



What the public say

about designing climate change
and low carbon interventions

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What the public say

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1. INTRODUCTION

What is this report about?

The UK needs to decarbonise its economy in order to help the world avoid the worst impacts of climate change. Scientific consensus on the role of man-made activity in climate change has increased in recent years, and the UK has signed up to legally binding targets which will require emissions to be significantly reduced.

The public's views and attitudes are important in meeting the critical challenge of emissions reduction. First, governments and other bodies will require public support for any fiscal or regulatory policies, either those on the table now, or others which may be devised in future. They need to understand the potential bases of public support, to give their policies legitimacy and to make sure that the public are able and willing to comply with national and local policies. Second, future government interventions are likely to continue to require individuals to change their own consumption behaviours. Governments, companies, and any other bodies involved in decarbonising the economy should consider carefully the body of work which has already uncovered public views on these issues. If the public's views are borne in mind when designing low carbon policies, products and services, then the public are more likely to support policies and take up products and services.

This report identifies **overarching messages from the findings of a range of studies which have been carried out since 2007**. These studies have investigated public attitudes in relation to climate change, and their views on the sorts of interventions that may combat climate change.

Are there consistent messages in what the public have had to say about climate change? In particular, what lessons can be learned across the different projects when it comes to designing low carbon interventions? And are there any **differences** between the views that the public express in surveys, and those they express in longer-lasting engagements, such as qualitative groups, deliberative sessions and public dialogue?

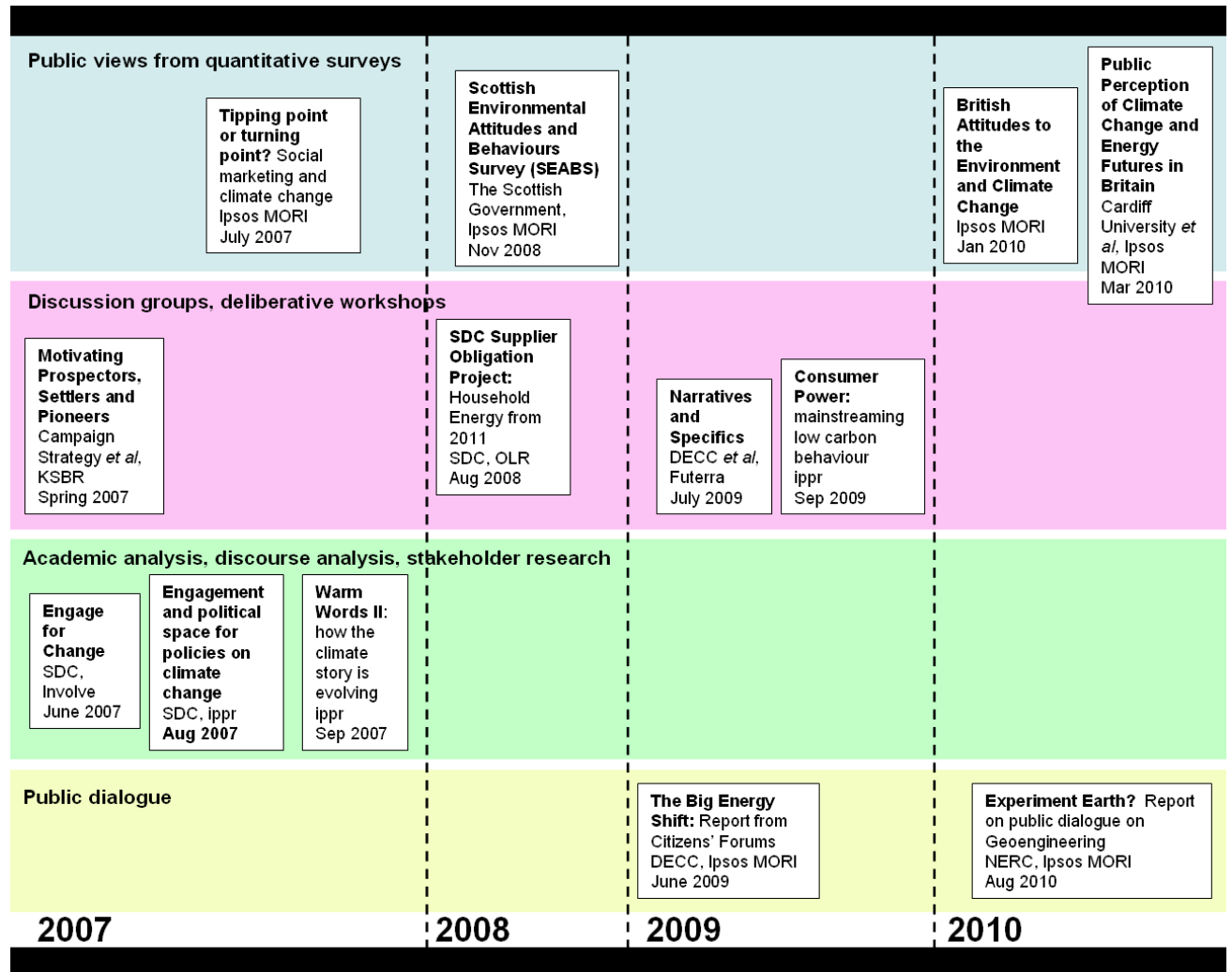
The report points out the implications for policymakers and others, and recommends how public views can be taken into account in future, in:-

- The design of interventions
- The design of future public engagement.

Studies included in this analysis

The table overleaf shows the research projects included in this analysis, in the order in which they occurred (full details given in endnotes).¹

Since 2007 the climate change debate has shifted; culturally, politically and in terms of the kind of public opinions expressed. The context around public opinions is likely to change further. For example: a different media context; the growth and maturing of markets for low carbon products; or new scientific evidence emerging – all this may mean that the debate moves equally quickly over the next few years. Public opinions might change, and new insights might emerge.



