The Experience of Carbon Rationing Action Groups: Implications for a Personal Carbon Allowances Policy

Executive Summary

Personal Carbon Allowances (PCAs) have been proposed as a policy to facilitate reductions in individuals' carbon dioxide (CO_2) emissions. A PCAs scheme would be a cap-and-trade system covering emissions from home energy use and personal transport. Many questions remain to be answered about the practical and psychological implications for individuals of a PCAs scheme and about how a policy could best be designed to maximise public acceptability and encourage emissions reductions. This study attempts to begin exploring such issues by examining the experience of members of Carbon Rationing Action Groups (CRAGs).

Carbon Rationing Action Groups are grassroots groups of concerned citizens who set themselves a voluntary carbon ration for the year and provide support and encouragement to members seeking to reduce their carbon footprint. Some groups have a price for carbon emitted in excess of the target, and even basic trading systems whereby under-emitters are rewarded using the financial penalties collected from over-emitters. These groups therefore operate the nearest scheme in existence to PCAs.

The overall objective of this research was to determine whether the operation of the CRAGs movement, and the experiences of individuals involved, can offer any useful information about the process of individual/household level carbon footprint reductions, the psychological effects of having a carbon allowance and trading system, and therefore any issues for consideration in the design of a Personal Carbon Trading policy.

Semi-structured interviews were carried out between June and August 2008 with 23 members of the movement, from 10 different CRAGs. Topics covered included participants' motivations for involvement; how the group carbon 'ration' was chosen and what was included; carbon accounting, including the conversion factors used and the process of tracking energy use and calculating carbon footprints; whether/how emissions reductions were achieved, and what was easy and what was difficult about reducing emissions; the use (or otherwise) of financial penalties for over-emitters; participants' opinions of a compulsory, national PCAs scheme and on whether they would be likely to trade within such a scheme; and the benefits and limitations of belonging to a CRAG.

The interviewees were generally highly motivated, well-educated, middleclass homeowners, and therefore not representative of the general public. Most CRAGs had chosen to apply the same 'carbon ration' to each member of the group, although some had differentiated targets. Members generally did their own carbon accounting, and most reported that they had more understanding of where their emissions come from and the relative impact of different activities than they had before joining the CRAG. Many members reported reducing their emissions since joining a CRAG, although not all attributed these changes to their involvement with the group. Reductions were made both through installation of technologies such as solar thermal water heating, and behavioural changes such as taking fewer flights. Barriers to change included cost, housing situation (eg. renting), family commitments necessitating flying, and lack of public transport options in rural areas. Not all CRAGs instituted a financial penalty for members who exceeded the ration, and among those that did, it was more common for the monies to be given to environmental charities, projects, or offsetting organisations than to under-emitters. Payment of a carbon price for over-emitting, or receiving a monetary reward for under-emitting were not strong drivers of behaviour for interviewees. They reported many benefits of belonging to a CRAG, chiefly a sense of 'moral support' and the potential for sharing information.

The experiences of those involved in CRAGs suggest that it is possible for at least a certain section of the population to make significant cuts to their direct carbon emissions, provided that they are motivated. Whether the proponents of PCAs are correct in suggesting that such an allowances scheme would provide motivation for the general population is not possible to determine from this study. The findings of this study do suggest that:

- Equal-per-capita allowances may not be perceived as fair by everyone;
- The issue of what allowance, if any, should be given to children might well be controversial, as might the boundaries of the scheme and the conversion factors used;
- Some under-average emitters will be unwilling on principle to sell their spare allowances on an open market. Widespread unwillingness or inability to trade could have implications for the operation of the system. More research is necessary to explore how people would deal with carbon budgeting and their likely trading behaviour: for example, whether they would be willing to trade allowances, whether people will prefer to immediately sell all their allowance and purchase necessary units at point-of-sale etc;
- The carbon literacy achieved by CRAGgers came about largely because they computed and compared their own footprints; provision of detailed carbon statements to individuals would be necessary to try and encourage a similar effect in a national scheme;
- Some of the benefits of belonging to a CRAG (such as information sharing) would not necessarily apply in a national PCAs scheme; they might occur in a more ad hoc way, but there would still be a place for grassroots support/information groups such as CRAGs.