

Personal Carbon Trading: Public Acceptability

A research report completed for the Department for Environment, Food and Rural Affairs by Opinion Leader and Enviros Consulting

March 2008



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Executive Summary

Introduction

This report presents the findings of research completed by Enviro Consulting and Opinion Leader on behalf of Defra. It aims to assess the public acceptability of Personal Carbon Trading (PCT) and to explore what could make PCT more ‘user friendly’ if it were to be introduced. The views expressed in this report reflect those of participants in the research and are not those of Defra, Opinion Leader or Enviro Consulting.

This report is structured as follows:

- Section 2 details the methodology that we used, including details of the way that we recruited focus group participants.
- Section 3 presents views on responsibility for climate change.
- Section 4 describes the initial feedback on personal carbon trading. It also highlights views around its impact on different types of individual and its implementation.
- Section 5 summarises participants’ views on the two other options that were presented alongside PCT: a carbon tax and upstream trading.
- Section 6 presents some of the other ways that participants considered Government could influence individuals’ behaviour.
- Examples of the participants that raised particular views and quotes from different respondents are provided throughout the document. Section 7 summarises any themes in particular segments.
- Section 8 presents the findings from the questionnaires and follow up calls.
- The findings of the research are summarised in the final part of the report, Section 9.
- Appendices detailing the research materials are provided in a separate document.

Qualitative approach

The project involved 12 focus groups, each lasting two hours and involving 92 participants in total. The 92 participants represented members of each of the seven segments described by the Defra environmental segmentation model (which groups individuals according to their environmental values and attitudes). At each focus group the concept of individual responsibility for climate change was first discussed and then the idea of Personal Carbon Trading was presented alongside two other policy options (a carbon tax and upstream trading). The findings presented in this report also take on board responses to a follow-up questionnaire that participants were asked to fill in at the end of the focus group and follow up calls that were conducted with around 50 of the participants two weeks after the groups were held.

Interpreting the findings

The research for this project is designed to provide an initial insight into public views on the acceptability of PCT, and, therefore, has a number of limitations. It was presented alongside alternative policy options and described in the way documented in the appendices to this report. We note that the sample size is relatively small and that information was provided to participants over a relatively short time period (two hours). The findings that follow should be viewed in this light.

Key findings from the research

- The extent and depth of understanding about the causes of climate change varied considerably from individual to individual. Although participants were typically able to identify the types of behaviour that result in greenhouse gas emissions, there was some confusion around the relative impact of different activities.
- Participants were generally willing to accept some responsibility for climate change. However, there was a strong view that Government should help individuals to mitigate their impact (approaches suggested ranged from the provision of information and advice to direct intervention and choice editing).
- Although some participants readily identified ways that behaviour could be changed, there was a degree of uncertainty about how much individuals could actually reduce their emissions (either because they are already taking steps in the right direction or due to financial or circumstantial constraints).
- There was also some resentment and scepticism about whether individuals should or would change what they do, regardless of the policy approach chosen. Some did not agree that Government should enforce limits on individual behaviour on principle, although many saw a role for Government in providing information and facilitating change.
- Views around this point often influenced comments on the merits (or otherwise) of the different policy options. There was a strong feeling that none of the policy options proposed were appropriate, to the extent that participants suggested a range of other ways that Government could influence behaviour. There was considerable reluctance to the idea of imposing 'limits' on individual carbon emissions¹ and around the concept of using a price signal to achieve this (be it via PCT, a carbon tax or upstream trading).

¹ It was explained to participants that although a cap would be imposed on total emissions from all individuals, each individual could choose their own level of emissions and use the trading scheme to buy additional allowances/ sell any surplus as necessary (i.e. that there would not be individual caps on emissions).

- Initial reactions to the idea of PCT across all behaviour segments were typically negative, at best, lukewarm. Key concerns were around whether such a scheme was appropriate in principle, how it would work in practice and whether it would actually serve to reduce carbon emissions. However, some participants could see that PCT may be a more equitable approach than either upstream trading or a carbon tax.
- Concerns around the impact of PCT included around the equity of such a scheme on different groups of people (e.g. vulnerable groups, families, rural population, migrants and those with links overseas). There were also some concerns around moral issues, both in terms of whether some should benefit financially while others would have to pay and whether it is 'right' to make money out of an environmental scheme.
- Participants also questioned how the scheme could be made to work (both in terms of the cost and complexity of implementation) and also whether participants would actively trade. Key points around the implementation of a scheme included:
 - administration: a Government run scheme was favoured over a privately run scheme;
 - verification: participants raised questions around avoiding fraud/ risk of corruption/ a 'black market';
 - feasibility: there were a wide range of concerns around the complexity and practicality of a PCT scheme (ranging from how data would be kept securely to how individuals would learn about the scheme and participate in it); and
 - access to credits: there were concerns around panic buying/ hoarding and some were worried that they may not be able to buy additional credits if they needed them.
- Feedback from the post group questionnaires highlighted relatively polarised views around PCT; although a larger proportion of respondents were 'very negative' about PCT than were about the two other policy options proposed, a 'quite positive' view was more common for PCT than for the other two options.

- These views did not change markedly between the focus groups and the follow up telephone questionnaires; although there was a slight shift around the strength of feeling and some participants' views were less strong².

Conclusions

Overall, the degree of resistance to individual behavioural change was less than had been expected compared to previous research. Opinion Leader has conducted in this area. But even in this light, there were strong perceptions of Government-imposed 'limits' on individuals' carbon emissions. Of the three policy options proposed, PCT was seen as the most complex and difficult to understand, even though some could see that it may be more equitable than the other two options.

Some of the issues raised in response to the idea of PCT could be a challenge (to a greater or lesser extent) for the implementation of any climate change policy for individuals, not just for PCT. In addition, there are a range of ways of addressing some of the negative views of participants, and attitudes towards PCT may be different if these key concerns were addressed. Some participants suggested that trialling PCT (perhaps on a voluntary basis at first) to show how the scheme works in practice and provide an opportunity for learning.

In particular, the research highlighted that the way that personal carbon trading is presented and described and the context in which it is set, can have a considerable impact on its acceptability. The implementation of any of the policy options proposed would therefore present a communications challenge; a key starting point to influencing behaviour will be raising awareness and providing information of the impact of different activities.

² More respondents gave a 'neither/nor' or a 'quite negative' response compared to the post group questionnaires where respondents were more likely to answer 'quite positive' or 'very negative'.

1 Introduction

Introduction

- 1.1 This report presents the findings of research completed by Enviro Consulting and Opinion Leader on behalf of Defra. It aims to assess the public acceptability of Personal Carbon Trading (PCT) and to explore what could make PCT more 'user friendly' if it were to be introduced.
- 1.2 The views expressed in this report reflect those of participants in the research and are not those of Defra, Opinion Leader or Enviro Consulting.

Background

- 1.3 The UK is committed to reducing its greenhouse gas emissions and the Climate Change Bill³ proposes a target of a reduction in carbon dioxide emissions of at least 60% by 2050 (against a 1990 baseline). Individuals are responsible for around 40% of the UK's carbon dioxide emissions (largely from heating homes and water, and leisure travel), and in order to meet our longer-term emissions targets, emissions from individuals must be reduced, as well as those from business and industry.
- 1.4 One potential measure to deliver these reductions is personal carbon trading. This is an emissions trading scheme where equal rights to emit are allocated to individuals in the economy as emission allowances (or 'carbon credits'), which must be surrendered when purchasing goods or services that cause emissions (e.g. paying their gas bill, or refuelling their car). Anyone with surplus carbon credits could sell these to individuals who require extra (where it is cheaper to buy extra, than to reduce their emissions).
- 1.5 In 2006, Defra commissioned the Centre for Sustainable Energy to assess the ideas and issues involved in the concept of individual carbon trading, and a report was produced: "A rough guide to Individual Carbon Trading"⁴. The

³ At the time of publication the Climate Change Bill is continuing its progress through Parliament. These details are therefore subject to the outcome of the Parliamentary process:

<http://www.defra.gov.uk/environment/climatechange/uk/legislation/index.htm>

⁴ <http://www.defra.gov.uk/Environment/climatechange/uk/individual/pca/pdf/pca-scopingstudy.pdf>

Government has since conducted a pre-feasibility study to explore key high-level issues highlighted by the CSE report: effectiveness and strategic fit; equity and distributional impacts; public acceptability; and technical feasibility and cost.

Working assumption for a Personal Carbon Trading system for this project

- 1.6 There are different types of personal carbon trading that vary depending on the emissions covered, who participates and how it might be implemented. For the purposes of this study, a Domestic Tradable Quota model has been assumed:
- A mandatory scheme involving individuals and organisations, where 40% of carbon credits are allocated free to each adult and the remaining 60% are auctioned – traders and large organisations would make up the majority of buyers.
 - Each adult would receive an equal carbon allocation of 4tCO₂
 - ‘Credits’ would be surrendered to cover the carbon content of electricity and gas use in the home and for personal transport fuel purchases, with airlines covered and treated just as other fuel consumers.
 - All individuals and organisations would have access to the market to trade their carbon credits.
 - A ‘pay as you go’ option would allow individuals to pay the price of the carbon credits at the point of purchase, leaving the vendor to buy and surrender sufficient allowances for that sale.
- 1.7 A start date range of 2013 – 2020 has been assumed, with 2013 representing the earliest possible introduction date.
- 1.8 That Defra provided a broad description of a PCT scheme for use in this project, including assumptions about the preferred scheme design and the treatment of a number of factors e.g. inclusion of children or industry, should not be taken to indicate Government preference for any particular scheme design, nor does it indicate Government views around any specific elements of scheme design. Rather the assumptions provide a baseline for this research project which is consistent with other related research also

commissioned by Defra.

- 1.9 DTQs are the most downstream, radical design proposal for a personal carbon trading system. This proposal makes very strong assumptions about the nature of the policy landscape into which PCT is introduced and so has allowed us to test a relatively extreme view. The appendices to this document provide full details of the assumptions and model description.

Objectives

- 1.10 The purpose of this project is to address the question of public acceptability and also to delve into the details; to explore what could make PCT more 'user friendly' if it were to be introduced.
- 1.11 This research project was designed to provide Defra with an initial insight into the following areas:
- public understanding of the behaviours contributing to individual carbon emissions;
 - attitudes to the general principle of personal responsibility for carbon emissions and the idea of limits to emissions from the domestic sector;
 - public reactions to the idea of Personal Carbon Trading (PCT) compared to two other policy options (a carbon tax with and upstream trading);
 - public reaction to the need for serious behavioural change beyond, for instance, simply buying energy efficient light bulbs;
 - views on what might make PCT acceptable to the public, and whether the public would understand and engage with a personal carbon trading scheme;
 - attitudes to key related matters, such as trust, acceptability, fairness, equity and privacy.

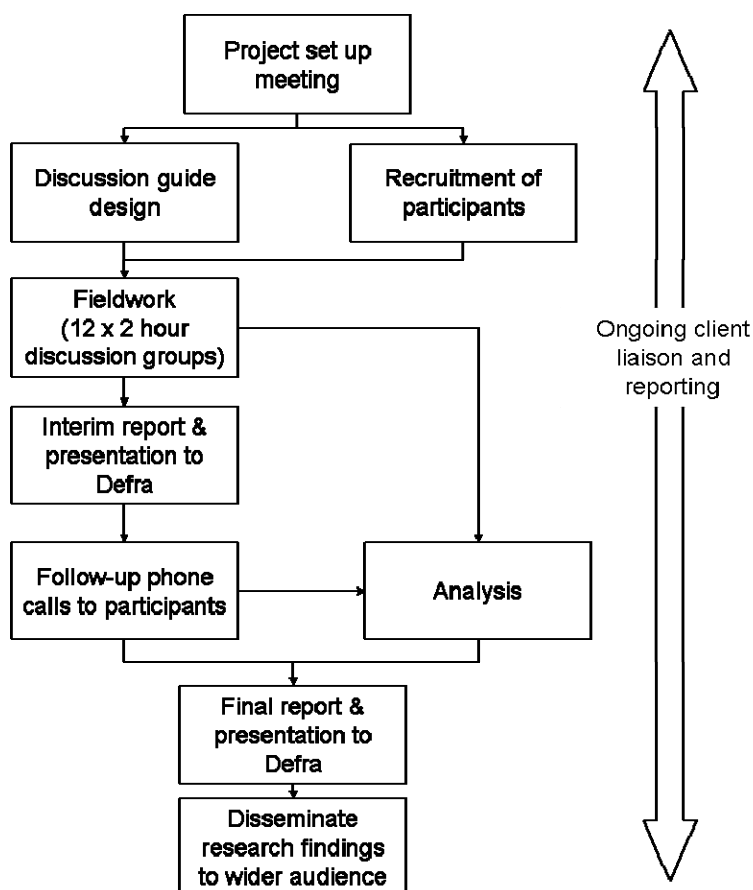
Our approach

- 1.12 The approach to this project was chosen to address the objectives above within the time and resources available. It builds on existing research and aims to provide an initial heads up of the issues that could be key for policy makers to consider when designing different policy options to influence

individuals' behaviour in future.

- 1.13 The approach to this project is detailed in Chapter 2. In summary, we took the approach, illustrated in the diagram below.

Figure 1 Summary of project approach



- 1.14 Defra's environmental segmentation model⁵ (which groups individuals according to their environmental values and attitudes) was used to identify participants for each of the focus groups (see Chapter 2 for further information).

Rationale and limitations of the approach

- 1.15 A qualitative approach was chosen for this research because it offered a useful exploratory tool that could provide an initial indication of ideas and views on the public acceptability of PCT. A quantitative approach would have forced the categorisation of answers and this was not considered appropriate at this early stage of research. It may be that in future, were a hypothesis to

⁵ <http://www.defra.gov.uk/evidence/social/behaviour/>

be tested or the statistical significance of a difference between policy approaches to be sought, a quantitative approach would be warranted.

1.16 It should be recognized, however, that, given the approach taken, the study's findings are an indication of the views of a small group of individuals. These views were formed over a relatively short period of time. They may have been influenced by the way that the focus groups were structured and/ or by the views of other participants in the group. It would be incorrect to place too much emphasis on results indicating majority/ minority views or any percentage figures. The results are a good indication of views held only by those surveyed and caution should be applied in extrapolating these opinions to the wider population.

1.17 In addition, there are a number of areas that the project explicitly did not cover.

- different personal carbon rationing scheme options e.g. Personal Carbon Allowances (PCA) or Tradable Energy Quotas (TEQs);
- alternative policy options beyond a carbon tax and upstream trading e.g. a Supplier Obligation; or
- discussion of the (relative or absolute) costs of different policy options to individuals.

2 Methodology

Recruitment

- 2.1 To meet the stated objectives, a qualitative approach was chosen, consisting of 12 focus groups of seven or eight participants each lasting two hours. A total of 92 participants attended the discussion groups. These were conducted between the 15th and 28th January 2008 across six locations in England, chosen to ensure a spread of rural, suburban and urban responses as well as representation across the country.
- 2.2 The Defra environmental segmentation model⁶ (which groups individuals according to their environmental values and attitudes) was used as the basis for purposive recruitment, with additional broad demographic quotas included to ensure some degree of homogeneity in the groups. These demographics were taken from the segment profiles and were chosen to capture the demographic 'heart' of each segment, as well as to ensure a wide spread of ages and socio-economic backgrounds across all groups. The full break down of groups is presented in the table below, with further information detailed in the appendices of the report.

Table 1 – Details of focus groups

Location	Segment	Age	Socio-Economic Group ⁷	Number of participants
Manchester	Sideline Supporters	18-40	C2DE	7
	Honestly Disengaged	25-55	C2D	8
Birmingham	Stalled Starters	50+	DE	8
	Cautious Participants	18-40	C1C2	8
Nottingham	Honestly Disengaged	25-55	C2D	8
	Waste Watchers	50+ (a third over 65)	C1C2	7

⁶ <http://www.defra.gov.uk/evidence/social/behaviour/>

⁷ The socio-economic group classification system assigns every household to a grade, usually based upon the occupation and employment status of the Chief Income Earner, but in some cases using other characteristics. 'A' groups consist of those in higher managerial, administrative or professional occupations while 'E' groups are classified as state pensioners or widows, casual or lowest grade workers. For further information about the socio-economic groups refer to: <http://www.mrs.org.uk/networking/cgg/cggsocialgrade>

Location	Segment	Age	Socio-Economic Group ⁷	Number of participants
Surrey	Concerned Consumers	25-55	ABC1	8
	Positive Greens	40-65	ABC1 (half AB)	8
North London	Stalled Starters	50+	DE	7
	Concerned Consumers	25-55	ABC1	8
Cheddar	Waste Watchers	50+ (a third over 65)	C1C2	8
	Positive Greens	40-65	ABC1 (half AB)	7

- 2.3 Due to resource constraints, it was not possible to run two groups with each segment; it was therefore decided to conduct only one group with Cautious Participants and Sideline Supporters on the basis that these groups are most similar in outlook.
- 2.4 Recruitment was conducted in-person using pen portraits of the individual segments alongside a recruitment questionnaire, whereby participants were fitted to a group according to their responses to a range of attitudinal questions. Full details of the segments and recruitment criteria can be found in the appendices of this report.

Group format and discussion topics

- 2.5 The format of each group was designed to:
- gauge current levels of awareness and understanding around climate change;
 - explore how willing participants were to consider taking responsibility to change their own behaviours; and
 - explore responses to the proposed schemes.
- 2.6 It was explained to participants that the policy options were open to debate and that no decisions had been made by Government as yet.
- 2.7 Each discussion group followed the same format, summarised below:

Warm up and introductions: Discussion around climate change and behaviours contributing to individual carbon emissions. This discussion explored current levels of understanding around climate change and the impact of individual behaviours.

Following spontaneous discussion, participants were given a short reference note explaining climate change, in order to ensure a base level of understanding across all groups.

Emissions from different activities: Participants engaged in an exercise ranking different types of behaviours (such as heating houses, driving, flying and using electrical appliances) according to the amount of carbon they emitted. This exercise provided an indication of participants' current understanding as well as providing participants with information around the relative amounts of carbon emissions inherent in the different activities.

Discussion around perceptions of responsibility: This discussion explored the extent to which individuals were prepared to take responsibility for their carbon emitting behaviours.

- Participants were given information about the main schemes in place requiring Government and businesses to take responsibility for tackling climate change (to explain action being taken by Government and industry, to help participants accept a degree of personal responsibility for their own carbon emissions).
- Information about the impact of individuals' behaviour in the UK was also provided in order to challenge participants' potential assumptions that their own carbon footprints were below average.

Introduction of the three potential policies: Personal Carbon Trading, Carbon Tax and Upstream Trading: The potential policies were introduced to participants (the order of introduction varied in each group so that the impact of potential hostility towards the first proposal would be lessened, although Upstream Trading always followed Carbon Tax because the concept was most easily understood as a variation on Carbon Tax) and spontaneous responses were aired.

- It was emphasised to participants that something would have to be done to meet UK carbon reduction targets and that doing nothing would not be an option.

- Participants were first given some examples of abatement options that would not be open to them in 2013. For example, the working assumption was that all light bulbs on sale would be energy efficient and all electrical appliances would be A-rated or above. This ensured that participants were aware that 'easier' behaviour changes would not be an option by 2013.
- Participants were given a handout outlining each policy option and discussed each in turn before comparing the three schemes.

Further discussion on how PCT might work: Participants were then engaged in a fuller discussion on the impact PCT would have on different groups and how it might be implemented in practice.

Summing up: In light of all discussions, participants were asked to choose their preferred policy option and give their rationale for this choice.

Questionnaire: Participants completed a questionnaire at the end of the group giving each option favourability scores, ranking them in order of preference and giving reasons for their answers

Follow up phone call: Approximately a fortnight after attending the groups, an additional questionnaire was conducted over the phone exploring changes in attitude.

- 2.8 All research materials including recruitment specifications and questionnaires, discussion guide and stimulus handouts, and the post-group and follow up questionnaires can be found in the appendices of this report.

Feedback from peer reviewers

- 2.9 The interim findings of this research were shared with a small number of researchers involved in the PCT debate. A number of criticisms were raised amongst the feedback received, including: it is too early or to examine the acceptability of PCT (given that the details of the scheme are not yet known); the working definition of PCT used could be challenged and may not necessarily be the most appropriate; the short (two hour) focus groups did not allow participants sufficient time to understand such a new concept; the coverage of this research (in terms of number of participants) is too narrow to be able to draw firm conclusions; the potential positive impacts of PCT on

equity were not emphasised sufficiently.

- 2.10 Both Defra and the organisations that have undertaken this research acknowledge all of these points. We would emphasise that this project is intended to be an initial, exploratory piece of research. The discussion materials were structured to introduce PCT alongside two other policy options; no attempt was made to 'sell' the merits of PCT over and above the other approaches. The nature and number of focus groups was determined by the time and resources available for the project. The way that PCT was described aimed to be consistent with the working definition used for other studies Defra commissioned concurrently with this one. If the caveats noted above are taken into account when interpreting the results, we consider this research has provided policy makers with a useful insight into the range of challenges that the implementation of such a scheme could present.

3 Public attitudes to climate change

Attitudes to climate change

- 3.1 As might be expected, participants' knowledge and attitudes towards climate change varied according to environmental segment. For example, Positive Greens displayed greater levels of awareness and concern than Stalled Starters.
- 3.2 There remained some confusion, even amongst more environmentally aware segments, about what climate change was and how it worked. The ozone layer was mentioned in nearly all groups. Participants in both Stalled Starters groups had little understanding of carbon being an invisible gas (they assumed that pollution was worse in the past when smog/ smoke was clearly visible).
- 3.3 However, even though the science behind climate change was not always understood, its impact usually was, and across all groups there was a sense of disquiet about changing weather patterns and their implications. Even amongst more cynical participants, there was recognition that the climate is changing (even if they thought it was a natural phenomenon rather than man made).

Understanding of behaviours resulting in climate change

- 3.4 Participants were able to identify which behaviours resulted in carbon emissions, although a small number of people did mention aerosols. Whilst participants were aware that heating, electricity, driving and flying were key carbon emitters, packaging and waste were often top of mind.

“Anything to do with transportation, getting around apart from walking. The way we live in our houses – central heating, anything electrical, overuse of water, household waste and lack of recycling.”

