car with fuel or bought a flight, they would have to surrender carbon 'credits' from their account. If they had used up all their credits they could buy more from those who had been more carbon-frugal, at the market price.

The scheme does not cover emissions generated by organisations.



A mock up of what the PCA card will look like

Changing relationships

PCA is an overarching policy instrument which aims to deliver a reduction in national emissions in an equitable way. It would complement rather than replace existing policies such as energy efficiency standards and building regulations. It is sometimes seen as simply an economic instrument. However, I believe it could be much more powerful than that. PCA could change peoples' relationship with their own carbon emissions, engender a greater interest in and ability to reduce emissions and drive a change in social norms to favour lower carbon lifestyles.

Comparison with other policies

There are other policy proposals similar to PCA which have the same aims. Two of the best known are 'domestic tradable quotas' also known as 'tradable energy quotas' (TEQ) and 'Cap and Share' (C&S). Both TEQ and C&S are greater in scope than PCA: they cover all carbon emitted in the economy. However, for householders TEQ would be very similar to PCA – except that air travel would not be included in the personal TEQ allowance. C&S would be different, as explained in the second half of this article. C&S does not introduce personal responsibility for carbon emissions in the same way as PCA, rather it relies on economic changes (in the price of direct and indirect carbon) to drive changes in personal behaviour. It seems likely to be very different, and more limited, in its psychological impact. PCA treats people as morally-engaged citizens living within complex social networks, not just as rational economic actors.

Political interest

There has been considerable political interest in personal carbon trading. A private member's bill, sponsored by Colin Challen MP, was introduced into the House of Commons in July 2004 calling for the introduction of domestic tradable quotas (2004). More recently, the idea has been promoted by David Miliband MP when he was Secretary of State for the Environment (2006 – mid-2007). He explained his interest in the concept during a House of Commons debate on 14 December 2006 about reducing carbon emissions:

"Individuals can play an important part, too, and that is why I have led the debate about personal

carbon allowances and so-called carbon credit cards, which could help individuals to see how they can make a contribution that will help the environment and themselves."

As a consequence, Defra is developing a funded research programme on personal carbon trading. In parallel, the House of Commons Environmental Audit Committee held an 'inquiry into personal carbon allowances' during June and July 2007, with their report due shortly.

A network of more than thirty 'carbon rationing action groups' is testing out PCA informally, and other communities are trialling similar voluntary schemes. Universities, environmental writers and independent research organisations are developing detailed thinking on PCA. However, despite all this activity, PCA is still at the development stage, with gaps in knowledge remaining.

More action needed

Radical action to reduce UK carbon emissions is desperately needed. The draft Climate Change Bill includes powers to enable government to introduce new domestic emissions trading schemes through secondary legislation, so in theory PCA could be introduced quickly. However, PCA would probably not currently be seen as politically or socially acceptable. To change this we would need:

- convincing evidence on how PCA would work, who would be affected, what it would cost;
- demonstrations that people can adapt to and live well under a PCA scheme, via voluntary and research trials;
- understanding of the benefits of PCA compared with the alternatives (e.g taxation);
- and even greater public and political concern for and action on climate change.

While the UK Energy Research Centre and others are working to provide answers to the research questions, the question of whether the UK is ready to take serious action on reducing carbon emissions remains as troubling as ever.

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Information on UKERC research about PCA is available at:
www.eci.ox.ac.uk/research/energy/pct.php

- just how would you look after them?

Cap and Share

BY DR WILL HOWARD,
COORDINATOR, CAP AND SHARE (BRITAIN)

Irish Environment Minister John Gormley, the leader of the Irish Green Party, is tipped to announce soon that Cap and Share (C&S) is being considered for adoption when the country's first Carbon Budget is presented this December. The Irish Sustainable Development Council, Comhar, the equivalent of the Sustainable Development Commission, has commissioned an econometric study of the system.

Strictly, C&S does not allocate personal carbon allowances. Instead, it gives every adult a share of whatever tonnage of carbon dioxide is to be released in a given year - "supplier permits" - and allows them to decide what to do with it. They can either sell them through the banking system to the companies who introduce the fossil fuels into the economy or they can destroy them, thus reducing the national emissions by the amount they have withheld.

No-one will need C&S permits to buy fuel. People will be able to buy as much fuel as they like, but if demand is high, so will be the price the fuel importers offer for permits, and therefore the price of fuel, thus rewarding those who are fuel-frugal.