2. CONSISTENT MESSAGES

Are there differences between the views expressed in different studies?

Public views are very **consistent** across all these studies. There are no large areas of disagreement between the key findings from surveys and the findings from deliberation, dialogue or other qualitative methods.

This is partly because what the public say depends on what questions they are asked. Different methodologies have tended to focus on slightly different questions, so the findings from surveys, discussion groups and so on tend to overlap, rather than replicate, each other. All these methods form different parts of the overall evidence picture.

The various studies reflect different assumptions underlying the commissioning of all these reports. Broadly, there are two different perspectives on how public views can be helpful in tackling climate change:-

- **“If they understand the problem, they’ll change”** If we make sure that people fully understand the challenge, then they will be more likely to support policies to counter climate change, and even change their behaviour. Surveys asked about attitudes to climate change, belief in anthropocentric causes of climate change, stated willingness to change behaviour, and so on. Some of the qualitative work, including the public dialogues, took climate change as an *agreed starting point* for the discussion of interventions².
- **“It doesn’t matter whether people care about climate change, so long as they change their behaviour”.** Market research and social marketing approaches have been used to investigate public views to help design low carbon interventions. The underlying assumption is that consumers can be persuaded to take up low carbon solutions based on individual needs and motivations, just as they are persuaded to consume other products and ideas. In this model, views on climate change are only relevant if those views can be used in the service of salient ‘hooks’ to ‘sell’ products or ideas. Some of the qualitative and deliberative discussions took this approach.³

Implications and recommendations

These reports reveal that public opinion changes depending on the questions which are asked. This implies that in future, public engagement should be designed based on the intervention which is being researched. Are we seeking to discover how best to “open up political space” for climate change to be discussed,⁴ asking the public to engage with the strategic policy issues? Or are we finding out how individuals can be motivated to change their behaviour? These different aims have practical implications for how public engagement is designed, its objectives, and the detail of how it is carried out. These hypotheses should be surfaced and discussed.

The results from the dialogues, in particular, reveal that framing information given about climate change can affect how participants react to ideas for interventions.

Future public engagement should take account of the fact that public views so far tell a very clear story. Rather than duplicate the methods of previous studies and replicate the learning, future engagements should be designed in a way which moves the climate change discussion forward.

3. PUBLIC ATTITUDES TO CLIMATE CHANGE

What do they think about the problem?

The vast majority of the public believe that climate change is a reality, and are concerned about it. From surveys, six or seven people out of ten believe that the climate is changing. However, the most recent surveys suggest a small, but significant, decline in belief in climate change, from higher levels in recent years.¹

Qualitative studies also suggest that climate change is fairly embedded as an issue; in discussions, only a minority of people do not accept it. It is clearly now 'on the agenda', something people have heard about and have views on.

In the *Big Energy Shift* and *Geoengineering* dialogues participants were given information upfront which suggested that climate change was both a *reality* and a *concern*. At the start of the event, the majority took said that they agreed with this way of describing the complex story of climate change. (This is what we would expect, given the other evidence from surveys and qualitative research that the public largely believe climate change to be happening). A minority, however, believed that climate change was *not* happening, and certainly believed that anthropomorphic activity was not the cause. While the dialogues did not have the aim of changing people's views, a side-effect of the process was that most of this minority did actually change their views by the end of the session, to come more in line with the majority view. The dialogue reports suggest that the factors which made a difference were: clear framing information in the form of presentations which explicitly stated that climate change was happening; experts giving their opinions to back this up; and importantly, a peer group where the majority already accepted the issue. It could be inferred that where the general public believe in climate change, similar processes may have operated.

However, despite general acceptance of climate change, it does not seem to be a clear, simple or particularly motivating issue for the public to discuss. Public views are characterised by the following themes, drawn out from across the reports.

We accept it's happening - but is it our fault, or just a natural process?

In qualitative discussions the public are often undecided about humanity's role in the problem, and hence whether humans can and should do anything about it.².

"We've speeded it up but is it a natural thing that happens anyway?"³

This argument tends to emerge when members of the public are shown low carbon products or policies that they would *not* like to take up. Many of the reports note this behaviour, and the authors of *Motivating Prospectors, Pioneers and Settlers...* describe it as an 'opt out' for participants – a way for them to avoid the difficult challenge of changing their own behaviour, by questioning whether they need to.

Statistically this is reflected in surveys; most commonly people consider that climate change is caused by a combination of human activity and natural processes (47%).⁴

A complex issue to discuss – with nobody cutting through the complexity

Members of the public express uncertainty around many of the mechanics of climate change, including:-

- How the climate (especially the atmosphere) works, why different elements are important
- Awareness of basic science and terminology (e.g. about gases, emissions, carbon and carbon dioxide) *“Is my body giving off emissions?”*⁶
- How greenhouse gases lead to the atmosphere heating up
- The impacts of climate change beyond rising temperatures.⁶

The risk and scale of climate change impacts are also hard to understand. While people believe that there are risks from climate change, and that these risks might affect Britain⁷, it is hard for some to grasp the unpredictability of where, when, and what kinds of impacts might be felt.

*“When is the tipping point and when will we know when we’ve reached it?”*⁸

*“We don’t get much sun in Wales, so some global warming might be nice!”*⁹

The global scale of climate change is also hard to understand. In both the public dialogues, there was time to explore views in depth and people’s real understanding was revealed. Even when given a lot of information, some participants did not (or did not want to) grasp the amount of individual behaviour change which would be needed to make a difference. It may be that this lack of understanding is prevalent in the population as a whole. People have heard about things that they can do, such as recycling, and things that are happening globally, such as ice melting, but don’t necessarily connect the two things.