Male, Manchester, Sideline Supporter

“We’ve come up with the obvious ones; travel – so planes, cars, buses etc.; we also had the use of electrical appliances, both for the fact that you’re obviously using them and then to replenish the electricity supply.”

We've got ... things at home... like gas fires and appliances like that. We've also got disposing of rubbish, and that's pretty much it."

Female, Farnham, Concerned Consumer

"The main thing I think probably is packaging on food – plastic bottles and plastics are probably the biggest threats, and carrier bags."

Female, Manchester, Honestly Disengaged

- 3.5 Unsurprisingly, the more environmentally aware segments were more sophisticated in their knowledge and gave examples of behaviours such as food miles, buying less energy efficient appliances and cutting down short car journeys, although some were confused about the relative impact of different activities.

"Cutting out the short journeys, because long journeys are more efficient. The short journeys you know, school runs and whatnot, when it's viable to walk you know...."

Male, Farnham, Concerned Consumer

"We have not flown for years [because of the carbon emissions] but I then cannot understand the conflicting advice... I am told that when people do fly then they can off-set it and it is a small amount of money, it is £10 or £12."

Female, Cheddar, Positive Green

- 3.6 Some groups discussed the benefits of heating homes with coal or wood rather than gas fires but there was some confusion about which energy sources were more or less environmentally friendly.

"We use coal rather than electric for stuff so that if you burn coal in your grate you get three times the heat than what you have to burn in a power station. What you burn in the power station, two thirds is waste heat, so it is much better to have local generation of heat."

Male, Cheddar, Waste Watcher

- 3.7 Energy saving light bulbs were mentioned as a way of reducing carbon emissions in nearly all the groups. However, they were criticised by some for the quality of light they gave off. The issue of mercury and disposal was also

discussed, with participants unsure whether they really were the right choice to make.

- 3.8 When asked to sort a range of activities in order of their carbon emissions, participants were able to broadly identify the highest carbon emitters, although many were surprised that flying from London to Sydney emitted less carbon than heating a house for a year. Prior to this exercise, flying and recycling seemed to be the activities most directly associated with environmentally (un)friendly behaviour, and even afterwards they remained top of mind for many.
- 3.9 Most participants struggled to put the lower carbon emitters in the correct order, for example, many assumed that leaving a TV on standby was particularly carbon intensive and so were surprised that this activity emitted the least carbon of the options presented. A few participants did not understand the energy ratings system and so were unable to tell whether the C rated tumble dryer emitted more or less carbon than the A rated.

Responsibility for carbon emissions and readiness to change behaviour

- 3.10 Participants were generally willing to accept a degree of personal accountability for reducing carbon emissions – when asked whose responsibility it was to reduce carbon emissions, the response in most groups was that everybody should be responsible.
- 3.11 However, participants wanted Government to facilitate their efforts to make individual reductions. In many cases they did not feel that the individual could do much without assistance from Government. For example, participants wanted help in the form of financial incentives, improved public transport or the provision of information. It was felt that Government should make it easier for individuals to make the 'right' choices or behaviour changes. They also needed reassurance that Government and business were 'keeping their side of the bargain' and making efforts to reduce its own emissions. Participants also wanted to see Government put pressure on businesses.

"We all like to fly so it has to be the Government who says 'right, we are going to make this expensive and we are going to make going on the bus or going on the train cheap'. The price mechanism is immensely important in travel decisions, so for people who cannot afford the luxury of travelling any other way but the cheapest, you have got to make the cheap options going by train or going by bus."

Female, Cheddar, Positive Green

"Well they could make some grants available, because some people would look at solar panels, but that's quite expensive to install, but if you could get grants for it then I think more people would go for it."

Female, Farnham, Concerned Consumer

"I agree generally speaking that it is everyone's responsibility [to reduce carbon emissions]; however, when you come to aeroplanes and cars, the cars you can control to some extent yourself – aeroplanes you can't, other than not use them. Seriously, the aircraft industry has been let off light when it comes to emissions; the cars have been fairly hard put upon."

Male, Nottingham, Waste Watcher

"It's the Government's [responsibility to reduce carbon emissions] – they should immediately put pressure on manufacturers to cut down their packaging by about three quarters. I find it infuriating that the responsibility is on the consumer to recycle ridiculous amounts of Easter egg packaging and Christmas crackers and all that rubbish we don't need and would happily live without if it wasn't in the shops."

"And yet using your house is the most dramatic thing that's on [the list of carbon emitting activities] so blaming the Government for not controlling packaging... Can't we put more jumpers on and cut the heating bill?"

Female/Male exchange, Farnham, Positive Greens

- 3.12 In most groups a discussion was had about other countries' commitments and responsibilities towards tackling climate change. Even though participants may have been willing to consider how they could change their own behaviours, there was a feeling that the significance of individual action in the UK would be minimal in comparison to the scale of emissions reductions

needed, and the expected increases in various countries' emissions. Some participants were resentful that they should be expected to curtail their behaviour in light of this, although others were of the attitude that all individuals should still 'do their bit'.

"We are actually pissing in the wind in this country even though we're all trying to do our bit, you've got China, America, India and all these other countries to reduce."

Male, Farnham, Positive Green

"There's a very significant argument which says what's the point anyway, because the Chinese are building a new power station every week... and you know our contribution is very small."

"It does make you think that way, but at the same time we should be trying to lead, shouldn't we?"

Male exchange, Cheddar, Waste Watchers

- 3.13 There was also a degree of cynicism amongst some that they, the public, would be expected to pay for Government's efforts to reduce climate change. For example, participants felt that the cost to Government and businesses of carbon reduction schemes (whether they be PCT, a carbon tax or something else) would be passed directly on to consumers. There was also a sense amongst some that Government would not actually lead by example.

"The government will tell us to do this and they don't do it themselves."

Male, London, Stalled Starters

- 3.14 There was a range of views about how much participants felt they were able or willing to change their personal behaviour, which did not necessarily correlate with what was already being done. Some felt that they were already doing as much as they could to be green and keep their carbon emissions down. For example in the Positive Green groups, amongst other activities, individuals were already composting, reusing bath water, using reusable nappies and not tumble drying, and felt they were already doing as much as they could.

- 3.15 For others, financial constraints meant that they did not see that they could do

more than they already were. For example, those in the Honestly Disengaged group felt that they kept their heating and electricity usage to a minimum in order to save money.

"It's got nothing to do with carbon, I'm saving my cash."

Male, Manchester, Honestly Disengaged

- 3.16 Others were of the view that personal circumstances limit the extent to which they could reduce carbon. Some felt that they could not have a smaller car given the number of children they had or that they could not drive any less than they did as they needed to drive to work, and public transport was not an option. Some greener segments then looked for other areas where they had more control over emissions.

"If you've got a household with two or three kids you can't walk to the shops and carry ten bags of groceries back with you. It's impossible."

Male, Manchester, Honestly Disengaged

"What happens if you've got four children? You cannot drive a normal sized car because you cannot fit them all in. We used to have two small cars so we were using double [the amount of fuel] but now we are [paying more tax] because we've got a bigger car and we're using less [fuel]."

Female, Manchester, Honestly Disengaged

"We've got one handicapped son, so he needs heating on his bedroom and stuff like that, and there are people in the house quite often, all day, so you can't just leave it cold all day."

Male, Cheddar, Waste Watcher

"Going back to heating houses, one has to think quite carefully about what we can alter in our behaviour patterns and what we cannot alter. Although I am aware that we can do quite a lot with housing and new housing, there is less you can do with old housing. So you have to look at the areas where you can do most..."

Female, Cheddar, Positive Green

- 3.17 Others were unwilling to make certain behavioural changes that they felt would impinge on their lifestyles, such as curtailing flying or turning down

heating.

“You can cut down on things but if you’re cutting down on flights and things like that, you’re eating into your lifestyle aren’t you? Like we’re all from Manchester aren’t we, so you take two weeks off in the summer and you’re not going to stay here if you can help it are you? You know I think there’s a lot of things that should be done, but I think there’s many things that could be done before you start impinging on people’s lifestyles.”

Male, Manchester, Honestly Disengaged

- 3.18 Some simply resented being told what to do by Government and felt that it should be left to the individual to decide if and how they would make behaviour changes.

“If you want to do what you like in your own home, it should be up to you – you paid your taxes and things like that. Why should somebody dictate to us you should turn out your lights at this time, you should have energy [saving] bulbs... I mean, fair enough, that is sensible I know, but it’s the dictating I don’t like.”

Female, London, Stalled Starter

- 3.19 It was also clear that some people were not necessarily considering the behaviour changes they could make. For example, one Sideline Supporter felt that he was probably below the UK average in terms of his carbon emissions because his drive to work was only six minutes; it did not seem to occur to him that he could probably walk instead. Others felt that they were being asked to do too much, and did not necessarily consider making gradual changes, for example turning their heating down rather than off.

“The only thing we can do is actually switch the heating off; but you can’t do that.”

Female, Birmingham, Cautious Participant

- 3.20 Nevertheless, some participants were willing to acknowledge that they could do more than they were doing currently and that it would require further effort on their parts for them to do so. A number of people were quick to identify actions that people in general could do (even if they did not necessarily

include themselves in that group).

“You can turn your heating down, you can hang your washing out and not use your tumble dryer. There are loads of things you can do which I think probably our generation’s done more of anyway because we’re more thrifty.”

Female, Nottingham, Waste Watcher

- 3.21 It was acknowledged in a number of the greener groups that it would be hard to encourage behaviour change in certain areas as people were not used to having to consume and do less; rather, we live in a culture where progress was equated with increased consumption and ‘creature comforts’. There were differences in opinion as to whether or not people’s attitudes could be changed.

“Part of the trouble is that... we’ve all become accustomed to getting the next level of comforts and our creature comforts have risen. So we’ve got them; taking that away is awfully difficult.”

Male, Farnham, Positive Green

“We have so many things that it is perfectly possible to live without and our parents lived without them and our grandparents lived without them quite happily and I think we just got used to such a high standard of living. It does not actually make us any happier.”

Female, Cheddar, Positive Green

- 3.22 Even though it was recognised that some of the changes to peoples’ lifestyles that have increased carbon emissions were not always necessary, people felt that they would resent having to give them up.

“Probably 30 or 40 years ago very few people had central heating, but nowadays virtually everybody has got central heating... even though it’s milder as far as the outside temperature is concerned.”

Male, Nottingham Waste Watcher

- 3.23 Flying was one area where many participants struggled with the idea of cutting down, although it had been seen to be one of the worst ‘culprits’ in terms of carbon emissions. People resented the idea of having to cut down or

change their holiday plans because of the impact of flying. The reluctance to change flying habits was evident across all environmental segments, although there were varying levels of guilt about this. For example, Positive Greens admitted that they felt bad for not giving up flying and some offset their flights, whereas Stalled Starters were typically more unapologetic and, like other groups, did not see why they should have to give up the 'few luxuries' they had.

"If you're not going to fly, someone else is going to – the plane is still going to go."

Male, Birmingham, Cautious Participant

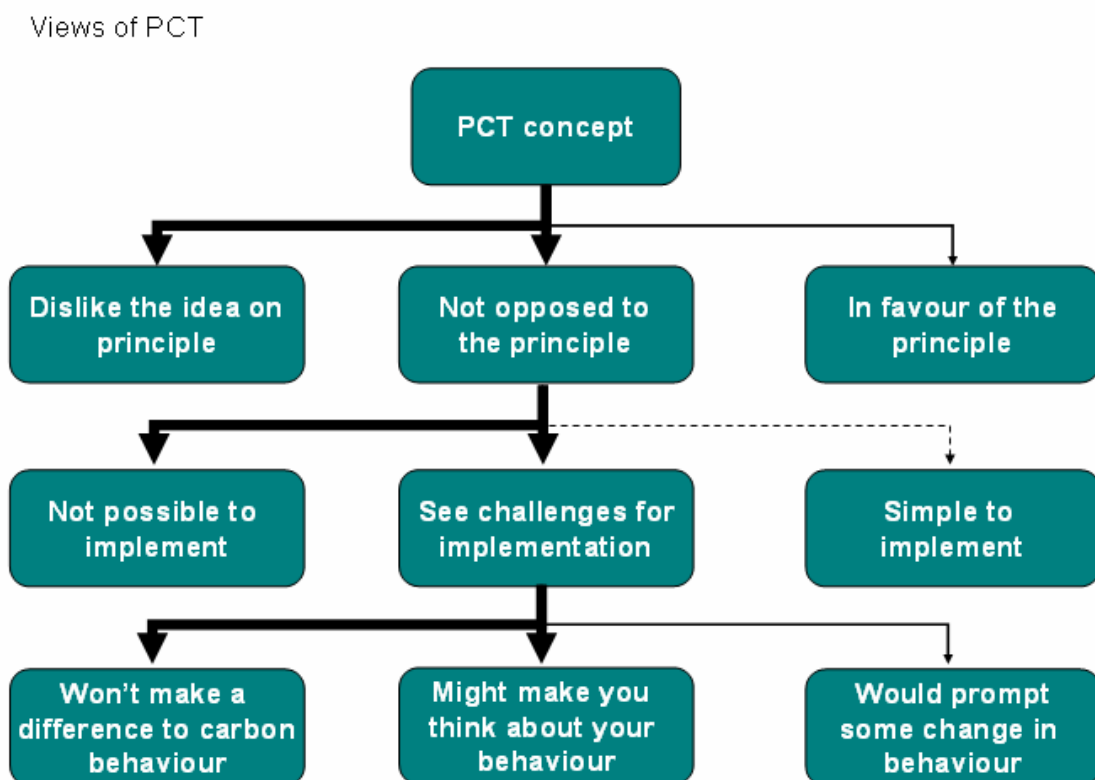
- 3.24 Even in the early discussions, before the carbon reduction policies had been introduced, the topic of choice editing (although not described as such) was raised, with people wanting the Government to take away the 'bad' choices. This was mentioned spontaneously in both green and less green groups, for example some Honestly Disengaged participants wanted the Government to only allow hybrid or alternative fuelled cars to be sold and some Positive Greens suggested a ban or fine on goods such as flowers and exotic fruits which had been flown into the country.
- 3.25 Overall, however, the degree of resistance to individual behavioural change was less than had been expected compared to previous research Opinion Leader has conducted in this area. While participants were clear in their expectations of Government to facilitate their efforts, they also accepted the need for individual effort as well. Participants therefore generally entered the discussions on the carbon reduction schemes fairly receptive to the idea of personal behaviour change, albeit with some strong views about what Government should be doing as well.

4 Views on the concept of Personal Carbon Trading

Spontaneous response to concept of Personal Carbon Trading

- 4.1 Participants were introduced to the idea of personal carbon trading alongside upstream trading and a carbon tax. This section discusses participants' initial feedback on the idea of PCT rather than their views of PCT vis-a-vis the other policies suggested.
- 4.2 The initial feedback on PCT is summarised in the flow diagram below in which the width of the arrows shows the relative strength of feeling.

Figure 2 Initial feedback on PCT



- 4.3 After being presented with the concept of Personal Carbon Trading, participants tended to judge it on three levels (principle, feasibility of implementation and impact on carbon behaviours). As illustrated above, a range of responses were prompted at each of these levels. Overall, across all groups, reactions to the scheme were negative, at best, lukewarm.

- 4.4 Initial response often reflected how participants felt about the general principle of a carbon reduction scheme, generally splitting into:
- those who simply disliked the idea on principle, seeing it as overly interventionist of the Government;
 - those who disliked the idea but were not adverse to the principle per se; and
 - a minority of individuals who were broadly in favour of the principle.
- 4.5 Viewpoints around the feasibility of implementing such a scheme were mixed. There were some participants who thought that the scheme would be impossible to implement and others who raised particular doubts and concerns about the viability of the scheme. These points are discussed in more detail in later section 'Implementation of PCT'. There were no participants who did not envisage any implementation issues.
- 4.6 In terms of whether or not a PCT scheme would be successful in its ultimate aim of reducing carbon emissions, participants were divided as to whether or not a PCT scheme would have an impact on people's behaviour and whether or not carbon emissions would therefore be reduced.
- At one end of the scale there were those that did not see it having any impact on behaviour.
 - There were others who thought it might make people think more, even if they did not necessarily change their behaviour.
 - A minority of individuals thought that it would encourage people to reduce their carbon emitting behaviour.
- 4.7 In summary, response to PCT was generally negative, with the bulk of participants disliking the principle and/ or seeing problems with implementing such a scheme. However, a few participants saw it as having potential to change to encourage behaviour change as long as the scheme was properly implemented.

Negative reactions

- 4.8 One key factor driving negative responses to the concept of PCT was the idea of Government intervening in people's every day lives. Some considered that it was state intervention gone too far, with comparisons of Government to Big

Brother. People were concerned about what they saw as Government trying to exert influence over how they lived and clamping down on their freedom of choice.

"It's like you're a robot and you're being watched... It's the nanny state isn't it?"

Female, Farnham, Positive Green

"I think this is very dangerous. I do not think it is a good thing at all... I think this is a scary future, if this is what is going to happen."

Female, Manchester, Honestly Disengaged

"There is also the horrifying thing – the Big Brother. You know all these things we are talking about, like the Government tracking our every move in a car, they are saying how much fuel... I mean this is to me it's all wrong."

Male, Cheddar, Waste Watcher

- 4.9 A theme in participants' early discussions was the belief that the public would have to bear the brunt of the costs to reduce the UK's carbon emissions, and the proposal of PCT seemed to confirm this suspicion for these participants. They felt that they would be penalised financially by such a scheme and that the rewards would not actually be equal to the costs they would incur. Many made associations and connections with the poll tax and judged a PCT scheme as being unpopular to introduce and make feasible.

"Look at the Poll Tax... theoretically... a good idea... we all know what happened... The amount we saved was negligible. True it didn't get off the ground, but nevertheless we had the figures; it was negligible. Theoretically we should have saved quite a bit (with the Poll Tax), and the same thing would happen here. You would sell your credits for £1 and somewhere down the line it would pay £5. Where's the difference, you would get a negligible amount for trading in and a fortune to buy them back."

Male, Nottingham, Honestly Disengaged

- 4.10 Another link some of the slightly older participants tended to make was with rationing – due potentially to knowledge transferred from their parents' generation and personal experience. They felt that it would be a step backwards to return to such a system. Although this association was often

made early on, when the idea of PCT was first introduced, even later in the groups, after more considered discussion, it continued to be seen in this light.

“Just straight away it reminds me of going back to the war and rationing. I think there will be a black market straight away.”

Female, Manchester, Honestly Disengaged

- 4.11 Other participants, across all segments, were initially quite perplexed as the idea of a designated carbon allowance seemed far-fetched, and the idea of trading difficult to imagine.
- 4.12 Those participants who did grasp how the scheme would operate offered a mix of viewpoints as to whether or not PCT would prompt the public to change their behaviour. Participants were concerned that rather than encouraging individuals to reduce their energy emissions, people would simply buy additional credits. Participants across all segments pointed out that those who were currently able to afford to live carbon intensive lifestyles were unlikely to be deterred from doing so with the introduction of PCT.

“If you’ve got the money and the wealth and don’t care you will frankly continue, you will just buy more credits.”

Male, Cheddar, Waste Watchers

- 4.13 Participants, particularly from the Stalled Starters and Cautious Participant segments, felt that the scheme was unfair for this reason as it would affect the less well-off individuals in society the greatest, as will be explored below. An especially strong theme from all of the discussion groups was that of fairness and equality, which is discussed in further detail in the section ‘Impact of a PCT scheme on different groups of people’. Participants felt that the negative impact on choice would outweigh the benefits of the scheme to low income households (e.g. from selling spare allowances).

More positive reactions

- 4.14 Some participants, while not strongly positive towards the concept of a PCT scheme, were resigned to the idea of something similar coming into place. While they did not necessarily agree with all aspects of the scheme, they were prepared to accept that if something had to be done. For these participants, PCT was seen to be as good an option as any. However, it should be noted that this resigned support was strongly caveated by the need for support and

information from the Government.

- 4.15 There were also some more enthusiastic reactions amongst a very small number of participants from all segments. These participants' first assessment of PCT was that it might encourage the public to be more thoughtful about their energy use, particularly as there was a cost implication. The consensus amongst these individuals was that a scheme like PCT was necessary and important, but that the details of how it would work were not necessarily the best solution.

"I'm not saying I agree 100% with this scheme, but I think if they're serious about reducing it, something like this has got to come in."

Male, Nottingham, Honestly Disengaged

"I think it'll really make you think about holidays and flights, I think that's the big one."

Female, Farnham, Positive Green

Moral objections

- 4.16 Amongst a minority of individuals, there was some objection to the PCT scheme on a point of principle. These participants considered that there was a moral imperative for taking action to reduce carbon emissions and they saw it as their responsibility to safeguard the planet for future generations. They were opposed to this moral dimension being hijacked by profiteering or those looking for financial gain.

“It’s a moral case of doing it, so you should do it anyway.”

Male, Cheddar, Waste Watchers

“They are appealing to people’s greed by saying; well you can sell some of these credits.”

Male, London, Stalled Starters

The impact of a Personal Carbon Trading scheme on different groups of people

- 4.17 Participants were asked to consider how PCT might affect different groups of people and what the implications would be for each group. The following list is ordered according to priority levels, with those deemed to be most impacted at the top.

Vulnerable groups

- 4.18 Participants drew attention to a number of different vulnerable groups in society who they felt could be adversely affected by a PCT scheme.

Older people

- 4.19 The impact PCT would have on older people was a particular concern. It was felt by participants across all segments that older people may struggle to understand the concept of PCT, and how to use carbon credits. Participants speculated that this could lead to older people going without central heating due to anxiety about running out of credits. Participants also saw older people as being at a disadvantage because they were potentially more likely to be at home during the day requiring more energy to heat and light their homes than other groups of people.

"I can't imagine my mother being able to sell credits. I think it would worry her to death."

Female, Cheddar, Waste Watchers

"Goodness, they [older people] went mental when we went decimal, so you can imagine what's going to happen if they started to introduce something like this."

Female, Nottingham, Honestly Disengaged

People on low incomes

- 4.20 As previously highlighted, a spontaneous reaction by participants to the idea of PCT was that it would hit the poor the hardest. It was felt that people on low incomes, who struggled to pay bills already, would be made to pay yet more for basics such as gas and electricity.

"You may not be a very affluent person and some people, again, are going to be penalised more than others through personal circumstances."

