

CARBON RATIONING ACTION GROUPS – A SHORT GUIDE

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AIMS

The main aims of the scheme are as follows:

1. to make us all aware of our personal CO₂ footprint
2. to find out if it can help us make radical cuts in our personal CO₂ emissions
3. to help us argue for (or against!) the adoption of similar schemes at a national (DTQ) and/or international (C&C) level
4. to build up solidarity between a growing community of carbon conscious people.
5. to share practical lower-carbon-living knowledge and experience

THE BACKGROUND

In 2003, the average UK citizen caused 5.4 tonnes of CO₂ to enter the atmosphere (ref 1). In order of importance, these were due to:

- air travel (1.8t)
- household heating (1.5t)
- car use (1.0t)
- household electricity consumption (0.9t)
- other public transport use (0.2t)

These five categories make up our so-called personal CO₂ emissions. Personal CO₂ emissions make up about half of the UK's total. The other half is caused by businesses and the public sector.

A sustainable level of personal CO₂ emissions may be as low as about 0.6t. This represents a 90% reduction from today's level. To avoid dangerous and potentially runaway climate change, this may need to be achieved by 2030 (ref 2). To achieve a 90% reduction in personal emissions by 2030 would require a rate of reduction of close to 10% each year.

THE CRAG SCHEME

CRAGs give us all an opportunity to start contributing our fair share to that goal. For simplicity, the basic scheme covers the first four categories (96%) of personal emissions only, that is: air travel, car use, household heating and electricity. The scheme assumes these came to 5t, i.e. 5000kg, of CO₂ per person in 2005. The personal ration of each member of the group is decided by consensus during the first few weeks of the “carbon year”. So far most groups have settled for a ration of 4500kg in 2006 with the carbon year running from April to March. The CRAG scheme potentially rewards those who live within their ration and penalizes those who exceed their ration. In this sense it follows the general principles of Contraction and Convergence and Domestic Tradeable Quotas (refs 3 and 4).

HOW TO JOIN

You join a CRAG by letting your nearest group’s “carbon accountant” know and by explaining something about your living circumstances as this will affect how your CO₂ is counted.

For example, my details are:

I share a house with 3 others
Our heating is by coal, oil and wood
We don't get our electricity from a renewables source
Three of us own cars; one of them is mine
I am the only one joining the scheme

My ration would therefore have to cover 1/4 of the household’s emissions (no matter how much or little the others contributed to the total) and all of my car’s emissions (no matter how often others borrowed or shared my car).

If there isn’t an existing group near you, give us a shout and we will help you start your own.

HOW IT WORKS

At the start of the year, the carbon accountant will credit your CO₂ account with your annual ration (4500kg in 2006). Every time you get an energy bill, a new MOT or a plane ticket, you will let her know the details (e.g. how many kWh of electricity, annual car mileage, flight destination, etc) and she will debit the equivalent amount of CO₂ from your account and let you know your new CO₂ balance. This should not mean you sending her more than about 12 to 15 emails a year.

At the end of the year you are overdrawn, she will ask you to pay off your carbon debts! Debts will be paid at a rate of so many pence per kg of CO₂. The participants will agree amongst themselves what this rate should be. They must come to an agreement by the end of the first quarter of the carbon year as defined by the group. Debtors will pay their dues into a “carbon fund” held with a friendly bank. The fund will then be distributed in a way agreed upon by the group, for example, amongst the CO₂ savers in proportion to their

share of total savings, or to a charity, or to a green project, or a combination of all of these or none. It is up to each group to decide for itself.

To understand what this would mean in practice, let us assume that in 2006 the participants settle on a rate of 10p per kg. Imagine you have used up your ration of 4500kg and want to make another journey. You will now be going into carbon debt. At 10p/kg, a car journey from Birmingham to London will cost about £4, a return flight to Athens will put you back £188 and a return flight to New Zealand will cost £1200!

At the end of the year, whether you are in CO2 credit or overdrawn, if you want to remain in the scheme, you should send the carbon accountant paper copies of your energy bills, MOT and plane tickets as proof of your year's carbon footprint. These should get to her before the end of the first month of the new carbon year. Carbon debts due on the old year should be paid in by the end of the second month of the new carbon year. The carbon fund should be distributed by the end of the first quarter of the new carbon year just as the group is deciding on the new year's ration and carbon penalty.