For participants in the *Big Energy Shift*, seeing specific examples of energy loss from buildings, and amounts of money and energy which would be saved, helped people to understand the problem better.¹⁰

Some complacency – we’ve already changed our behaviour, so it’ll be OK

Qualitative studies often report the public saying they are already doing all they can, and have already changed their behaviour considerably. Though they say this, the research overall gives a more mixed picture. Surveys tell us that 84% say they have reused carrier bags in the last 12 months, along with similarly high proportions of those who recycle.¹¹ However this reduces sharply when it comes to taking energy saving measures *every time*.¹²

When people are pushed beyond complacency in qualitative sessions, to think about further actions which could be taken to mitigate climate change, they become quite demotivated. They worry that even if they take action, other individuals will not; and even if the UK takes action, other countries will not.¹³ This mixture of complacency and helplessness actually acts as another ‘opt out’, so people can avoid further change.

Climate change is old news

Though accepting climate change is happening, participants in discussions do not show great emotional involvement with the idea.¹⁴ The authors of the *Big Energy Shift* report note that some sections of the public think that climate change is a ‘fait accompli’.¹⁵

The authors of the *Narratives and Specifics* report quote a participant who says *“I’m becoming desensitised to climate change”*.¹⁶ They suggest that too much discussion of negative climate change impacts, in the absence of a clear story alongside on

what we can do about climate change, may have created a 'doom and gloom' message which has caused audiences to switch off.

Cynicism over the motives of those promoting behaviour change

In most studies participants are sceptical about whether government is just using climate change as an excuse for higher taxation.¹⁷

There is also a degree of cynicism expressed about the private sector's involvement in climate change, especially where new low carbon solutions are being provided by energy suppliers, or where local solutions involve the private sector.

*"The local fat cats would get the money, people like us would never see it"*¹⁸

But... energy security and rising fuel bills are a motivating part of the story

The public are concerned about energy security, fuel prices and the consequences of running out of fossil fuel supplies.¹⁹ This came through strongly in all the qualitative research.

*"I think this is a more tangible problem isn't it, because this is something which is actually affecting us"*²⁰

Also, when people talked about why they had taken individual action against climate change, combating rising fuel bills was the reason they most often gave for doing so.

Implications and recommendations

These studies paint a picture of a public who know climate change is a problem. It has become a mainstream part of life and they have heard about it for a while now. In fact, they are telling us that they have heard a lot about how complex the problem is.

But while the public say they are willing to do more in principle, they are 'stuck'. They are not sure if they are doing enough; don't quite know what to do next, and are unsure about whether they can have an effect anyway. They do not know what the next stage of action on climate change would involve, either for themselves or for governments.

In this state of uncertainty, have the public 'gone off the boil', and is this why they are starting to deny the problem?¹

However, they are interested in energy security, so there may be potential to recapture the public's interest by telling a story about insulating the UK against fluctuating fuel prices.

The SDC and Involve's *Engage for Change* report cites the Make Poverty History campaign as a relevant case study. This campaign succeeded in "*getting a complex meaning to as many people in the UK as possible using a simple message*". Crucially, this message was linked to a set of very simple *actions* which people could immediately do.¹

If the public are telling us that they feel confused and stuck when faced with an overly complex story, Those who wish the public to change their behaviour learn from Make Poverty History, and create simpler calls to action which are easier to act upon.

The next section describes who the public thinks is responsible for tackling climate change, and how they want Government to communicate with them about it.

4. THE POLICY NARRATIVE

Public think the Government is most responsible

When the public are asked who should take the lead on climate change, the government is the most often mentioned.²¹ Qualitative research supports this and illustrates that the public see government as having a key role.²²

Why do people believe that Government should take action?

First, climate change is seen as a **societal** problem. Consumers feel they should not have to bear the financial burden of switching to a low carbon economy themselves. Government has the **overview** of what would be best for society as a whole. Furthermore, it is a **serious** problem so they feel it should not be 'left to the market'.

"If they're really serious about doing stuff, why don't they just tax the green issue things?"²³

"Eventually the Government has got to say – we think this is the best way forward. We as individuals can't make that decision, as we don't know what it is".²⁴

Second, at the moment, the public's language in research suggest that they are familiar with a '**moral**' discourse around climate change. Public campaigns such as Act on CO₂ have focused on sacrificial actions - giving up luxuries, thinking about others, and so on. The public question - if the government is asking *them* to change, then how far is government itself changing? Is it 'giving up' its own popular, high-carbon policies, bearing the risks of new technologies, or is it just carrying on as usual?

*"I think if **they want us to save energy to save the world [bold added]** then it should be installed free".²⁵*

"It's 'Do as I say', isn't it – not 'Do as I do'" .²⁶

Local government, local communities, and the voluntary sector less so

People consider local government, local communities and the voluntary sector to have less responsibility for action on climate change than the national government.²⁷

The *Big Energy Shift* and *Supplier Obligation* projects looked at community-level solutions. Participants tended to be concerned about who would deliver the solutions and how involvement would be motivated.²⁸ In particular, people are concerned about the motivations of commercial organisations such as energy companies and developers.²⁹

It may be that people have few templates for how community-level activity can be organised. For instance, when home energy clubs were discussed in the *Big Energy Shift* study, people could not envisage the type of people who might get involved, and how they themselves might join in and benefit.³⁰

The public would like to hear the narrative

Qualitative and deliberative findings suggest that the public respond well to an **overarching narrative**. This 'big story' might draw on climate science, but more to the point focuses positively on what the government is going to do, what individuals

have to do, and how both sets of efforts help achieve targets. Recommending such a narrative was one of the key conclusions of the *Big Energy Shift* report.