Female, Cheddar, Positive Green

"You've got cheap flights to Malaga, but then the people that would go on those holidays can't afford to get the carbon credits ... But the people that maybe would go somewhere more expensive, say Sydney, can still go because they can just buy [the credits]."

Male, Farnham, Concerned Consumer

- 4.21 In most groups participants tended to focus on the cost effect of purchasing additional credits rather than the potential for the less well-off to make money. Even when it was pointed out that those on lower incomes might benefit from the scheme (in that they were likely to have a lower carbon footprint and therefore surplus credits that could be sold) participants continued to concentrate on the additional cost people might incur. For example, there was a view that if someone had saved for a long time for a holiday of a lifetime, they should not then have to pay extra for carbon credits on top of that.
- 4.22 The impact of a PCT on people with lower incomes was seen as particularly severe when contrasted with those on higher incomes. People felt that wealthier individuals simply would not notice the cost of additional credits if

their allowance ran out, whereas poorer people may struggle to find the extra money for them.

People with physical disabilities

- 4.23 A minority of participants were concerned about people with physical disabilities, or conditions which required continuous homecare. Participants pointed out that such people, like older people, may need specialist electrical equipment – such as hoists, stair-lifts and people with dialysis machines – and are more likely to use heat and light at home throughout the day. They thought that those that need to use electrical equipment like this should benefit from additional credits to cover it.

“I would also think... because my daughter has a disability, that maybe some disabled people should also get extra.”

Female, Farnham, Concerned Consumers

- 4.24 There was concern over the ability of people with physical disabilities or long-term health conditions to manage or trade in credits, which raised questions as to who would be responsible for looking after their share. Participants also voiced concern about how people with learning difficulties might manage.

“It’s fine if you’re well and you can understand, and have the mental capacity to understand, but I’m sorry there are a lot of people who aren’t at the level to understand the words on the page, let alone take it on board and understand how it’s going to affect them.”

Female, Cheddar, Waste Watchers

Families

- 4.25 A salient concern for all participants was the potential inequality of the scheme in relation to families. Participants raised the issue of parents having to use their carbon allowance to cover their children’s energy consumption as well as their own. Participants who were parents described having to drive their children to school and social activities and felt that it was unreasonable for their individual carbon budget to cover this. There was some consensus that parents should be given supplementary carbon credits to compensate for their children’s energy use.
- 4.26 Other participants, predominately from the less environmentally conscious

segments, would prefer children to be given a carbon allowance directly; but there was some disagreement as to at what age they should receive this. As with older people, participants were doubtful about whether PCT would be understood by all children.

“Children aren’t going to be able to manage it themselves are they?”

Male, Birmingham, Cautious Participants

- 4.27 Participants mentioned that a carbon allowance would be particularly detrimental to single parents with many children to look after. Participants typically commented that these disparities would need to be addressed if PCT were to be a viable option.

“Some households have no children, some have one, some have two, some have three. And you know bigger families are going to use more but they might not necessarily have more money.”

Male, Manchester, Sideline Supporters

- 4.28 Participants also raised the issue of household size, believing that single people living alone would be disproportionately affected by a PCT scheme as they would have to use their credits to buy energy for a whole house, whereas those in shared houses would only be required to contribute a proportion.

The rural population

- 4.29 Rural based participants felt that they would be unfairly penalised by PCT. This group of participants were highly reliant on travelling by car because of the poor provision, or lack of, public transport in their area. These participants felt that their car use was essential and not something that they could compromise on. They were supported in this by urban based participants too, who recognised the importance of personal transport in rural areas.

“Not everyone wants to live in the city, so you shouldn’t be penalised for living outside the city.”

Male, Farnham, Concerned Consumer

- 4.30 Urban participants could also identify with rural participants’ concerns because they were also dependent on their cars in their everyday lives. Most participants shared the view that they would be more prepared to take public

transport if it were cheaper, safer and more frequent.

- 4.31 There was also a minority strain of thought from urban participants however, that the rural population did not necessarily deserve special compensation.

“My view has always been you choose to live where you want to live; if you live in the country that’s your problem, if you live there that’s your problem.”

Male, Manchester, Sideline Supporters

- 4.32 One line of thought put forward by participants was that the Government could bring about a reduction in the UK’s carbon emissions by providing cheaper alternatives to the car without recourse to initiatives like PCT. There was a real sense of conflict for some of these participants. On the one hand, they felt they had no choice other than using their car on a daily basis, but on the other, they were aware of and not comfortable about emissions caused by this. To these people, who spanned all segments, PCT seemed too ambitious a scheme to impose when they thought that legislation could be introduced to promote clean fuels and halt the production of energy inefficient cars – or to improve public transport services.

Migrants and those with families abroad

- 4.33 Another way in which participants deemed PCT unfair was towards people with links abroad and migrants. The issue of flying was seen as relevant to those with family living abroad and who needed to travel to see them quite regularly; it was thought unfair and stigmatising to penalise these people.

“What if you’ve got relatives that live in other countries... forget the open wedding in Australia but if you’ve literally just got relatives you want to keep in touch with... it’s just another way of saying I can’t do what I want to do because I’m giving off too many gases.”

Female, Nottingham, Honestly Disengaged

“I think one of the problems is this flight to Australia. It is one thing to fly for a wedding but what happens if your child is living there? You are going out to see your grandchildren.”

Female, Cheddar, Positive Green

- 4.34 A minority of participants also speculated about how immigrants might be included in the PCT scheme, or whether they would be exempt if their stay

was only temporary. Participants questioned how irregular migrants would pay for fuel or afford to heat accommodation if they did not have carbon credits. Participants were not pleased with the prospect of those remaining in the UK on a temporary basis, such as asylum seekers, being granted concessions. They thought that this seemed a potential loophole in the scheme.

“What are they going to do for all the immigrants who really shouldn’t be here that need heat?”

Female, Manchester, Honestly Disengaged

‘Irresponsible’ groups

- 4.35 In addition, participants were uncomfortable with the idea of less ‘responsible’ groups in society being given any carbon allowance. These participants singled out students as an example of a group who might not be best suited to managing their own carbon allowance, and more extremely, those with drug or substance dependencies. Participants imagined scenarios where these groups might sell their entire annual budget at once for cash, and wondered who would then provide them with credits later down the line.

“If you had some poor students or really poor people who just sold all their carbon credits because they needed the cash, what would then happen? Would their electricity just be cut off?”

Female, Farnham, Positive Greens

- 4.36 People on benefits were also identified as a group who should not necessarily be eligible for a carbon allowance. A few individuals felt that those already in receipt of benefits should not be entitled to another State handout in the form of the carbon allowance, as they might end up profiting if they did not use up their allowance and could sell their surplus credits. These participants thought that people on benefits already receive enough help from the State as it is, and might not be responsible enough to manage their own allowance.

People on higher incomes

- 4.37 While participants did not feel that those on higher incomes would necessarily feel the financial impact of a PCT scheme, there was a sense amongst some (those who thought that the scheme could change behaviour) that it might still

have an impact in terms of the hassle factor. They felt that if people were required to get a separate card out or use a separate number each time they made a purchase of fuel or paid a utilities bill, then it would at least impact on their consciousness. Others disagreed however, and felt that it was something that people would simply get used to and not notice after a time.

Implementation of Personal Carbon Trading

State versus private ownership

- 4.38 Participants arrived at a reluctant consensus that they preferred a PCT scheme implemented and run by Government, as opposed to private ownership, although they could see weaknesses and potential drawbacks in both methods of management. There was much scepticism amongst participants about the Government's ability to efficiently and securely handle and run a PCT system⁸. However, this doubt was generally overridden by the concerns about private ownership; participants did not want to see PCT run as a profit making scheme as they felt that it diluted the overall objective of reducing carbon emissions. Participants also cited example of perceived poor management by private companies, such as the rail service, as reasons why they would not want any PCT to be privatised.

"Thinking about it probably the government would be better, because if it's private, people in the private sector are out to make money aren't they?"

Male, Birmingham, Cautious Participants

"I think it's a very good idea until you mention banks and financial establishments."

Male, Nottingham, Honestly Disengaged

"Private ownership would spell a disaster for this."

Female, Cheddar, Positive Greens

The administrative challenge

- 4.39 A key reason why participants objected to the notion of PCT was that they

⁸ 4.43 It should be noted that these groups were conducted at the same time as a number of stories about loss of data files by Government were prominent in the media.

could not conceive of how such a scheme could be set up and administered. Participants were sceptical that government had the capability to put in place such a complex arrangement as PCT. They were doubtful that it would be run efficiently and were concerned that the cost of staffing the system would be extremely high to the tax payer. In addition, participants were opposed to PCT (compared to other proposed schemes) on the grounds that it could be quite carbon intensive – because of paperwork and computer power – to implement, which they saw as contradictory and hypocritical.

“I also think that [this scheme is] going to be environmentally very expensive to administer. There is going to be forests cut down to... provide all the paperwork, computers going, lots and lots of, hundreds, thousands of people driving cars about administering the whole thing. It is going to be environmentally not neutral to administer.”

Female, Cheddar, Positive Greens

The threat of black markets

- 4.40 Another common concern amongst all groups of participants was that a PCT scheme would be open to abuse and illegitimate trading on the black market. The image of ‘dodgy’ trading was one of the first which came to mind when participants were asked to consider PCT in-depth. They were unsure whether such a scheme could be introduced and kept free from corruption. Participants made associations with second-hand, online auction sites and imagined that these would become a forum for trading as some people attempted to make money out of the scheme.

“I get visions of... vast quantities of people sat on e-bay, flogging off [credits] using up huge amounts of power to do so.”

Male, Cheddar, Positive Greens

“I have to say my first thought was ‘I wonder if I can make some money out of this’ if you can flog them off. You know I’ll keep growing more of my own wood and using less and less coal and make some money. But that’s actually not supposed to be the idea behind it, is it? It’s supposed to be about reducing the carbon, not beating the system.”

Male, Cheddar, Waste Watchers

PCT practicalities

- 4.41 Participants had some difficulty envisaging how a PCT scheme would work in

practice. One proposal was for personal carbon credits to be stored on a credit card – similar to a store loyalty card – which could be swiped at the point of purchase of carbon credits.

“It would be like a debit card... so when you go and you pay for your petrol, you swipe it and it takes your credits off the card. So, in theory, you should be able to put it in a machine, it tells you how many you’ve got left.”

Male, Manchester, Sideline Supporters

“You need to have some kind of system that you can log onto online very easily, which just clocks up how many credits you have used and how many you’ve got left at any one time. But you need to have it in a consolidated way... it needs to all be in one central place for each household.”

Female, Farnham, Positive Greens

“However, how are you going to gauge and monitor this? The resources needed, the infrastructure needed to put a [scheme] such as this in place would be phenomenal. If you were in the petrol station... are you going to refuse to allow me to fill my car up unless I show you some credits? I might come to you and you say ‘right that’s £20 sir’ plus X amount of credits. Well I haven’t got any. What are you going to do?”

Male, Nottingham, Honestly Disengaged

- 4.42 However, there was a lot of concern amongst participants about the loss or theft of these cards. In particular, participants were conscious of the recent government loss of personal data, and this was invoked by participants as a reason why sensitive information should not be entrusted with the government, or on one card.

“At the moment the government can’t keep anything secure can they? I mean all this personal data that’s floating around.”

Male, Cheddar, Waste Watchers

“I’ve got absolutely no faith that the government could implement this in a way that would be reliable, honest and trustworthy, based on experiences that I’ve had with child benefit, working families tax credit and my self assessment tax return in the last year.”

Female, Farnham, Positive Greens

- 4.43 It should be noted that these groups were conducted at the same time as a

number of stories about loss of data files by Government were prominent in the media.

Panic buying

- 4.44 There was much discussion, amongst all groups, about panic buying. Participants expected that, if PCT were to go ahead, people would buy additional credits straight away to boost their total allowance as an insurance against running out. In the event of this scenario, participants were concerned that the price of additional credits would increase. They wanted there to be a guarantee with PCT that the credit market would not either run out, and that it would not become prohibitively expensive.

Assessing need and requirement for support

- 4.45 Participants were strongly opposed to the prospect of means testing people to establish whether they are eligible for additional credits. However, having identified certain vulnerable groups in society who may require supplementary credits, participants discussed how this might work in practice and felt that additional support should be offered to those most in need.
- 4.46 Participants thought that the PCT scheme would have to be initiated alongside a far-reaching education programme which explained how PCT would work, and where people could go for help. Participants variously mentioned helplines and adverts as well as a 'one stop shop', where people could go for advice and guidance.

"It's very easy for us to be negative, it's very easy for somebody to put an idea forward and then everybody finds a million reasons why it's not going to work without actually trying to be positive about it, and I suppose we ought to open our minds a little bit more to see. But it is about education, without a shadow of a doubt."

Female, Farnham, Positive Greens

How people might use the Personal Carbon Trading scheme

Buying and selling credits

- 4.47 Participants had trouble imagining themselves actually trading in carbon credits. Participants more realistically saw themselves buying extra credits when they needed them, and saving unused credits for a later date.

“Have you really got time to start bartering on the market with credits, if you’ve got three children and a household to run and to work?”

Female, Manchester, Sideline Supporters

“You’d save them up for a rainy day, wouldn’t you?”

Male, Nottingham, Waste Watchers

- 4.48 A minority of participants thought that they would perhaps trade at a more local, or unofficial level, for example with neighbours, friends and family. The idea of giving away surplus credits, rather than selling them on, was sometimes a more appealing option for participants. Participants focused more on the purchasing aspect of the scheme rather than the selling. Generally participants did not seem to recognise the potential for the scheme to work in their favour (by enabling them to trade and benefit from it if they reduced their emissions); rather they felt that they would need more credits than the allowance provided.

Pay as you go

- 4.49 There was a fairly warm reaction from participants to the idea of only paying for the carbon allowances they used, as and when they are needed. There was a view that this would enable participants to properly manage their finances and keep a track of the amount of carbon bought at the same time.

“You pay for what you use, you’ve not got to worry about buying and selling credits and things.”

Male, Manchester, Sideline Supporters

Trialling

- 4.50 A small number of groups, while not warm to the concept of PCT, were open to, and even suggested, the idea of trialling such a scheme (perhaps on a voluntary basis at first) in order to see how it might work in practice and whether it would make a difference to personal behaviour. It was suggested by participants that a trial should not include money; rather it would simply involved a free credit allowance so that participants could get used to the idea of keeping within their limits and gain a better understanding of their overall carbon consumption. While this was not a common theme across the discussion groups, it did indicate a (reticent) willingness to trial by some.

“Everyone should do it for a test year. The year before [so] at least you know what you’ve got coming up.”

Female, Farnham, Concerned Consumers

5 Response to Carbon Tax and Upstream Trading

Initial reactions

- 5.1 Given that the concept of taxation was familiar to all participants, the idea of a Carbon Tax or Upstream Trading was typically slightly easier to grasp than the idea of PCT. In addition, the Carbon Tax and Upstream Trading policies were seen to be cheaper and easier to implement than PCT, and therefore less costly to the tax payer, which was another point in their favour.
- 5.2 However, this did not mean that these alternatives to PCT were seen as attractive concepts. Whereas participants saw PCT as a tax by another name, these two other options were recognised as direct taxes which influenced participants' spontaneous reactions to them. As with the proposals for PCT, some participants wanted to know more information about the proposals, and how they would work, whereas others were immediately sceptical and opposed.

"I think all this is disgusting.

"It is a lot of things to think about isn't it? Imaging living like this?"

"I know it would be awful."

Female/Male exchange, Manchester, Honestly Disengaged

"I mean it's Big Brother all again isn't it, it's just tax, tax, tax."

Male, Nottingham, Honestly Disengaged

"I just think that we have got a very heavy tax burden at the moment. I mean, for instance on petrol I think most of the price of petrol is tax already... community tax is going up faster than inflation."

Female, Cheddar, Positive Greens

- 5.3 Participants claimed that they were already subject to enough taxation, and could ill-afford to pay another. Another initial criticism of these schemes was that Carbon Tax and Upstream Trading required people to pay tax up front, and that they were open to abuse by energy companies who might pass on additional costs to the customers.
- 5.4 Participants were generally unable to differentiate between Carbon Tax and Upstream Trading. There was a mild tendency for participants to see Carbon

Tax as placing the onus on the individual, whereas Upstream Trading emphasised the actions of business and industry.

Ease of understanding

- 5.5 There was a definite sense that, compared to PCT, these ideas would be simpler for the public to understand.

“I think the easiest for all around would be upstream trading really, personally. It’s easier for people to swallow, it’s not messy, it’s straightforward.”

Male, Nottingham, Honestly Disengaged

- 5.6 Another reason that these ideas had some appeal for participants is that they would require less effort on the part of the individual (Upstream Trading was particularly perceived this way). It was considered that a simpler option might avoid penalising those who might be unable to cope with the complications of PCT. This was a theme common to all groups of participants: preferring less, rather than more, autonomy over attempts to reduce their carbon emissions.

“This is probably the one [Upstream Trading] that I would say that they (the Government) would go for the most out of the three (proposed schemes) because it’s easier, it doesn’t pull on a lot of resources, there are importers and producers of fuel, it would be very easy to slap a levy on them and say ‘right we’re going to charge you this because of your dirty fuel’.”

Male, Nottingham, Honestly Disengaged

- 5.7 With the Carbon Tax and Upstream Trading proposals, participants were more able to understand how the rewards system would work. The idea that the public would be remunerated seemed much clearer for participants to comprehend than the proposition that they could make money by trading carbon credits. However, participants thought that people would see the returned tax as a windfall, and would not equate it with the additional money spent over the time period preceding it. The way that this windfall might be spent (i.e. whether it could result in activities that subsequently increase emissions) was not widely discussed.

Impact on individuals

- 5.8 A strong message from participants with regard to these two proposals was that they expected that the two schemes would be as, and perhaps even more, punitive than PCT in practice.

“These that you have given out [Carbon Tax and Upstream Trading] I mean they all seem to be based in some way in a kind of a punishment model, really.”

Female, Cheddar, Positive Greens

“Here [Carbon Tax] you’re sort of penalised for being successful I suppose. So if you’re successful and earn a lot of money and have a nice car, then you are getting penalised for that, so what should you do? Just sit there and do nothing. And then you get a little bit back.”

Male, Birmingham, Cautious Participants

- 5.9 However, there were a lot of comments from participants to the effect that they saw these two schemes as being especially harsh on those less well-off – even more so than with PCT.

“It’s not equitable, it’s less equitable than the previous idea (PCT) which was very strange, and this is even a less fair deal for people... who are not driving large cars, who aren’t having holidays, because they can’t save much more can they?”

Female, Nottingham, Waste Watchers

- 5.10 As with PCT, participants raised concerns about the more vulnerable groups in society – the elderly and infirm – and the impact either of these two schemes would have on them.

Impact on behaviour

- 5.11 Ultimately, however, participants felt that the introduction of either Carbon Tax or Upstream Trading would be unlikely to change people’s behaviour. Participants felt that people would be unlikely to directly link the extra cost of fuel or electricity to carbon emissions; rather, they would swallow the cost (as they would any other price increase), and see the sum received at the end of the year as a cash bonus, rather than equate it with their carbon footprint.

"I can't see the tax is actually going to cut things, because people will just find the money from somewhere. They are just going to carry on as normal and it will just be another tax you have got to pay."

Male, Manchester, Sideline Supporters

"Seems to me the government thinks that a little bit of cash back is going to motivate all of us... and I'm not sure it's going to change any of us, it's not going to motivate us to do this. If you are right at the bottom end you haven't got to worry because the government pays your money for you anyway."

Male, Farnham, Concerned Consumers

- 5.12 People on higher incomes (considered those likely to be emitting the most carbon) were seen as being able to afford whatever level of taxation was imposed on them, and so taxation would not effectively equate to reducing carbon emissions.

"But... money back, what's the point of the whole thing? Because if you're going to have a bigger car you're not saving on the emissions anyway... you're not actually helping the atmosphere that we live in; you're just prepared to pay a little bit more to have the luxury of a big four by four."

"And if you've got a big four by four you can afford it anyway."

"Yes, so you just shrug your shoulders at the whole thing."

Female exchange, Farnham, Positive Greens

- 5.13 There were some more positive responses to the two proposals; a minority of participants thought that the Carbon Tax or Upstream Trading could only be successfully introduced if it was launched as one of many initiatives designed to bring about reduced carbon emissions. This small group of participants thought that, at the least, Carbon Tax or Upstream Trading would encourage people to think about the necessity of personal travel and, other activities which produce carbon and can be controlled.

"It's obviously designed just to try and get people to think about it and to reduce...if you think to yourself we've got to use less this year, less the next year, you start thinking a bit more about how much you are using."

Male, Manchester, Sideline Supporters

- 5.14 Collective education and awareness raising on the ways to lower emissions were also seen by participants as being effective ways of altering behaviour.

“Once again we need to look at this whole range of things. There is no one or two or three things that is actually going to help. It has got to be a whole raft of things and you know the most important part of that is actually education because if you educate people then there is a chance of making [carbon reduction] happen.”

Male, Cheddar, Positive Greens

6 Alternatives to carbon reduction schemes

- 6.1 As participants were generally resistant to the idea of a carbon reduction scheme, they were keen to find alternative ways of reducing individuals' emissions. Participants were not explicitly asked to do this during the group discussions, and arguably suggested policies some would perceive as being more intrusive than those proposed. The very fact that participants suggested and were prepared to entertain the possibility of these (in some cases, somewhat extreme) alternatives could be seen to indicate just how strongly participants rejected the carbon reduction proposals.

Information provision

- 6.2 A popular proposal amongst participants was for more information about the impact of personal behaviour and how the public could reduce their carbon emissions. There was a feeling that this would be enough to bring about some level of behavioural change. Participants felt that the public would be persuaded to lower their personal carbon emissions if they were informed of the benefits and this was complemented by some form of incentive. Participants thought that they would alter their behaviour if it was shown to them that it was in their financial interests to do so, often not making the connection that the three posited schemes intended to do just that.

"Taxation is not the answer, education is the answer."