ENFORCEMENT

Threat of exclusion from the scheme is the only means of enforcement at our disposal.

You will be excluded if:

1. you fail to provide proof of your carbon footprint by the agreed deadline, or
2. you fail to pay off your carbon debt by the agreed deadline, or
3. you opt out of the scheme

The last one prevents people going off for a carbon binge and rejoining the next year without paying their carbon dues.

(ANTICIPATED) FREQUENTLY ASKED QUESTIONS

The answers to these FAQs are only suggestions. Ultimately it is up to each group to agree by consensus.

Q1. How will the carbon accountant calculate the CO2 emissions associated with the energy use that I report.

A1. She will use the conversion factors that the group has agreed upon. These will be posted on the website. Most groups currently use those obtained from the coinet.org.uk website. They are the same figures as used by CAT and Mayer Hillman. The numbers come from the DTI and include a 3x factor on air miles to account for the enhanced warming potential of gases emitted at altitude. Please feel free to check the accountant's arithmetic when she updates your balance

Q2. How can we ensure the group hits its annual emissions target?

A2. If total CO2 savings are equal to or greater than total CO2 debts at the end of the year, then you will have hit or bettered your target. This may not happen in the first year

because the group may (not unreasonably) choose to set the cost of carbon debt too low. You will probably be more radical in the second year and easily hit your target.

Q3a. I am a student and live 30 weeks a year in a hall of residence and the rest of the year I am either travelling or at home with the folks. How does that work?

A3a. Your personal share of electricity and heating energy consumption is difficult to quantify. You probably don't have much control over them. It is suggested you accept the CO2 ration for car and plane use only (i.e. 55% of standard ration) and report only these.

Q3b. What happens when I move out of hall and into that flatshare?

A3b. You'll get the full ration. We will divide the household's emissions calculated from the bills by the number of people officially resident and that will be your share of emissions.

Q3c. What if energy bills are included in the rent?

A3c. You cannot be serious! But if you are, I would suggest you get a copy of the bill off the landlord and we would do it as per A3b above.

Q4. What is to stop me cheating by not reporting a flight?

A4. Only your conscience. This scheme will depend on us trusting one another not to cheat. The better we know each other the easier this will be. Therefore the more local the group the better. Groups should aim to meet up at least once a quarter to catch up and compare CO2 notes.

Q5. Can I join part way through the year?

A5. Yes, but you'll need to report your CO2 emissions (i.e. dig out your energy bills, MOT and plane tickets) for the first part of the year.

Q6a. I have a baby. Does she get a full ration too?

A6a. Yes, as does any dependent that lives full time in the same house as you.

Q6b. What will the carbon accountant do when I report our household energy use?

A6b. I will calculate the CO2 equivalent and debit half of it from you and the other half from your baby's account.

Q6c. What will she do when I report our car mileage?

A6c. She will calculate the CO2 equivalent and debit all of it from your account. It's your car after all.

Q6d. What will she do when I report our air travel?

A6d. If you both flew, she will calculate the CO2 equivalent for the journey and debit it from each account.

Q7a. I live with my partner and we share a car but he is not interested in his CO2 emissions. How will that work?

A7a. You will be debited only half your household energy emissions whether he joins in the group or not.

Q7b. And what about the car emissions?

A7b. If you own the car, they will be debited from your account. If you don't, they won't. We have to keep it simple.

Q8. I drive/fly on business. Does that come out of my ration?

A8. The scheme only covers car/plane travel for private purposes. If you use your car for work AND private use, you will have to explain how you split the mileage. Don't you have to do that for the taxman anyway?!

Q9. Add your own here!

REFERENCES

1. Mayer Hillman "How we can save the planet", Penguin (2004). Table 4 p148. Reproduced on the internet at <http://coinet.org.uk/solutions/carbon-rationing>.
2. Colin Forrest "Cutting Edge: Climate Science to April 2005" <http://www.climate-crisis.net/downloads/>
3. <http://www.gci.org.uk/>
4. <http://www.dtqs.org/>

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