The ippr's 2007 report *Engagement and political space for policies on climate change* comes to a similar conclusion, asserting that a **well-framed story** about the challenge of climate change, setting out the challenge as a set of clear **choices**, would help to open up the political space for debate on climate change.³¹

The authors of *Narratives and Specifics* again agree with this idea, and make recommendations on the ingredients such a narrative should have.³²

- A positive story setting out the goal – what kind of society are we going for?
- Blunt choice between this future vision, and the results of not doing it; the impacts of climate change for the UK.
- A clear five year plan with actions and measurable outcomes.
- Locally focused specific policies and interventions.

The public are particularly keen to hear about specific, joined-up interventions which form a coherent programme of effort and link to the government's narrative, and feel that this would assist them in their own behaviour change.

Participants in qualitative work tend to focus on the national scale, assuming local efforts will be supported by the national narrative.³³

Implications and recommendations

The public say they would like a **clearer story** about what Government is doing, and what it wants them to do, to solve climate change. The problem is seen to be a shared problem, so people look to government to help create a shared solution, and to measure progress towards targets.

While the public also say that they have heard a lot about what Government wants them to do, they have heard less about what government is doing. Though this may simply be another 'opt-out' (i.e. public participants in research finding ways to avoid having to take action personally), it could be hypothesised that hearing more about how government is changing its *own* behaviour might help consumers support climate change initiatives in their turn.

The new Government may have an interesting new story to tell on this, given its policy emphasis on creating a 'Big Society' through devolving power to communities. Voluntary and community groups may be able to play a more substantial role in the story.³⁴

However successfully introducing low carbon solutions does not have to rely solely on government communication and policy. In the next chapter we will see that the public are motivated by economic incentives, such as more efficient and cheaper products, so there may be scope for the private sector to design low carbon solutions for individuals and households which appeal to consumers. .

5. IMPLEMENTING SOLUTIONS

Individuals have some responsibility

Most people agree that they have some responsibility for tackling climate change.¹ And people do think that 'green' behaviours like energy saving and recycling are important.² But willingness to take action is not the same as actually acting.³

As mentioned in the first chapter, some studies use marketing theories and principles to establish pragmatic insights into what would make people change their behaviour. Sometimes, this does not involve a discussion of climate change at all.⁴

Different segments of the public are motivated by different things

Most of the deliberative and qualitative projects either work to an audience segmentation, or recommend that segmentation should be carried out.⁵

The **Values Modes** segmentation is a needs and values based segmentation which uncovers what people really want out of life, and what motivates them to behave in different ways. '**Prospectors**', including '**Now People**', are an important group. Now People are consumers with mass tastes, but motivated by celebratory messages and keen to make status purchases which will impress their peers. They are a crucial target for interventions, as they are active in diffusing behaviour change through society.⁶

Overall themes on motivation

The need for segmentation makes it very difficult to create one single story on what the whole public says might motivate them. Having said that, here are several themes which were common across studies dealing with different groups. When it comes to interventions, specific groups should be targeted, which will make all the difference to the detail of the way interventions are designed and communicated. Therefore, while this is an overview of some of the motivating factors, reading the original reports is necessary to understand the insights in depth and how they apply to different groups.

Save money now – and reduce upfront costs

'Save money now' is the strongest motivator.⁷ Smaller scale products most appeal when the money-saving benefits are explained.⁸ Energy-saving home products tend to involve investment and then long payback times, so are not always seen as a saving. Some new low-carbon products are no cheaper, and seem no more attractive than their high-carbon alternatives.⁹

The public tell us they want far higher financial incentives than they have so far been offered to adopt large-scale insulation or microgeneration projects.

For some, the cost itself is a barrier.

"If you haven't got £5000 you can't, no matter how much you would like to".¹⁰

Others could afford the costs, but see new products or services as too risky. This is why many participants ask for government to help bear the risk of being an early adopter. They want "carrots not sticks" to encourage them to take up innovations.¹¹ Ideally low carbon interventions would give the user an immediate payoff, not a longer-term climate change benefit for the whole of society.¹²

Where people have made lifestyle changes already, this is usually in order to save money on bills.¹³ While people in surveys say they are concerned about rising fuel bills,¹⁴ in qualitative research there is a vaguer sense of how much fuel bills might go up and how people might calculate the benefits of investing in new technologies.

This meant that while some are concerned about bills, they are equally worried about other future economic instabilities. They do not want to be tied into payment plans and processes, unable to switch suppliers or move house. They do not want to take on debt, as equity release or as other loans, which might leave them out of pocket.¹⁵

Being in control of home energy and of consumer choices more generally

This theme of *control* appeals to the public across all the qualitative studies.¹⁶ Energy meters were liked, as they helped people take some control over their energy use.¹⁷ Behavioural advice was also appreciated.¹⁸ Control was so important it was sometimes more valuable than saving money.¹⁹

Tangible things

Ideas and products that really work in practice are appealing. Examples and demos are reassuring.²⁰

“So how many are there already though, it doesn’t say how many have already been done does it?”²¹

Fit with aesthetics of home, desire for taste and status

In the *Big Energy Shift*, double glazing was seen as the simplest thing to take up as it was already “*normal*”, well-established, looked good and would enhance the saleability of a house.²²

The Now People also expressed this desire for products and services which were exciting and novel, yet at the same time fit with their aesthetic ideas without being ‘way out’ in design.²³ The researchers saw this as specific to the Now People, and other projects have also picked up on this theme (perhaps there were some Now People within the wider general public group at the *Big Energy Shift*).