Male, Farnham, Positive Greens

Direct intervention

- 6.3 There was a definite sense that if the Government was seeking to condition behaviour by intervening into people's personal lives, they should channel this action in the right way – rather than tell people how to live their lives, they should intervene directly to facilitate carbon reductions for individuals. For example, participants thought that the Government could invest directly such as installing insulation in people's homes and making solar panels more affordable for houses. In addition, given that carbon reduction schemes would not be introduced for another few years, participants thought that immediate changes should be made to address the problem.

“Really they should go through the older style of houses that use the most heating and whatnot and target them first and give them massive incentives to change... the heating and the insulation. Because I mean there are all these student houses... the landlords aren’t going to be prepared to spend any money putting double glazing and whatnot in there are they, but if they gave massive incentives throughout, starting with the older houses and working up to the newer houses, I am sure that would save a huge amount.”

Female, Manchester, Honestly Disengaged

Transport

- 6.4 Another area where participants felt Government could, and should, act was public transport. Participants argued that personal car use would diminish if the Government introduced cost effective or cheaper public transport alternatives.

“We’d be encouraged to use less carbon if there was a very efficient and reliable transport service that you could use to leave your car at home, or not even have a car.”

Female, Farnham, Concerned Consumers

- 6.5 There was also a level of bewilderment amongst participants that the Government has not already made serious efforts to clamp down on more carbon-intensive products, such as limiting the production of certain cars with big engines. There was a slight feeling amongst participants from all segments that the Government’s overarching aim was worthy and valid, but there were other targets – like cars and aviation – for action that the Government could legislate on.

“I suppose one of the things the Government should have done perhaps a long time ago is forbidden four by fours to enter this country.”

Female, Farnham, Positive Greens

“The Government presumably could legislate over Tesco and say actually you cannot do this, you cannot bring in, fly in food from all over the world.”

Female, Cheddar, Positive Greens

- 6.6 The fact that participants had been shown evidence earlier in the group

discussions which was intended to highlight the size of the public's contribution to carbon emissions did not stop them from pursuing this line of argument.

7 Differences by environmental segment

- 7.1 There were no clear differences in attitude by segment towards the idea of carbon reduction schemes. There was opposition from all segments to the proposed schemes, and the strength of this opposition did not correlate with how environmentally aware participants were. Instead, opposition or acceptance of the proposed policies seemed to be more related to participants' general attitude to Government and state intervention (quotes and further comment about this point are provided in section 4.8 above).
- 7.2 The segments were united in their view that the administrative and technical demands of setting-up the scheme would be a major challenge for the Government, and it was this scepticism which appeared to drive opinions. Participants from across all segments believed that any formal carbon reduction scheme would have to be instituted alongside education and awareness raising initiatives to facilitate the public. Common to all segments, too, was a view that the Government should act to install energy efficient appliances in existing as well as new homes, and encourage energy companies to help with this.
- 7.3 The small group of participants who were more receptive to the fundamental idea of some kind of scheme being introduced represented all segments. There were participants from all segments who supported the idea of PCT, on principle, making it clear that they thought something like it was needed, but that they were not convinced that in the format presented to them, it would work.

8 Post group questionnaires and follow up calls

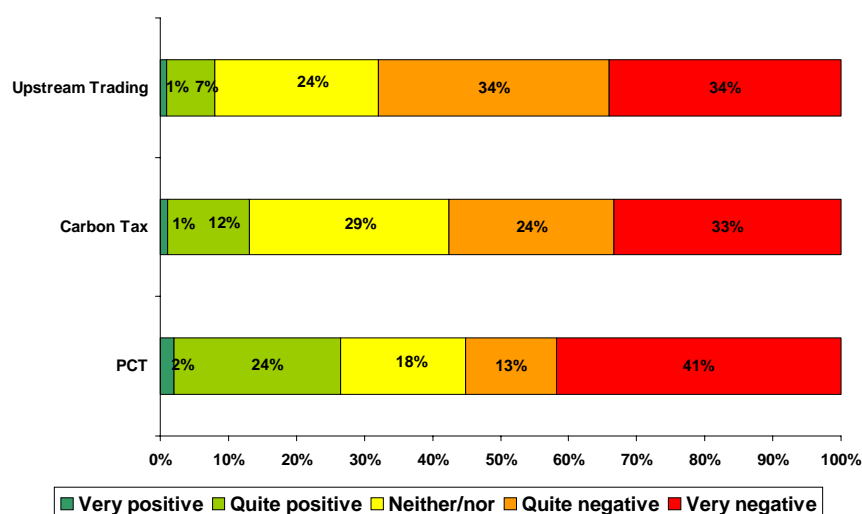
Results from the post group questionnaires

- 8.1 At the end of the group discussion, participants were asked to complete a post-workshop questionnaire to summarise their thoughts on the three proposals they had considered. Given the small sample of respondents, the views below should be taken as illustrative only; limited weight should be placed on the percentages and figures shown.
- 8.2 Participants were asked to rate their favourability towards each of the proposals; views from all 92 participants are shown in the chart below.

Figure 3 Views about different policy options

Post group questionnaire

How do you feel about each of the carbon reduction schemes discussed today?

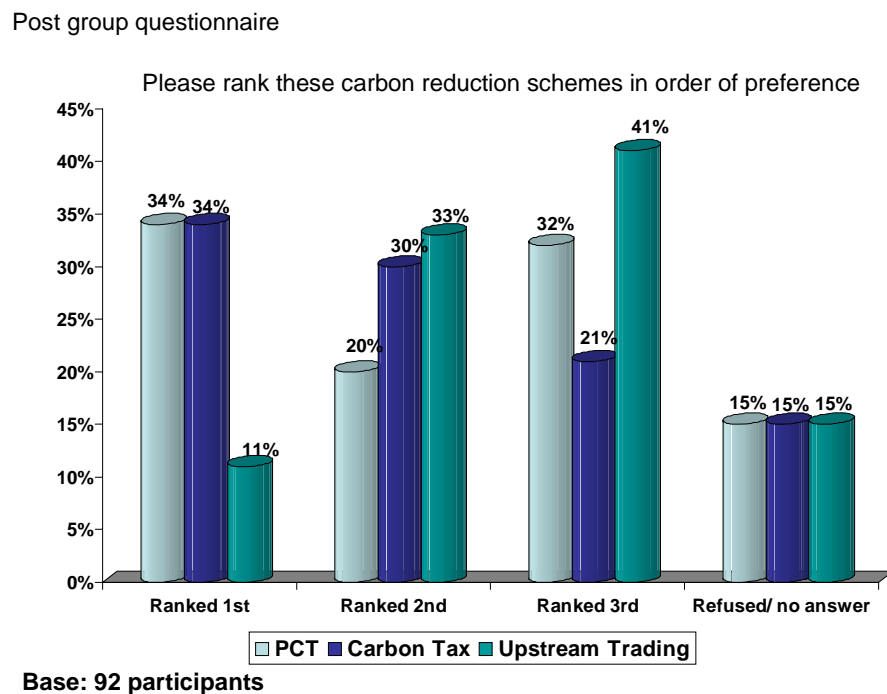


Base: 92 participants

- 8.3 Participants recorded relatively strong negativity towards the PCT scheme; over half were either quite or very negative towards the proposal, with most of these feeling very negative towards PCT. However, around a quarter of participants were positive to the idea of PCT (more were 'very' or 'quite' positive about PCT than were for either of the other two schemes). This indicates a degree of polarisation in participants' viewpoints towards this policy option.

- 8.4 Based on these questionnaire results, Upstream Trading was the proposal which participants liked the least; over two thirds of participants were either quite or very negative towards this option. This could reflect the fact that participants saw Carbon Tax and Upstream Trading as closely resembling one another.
- 8.5 After PCT, Carbon Tax was the scheme which participants felt most predisposed towards, and it was also the scheme about which participants felt the most ambivalent (just under a third of questionnaire respondents were neither positive nor negative towards a Carbon Tax, reflecting feedback from the discussions⁹).

Figure 4 Preference for alternative policy options



- 8.6 Respondents were asked to order the three different options in descending order of preference. Their views are summarised in the chart above where 'Ranked 1st' shows the proportion of participants that preferred each policy the most.
- 8.7 It is important to note that 15% of participants refused to rank the schemes as they expressed a dislike for them all and so were unwilling to give preference to any. There was the sense that these participants were unwilling to give a preference because they felt that if they did, Government would understand

⁹ Another tax was something that they would not welcome, and only a fraction would support, but participants were more familiar with the concept, and somewhat more resigned to accepting it.

their ranking as a positive 'vote' for those policies.

- 8.8 Reflecting feedback from the group discussions on how they felt towards the schemes in comparison to one another, a third of participants ranked PCT as their number one preference, a similar proportion as for Carbon Tax. As their second preferred option, a fifth of participants selected PCT, but just under a third chose Carbon Tax, reinforcing how some participants were more prepared to accept another tax than a PCT scheme. Upstream Trading was the least preferred scheme for participants, with four out of ten rating it as their third preference. Despite participants seeing little to distinguish Upstream Trading from Carbon Tax, based on the questionnaire responses, it was the latter that they would most prefer of the two.

Results from the follow up calls

- 8.9 Approximately two weeks after they attended the group discussions, participants were re-contacted and a telephone questionnaire was conducted to explore changes in attitude. In total 50 participants were re-contacted. The responses from the original post group questionnaire of these 50 were broadly representative of those of the total sample set of 92 and therefore the results can be usefully compared. However, given the low base size, data charts have not been included in the body of this report (full results can be found in the appendices but should be treated with caution).
- 8.10 Respondents were asked what their views of PCT had been during the groups and these were generally reflective of the group sentiment, with approximately a fifth being positive towards the idea, a quarter being neutral and over half being negative. When asked if opinions had changed, around three quarters stated that their views were about the same (with roughly equal numbers of opinions being more or less positive). This is broadly reflected when favourability and ranking scores are compared between the questionnaires and phone call results.
- 8.11 Favourability scores for PCT were a little less polarised in the follow up questionnaires, with more respondents more likely to give a 'neither/nor' or a 'quite negative' response compared to the post group questionnaires where respondents were more likely to answer 'quite positive' or 'very negative'. Ranking responses were very similar to those in the post group questionnaire.

- 8.12 Verbatim feedback from the follow up questionnaires reflected feedback from the groups, with prime concerns centring around both the potential inequality of a PCT scheme and the difficulty of implementation.
- 8.13 The rationale behind some participants' responses is illustrated below:

"PCT: Interesting for you to see how much you are using – make people more aware. Being personally responsible for how much you use is a good thing."

Female, Farnham, Positive Green

"[Carbon Tax:] I like the idea of paying up front – it's simple and easier to manage. And I like the idea of getting money back. [PCT:] People will just buy more credits - so how effective will it be? [Upstream Trading:] Don't like the idea of big companies doing it."

Female, Manchester, Sideline Supporter

"[PCT] is the best out of 3 evils - you have some control. Upstream Trading is simple but I'm worried about the prices. Carbon Tax - How would they go about redistributing - how would that actually work?"

Male, Birmingham, Stalled Starter

- 8.14 Overall, feedback from the follow up calls would indicate that participants' viewpoints did not vary to any great degree after they had more time to consider the proposed policies. The only slight shift that can be observed is around strength of feeling – some participants' views were less pronounced than in the groups. Although the small sample size should be emphasised, this finding could indicate that initial strength of feeling about PCT may become slightly milder upon reflection.

9 Conclusions

- 9.1 Overall, the degree of resistance to individual behavioural change was less than had been expected compared to previous research. Opinion Leader has conducted in this area. But even in this light, when first proposed at the meetings, there was a strong feeling against the perceived idea of Government-imposed 'limits' on carbon emissions from individuals¹⁰. Of the three policy options proposed, PCT was seen as the most complex and difficult to understand, even though some could see that it may be more equitable than the other two options.
- 9.2 Some of the issues raised in response to the idea of PCT could be a challenge (to a greater or lesser extent) for the implementation of any policy aiming to reduce individuals' emissions, not specific to PCT. In addition, there are a range of ways of addressing some of the negative views of participants, and attitudes towards PCT could be different if these key concerns were addressed.
- 9.3 In particular, the research highlighted that the way that personal carbon trading is presented and described and the context in which it is set, can have a considerable impact on its acceptability. Although it is difficult to be definitive with this small sample size, the results from this project indicated that none of these options were necessarily unacceptable in principle. However, the concepts and detailed rules need to be communicated clearly and carefully to individuals if they are to be understood (either to gauge acceptability or to implement such a scheme). A considerable amount of information would need to be provided in order to help people understand and get to grips with such a scheme. The implementation of any of the policy options proposed would therefore present a communications challenge; a key starting point to influencing behaviour will be raising awareness and providing information of the impact of different activities.
- 9.4 The research also highlighted an apparent inconsistency of views. On the one hand participants thought that something should be done to cut emissions and that Government should be responsible for helping individuals to reduce

¹⁰ It was explained to participants that although a cap would be imposed on total emissions from all individuals, each individual could choose their own level of emissions and use the trading scheme to buy additional allowances/ sell any surplus as necessary (i.e. that there would not be individual caps on emissions).

their impact. On the other hand, there was also some unease about Government influencing individual behaviour in this way and concern that individuals would have to pay for the emissions reductions to be achieved.

Questions that this research has not addressed

9.5 Given the scope and timetable for this project there are a range of areas that this project has not addressed, but that it has highlighted may benefit from further work.

- The language used to describe PCT and that participants developed themselves to describe it was an important driver of respondents' views (for instance several participants perceived PCT to be 'rationing' which elicited some particularly negative responses). This inaccurate link and resultant use of the term 'rationing' in the context of PCT illustrates a particular communications challenge. Research into the impact of different ways of explaining/ describing PCT may help to improve its acceptability.
- The carbon trading model chosen proved relatively complex for individuals to understand in the time available. Other scheme designs may be more straightforward for participants to absorb and may also address some of the concerns around the practicalities of implementation. Also, more detailed information about how PCT might work in practice may have helped participants understand the scheme's implications.
- The project did not attempt to explore whether attitudes may be different if participants had been aware of the scale of costs of buying carbon under PCT (or of the cost implications of the other policy options). Some of the concerns around equity may have been less strong had the level of costs been understood.
- The strength of the reaction to the perceived idea of 'limits' on individuals' emissions and around PCT may change over time as individuals' familiarity with the impact of different activities changes and as the concept of PCT beds in. For instance, the Climate Change Bill introduces carbon budgets and may help make individuals more familiar with the concept of a budget for the domestic sector, so increasing understanding of PCT. Monitoring changes in these views over time could help to inform the best way to improve the acceptability of different policy approaches.
- There may also be lessons to learn from the implementation of other schemes that involve one or more similar concepts (e.g. the congestion

charge, electronic smartcard travelcards, pay-as-you-go rubbish collections, retail loyalty cards).

- Concerns around the moral issue of making money out of climate change could influence the public's view of a wide range of policy options. Exploring the strength and depth of these concerns could prove informative.

APPENDICES

List of Appendices

Appendices are provided alongside this report, see below list for contents. All discussion group materials were designed using information supplied by Defra.

1. Personal Carbon Trading Assumptions Crib Sheet

Supplied by Defra as the basis for the PCT system to be examined

2. Defra Environmental Segmentation Model Summary Profiles

Supplied by Defra as the basis for focus group participant recruitment

3. Segmentation Answer Grid

Created by Opinion Leader to enable potential participant segmentation

4. Recruitment Spec

The basis on which focus group participants were recruited

5. Recruitment Questionnaire

Designed and used by Opinion Leader for recruiting focus group participants

6. Personal Carbon Trading Public Acceptability Groups – Discussion Guide

Designed by Enviro Consulting and Opinion Leader

7. Climate Change Briefing – An introduction

Designed by Opinion Leader

8. Carbon Emitting Activities

Used during focus groups to illustrate emissions contributions of every day activities

9. Carbon Emitting Activities

As per 8 above

10. What Government and Business are doing

Used to illustrate contributions to emissions reductions from Government and Business sectors

11. Why Individual Behaviour Matters

Used to illustrate during focus groups importance of individual behaviours in contributing to emissions and emissions reductions

12. What will happen in the future

Used to illustrate during focus groups the emissions saving opportunities that will be available to individuals by the time PCT would be likely to be introduced

13. Carbon Tax Scheme Summary Handout

14. Upstream Trading Scheme Summary Handout

15. Personal Carbon Trading Scheme Summary Handout

13 – 15 were used during the focus groups to present descriptions of the three policy options.

16. Post Group Questionnaire

The questionnaire that focus groups participants completed immediately after their participation in the focus groups

17. Post Group Questionnaire Results Charts

Results from the post group questionnaire

18. Follow Up Calls Questionnaire

The questionnaire used with participants for the follow up survey

APPENDIX 1:

PERSONAL CARBON TRADING ASSUMPTIONS CRIB SHEET

Personal Carbon Trading project: assumptions crib sheet

Background

The Government is looking into the potential value of personal carbon trading (PCT). This is just one of a number of potential long-term options being explored for making individuals better informed about, and involved in, tackling climate change. We are now carrying out a pre-feasibility study to assess whether personal carbon trading might be a practical and feasible policy option, compared with other measures for constraining emissions. This work programme complements the research and academic work being undertaken by researchers and academics such as The Tyndall Centre for Climate Change, the Environmental Change Institute and the Royal Society for Arts.

PCT Project

The PCT work programme as a whole incorporates four workstreams (listed below). The outcomes of this work will be brought together to provide a summary of the key findings and recommendations on whether further work is necessary, and if so, in which areas.

- Economic value of PCT and its strategic fit;
- Equity and distributional impacts;
- Public acceptability;
- Technical & cost issues (allocation and subsequent management)

Context/ Purpose of the assumptions crib sheet

Due to time and budget constraints it is necessary to provide a broad description of a PCT scheme, including assumptions about preferred scheme design and treatment of a number of factors, e.g. inclusion of children, industry, etc. This is to ensure the four workstreams are compatible and can be brought together in a synthesis report. Although analysis should be on the basis of this particular description of a PCT scheme, we welcome (and indeed encourage) consideration of these assumptions as variables within the analysis - time and cost permitting.

Note! This does by no means indicate a preference for any particular scheme design, nor does it signify the Government's views on any specific elements of scheme design (e.g. inclusion/ exclusion of children). It is merely a baseline upon which the project can be based.

Assumed scheme design and implications

We have opted to examine PCT on the basis of the most downstream, radical design proposal – Domestic Tradeable Quotas (DTQs) (formally Tradeable Energy Quotas (TEQs)). It should be noted that this proposal would make very strong assumptions about the nature of the policy landscape into which PCT is introduced. Though these assumptions may not be met in practice, by considering the DTQ scheme we will provide a best case benchmark against which the real circumstances into which a PCT scheme is introduced could be compared. It will provide the best insight into the merits or otherwise of downstream emissions trading from a strategic perspective. A key assumption of this design proposal is that PCT can work alongside the EU Emissions Trading Scheme (EU ETS). It would also require that the design of the Supplier Obligation did not place a cap on domestic energy suppliers.

Description of DTQ model

An economy-wide system involving all individuals and organisations, where 40% of the economy's allowable carbon emissions are allocated to adults only free of charge on an equal per capita basis, and 60% is auctioned off to 'primary dealers' who then sell

on to organisations in a secondary market. 'Credits' would be surrendered to cover the carbon content of electricity, and heating (e.g. gas, oil) and personal transport fuel purchases, with public transport and aviation covered (dependent on its status internationally) indirectly through the organisations responsible for fuel purchases¹. All individuals and organisations have access to the market to trade their credits. It is anticipated that individuals would also be able to opt-out of trading by selling their credits immediately upon allocation to an intermediary for cash, and that smaller organisations would similarly be able to refrain from direct trading by paying the carbon cost of energy/ fuel on purchase.

Summary of assumptions

- 1) Economy-wide system with 40% free allocation to individuals and 60% allowances auctioned. No explicit interaction with the EU ETS or Supplier Obligation.
- 2) A mandatory scheme.
- 3) Sectors included are household energy use, private road transport and flights.
- 4) 50 million individuals will participate in the scheme (meaning children are exempt)
- 5) An allowance unit of kg
- 6) An equal allocation of 4 tonnes CO₂ to every participant (4000 allowances of 1kg each). There would initially be allowances to cover 500 million tonnes, with a total of 200 million tonnes of allowances being allocated to individuals.
- 7) We must look at the equity impacts of PCT in the context of how it might impact today, as analysis will be based on current energy use and emissions. However, the public acceptability workstream will need to set the scene of a PCT scheme in a post-2012 landscape where abatement options are limited (as many of the easier abatement options have already been taken up)². [N.B. Any scheme start date is still very much unknown, other than 'no earlier than 2013, but could well be later.]
- 8) That household energy efficiency will improve evenly across income and geographical groups in the future, as well as demand for energy services (there will be an equal percentage increase in demand for energy services across all income groups). Though a strong assumption, this will allow inferences to be made from the data produced in the equity workstream
- 9) A PCT scheme would be owned by Government, but sub-contracted to the private sector for day-to-day management.
- 10) The allowances will be issued in denominations to the nearest Kg. Rounding issues will be settled within the cash transaction (so if they use 10.5kg of carbon, will use 11 kg of allowances, and the additional 0.5kg will be 'sold' to the market at the point of sale at current market price).
- 11) Central prediction for the market price of allowances will be £20/t. For sensitivity analysis, a range of £10/t to £30/t should be used. That is a price of 2p for each allowance of 1 kg.
- 12) PCT data would need to be managed within the UK, however, the development of such a system could be led outside the UK.
- 13) Visitors to the UK (and those without the facility to surrender allowances at the point of purchase) would purchase allowances from the market at the market price (rather like a tax).
- 14) Trading volumes - 60% would be auctioned and of the 40% allocated for free. It is assumed that 10% of all allowances will be traded on the secondary market.

¹ Note that this would make the incorporation of non-carbon aviation emissions difficult and would most likely require the additional use of taxation and/or regulation to ensure that the external cost of such emissions were taken into account.

² Further discussion will be required for this workstream on the detailed assumptions relating to easier abatement options having been taken up.