Rights that inspire rationing

C&S starts by assuming that the value of the Earth's limited capacity to absorb greenhouse emissions belongs equally to everyone, rather than to companies (as in the EU ETS) or governments (for instance, TEQs may give 40% of the available emissions tonnage to individuals and the Government may auction the remaining 60% to companies).

The distribution of supplier permits to every adult in Ireland will probably be as a yearly booklet of four permits, one for each quarter, arriving by post. This quarterly allocation is intended to smooth the flow of permits into the market. Recipients will be able to sell their

permits at banks and post offices for whatever the price the fuel suppliers are prepared to pay that day for the right to sell an amount of fuel that will release a tonne of CO₂ when burned.

The banks sell on the permits to the fuel importers and Customs and Excise will verify that enough permits are surrendered to them for all the fuel arriving in the country. This makes the scheme relatively quick and easy to introduce and the transaction costs are low because it does not rely on a computer network and the use of swipe cards for every fuel sale.

Local schemes that build a global system

Another big difference between C&S and TEQs is that TEQs are a national system whereas C&S is potentially a global one. If C&S proves successful in Ireland, it could be adopted in Britain to implement the Climate Change Bill and then by Europe to control all non-EU ETS emissions (particularly transport and home fuels) which, even though they are some 55% of the total, are still outside any control.

It has been suggested in Ireland that the supplier permits should be issued by an independent Climate Protection Trust and a proportion of the supplier permits used to create a Transition Fund. This would enable communities and individuals to have a say in financing the transition to a low-carbon economy. Money would be available to prime community projects like district heating, energy saving and renewable energy. The Fund may also provide the economic pivot between restricting emissions and building up sinks that can suck carbon back out of the atmosphere, such as forest conservation, bio-charcoal and marine plankton regeneration.

All-round education

The yearly issue of permits is expected to prompt media discussion on climate change



and energy saving. While PCAs tend to focus on counting transport and domestic fuel use, C&S aims for a broader understanding of how prices will reflect both direct and embedded emissions in all products and services.

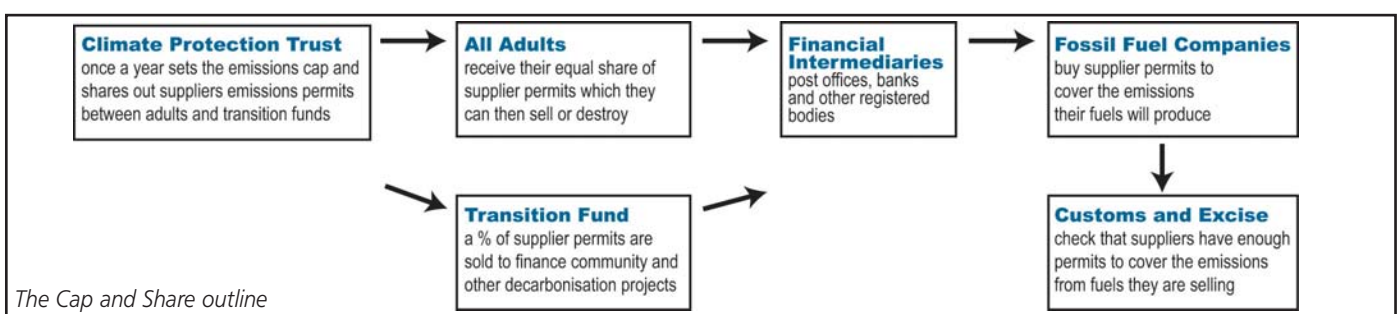
Energy use is highly skewed towards the better off. The worse off will have an interest in even deeper cuts to drive up the value of their permits. The direct distribution of permits through transparent and accountable "Climate Protection Trusts" will make corruption or diversion of funds difficult.

The rising price of emissions will encourage and reward low-carbon industries and put them "ahead of the curve". Politicians of all persuasions should find C&S an easy sell. After all, they will be providing an enabling framework that empowers citizens to be the solution to protecting the climate. They will not be imposing rations or taxes or diverting funds for other purposes.

From negative to positive motivation
An unwanted side effect of PCAs could be guilt-tripping non-cooperative individuals. The constant dual accounting of carbon units and money could be rejected by large sections of the population who are not into detailed carbon counting. People want to be free to live their lives within fair boundaries.

But C&S guarantees a collective emissions cap and, as today, allows people to adjust their lives to a low carbon future they can feel good about - because they have become the solution, not the problem.

More: www.capandshare.org



The Cap and Share outline