For those wanting to communicate specifically with the Now People, the researchers who spoke with them recommended using celebrities with mainstream appeal as exemplars to ‘normalise’ these technologies and help Now People feel confident that they are high status choices.²⁴ Though interventions need to be designed for individual segments, this idea may have potential across wider groups in society.

Desire for self-sufficiency

When responding to microgeneration, the public are interested in the idea of being self-sufficient. This links with their desire to keep control of energy bills and to have a more empowered relationship with energy suppliers.²⁵ In surveys the public are very keen on renewables.²⁶

Solar panels are seen as the most acceptable face of microgeneration, suggesting an appealing self-sufficiency.

“All new houses should be built with solar panels”²⁷

Solar has potential for takeup by a wider audience, if suppliers can communicate that there are no problems with planning permission or reliability, and if some of the upfront costs can be defrayed.²⁸

Positive, congratulatory, light hearted communications

Across all the projects the idea of sacrifice and 'worthiness' does not appeal. This is particularly relevant for Now People who want to be told how well they are doing rather than focusing on the difficulty of meeting the climate change challenge. Home energy audits are appealing, for example, but at their best they provide interesting information, rather than make people feel guilty or overwhelmed with what they should do.

"Dare I say, there's still got to be a slight entertainment element for us to pay attention."²⁹

Implications and recommendations

The consistency of results from this wide range of research studies demonstrates that we know a lot about the public's overall attitudes to climate change.

Quantitatively, it will be important to continue tracking the **emergent trend of disbelief** in climate change.

We now **know a lot about public attitudes to climate change** and what people say about their willingness to change behaviour; so it may not be necessary to carry out further public dialogue on these broader subjects.

However should the new government need to engage the public on *new* aspects of national climate change strategy for the country, (bringing in new considerations, or testing new policies), then the findings from previous dialogues demonstrate that it is possible to engage and motivate members of the public to talk about this in depth.

Across the reports analysed, the authors in general recommend **segmenting the public further and engaging them** in the design of tailored interventions.

Co-creation approaches could be used, encouraging stakeholders and narrowly specified segments of the public to work on concepts under development. Views on such concepts could also be **quantified**, to understand the potential reach of new ideas.

The public say that they think government should lead the way in implementing low carbon solutions and bear the costs of innovation. At the moment individuals see the barriers – upfront costs, and risks – more clearly than they see the benefits of low carbon lifestyles. Demonstrably, the public are currently voting with their feet. Unless interventions can be made more appealing we can assume that it will not be individual citizens who will take the lead.

The public say that they are open to the idea of low carbon solutions. But though they see the potential of a variety of different ideas in principle, they did not give unqualified support to any of the concepts they were shown during these research studies.

It may be that shifts towards purchasing low carbon home energy products are occurring already, as incentives such as the Feed In Tariff and Renewable Heat Incentive are communicated. But the overriding impression from these studies is that the public are waiting for well designed products and services, along with inspiration and a catalyst.

These might include local and national government incentives; incentives from suppliers; clever and innovative design of aesthetically appealing products; and careful targeting of communication at the right segments of the population. The next step is to create these ideas and bring them to the public.

REFERENCES, SUPPORTING EVIDENCE AND FURTHER ANALYSIS

1. INTRODUCTION

¹ This report does not cover the exhaustive list of the projects which have been carried out. There are a great number, commissioned by government, NGOs, and consumer interest bodies as well as individual commercial studies carried out by corporates and their advertisers. The reports analysed here are:-

Study	Date	Authors	Method
Tipping point or turning point? Social marketing and climate change	July 2007	Ipsos MORI	Synthesis of polling data and analysis of social marketing theory applied to climate change.
Scottish Environmental Attitudes and Behaviours Survey 2008 (SEABS)	Nov 2008	Ipsos MORI on behalf of the Scottish Government	Nationally representative survey of 3,054 adults in Scotland
British Attitudes to the Environment and Climate Change	Jan 2010	Ipsos MORI	Synthesis of polling data
Public Perception of Climate Change and Energy Futures in Britain: summary findings of a Survey conducted in January-March 2010. Technical Report (Understanding Risk Working Paper 10-01).	Mar 2010	Fieldwork conducted by Ipsos MORI, analysis by Ipsos MORI, Understanding Risk Research Group, Cardiff University. Funded by UK Economic and Social Research Council, Leverhulme Trust	Nationally representative quota sample of 1,822 British population aged 15-75+.
Motivating Prospectors, Settlers and Pioneers to Change Behaviours that Affect Climate Emissions	Spring 2007	Chris Rose (Campaign Strategy) with Pat Dade (Cultural Dynamics) and John Scott (KSBR)	10 x 2-hour discussion groups held across 4 locations in the West of England, recruited according to Value Modes segmentation. 8 groups were home-owners who had children still living at home, one group retired/ 'empty nesters', one group renting accommodation with no children.
SDC Supplier Obligation Project: Household Energy from 2011	Aug 2008	Opinion Leader Research on behalf of the Sustainable Development Commission	Stakeholder and public engagement process. 12 x discussion groups Stakeholder analysis of messages emerging.