APPENDIX 2:

DEFRA ENVIRONMENTAL SEGMENTATION MODEL SUMMARY PROFILES

Defra environmental segmentation model: Summary profiles

Positive Greens: 18% of the population (7.6 million)

“I think we need to do some things differently to tackle climate change. I do what I can and I feel bad about the rest”

- This group assess themselves as acting in more environmentally friendly ways than any other segment does. Additionally, they are the most likely group to want to live a more environmentally friendly life than they currently do.
- They consistently hold the most positive pro-environmental attitudes and beliefs; they believe that we are reaching the planet's natural limits, and that the ecological crisis is pressing. They believe that humans are largely responsible for the environmental damage and it is up to individuals to adapt their behaviour to address this.
- While they are likely to be doing most to reduce their impact on the environment, there is scope for them to do more, particularly with their travel behaviours. They are most likely to have undertaken behaviours in the home including saving energy and water, and they are the heaviest recyclers. They are also most likely to buy ethical and local products, including local food and fairtrade. They have pro-environmental attitudes to travel yet, for example, their dependency on cars is only just below average.
- They are the least motivated by saving money (and by far the most willing to pay more for environmentally friendly products), keen to avoid waste, and the most likely to feel guilty about harming the environment.
- They are least likely to cite generic barriers to being more environmentally friendly (whether effort, the difficulty of changing habits or the level of others' action).
- They have the highest levels of self-reported knowledge about environmental terms, although still around a half know little or nothing about carbon footprints and offsetting. They are also most likely to want more information on what they can do.
- They are most likely to seek to influence friends, family and the workplace to be more environmentally friendly. They are most likely to be involved in environmental and community organisations, although still at low levels (eg. fewer than one in ten are members of Greenpeace or Friends of the Earth).
- They are the most likely by far to be in AB socioeconomic groups (SEGs) and have the highest levels with household incomes of £40k and over per annum. They are the most likely to have a degree, and to read The Guardian, Independent or Times. Their profile is biased towards middle age (41-64), and owner-occupancy.

Waste Watchers: 12% of the population (5.1 million)

“Waste not, want not’ that’s important, you should live life thinking about what you’re doing and using”

- This group is doing more than any other (except group 1) to help the environment. However this behaviour is driven by an urge to avoid waste rather than seeking to reduce their environmental impact.
- Members of this group are as likely as group 1 to rate their behaviour as environmentally friendly. Nearly three quarters are content with what they are currently doing to help the environment - whereas three quarters of group 1 would like to do more.
- Their ecological worldview tends to be slightly more pro-environmental than the average, but they are also more likely than average to be sceptical about the scale and urgency of environmental problems.
- They are very concerned about changes to the UK countryside and loss of biodiversity (second only to group 1).
- They say that the environment is a high priority for them, yet they are the second least likely group (after group 7) to feel guilty about their environmental impacts and they do not share group 1's pro-environmental attitudes to travel.
- Their current behaviours focus on those in the home (including saving energy and water), using a more fuel efficient car and purchasing ethical and local/national products. They are very committed

Defra environmental segmentation model: Summary profiles

recyclers, indeed they are most likely to volunteer that they cannot recycle any more as they already recycle as much as they can.

- There is a middle age and older bias. One third are aged 65 and over (nearly twice as likely as average), while less than a quarter are 40 and under (half as likely as average). More than one third are retired, and many households are on low incomes (two fifths on £20k per annum or less). Over half own their homes outright and they are the most likely to read the Daily Mail or Telegraph.

Concerned Consumers: 14% of the population (5.7 million)

“I think I do more than a lot of people. Still, going away is important, I’d find that hard to give up..well I wouldn’t, so carbon offsetting would make me feel better”

- This group hold broadly pro-environmental beliefs, although with less conviction than groups 1 and 2. Members of this group are particularly sympathetic to the concept of ‘climate change’, acknowledging their personal impact and seeing taking action as important. Conversely, they show the strongest rejection of any group of the idea that we are reaching our limits to growth and they also doubt that an ecological crisis is imminent.
- They rate themselves as environmentally friendly in their behaviours and two thirds claim they would like to do more.
- Their current behaviours focus on environmental behaviours in the home including saving energy and water (these behaviours are similar to group 5), and some purchasing behaviours; both of which they undertake at above average levels. In terms of travel, this group have greener attitudes to travel than most. However, their levels of dependence on the car remain average, while they take the most flights per year of any segment.
- There is little stopping them being more environmentally friendly, as they are less likely than average to cite general barriers to pro-environmental behaviour, such as money-saving, inconvenience, and others not taking action. There is also some guilt about harming the environment and pro-environmental behaviours seem to fit with their self-identity. They may like to think that they are doing more than they are.
- One third are aged 30-40, and there are the lowest levels aged 65 and over. There is a slight bias towards ABC1 SEGs. One third have household incomes of £40k and above per annum and, notably, this includes the highest level of all groups with household incomes of £60k and above (nearly one fifth of the group). They are the most likely to be owner-occupiers with a mortgage, and the most likely to have dependent children (along with group 5). They are the second most likely to have a degree.

Sideline Supporters: 14% of the population (5.6 million)

“I think climate change is a big problem for us. I suppose I don’t think much about how much water or electricity I use, and I forget to turn things off..I’d like to do a bit more”

- This group has a generally pro-environmental worldview, similar to group 1 though with less conviction. Members of this group are second only to group 1 in anticipating an imminent crisis; however they are more likely to think that humans (possibly other people) will find the solution.
- Their green beliefs have not translated to their behaviours – this is the group where the attitude action gap is most evident. They are much more likely than the first three groups to say they have not thought about doing particular behaviours. However, low knowledge is also a barrier (for example, roughly two thirds say they know nothing about carbon footprints or offsetting).
- Their current behaviours are less ‘green’ than all except groups 6 and 7 on a range of pro-environmental behaviours including habitual behaviours in the home, though there are lower levels saying that they ‘don’t want to do’ specific behaviours than groups 6 and 7. They have the second highest level of car ownership and at the same time, they show the strongest dislike of any group for getting on the bus.
- Most say they are doing one or two things to help the environment and would like to do more.

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- They acknowledge a range of barriers more readily than group 3, such as the need to fit with their current lifestyle and the difficulty in changing habits; they are more likely to feel guilty about harming the environment (with group 5).
- They recognise the environmental issues, are willing to learn and do more – they appear receptive though are unlikely to be proactive in acquiring information or adapting their behaviours.
- Members of this group span all ages, although under 30s are over-represented. They have average levels of household income, but with a bias towards C2DE SEGs. They are more likely than average to read the Daily Mail or the Sun, and fewer than average are educated to degree level.

Cautious Participants: 14% of the population (5.6 million)

“I do a couple of things to help the environment. I’d really like to do more..well as long as I saw others were”

- This group’s environmental worldview is close to the average for the population: members of this group tend to agree there is a pressing crisis, and that there are limits to growth. They are pessimistic about our ability to tackle climate change, but recognise their impacts.
- Their current behaviours focus on those in the home, including habitual behaviours saving energy and water.
- This group are quicker to say that our efforts can be negated by other individuals and countries (than groups 1, 3 and 4); others’ levels of action are key to this group’s potential to act and so a sense of popular momentum may be required.
- They report more barriers to pro-environmental behaviour than groups 1 and 3, including the need to fit with current lifestyle and difficulty in changing their habits; they are more likely to feel guilty about harming the environment (with group 4).
- They tend to have green travel attitudes, and are particularly keen on travellers paying for the environmental damage they cause (second to group 1 in this area).
- Environmentally friendly behaviours are not a natural fit with their self-identity – with levels feeling they would be embarrassed to be green higher than groups 1-4. Half this group report doing only a few things or nothing pro-environmental, but three quarters say they would like to do more – the second highest proportion after group 1.
- This group has a younger than average age profile, with one quarter 30 and under, and nearly as few aged 65 and over as group 3. Equal with group 3, they are the most likely to have dependent children, however they are slightly more likely to be renting than group 3. They are the third most likely to have a degree, after groups 1 and 3.

Stalled Starters: 10% of the population (4.1 million)

“I don’t know much about climate change. I can’t afford a car so I use public transport..I’d like a car though”

- This group present somewhat confused environmental views: mostly the views are strongly negative: members of this group have the highest levels saying climate change is too far in the future to worry about and, with group 7, the highest levels believing that the environmental crisis has been exaggerated (about half). However they are also the most likely (with group 1) to agree that there are limits to growth and that humans are damaging nature; if the group genuinely holds these views, they appear not to want to act on them.
- They have the lowest levels of knowledge about environmental terms: only just over a third know more than a little about climate change, and nearly three quarters know nothing about carbon footprints.
- They are most likely to say that their behaviour does not contribute to climate change, and that the environment is a low priority for them personally.

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- Their life may have a relatively low impact on the environment for other reasons, such as financial constraints; though they are less likely to focus on thinking about the levels of energy and water they use in the home or generally undertake the smaller positive habitual behaviours. They currently choose not to do many pro-environmental behaviours beyond recycling (and have the lowest levels doing this with group 7). In keeping with their likely low impacts, they are the least frequent flying of all groups, and the least likely to own a car. Nonetheless in both cases a higher proportion of this group does not want to reduce their use of cars and planes than the proportion that has already done so.
- They have a lot of serious life priorities to address before they consider the environment. They mention lots of barriers – they are the most likely to cite convenience, difficulty, cost issues, others' level of action, and the need for behaviours to fit with their lifestyle. They are the most likely to see being green as embarrassing, while the majority of the group see being 'green' as an alternative lifestyle.
- One sixth of this group (the highest of any) say they are doing nothing to help the environment; yet despite their low levels of pro-environmental behaviour, two thirds say they are happy with what they are doing and they do not want to do more.
- They have the lowest social profile of any group (nearly half are DE SEGs), and the lowest levels of income (nearly half are on less than £20k). They tend to be younger or older, with middle aged people under-represented, and the group includes more BMEs than average. They have the lowest levels of qualifications of any group (half have none), and are the most likely not to be working. They are the most likely group to read the Sun, Mirror and News of the World.

Honestly Disengaged: 18% of the population (7.4 million)

“Maybe there’ll be an environmental disaster, maybe not. Makes no difference to me, I’m just living my life the way I want to”

- This group’s ecological worldview is predominantly shaped by a lack of interest and concern. However members of this group are also sceptical about the current environmental threat (half think it has been exaggerated). They are nearly as likely as group 6 to deny that their behaviour contributes to climate change and more likely than most to think the problem will be solved without people needing to make changes to their lifestyles.
- They do not see themselves as ‘green’ in any way, although they would not particularly care if others saw them as such (albeit that this is unlikely). It is not their scepticism or sense of indifference about environmental issues which sets them apart from others. On each of the main environmental issues, roughly a third of this group (far more than any other) does not express an opinion one way or the other. It seems that debates about the environment and climate change do not touch their lives.
- This group rate themselves as having the lowest levels of pro-environmental activity: more than half do little or nothing. This seems an honest assessment, as they report doing very little to help the environment beyond recycling (and have the lowest levels doing this with group 6). Fewer than a fifth have tried reducing their car use or the number of flights they take.
- Of all groups, they have the highest level saying they are happy with what they are doing, and they do not want to do more to help the environment (three quarters say so). In stark contrast to group 6, they are the least likely to want more information about what they could do (group 6 are the most likely to say they do).
- They do not seek excuses for their lifestyles; they are only slightly more likely than average to say that it is too much effort or too hard to find the time. They are more likely to say that they find it difficult to change their habits or that it needs to fit with their lifestyle (though this is similar to groups such as 4 and 5 and nowhere near the same level as cluster 6). They are more likely to think it is not worth acting if others do not, though they are less likely to say they would do more if government did more. Notably they are the least likely to feel guilty about harming the environment.
- While the group spans all ages, under 30s are over-represented (comprising more than a quarter). In terms of social grade members of this group are slightly more C12DE SEGs, with

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ABs under-represented; income levels are also slightly below average. Similarly, slightly fewer than average of this group have degrees. They are more likely than average to be working full-time, to be renting, and to read the Sun, News of the World and the Star.

APPENDIX 3:

SEGMENTATION ANSWER GRID

Q10 I'm going to read you some statements could you let me know if you strongly agree, agree, neither agree nor disagree, disagree or strongly disagree with each of them.

	Agree/ Disagree rating	Positive Greens	Waste Watchers	Concerned Consumers	Sideline Supporters	Cautious Participants	Stalled Starters	Honestly Disengaged
I don't pay much attention to the amount of water and energy I use in my home		MUST either answer: - Disagree - Strongly disagree	MUST either answer: - Disagree - Strongly disagree	MUST either answer: - Disagree - Strongly disagree	MUST either answer: - Neither agree /disagree - Agree - Strongly agree	MUST either answer: - Disagree - Strongly disagree	MUST either answer: - Neither agree /disagree - Agree - Strongly agree	MUST either answer: - Neither agree /disagree - Agree - Strongly agree
The environment is a low priority for me compared with a lot of other things in my life		MUST either answer: - Disagree - Strongly disagree	MUST either answer: - Disagree - Strongly disagree	MUST either answer: - Disagree - Strongly disagree	Expect a neutral answer	Expect a neutral answer	MUST either answer: - Agree - Strongly agree	MUST either answer: - Neither agree /disagree - Agree - Strongly agree
If things continue on their current course, we will soon experience a major environmental disaster		MUST either answer: - Agree - Strongly agree	Expect a neutral answer	Expect a neutral answer	MUST either answer: - Neither agree /disagree - Agree - Strongly agree	MUST either answer: - Neither agree /disagree - Agree - Strongly agree	MUST either answer: - Agree - Strongly agree	MUST either answer: - Neither agree /disagree - Disagree - Strongly disagree
It is only worth doing environmentally friendly things if they save you money		MUST either answer: - Disagree - Strongly disagree	MUST either answer: - Neither agree nor disagree - Disagree - Strongly disagree	MUST either answer: - Neither agree nor disagree - Disagree - Strongly disagree	MUST either answer: - Neither agree nor disagree - Disagree - Strongly disagree	Expect a neutral answer	MUST either answer: - Agree - Strongly agree	Expect a neutral answer
I would like to do a lot more to help the environment		MUST either answer: - Agree - Strongly agree	MUST either answer: - Neither agree nor disagree - Disagree - Strongly disagree	MUST either answer: - Neither agree nor disagree - Agree - Strongly agree	MUST either answer: - Neither agree nor disagree - Agree - Strongly agree	MUST either answer: - Agree - Strongly agree	MUST either answer: - Neither agree nor disagree - Disagree - Strongly disagree	MUST either answer: - Neither agree nor disagree - Disagree - Strongly disagree
We are close to the limit of the number of people the earth can support		MUST either answer: - Agree - Strongly agree	MUST either answer: - Neither agree nor disagree - Agree - Strongly agree	MUST either answer: - Neither agree nor disagree - Disagree - Strongly disagree	MUST either answer: - Neither agree nor disagree - Agree - Strongly agree	MUST either answer: - Neither agree nor disagree - Agree - Strongly agree	MUST either answer: - Neither agree nor disagree - Agree - Strongly agree	MUST either answer: - Neither agree nor disagree - Disagree - Strongly disagree

The so-called 'environmental crisis' facing humanity has been greatly exaggerated		MUST either answer: - Disagree - Strongly disagree	MUST either answer: - Neither agree / disagree - Agree - Strongly agree	MUST either answer: - Neither agree nor disagree - Disagree - Strongly disagree	MUST either answer: - Disagree - Strongly disagree	MUST either answer: - Neither agree nor disagree - Disagree - Strongly disagree	MUST either answer: - Neither agree / disagree - Agree - Strongly agree	MUST either answer: - Neither agree / disagree - Agree - Strongly agree
I sometimes feel guilty about doing things that harm the environment		MUST either answer: - Agree - Strongly agree	MUST either answer: - Agree - Neither agree nor disagree - Disagree	MUST either answer: - Agree - Strongly agree	MUST either answer: - Neither agree / disagree - Agree - Strongly agree	MUST either answer: - Agree - Strongly agree	Expect a neutral answer	MUST either answer: - Agree - Neither agree nor disagree - Disagree
It's not worth me doing things to help the environment if others don't do the same		MUST either answer: - Disagree - Strongly disagree	MUST either answer: - Neither agree nor disagree - Disagree - Strongly disagree	MUST either answer: - Disagree - Strongly disagree	MUST either answer: - Neither agree nor disagree - Disagree - Strongly disagree	MUST either answer: - Neither agree nor disagree - Strongly agree - Agree	MUST either answer: - Agree - Strongly agree	MUST either answer: - Agree - Strongly agree
I don't know much about carbon footprints or carbon offsetting		MUST either answer: - Neither agree nor disagree - Disagree - Strongly disagree	MUST either answer: - Neither agree nor disagree - Disagree - Strongly disagree	MUST either answer: - Neither agree nor disagree - Disagree - Strongly disagree	MUST either answer: - Neither agree / disagree - Agree - Strongly agree	MUST either answer: - Neither agree / disagree - Agree - Strongly agree	MUST either answer: - Neither agree nor disagree - Agree - Strongly agree	MUST either answer: - Neither agree nor disagree - Agree - Strongly agree
For the sake of the environment, car users should pay higher taxes		MUST either answer: - Agree - Strongly agree	MUST either answer: - Disagree - Strongly disagree	MUST either answer: - Neither agree nor disagree - Disagree - Strongly disagree	Expect a neutral answer	MUST either answer: - Agree - Strongly agree	Expect a neutral answer	MUST either answer: - Neither agree nor disagree - Disagree - Strongly disagree

APPENDIX 4:

RECRUITMENT SPEC

Recruitment Spec – Personal Carbon Trading – Public Acceptability research

	Manchester		Birmingham		Nottingham		Surrey		North London		Cheddar	
	1	2	1	2	1	2	1	2	1	2	1	2
Segment	SiSu	HD	StSt	CP	HD	WW	CC	PG	StSt	CC	WW	PG
Age (ensure a spread)	18-40	25-55	50+	18-40	25-55	50+ (Ensure a third 65+)	25-55	40-65	50+	25-55	50+ (Ensure a third 65+)	40-65
SEG	C2DE	C2D	DE	C1C2	C2D	C1C2	ABC1	ABC1 (Ensure half AB)	DE	ABC1	C1C2	ABC1 (Ensure half AB)
BME	2 per group	2 per group	2 per group	2 per group	2 per group	2 per group	N/A	N/A	2 per group	2 per group	N/A	N/A

Other criteria

- All to be 50:50 gender split

SEG: Socio-Economic Group

SiSu Sideline Supporters: HD Honestly Disengaged: StSt Stalled Starters: CP Cautious Participants: WW Waste Watchers: CC Concerned

Consumers: PG Positive Greens

APPENDIX 5:

RECRUITMENT QUESTIONNAIRE



Recruitment Questionnaire - Personal Carbon Trading – Public Acceptability research

Good morning/afternoon. I work for a company called Opinion Leader and I am looking for people to take part in some important research about the environment. It would involve a two hour evening discussion group in X on X with about 8 other people.

You are not expected to be an expert on the environment at all – we are simply looking for people who are prepared to come along and have their say. You would receive **£40 in total** as a thank you for your time.

Q1 Have you or any member of your family or close friends been employed in any of the following occupations?

Advertising	Market Research
Marketing	Public Relations/Media
Journalism	Environmental organisations
Government	

IF YES TO ANY OF THE ABOVE – CLOSE

Q2 Have you ever attended a market research group discussion?

Yes		Ask Q3
No		Go to Q5

Q3 When did you last attend a market research group discussion or interview?

In the last 12 months		CLOSE
12 – 18 months ago		Ask Q4
Over 18 months ago		Ask Q4

**IF DISCUSSION ATTENDED IN LAST 12 MONTHS – INTERVIEW MUST BE CLOSED
NO MORE THAN 2 RESPONDENTS IN EACH GROUP SHOULD HAVE ATTENDED A
DISCUSSION/INTERVIEW IN THE LAST 12-18 MONTHS**

Q4 What were the subjects discussed in the group(s) that you attended?

--

DO NOT RECRUIT IF ATTENDED A DISCUSSION ON ENVIRONMENTAL ISSUES E.G. CLIMATE CHANGE, RECYCLING ETC.

CLASSIFICATION SECTION

Can I just check a few details with you please:

Q5 Record gender (DO NOT READ OUT)

MALE	
FEMALE	

RECRUIT ACCORDING TO SPEC

Q6 How old were you last birthday?

Under 18	DO NOT RECRUIT
18-24	
25-29	
30-34	
35-39	
39-44	
45-49	
50-54	
55 or over	

RECRUIT ACCORDING TO SPEC

Q7 Which of the following best describes your ethnic background?

White British		Indian	
White Irish		Pakistani	
Any other white background		Bangladeshi	
Mixed - White and Black Caribbean		Any other Asian Background	
Mixed - White and Black African		Caribbean	
Mixed - White and Asian		African	
Any other mixed background		Any other Black background	
Chinese		Any other background not listed (please write in below)	

--

RECRUIT ACCORDING TO SPEC

Q8 Could you tell me the occupation of the head of your household:

.....**WRITE IN**

.....(INDUSTRY)

IF RESPONDENT IS NOT THE HEAD OF THE HOUSEHOLD – ASK Q9

Q9 What is your occupation and is that full or part time employment?

OCCUPATION OF RESPONDENT..... **WRITE IN**

FULL TIME (30HRS+)
PART TIME (18-29 HRS)
FULL TIME EDUCATION
PART TIME EDUCATION
NOT WORKING
RETIRED

A	
B	
C1	
C2	

D	
E	

RECRUIT ACCORDING TO SPEC

PERSONALITIES AND ATTITUDES

Q10 I'm going to read you some statements could you let me know if you would tend to strongly agree, agree, neither agree nor disagree, disagree or strongly disagree with each of them.

	Agree/Disagree rating	e.g. Positive Greens
I don't pay much attention to the amount of water and energy I use in my home		MUST either answer: - Disagree - Strongly disagree
The environment is a low priority for me compared with a lot of other things in my life		MUST either answer: - Disagree - Strongly disagree
If things continue on their current course, we will soon experience a major environmental disaster		MUST either answer: - Agree - Strongly agree
It is only worth doing environmentally friendly things if they save you money		MUST either answer: - Disagree - Strongly disagree
I would like to do a lot more to help the environment		MUST either answer: - Agree - Strongly agree
We are close to the limit of the number of people the earth can support		MUST either answer: - Agree - Strongly agree
The so-called 'environmental crisis' facing humanity has been greatly exaggerated		MUST either answer: - Disagree - Strongly disagree
I sometimes feel guilty about doing things that harm the environment		MUST either answer: - Agree - Strongly agree
It's not worth me doing things to help the environment if others don't do the same		MUST either answer: - Disagree - Strongly disagree
I don't know much about carbon footprints or carbon offsetting		MUST either answer: - Neither agree nor disagree - Disagree - Strongly disagree
For the sake of the environment, car users should pay higher taxes		MUST either answer: - Agree - Strongly agree

Please see separate segmentation sheet to classify respondent's segment.

Q11. Which of the following sets of statements most reflects your own beliefs? You may not agree with all the statements in a box exactly, but pick the one which fits closest overall.

PLEASE USE PARTICIPANT CARD AT THIS POINT

<ul style="list-style-type: none"> I think we need to do more things differently to tackle climate change. I do what I can and I feel bad about the rest. 	Positive Greens
<ul style="list-style-type: none"> 'Waste not, want not' – that's important. You should live life thinking about what you're doing and using. 	Waste Watchers
<ul style="list-style-type: none"> I think I do more than many people to be environmentally friendly, but I think it would be hard to give up some things, like flying. 	Concerned Consumers
<ul style="list-style-type: none"> I think climate change is a big problem for us but I can forget to keep an eye on how much water or electricity I use. I would like to do more to help the environment but I'm not sure what. 	Sideline Supporters
<ul style="list-style-type: none"> I'd like to do a bit more to help the environment but only if everyone else is acting to tackle climate change too. 	Cautious Participants
<ul style="list-style-type: none"> I don't know much about climate change and to be honest, the environment is not a priority for me compared with other things in my life. 	Stalled Starters
<ul style="list-style-type: none"> Maybe there'll be an environmental disaster, maybe not. It makes no difference to me – I'm just living my life the way I want to. 	Honestly Disengaged

CONTACT DETAILS

NAME:

ADDRESS:

TEL NO:

INTERVIEWER'S DECLARATION:

I DECLARE THAT NO 2 PEOPLE IN THIS GROUP KNOW EACH OTHER AND THAT THIS IS A TRUE RECORD OF AN INTERVIEW WHICH HAS BEEN CONDUCTED WITH A RESPONDENT WHO IS NOT A RELATIVE OR FRIEND OF MINE

INTERVIEWER'S SIGNATURE DATE

APPENDIX 6:

PERSONAL CARBON TRADING PUBLIC ACCEPTABILITY GROUPS – DISCUSSION GUIDE

Public Acceptance of Carbon Reduction Policies

Draft discussion guide

Discussion flow		Handouts
Background and introductions		
<p>10 mins</p> <p><i>To explain the background of the project, set the ground rules and warm up participants</i></p>	<ul style="list-style-type: none"> • Explain background to and purpose of the research <ul style="list-style-type: none"> – Talking about climate change and individual carbon emissions • Reassure confidentiality • Reassure not expected to be experts • No right or wrong answers • Ask permission to record • Ask participant to introduce each other in pairs 	
Behaviour contributing to individual carbon emissions		
<p>20 mins</p> <p><i>To ascertain how much participants currently understand about personal carbon emissions and to emphasise the carbon impact of certain activities</i></p>	<ul style="list-style-type: none"> • We're going to be talking today about climate change and the impact human behaviour can have on the environment • What do you know about climate change? <ul style="list-style-type: none"> – What is it? – How does it work? – What impacts does it have? • If not already mentioned, explain that climate change is caused by greenhouse gas emissions that are changing the world's climate. Because we are producing too many greenhouse gases, they are absorbing more of the Earth's heat and causing temperatures to rise. The main greenhouse gas is carbon dioxide which is produced when we burn fossil fuels such as coal, gas and oil to use for energy • In pairs ask the attendees to list all the behaviours (or individual actions) that result in carbon emissions • Go around the group asking the pairs to read out their list <ul style="list-style-type: none"> – Flipchart responses • Identify commonalities across the group • If not mentioned probe on: 	

Introducing policies		
<p>35 mins</p> <p><i>To understand spontaneous reactions to the three options</i></p>	<ul style="list-style-type: none"> We are going to talk for the rest of the session about the options that are being considered for individuals to reduce carbon. Emphasise the following: <ul style="list-style-type: none"> Doing nothing is not an option – something has got to be done in order for us to meet our carbon reduction targets (according to the Climate Change Bill, the UK will have to reduce its carbon emissions by a minimum of 60% by 2050; this could change to 80% by 2050) However, none of these proposed options would happen before 2013 at the earliest By this time we will already be doing a lot of the things we talked about earlier (give out handout on what we will and won't be doing) i.e. many of the easy behaviour changes won't be an option Give out handout with positioning statements (rotate) and read out – check understanding Probe on each policy: <ul style="list-style-type: none"> What do they think of the policy? PROBE: How fair? Appropriate? Enforceable? How might they change their behaviour if this option was introduced in the UK? What wouldn't they change? Flipchart list of pros and cons What do you see as the key differences between the policies? As a group, rank the policies in order of participants' willingness to adopt them 	<p>Handout on what we will and won't be doing in 2013</p> <p>Handout x 3 on each carbon reduction policy</p>
Feedback on how PCT would work		
<p>25 mins</p> <p><i>To explore more detailed responses re the acceptability of a PCT scheme</i></p>	<ul style="list-style-type: none"> Now we're going to focus a bit more on the idea of a Personal Carbon Trading Scheme How do you think the scheme would impact on different people? How fair do you feel the scheme is currently? PROMPT: How easy would it be to understand? At the moment each person would receive an equal carbon allowance. How would you feel if different people received different amounts? Would that be more or less acceptable? <ul style="list-style-type: none"> Who (if anyone) should receive a larger allowance? PROMPT: older people, people with children, fuel poor, rural vs urban etc. What do you think about the fact that the scheme would only apply to adults? Should it include children? Why / why not? 	

	<ul style="list-style-type: none"> • The aim of the scheme is to reduce carbon emissions. Therefore, people would receive a smaller carbon allowance over time in order to bring about further carbon reductions. What do you think of this? <ul style="list-style-type: none"> – Thinking back to the sort card activities, would you reconsider which activities you would be willing to cut down on? • Now we're going to talk about how a Personal Carbon Trading scheme might work in practice <ul style="list-style-type: none"> – Overall, how prepared would you be to trade carbon? – If the scheme was to be rolled out, how could it be made more user-friendly? – What types of information, advice and support would be required? – Does it matter who implements or manages the scheme? PROMPT: Government vs privately run • Imagine it's November and you only have 200 carbon credits left til the end of the year. You know you will need at least 150 to heat your house and probably around 100 for petrol. What would you do in that situation? • Imagine you've got left over credits at the end of the year. What would you do with your surplus credits? PROMPT: Spend them? Retire them? • The scheme might offer a pay-as-you-go option for certain people, whereby you could choose to opt out of trading, by selling your credits immediately and paying for the expected emissions at the point of sale for electricity, transport fuel etc. when you are buying these products. <ul style="list-style-type: none"> – What do you think of this? What impact might this have? • What other conditions/guarantees would make the policy more acceptable/successful? PROMPT: Fraud prevention etc. 	
Final things		
10 mins <i>To gauge the overall acceptability of a PCT scheme</i>	<ul style="list-style-type: none"> • Having discussed the concept at length, how do you feel about the idea of a Personal Carbon Trading scheme? <ul style="list-style-type: none"> – How does it compare to the alternatives (carbon tax or upstream trading)? – How important is it to get individuals to take responsibility for their own behaviours? • Any other comments? • Post event questionnaires and permission to recontact forms • Thank and close <ul style="list-style-type: none"> – Incentives 	Post event questionnaire

APPENDIX 7:

CLIMATE CHANGE BRIEFING – AN INTRODUCTION

Climate Change

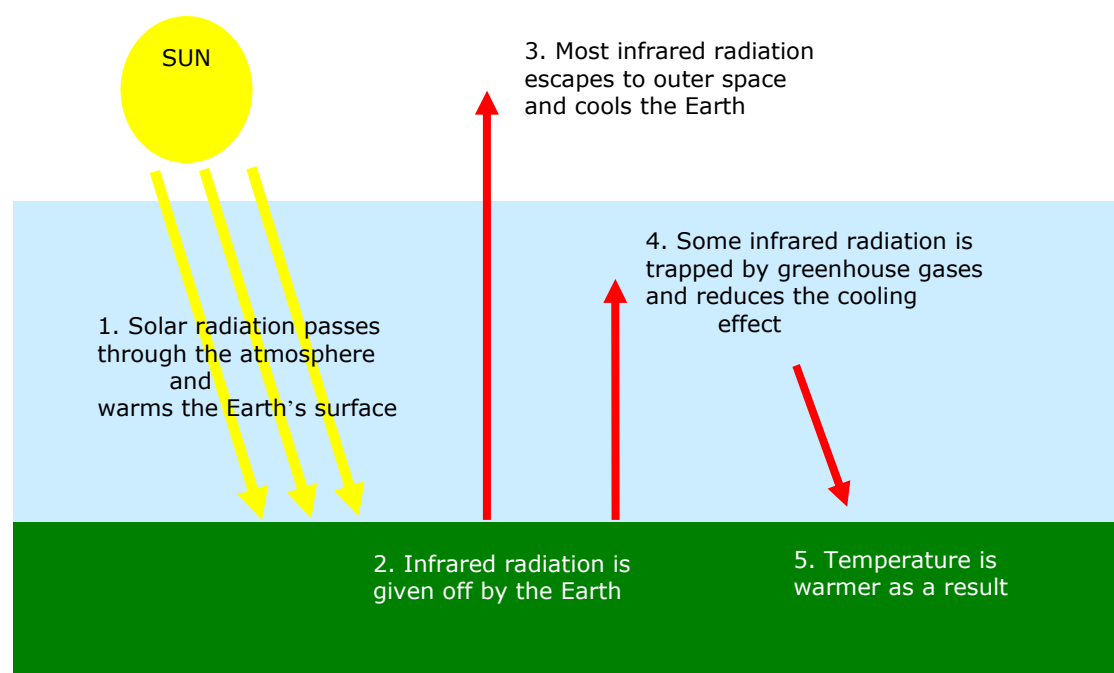
An introduction

Our planet is surrounded by a blanket of gases which keeps the surface of the earth warm and able to sustain life. This blanket is getting thicker, trapping in heat as we release greenhouse gases, mainly carbon dioxide. As a result, our climate is starting to change – in some places it is warming and in others flooding.

Scientific research indicates that, because of climate change, we may experience more intense and more frequent extreme weather events. A gradual increase in temperature also has major implications for ecosystems, growing seasons, animals and their habitats.

Concentrations of greenhouse gases are now higher than at any point in the past 800,000 years. Greenhouse gases are pollutants that occur naturally in the atmosphere but also as a result of human activity. They include water vapor, methane, nitrous oxide, and ozone, but the main greenhouse gas is carbon dioxide which is produced when we burn fossil fuels such as coal, gas and oil to use for energy. In just 200 years, the amount of carbon dioxide in the atmosphere has increased by 30 per cent.

Some changes to the climate are inevitable – even if we stop emitting gases now, the gases we have already released are likely to have an effect. However, we can make a definite difference to slow it down in the future. With some adaptation to our lifestyles we can achieve a new balance.



APPENDIX 8:

CARBON EMITTING ACTIVITIES

Return flight
from London
to Malaga

Return flight
from London
to Sydney

Heating a 3
bed Edwardian
1910 house for
a year

Heating a 3
bed 1975
house for a
year

Heating a 3 bed
post 1995 new
build house for
a year

Driving 20,000
km in a Ford
Focus

Driving 20,000
km in a Range
Rover

Watching a
plasma screen
TV 2 hours a
day for a year

Watching a
LCD TV 2
hours a day for
a year

Using A rated
tumble dryer
once a week
for a year

Using C rated
tumble dryer
once a week
for a year

Leaving a TV
on standby
overnight every
night for a year

APPENDIX 9:

CARBON EMITTING ACTIVITIES

Carbon Emissions

Activity	Carbon emissions	How long you'd have to leave a 60w light bulb on to generate roughly the same amount of emissions
<i>Heating a 3 bed Edwardian 1910 house for a year</i>	8000 kg CO ₂	29 years
<i>Driving 20,000 km in a Range Rover</i>	7040 kg CO ₂	25 and a half years
<i>Heating a 3 bed 1975 house for a year</i>	5000 kg CO ₂	18 years
<i>Heating a 3 bed post 1995 new build house for a year</i>	4000 kg CO ₂	14 and a half years
<i>Return flight from London to Sydney</i>	3380 kg CO ₂	over 12 years
<i>Driving 20,000 km in a Ford Focus</i>	3280 kg CO ₂	over 11 and a half years
<i>Return flight from London to Malaga</i>	440 kg CO ₂	a year and a half
<i>Using C rated tumble dryer once a week for a year</i>	138 kg CO ₂	6 months
<i>Watching a plasma screen TV 2 hours a day for a year</i>	133 kg CO ₂	6 months
<i>Watching a LCD TV 2 hours a day for a year</i>	84 kg CO ₂	3 and a half months
<i>Using A rated tumble dryer once a week for a year</i>	57 kg CO ₂	2 and a half months
<i>Leaving a TV on standby overnight every night for a year</i>	12 kg CO ₂	2 weeks

APPENDIX 10:

WHAT GOVERNMENT AND BUSINESS ARE DOING

What Government and Business are doing

There are a number of schemes and policies that will mean that Government and Businesses will be legally obliged to cut down their carbon emissions:

The Climate Change Levy

Public and private sector organisations except the very smallest businesses have to pay a **tax** on the energy that they use.

EU Emissions Trading Scheme

Large carbon emitters (such as power stations and refineries) have to take part in this EU wide scheme to **reduce** carbon emissions in an efficient way.

Carbon Reduction Commitment

Large non-energy intensive companies (such as supermarkets and high street chains) and large public sector organisations (such as county councils and universities) will have to take part in this scheme which aims to **reduce** participants' carbon emissions from energy use (e.g. gas, electricity, oil).

Improved building energy efficiency

Under **stricter building regulations** new buildings must be more energy efficient.

Leading by example

The public sector is required by the *EU Energy Services Directive* to play 'an **exemplary role**' on energy use.

Targets

Parts of the public sector (e.g. Government Departments and the NHS) have also committed to **targets** to reduce their energy use and carbon emissions. Power companies have to supply an increasing proportion of renewable "green" electricity year on year.

Climate Change Agreements

Energy intensive businesses (such as the steel industry) have entered into **formal agreements** to reduce their energy use and carbon emissions with Government.

Opinion Leader

APPENDIX 11:

WHY INDIVIDUAL BEHAVIOUR MATTERS

Why individual behaviour matters

Climate change is a serious problem that affects us all. There is strong evidence that human emissions of greenhouse gases are changing the world's climate. The main greenhouse gas is carbon dioxide (CO₂), produced when we burn fossil fuels like coal, oil and gas for energy. The world's population produces 60 million tonnes of carbon dioxide emissions every 24 hours, of which the UK alone is responsible for 2%.

Over 40 per cent of carbon emissions in the UK come directly from what we do as individuals; for example, heating and using electricity in our homes - and driving vehicles. Flights are the next biggest source of individuals' carbon emissions. A further 40 per cent of carbon emissions come from business activity.

In 2005, total UK carbon dioxide emissions were almost 554 million tonnes. 27% of those emissions came from the energy we use to heat, light and power our homes. Our transport emissions caused by passenger cars, buses and mopeds and motorcycles account for a further 15% of carbon emissions.

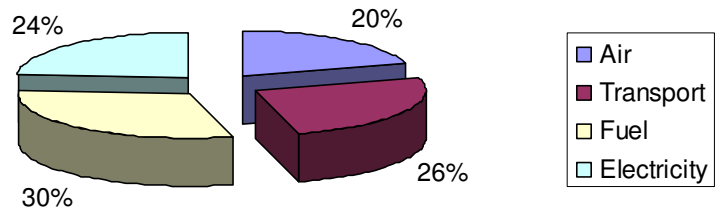
The average person's carbon footprint is about 4 tonnes of carbon dioxide. This equates to someone:

- Heating a post-1995 new build 3-bed (as part of a household of 4) for a year
- Driving 20,000km over the a period of a year in a Toyota Prius

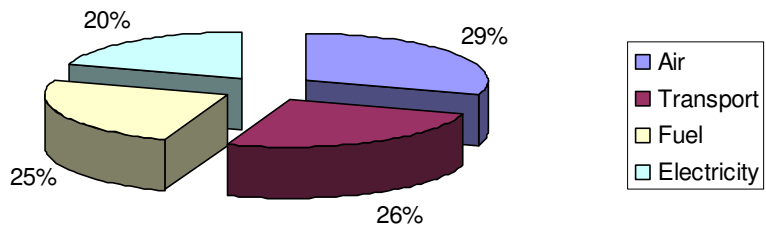
In comparison, the average person's carbon footprint of 4 tonnes is also the same as:

- One return flight from London to Sydney
- (With about half of a tonne left of the 4 tonne average)

2010 projections - individuals



2020 projections - individuals



APPENDIX 12:

WHAT WILL HAPPEN IN THE FUTURE

What is likely to happen between before a carbon reduction scheme is introduced:

- 2010 – Over 95% of dishwashers, fridges, freezers and electric hobs will be A rated or better
- 2011 – Non-energy saving light bulbs will no longer be available to buy
- 2013 – Loft insulation and cavity wall insulation will have been installed in all but a few homes
- 2015 – Around half of all gas heated homes will have condensing boilers

APPENDIX 13:

CARBON TAX SCHEME SUMMARY HANDOUT

Carbon Tax

What is it?

A carbon tax is a **tax on fossil fuels** (such as petrol, oil and gas) paid at the point they are brought into the UK or produced. The level of tax would be in line with the amount of carbon each energy source emits, so cleaner fuels would be taxed less.

How would it work?

- Prices of energy, and some goods and services would go up for consumers as a result of this tax
- The pot of money raised by this tax would be redistributed back to everyone equally
 - everyone would get the same amount of money back
 - Therefore if you did not use much carbon, the amount of money you get back would be more than the extra tax you paid for your energy
 - But if you used a lot of carbon, the amount you get back would be less than the extra tax you paid
- Government would monitor the level of emissions in the UK and accordingly, the level of tax would be revised

Case Study 1

Jessica has used a lot of energy this year. She has a home to run, a large car which she drives to work, and has also had two foreign holidays, one of which was in America. She has had to pay an extra £320 as a result of the increase in the price of goods and services that the carbon tax has caused. At the end of the year she receives £200 back from the Government which reflects an equal share of the overall amount raised by the carbon tax.

Case Study 2

Last year, Paul paid an additional £220 as a result of the carbon tax. This year he switched to a more fuel efficient boiler and a smaller car. As a result he has not had to

pay as much; only £150. At the end of the year he receives £200 back from the Government.

What would a Carbon Tax achieve?

The aim of an carbon tax would be to reduce the level of carbon emissions in the UK economy.

APPENDIX 14:

UPSTREAM TRADING SCHEME SUMMARY HANDOUT

Upstream Trading

What is it?

Government limits the amount of carbon emissions within the economy by issuing a limited number of allowances and auctioning them off to fuel producers and importers. Before a fuel producer or importer is able to sell their fuel they have to buy carbon allowances equal to the amount of carbon emissions that the fuel would create when burnt.

How would it work?

- Fuel producers and importers would pass on the extra cost of these carbon allowances to consumers, therefore the end cost of fuel will be greater for the consumer. The dirtier the fuel, (that is the more carbon emissions it creates per unit of energy), the larger the increase in the cost
- The pot of money raised by the auctioning would be redistributed back to everyone equally – everyone would get the same amount of money back
- Therefore if you did not use much carbon, the amount of money you get back would be more than the extra costs to you of goods and services
- But if you used a lot of carbon, the amount you get back would be less than the extra cost
- The level of emissions would be reduced steadily in line with UK targets

What would Upstream Trading achieve?

The aim of an upstream trading scheme would be to reduce the level of carbon emissions in the UK economy.

APPENDIX 15:

PERSONAL CARBON TRADING SCHEME SUMMARY HANDOUT

Personal Carbon Trading

What is it?

Everyone is given an equal number of **carbon credits** from a national carbon budget which they would have to use to buy household energy (i.e. gas, oil or electricity), personal transport fuels like petrol or flights, to cover the amount of carbon that would be emitted. **All adults** would have to take part in the scheme.

People would be able to buy or sell their credits through a **carbon trading** scheme. For example, those who used less carbon and so did not use up all their carbon credits would be able to sell them. Those who needed extra credits would be able to buy additional credits.

How would it work?

- Each citizen would be given 4000 carbon credits (1 credit = 1 kg of carbon)
- Every time you bought fuel at a petrol station, paid home energy bills or booked travel tickets, you would have to pay a certain number of credits from your carbon allowance (on top of the financial cost of your purchase)
- 40% of the national carbon budget would be allocated to the public. The remaining 60% would be auctioned off to be sold in a 'carbon market', for example to banks and other financial institutions, who would trade in carbon credits
- The funds from this auction would allow the government to reduce the level of taxes in the economy
- If you needed to buy extra credits or sell left-over credits you could buy them from this carbon market
- The price of one credit would vary according to the market (in the same way that exchange rates for foreign currency vary)

Case Study 1

Mike wants to fly to Australia for his friend's wedding. He expects to use up 3500 of his credits this year but the return flight will cost him a further 2880 credits. He decides the wedding is too important to miss so decides to buy the extra credits to cover the flight and the rest of his electricity and petrol for the year.

Case Study 2

Sonia doesn't have a car and so she doesn't think she'll use up all her carbon credit allowance this year. Rather than leave the credits unused she decides to sell 1000 of her credits on the carbon market.

What would Personal Carbon Trading achieve?

The aim of personal carbon trading scheme would be to reduce the level of carbon emissions in the UK economy.

APPENDIX 16:

POST GROUP QUESTIONNAIRE



Carbon Reduction Policies: Post-group Questionnaire

YOUR FULL NAME	
CITY WHERE GROUP HELD	
DATE OF GROUP	

Q1 Please tick in the box below how you feel about each of the carbon reduction schemes discussed today:

	Very positive	Quite positive	Neither positive nor negative	Quite negative	Very negative
Personal Carbon Trading					
Carbon Tax					
Upstream Trading					

Q2 Please rank these carbon reduction schemes in order of preference. Please put 1 next to the scheme you like best, 2 next to your second best option and 3 next to your third.