Narratives and Specifics: Generating visible public support for climate action	July 2009	Futerra on behalf of the Department of Energy and Climate Change and the Sustainable Development Commission	7 x 3hr focus groups covering all Defra segments plus read across to 'values modes'.
Consumer Power: mainstreaming low carbon behaviour	Sep 2009	ippr	6 x 3hr deliberative workshops, in London, York, Bristol.
Engage for Change: the role of public engagement in climate change policy	June 2007	Involve on behalf of the Sustainable Development Commission	Project A: Literature review, case studies, informal stakeholder interviews, stakeholder discussion workshop. Project B: Literature review, 18 stakeholder interviews, stakeholder discussion workshop.
Engagement and political space for policies on climate change	Aug 2007	Ippr on behalf of the Sustainable Development Commission	Literature review, case studies, informal interviews.
Warm Words II: how the climate story is evolving	Sep 2007	ippr	Discourse analysis and semiotics based on media representations of climate change and interviews
The Big Energy Shift: Report from Citizens' Forums	June 2009	Ipsos MORI for the Department of Energy and Climate Change / Sciencewise	9 x reconvened citizens' forums of 30 householders in each, in locations across England, NI, Wales. Each forum lasted 2 days with additional site visits, home interviews, website, individual tasks. Reconvened event brought together participants from across locations in London with stakeholders.
Experiment Earth? Report on public dialogue on Geoengineering	Aug 2010	Ipsos MORI for Natural Environment Research Council / Sciencewise	3 x general public forums of 30 householders, in Cornwall, Cardiff and Birmingham. Each forum lasted 2 days. Reconvened event brought together participants from across locations in London with stakeholders. Online survey of 65 stakeholders, open access events and additional discussion groups.

² Public dialogue explicitly avoids trying to change participants' opinions. However the framing information participants are given sets parameters for the discussion. In these dialogues, the potential causes of climate change were left out of the discussion, but both dialogues explicitly suggested 'climate change is happening' as the start point of discussion. This meant that participants had agreed to assume, for the purposes of the discussion, that climate change was happening and that anti-climate change interventions might be necessary. Participants' opinions from the dialogues should be taken as the opinions of those who have heard this framing information, rather than the opinions of the public overall.

³ The two points of view are explained in more detail in *Motivating Prospectors, Settlers and Pioneers...*, p1.

The authors of *Consumer Power* highlight that doing research based on the second assumption - looking at low carbon as simply a set of consumer choices - brings into play a wider discussion. Is motivating people on climate change about creating “a *fundamental shift in values against consumerism*”? Or is the creation of low carbon products and services just one commercial marketing challenge among many?

This wider and more philosophical discussion will not be discussed in detail here, but should be taken into account when public engagement is considered.

⁴ *Engage for Change*, p5

2. PUBLIC ATTITUDES TO CLIMATE CHANGE

¹ In 2006, 88% believed the climate is changing, and 68% said they had personally seen evidence of this. (*Tipping Point*, p12). In 2009, Ipsos MORI reported that this had fallen, and just under three-quarters (73%) now believed that climate change is happening. In 2010, this dropped to 60% (*British Attitudes to the Environment*).

The Cardiff research team also noted decline in belief in climate change in their 2010 survey. 78% of the public believed the climate was changing in 2010, as against a much higher 91% in 2005's survey. *Public Perceptions of Climate Change and Energy Futures* (p17) reveals that concern about climate change has also dropped – 71% concerned, down from the 82% who were concerned in 2005.

² *Consumer Power*, p5

³ *Motivating Prospectors, Settlers and Pioneers...*p11. In the *Geoengineering* discussions (*Geoengineering*, p26), participants also asked at the beginning of the sessions about long term natural trends, and asked how we would know if climate change was really a problem, or whether it was a natural process (the implication being that natural would *not* be a problem).

⁴ *Public Perceptions of Climate Change and Energy Futures*, p17

⁵ *Consumer Power*, p17

⁶ For example, issues like ocean acidification were discussed in *Geoengineering*. None of the participants had heard about this before. Across the other qualitative projects, participant views on climate change are mostly cited as being about their views on warmer weather. There are a few mentions of ‘natural disasters’, though not a lot of detail on what the public think these might involve. Participants tend to question whether different occurrences are due to climate change rather than being certain.

“The coastlines are eroding – is that to do with climate change?” (*Motivating Prospectors, Pioneers and Settlers...* p11)

In quantitative research, people are uncertain; a third believe that the UK will get wetter as a result of climate change, but a quarter also believe that the UK will have better weather and more sunshine. (*British Attitudes to the Environment*).

⁷ Two thirds agree that there are risks to people in Britain from climate change. This has dropped slightly from 2005. Two thirds also agree (66%) that there are risks to people in Britain from climate change, decreased from 77% in 2005. (*Public*

Perceptions of Climate Change and Energy Futures in Britain, p17). In Scotland, two thirds agree that the effects of climate change are near enough in time to be a concern. (*SEABS*, p11)

⁸ *Geoengineering*, p65

⁹ *Big Energy Shift*, p38

¹⁰ In *Geoengineering*, even after three days' debate, some participants supported planting trees and using Biochar fuels, but discounted or didn't understand the scale of production which would be needed to have an impact on greenhouse gases. Imagery which demonstrated how much living space each person on the planet has, and how much of this would have to be taken up by trees, made the issue clearer than talking in terms of the population as a whole. People then realised in a new way the scale of the problem, and the potential scale of ways to treat the problem.

This would not have emerged within the first couple of hours of a qualitative session – which suggests that these issues take a long time to sink in and need to be communicated in a variety of different clear, personal and vivid ways. (*Geoengineering*, p64)

¹¹ The *Tipping Point* report states that such as reusing wrapping paper or gift bags (21%), reusing plastic food containers (23%) or using home composting (19%).

¹² *SEABS*. The Consumer Power report also cites previous ippr studies (Retallack, S and Lawrence, T, 2007, *Positive Energy: Harnessing people power to prevent climate change*) to explain that there are a huge group of people who are not yet making significant changes to their own lifestyles – flying, driving, and so on, more than ever.