Personal Carbon Trading	
Carbon Tax	
Upstream Trading	

Q3 Why do you say that? **Please indicate why you answered Q2 the way you did**

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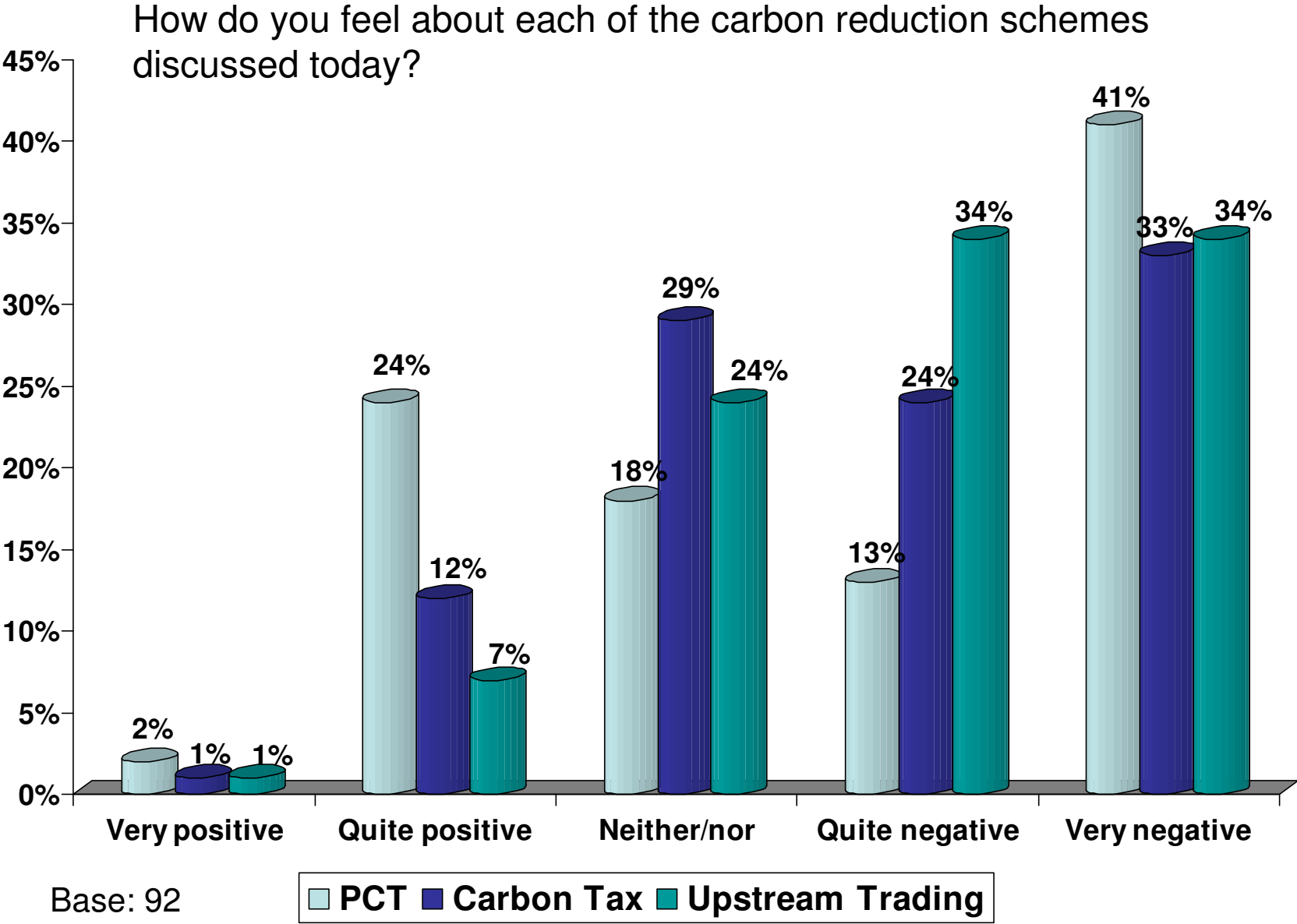
THANK YOU PLEASE GIVE THIS TO YOUR MODERATOR, MAKING SURE THAT YOU HAVE FILLED IN YOUR NAME ON THE FRONT
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APPENDIX 17:

POST GROUP QUESTIONNAIRE RESULTS CHARTS

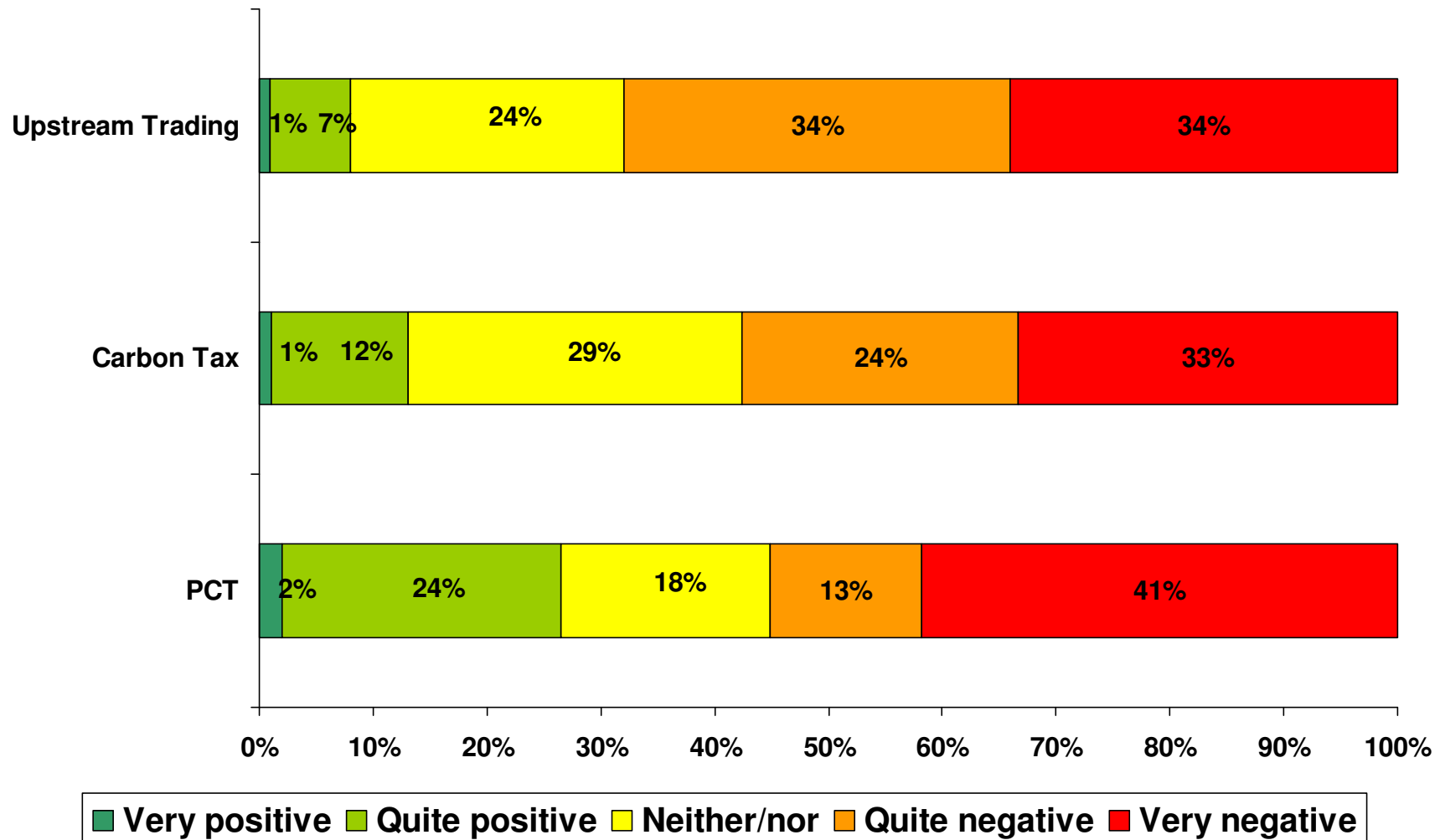
Post group questionnaire results

Post group questionnaire



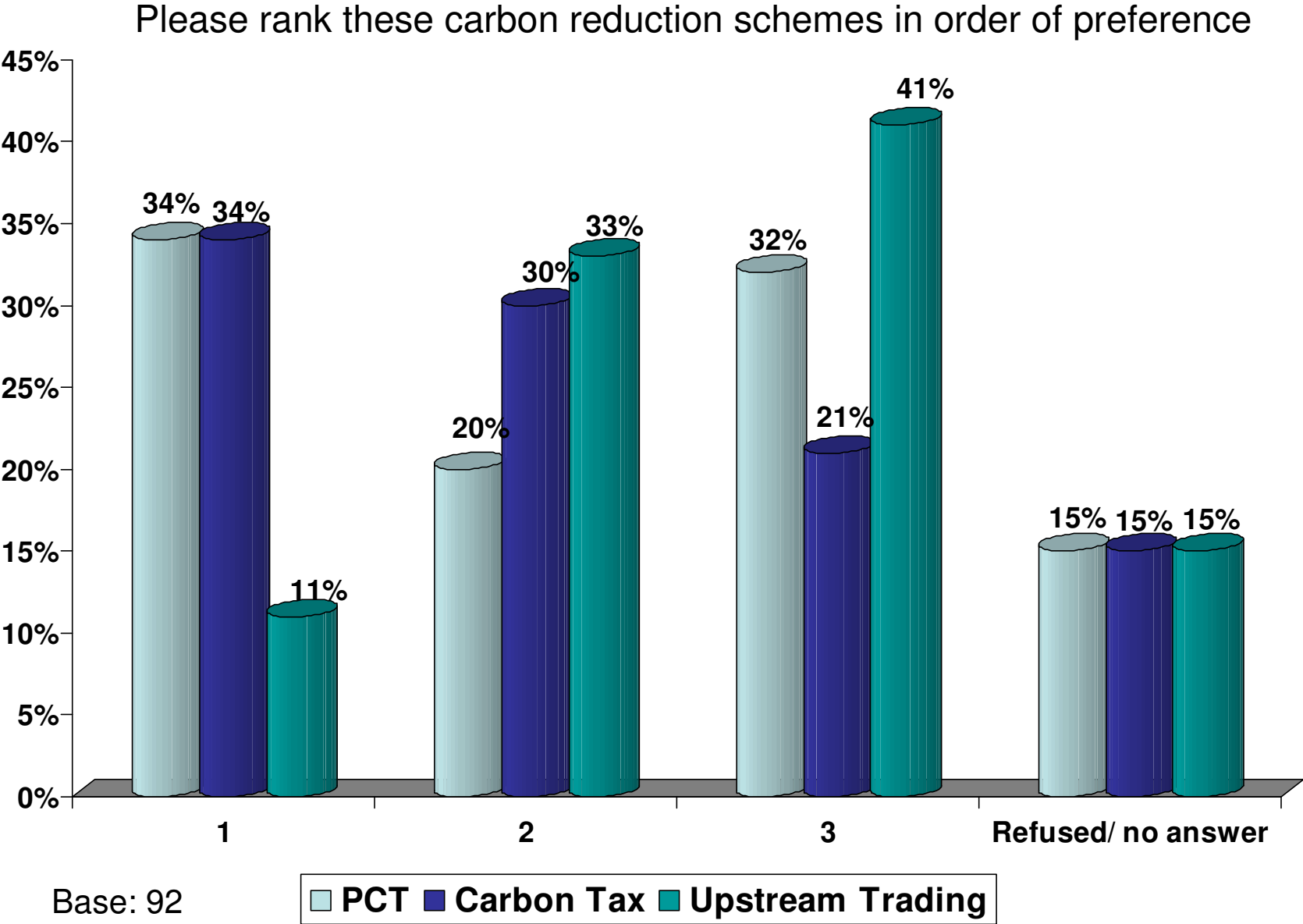
Post group questionnaire

How do you feel about each of the carbon reduction schemes discussed today?



Base: 92

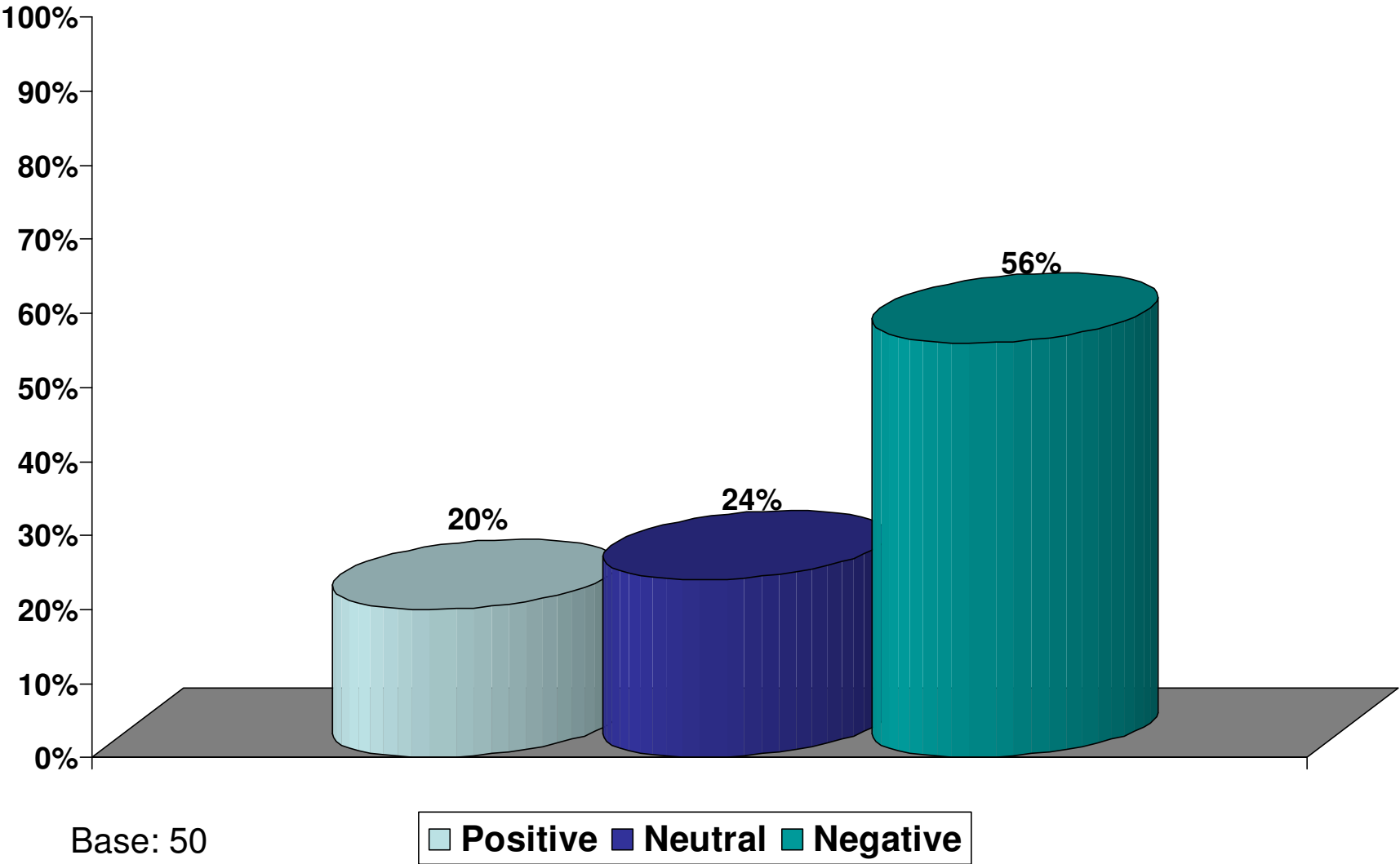
Post group questionnaire



Follow up questionnaire results

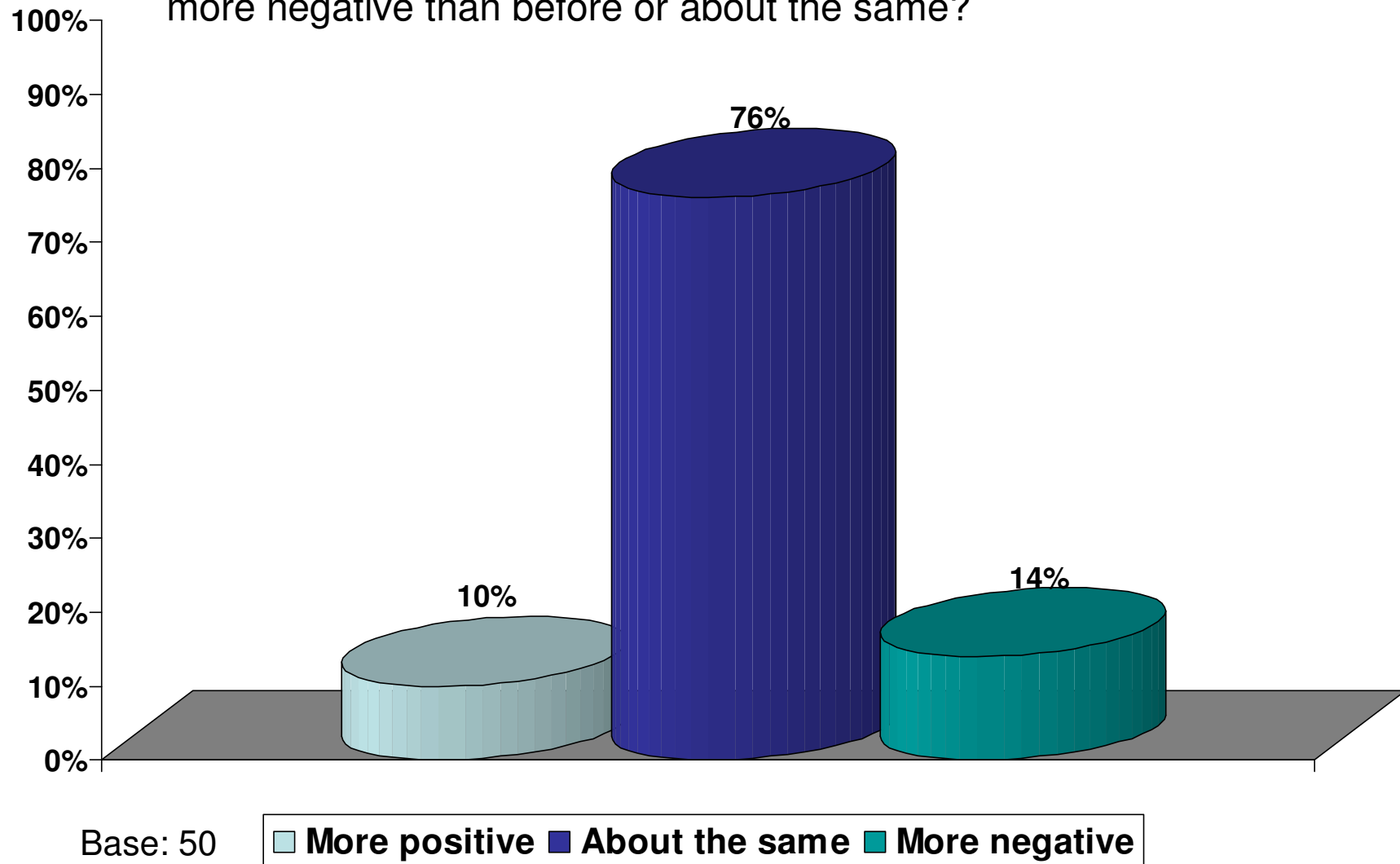
Follow up questionnaire

During the discussion would you say your opinion of Personal Carbon Trading was mainly positive, negative or neutral?

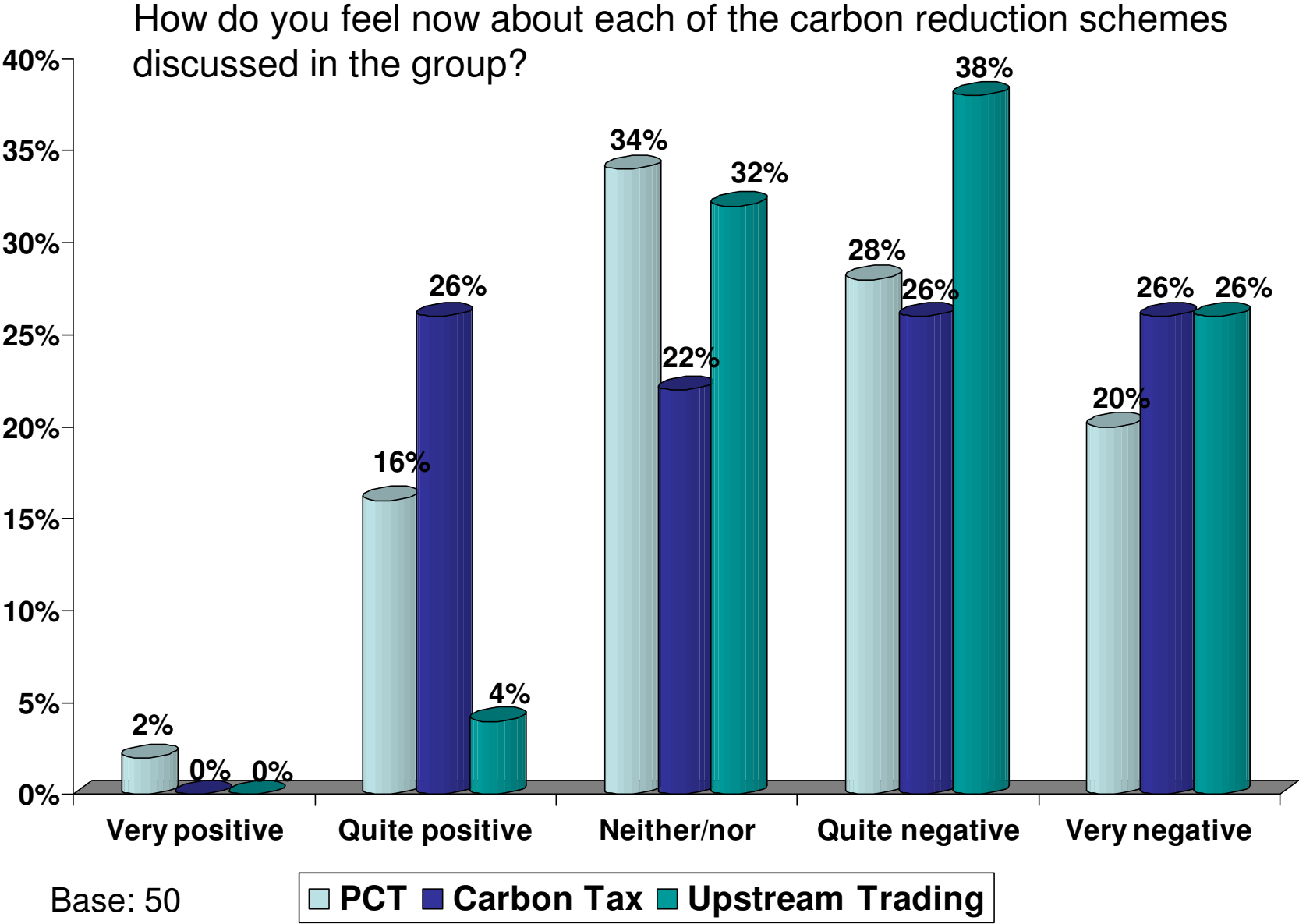


Follow up questionnaire

Has your opinion of Personal Carbon Trading changed since the discussion? Would you say your views are more positive than before, more negative than before or about the same?

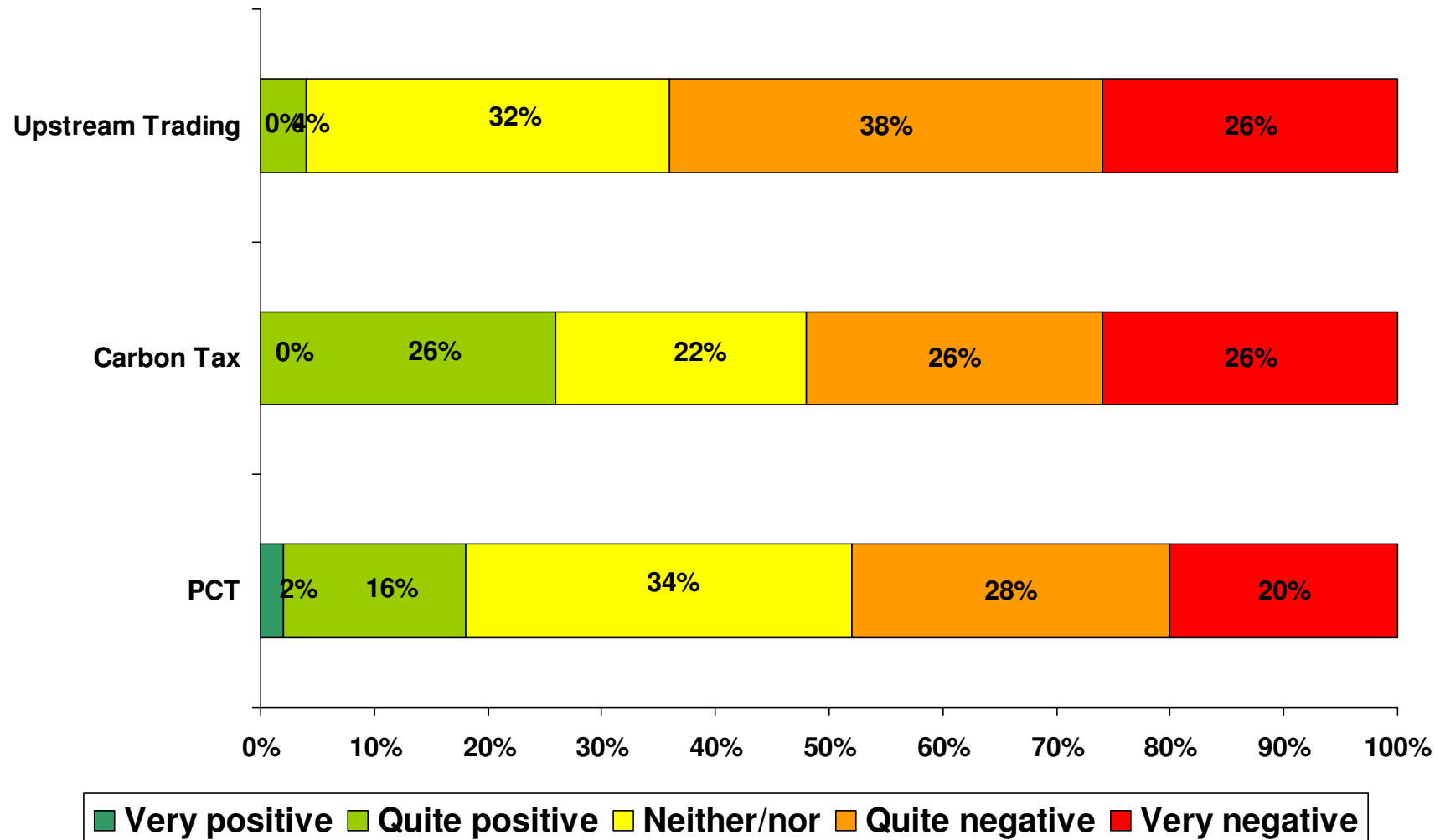


Follow up questionnaire



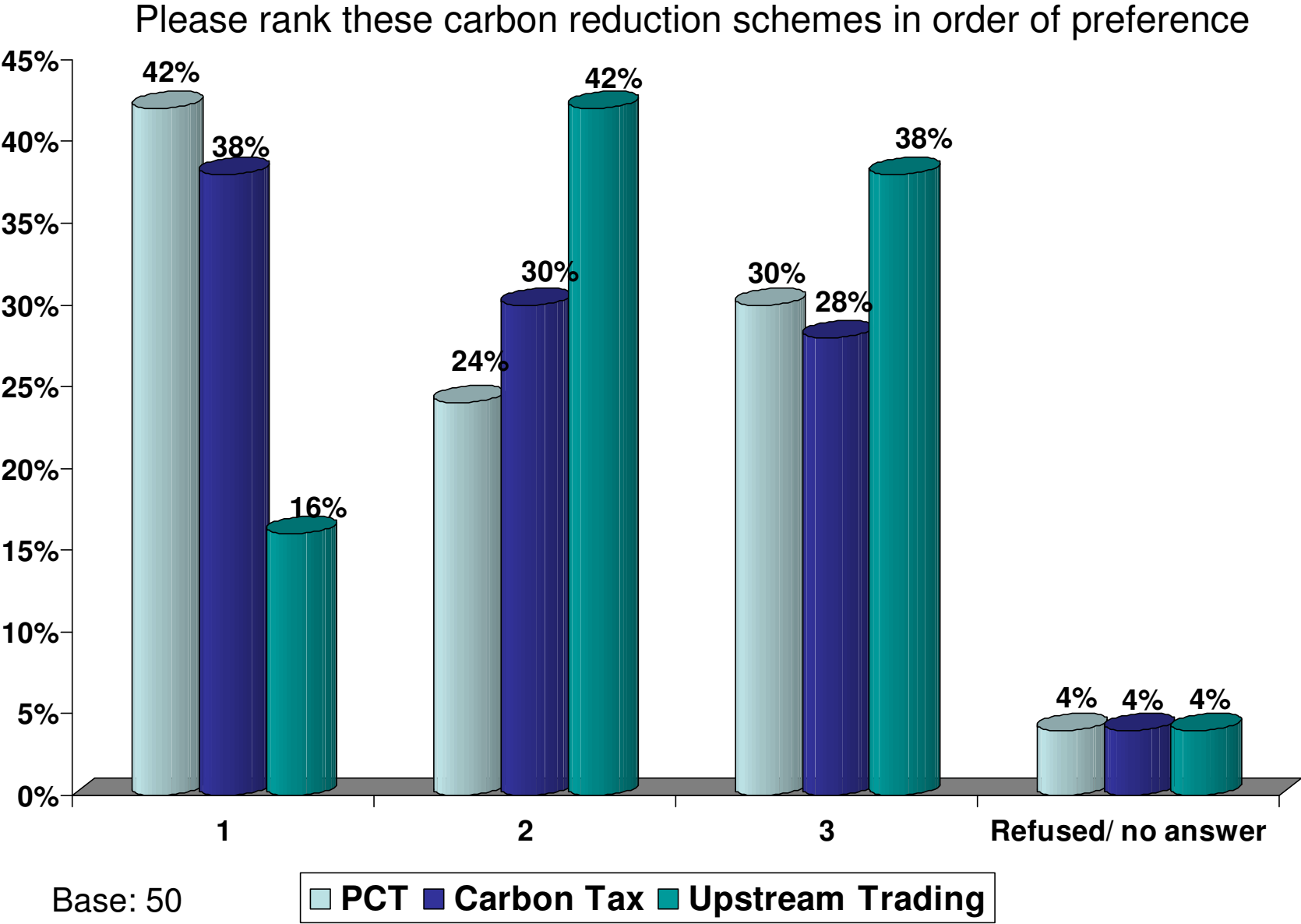
Follow up questionnaire

How do you feel now about each of the carbon reduction schemes discussed in the group?



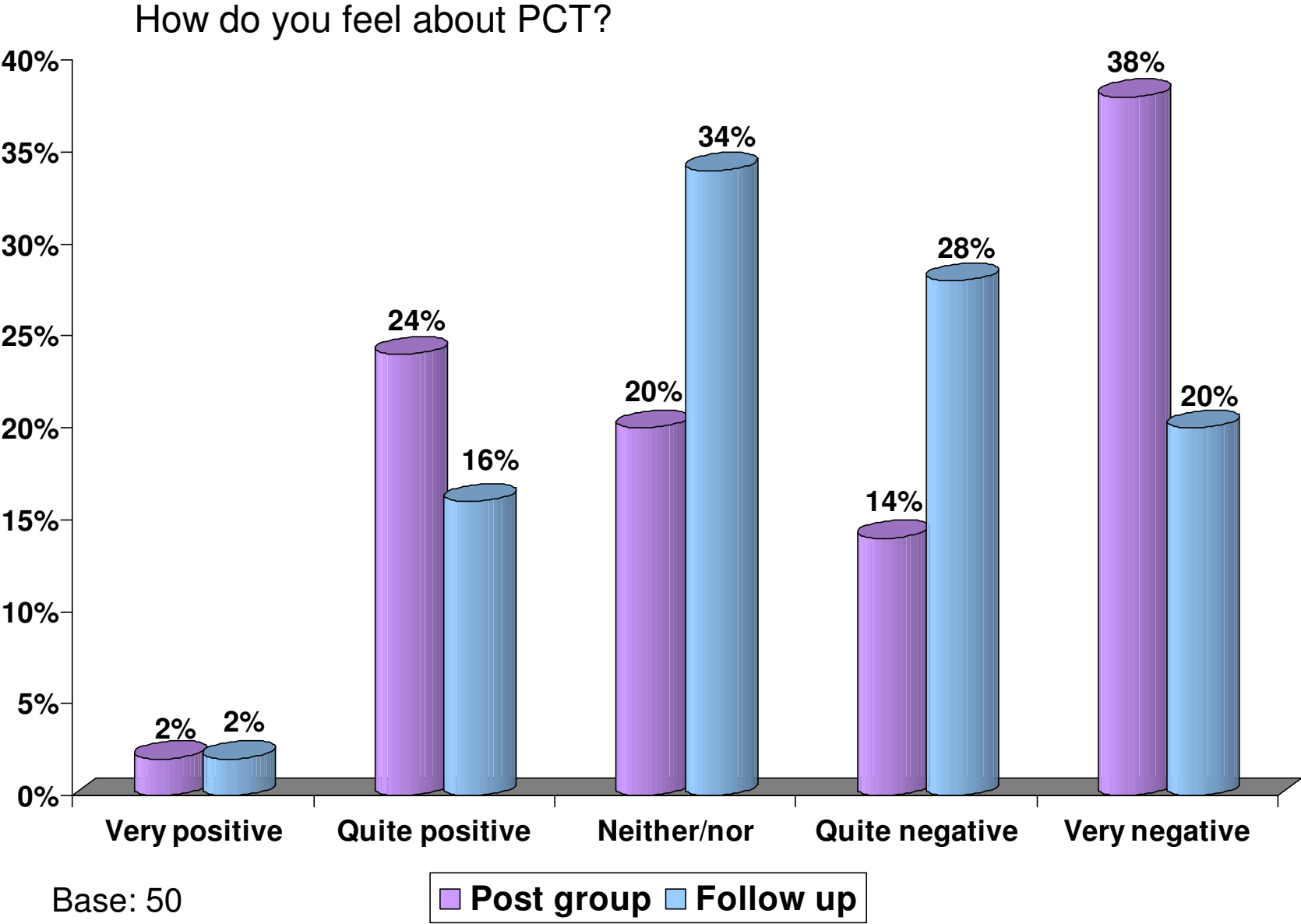
Base: 50

Follow up questionnaire

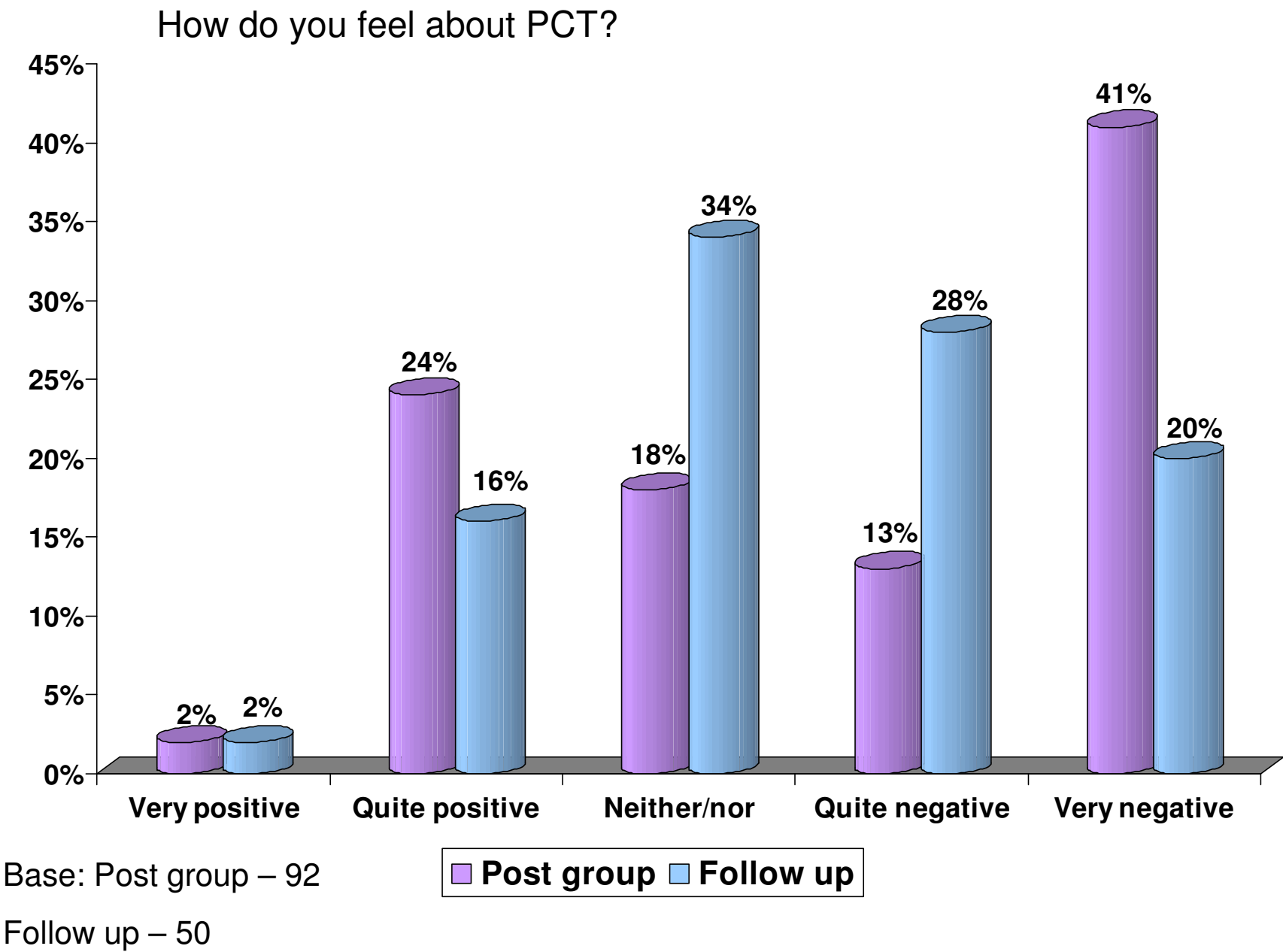


Results compared

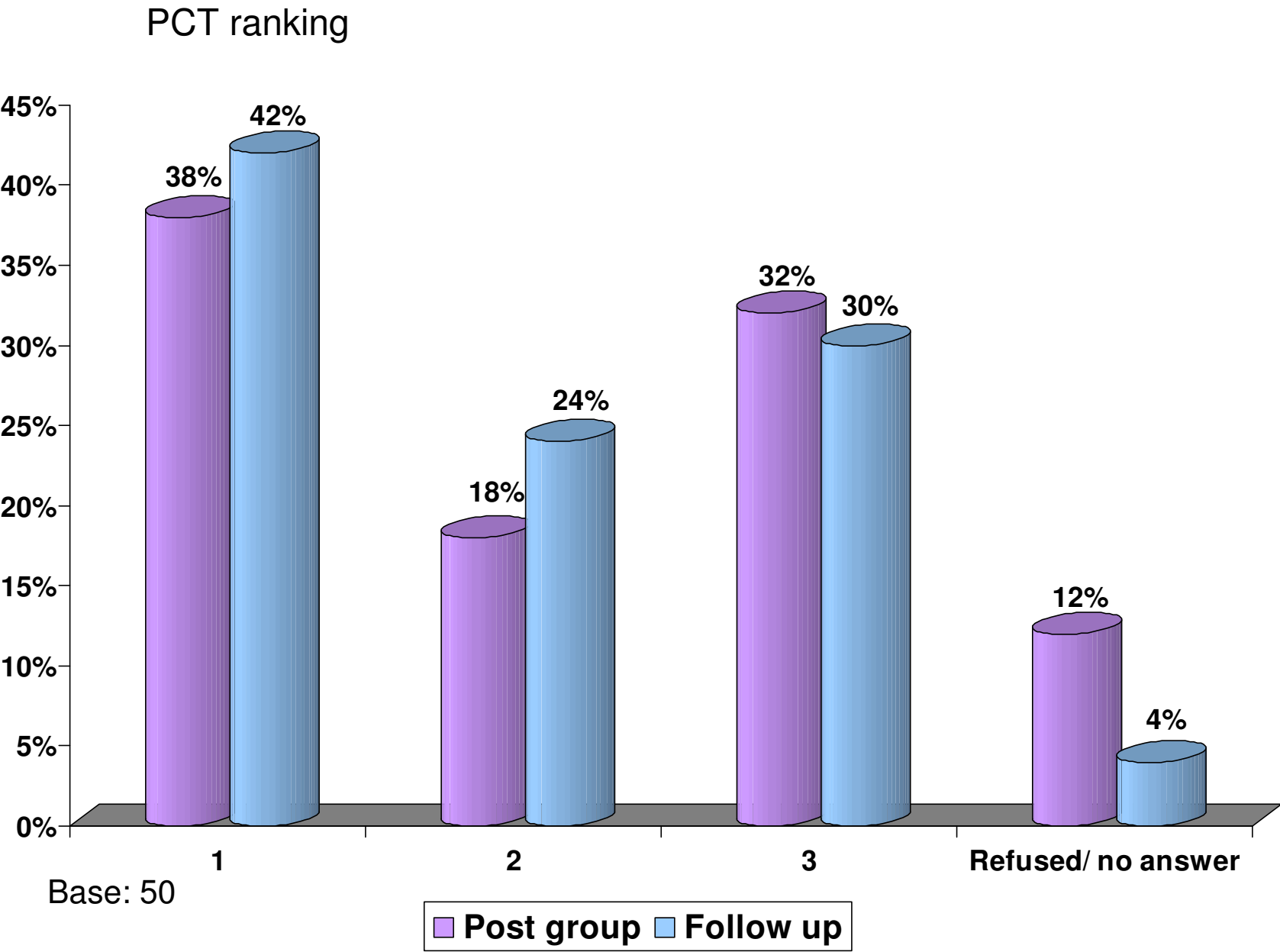
Post group (only those who did follow up) compared to follow up questionnaire



Post group (all) compared to follow up questionnaire



Post group (only those who did follow up) compared to follow up questionnaire



APPENDIX 18:

FOLLOW UP CALLS QUESTIONNAIRE



Carbon Reduction Policies: Follow up Questionnaire

RESPONDENT NAME	
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A few weeks ago, you took part in a discussion group about Climate Change and carbon reduction schemes. We'd just like to ask you a few questions to hear any after thoughts since the discussion and whether your views have changed at all.

Q1 Please could you tell me what you remember about the idea of a Personal Carbon Trading scheme?

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Just to remind you, Personal Carbon Trading is a system whereby everyone is given an equal number of carbon credits from a national carbon budget which they would have to use to buy household energy (i.e. gas, oil or electricity), personal transport fuels like petrol or flights, to cover the amount of carbon that would be emitted.

Q2 Have you spoken to any friends or relatives about Personal Carbon Trading since the group discussion? If so, what sorts of things did you discuss?

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Didn't discuss with friends or relatives ☐

Q3 During the discussion would you say your opinion of Personal Carbon Trading was mainly positive, negative, neutral?

Positive	
Negative	

Neutral	
---------	--

Q4 Has your opinion of Personal Carbon Trading changed since the discussion? Would you say your views are more positive than before, more negative than before or about the same?

More positive	
More negative	
About the same	

Q5 Thinking about each of the carbon reduction schemes discussed in the group, would you say you are very positive, quite positive, neither positive nor negative, quite negative or very negative about...?

	Very positive	Quite positive	Neither positive nor negative	Quite negative	Very negative
Personal Carbon Trading					
Carbon Tax					
Upstream Trading					

Q6 If you had to, how would you rank the carbon reduction schemes in order of preference where 1 is the scheme you liked best, 2 your second best option and 3 your third?

Personal Carbon Trading	
Carbon Tax	
Upstream Trading	

Q7 Why do you say that? **Please indicate why you answered Q6 the way you did.**

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Thank and close

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