However, in the SDC's *Supplier Obligation* study, the public told researchers they had already taken up all the energy-saving or environmental measures they could. The stakeholders who analysed the results from these groups identified a gap between this perception and the reality of what would really have to be done to have an effect on emissions (*Supplier Obligation*, p39)

¹³ This was a concern expressed in most of the qualitative projects. The *Geoengineering* report asserts that these views lay behind some participants' belief that mitigation (cutting emissions and energy use) will never succeed in solving climate change. Participants in the dialogue said that they thought others were "*Head in the sand and maybe a bit selfish*" (*Geoengineering*, p28). In the *Big Energy Shift*, participants made similar comments, "*There are a lot of people with no social conscience who will basically ignore all this and do nothing*". (*Big Energy Shift*, p91)

¹⁴ For example, the *Consumer Power* report states that their groups were '*Notably less animated following the introduction of climate change as a topic...some found the issue very boring. Others dismissed it as 'faddy' and trendy*'. In *Motivating Prospectors, Settlers and Pioneers...* a few telling comments are also mentioned, as participants say things like "*It's quite scary but nothing seems to really be happening ...all we get is warmer summers*" (p14)

This may reflect the fact that the problem seems vague at the same time as depressing; which is not the emotional state likely to encourage the public to spring into action on climate change.

¹⁵ *Big Energy Shift*, p19. The Cardiff quantitative study also speculates that the reason public confidence in climate change is declining may be that people have become bored with hearing about climate change narratives. Without a call to action on climate change, awareness of the problem becomes diluted.

¹⁶ *Narratives and Specifics*, p12

¹⁷ For example, *Supplier Obligation* p37

¹⁸ *Big Energy Shift*, p79

¹⁹ 81% are concerned that the UK will become too dependent on importing energy in future (*Public Perceptions of Climate Change and Energy Futures in Britain*, p12)

²⁰ *Narratives and Specifics*, p15).

3. THE POLICY NARRATIVE

²¹ Governments are most often mentioned as responsible for climate change action. 42% believe that 'governments' should take the lead on acting on climate change. In this 2010 survey, the proportion believing that governments are responsible for taking action has slightly increased from 2009, and the proportion believing that individuals should take responsibility has decreased. (*British Attitudes to the Environment and Climate Change*).

In another survey in 2010, 32% believe that 'national governments' are mainly responsible, and 30% say 'the international community', which is consistent with results when the public were asked the same questions in 2005. (*Public Perceptions of Climate Change and Energy Futures in Britain*, p18) In this same study, most people (68%) said that they would be in favour of a proposal to spend taxpayer's money on British projects designed to tackle climate change.

²² The *Supplier Obligation* study, the *Big Energy Shift* dialogue, and the study on *Motivating Prospectors...* all showed members of the public ideas for low carbon technologies and behaviours that they could take up themselves, and discussed what incentives government would need to put in place to help them do so.

Participants in both these studies wanted a clear signal from government that government is prepared to invest in tackling climate change on the widest societal level, involving fiscal policies and regulatory policies, as well as helping individuals take up new ideas.

²³ *Consumer Power*, p17

²⁴ *Big Energy Shift*, p20

²⁵ *Supplier Obligation*, p37

²⁶ *Consumer Power*, p17

²⁷ In one survey on influence and agency, 66% of people believed that the UK government could have a large influence on limiting climate change, but only a quarter (26%) believed that their local council could have an influence. Only 9% believed that the local community could have an influence. Of course, this may reflect the fact that people know national and international policies will affect larger numbers of people, so the influence is going to be greater. (*Tipping Point*, p24)

This does, however, chime with qualitative studies; the local community and local government are not often mentioned spontaneously as having responsibility and influence.

²⁸ Large scale renewable energy projects in the community are supported in the *Big Energy Shift*. These are seen as a quick win to change energy consumption of hospitals, schools and shopping malls, and would require local and national government intervention. Rural communities liked the idea of wind or wave power especially where they could imagine the benefits going back to their own community; but would need to be convinced as to how the community process could be orchestrated and managed, who would be in charge, and how quality standards could be enforced.

²⁹ *Supplier Obligation*, p38 and *Consumer Power*, p24

³⁰ *Big Energy Shift*, p74

³¹ The authors argue that this would help to create a more genuine and democratic public engagement in debating the issues and tradeoffs necessary in decarbonising our economy. The report recommends that communicators should frame the story as a set of choices between appealing and unappealing futures (as in, the long term financial consequences of no action vs. of taking action). This would create the space for the public to debate the trade-offs in different courses of action.

This would also create a climate of opinion where large-scale low carbon interventions become more politically viable. Providing a narrative which sets the framework for discussion may help move the debate forward towards more concrete actions. For example, moving discussion away from 'is climate change a reality?' to 'what economic activities will best strengthen our resilience in future to fluctuating energy prices?'

Public views expressed in surveys support the theory that framing the story differently creates different opinions about interventions. For example, support for nuclear power is higher when the question sets a context of concerns about climate change and energy security. (*Public Perceptions of Climate Change and Energy Futures in Britain*, p14)

³² *Narratives and Specifics*, p10. The DECC team who designed the Narratives project, to look at the type of narrative which would work, were building partly on findings from the *Big Energy Shift* which had recently taken place.

In the *Big Energy Shift* workshops, this idea of a framing narrative was, to some degree, 'tested'. The whole public dialogue was framed in terms of energy security, protecting the UK against rising fuel prices and helping those in fuel poverty, as well as meeting emissions reductions targets.

The results show the kind of discussion which occurs after such a frame has been put in place. The public concluded that they supported national investment in low carbon, and that they might well take up some low carbon technologies if suitably incentivised. They also called for a 'big story' about what the government is doing (*Big Energy Shift*, p20), to contextualise the individual efforts which people would have to make.

Warm Words also supports the public's call for a narrative. This report recommends a coherent narrative to make the story of climate change more coherent and to make individual policy efforts more salient and more likely to work. The authors advise

linking up the many different actions which can be taken to a large story or set of communications themes. In this 'meta policy' area of climate change, they argue that this is particularly important, because action on climate change requires such a wide range of interventions across such a wide range of private and public life.

"Climate change is a complex and abstract issue, encompassing many different concepts, objects and possible actions: 'CO2'; 'carbon'; 'ozone'; flying; driving, leaving the TV on standby...and more. It is complex, but all these concepts and actions are presented to a general audience in a complicated and unfathomable interrelationship. The abstraction and intricacy of the climate change discourse can become reasons to ignore it. There is a clear need to divide up or organise possible actions so that they are more easily digestible". (Warm Words, p8)

³³ Participants in the *Supplier Obligation* project recognised that low-carbon consumer interventions would not be simply consumer choices, but could relate to the world of government policy and regulation as well. For instance, in-home installation of new technologies might have implications for council tax, planning permission, and a range of other local policies, which at the moment are not necessarily coordinated to make it easy to take up these measures. Ideally, local government and national government would pull in the same policy direction.

"If council tax was actually varied depending on how energy efficient your house was... that might be a driver" (Supplier Obligation, p25)

In some sessions, the public stressed that the government should also be helping industry and local government to cut emissions. They want to hear the narrative about this, but more importantly to see changes in commercial and governmental behaviour. If this does not happen, the public say it will undercut their efforts and demotivate them.

"I'm trying to use things responsibly and be conscious of my actions but it frustrates me when I look at manufacturers or the supermarkets - the amount of packaging and waste - why isn't more being done about that?!" (Motivating Prospectors, Settlers and Pioneers... p23)

"You talk to me about saving energy in my own house – drive up the A40 and see all these offices at five o'clock in the morning with all their lights on...you've got all these offices with their lights on and they're talking about saving electricity". (Consumer Power, p18)

To some degree, this is another 'opt out'; consumers find it easier to point the finger at others rather than make changes themselves.

That said, it seems clear that visible changes in public estates or in corporate behaviour would help the public set a positive context for their own behaviour change. Not doing this seems particularly risky. If government uses a moral argument to ask people to change behaviours, it must be seen to be acting with integrity and changing its own behaviour too. Inconsistency ("do as I say, not what I do") will not be tolerated.

³⁴ However, it will also be important to keep abreast of shifting public views. Public perceptions of straitened national finances may have already created a new context for this narrative, which might change the way the public responds to communication. All the research studied here took place pre-election 2010.

4. IMPLEMENTING SOLUTIONS

¹ 71% agree that it is their responsibility to help do something. (*Public Perceptions of Climate Change and Energy Futures in Britain*, p18) However, only a quarter think that individuals have the greatest responsibility to act on climate change. Fewer believe this in 2010 than did in 2009, when a third thought that individuals should take the greatest responsibility (32%). (*British Attitudes to the Environment and Climate Change*). This suggests that there is willingness to do something, but a need for other actors to take part as well as individuals, and potentially a small decline in perceptions of individual agency.

² The public tell us that they are willing to change their own lifestyles to a degree. 65% of British people agree that they are prepared to reduce their energy use; and over half are willing to pay up to £10 more on energy bills to ensure renewable sources. (*Public Perceptions of Climate Change and Energy Futures in Britain*, p18)

This drops to 30% when Scotland is researched separately, however, perhaps reflecting socioeconomic factors. (*SEABS*, p28). The vast majority of the Scottish public think that everyday energy saving behaviours are important though; 94% say people should turn out lights, 91% think you shouldn't use a tumble dryer if you can hang out your clothes in summer, and so on. (*SEABS*, p18)

³ *Engagement and political space...* (p6)

⁴ Some analysts have stated clearly that if we are looking to find insight into what would make people change their behaviour, then research which identifies how to communicate the problem of climate change, (and even how to communicate a shared solution to climate change) may not be very useful. (*Motivating Prospectors, Settlers and Pioneers...*)

The authors of *Consumer Power* evidence this. They explain how they introduced climate change into a lively discussion of products and services and saw an immediate decline in the group's energy and focus.

If a marketing-style approach to designing interventions is taken, then some of the problems of defining a clear climate change narrative become less critical. If products are not sold within a 'climate change story', there is no need to support the sale with a story about sacrificing, mutually giving up luxuries, for the sake of the planet. Without this story, the public may be less likely to respond cynically, and less likely to turn the challenge of behaviour change back to the government and private sector.

The marketing approach also assumes that the individual, or household, level is likely to be the most effective way of approaching behaviour change.

⁵ Qualitative research reveals that across the public, groups of people consume and behave differently, have different aesthetics about what they want to consume and how they want to behave, and crucially have different motivations. This all argues for the validity of segmentation.

There are a range of different psychographic and demographic segmentations in existence, including one from Defra which should be considered.

Some quantitative surveys have sought to segment people in fairly simple ways by their environmental behaviours and attitudes, such as the *Scottish Environmental Attitudes and Behaviours* survey which segmented people into Deep Greens, Shallow Greens, and so on; working on the assumption that the 'greenest' are most likely to make substantial changes. This is borne out, to a degree, by quantitative surveys, for example 40% of people would pay more for an explicitly 'environmentally friendly' product, and this rises to 58% of the sub-group who believe climate change to be a reality (*British Attitudes to the Environment*).

However, the authors of *Motivating Prospectors, Settlers and Pioneers...* are critical of using an environmental segmentation to understand how to motivate behaviour change. They argue that people are motivated by a host of different factors when switching to low carbon products, or taking up low carbon initiatives. Their opinions about the environment may not be the catalyst for their changing behaviour.

⁶ The Value Modes model has been used by Campaign Strategy et al, the ippr, and DECC. Very broadly, key groups are:-

- **Pioneers** The most leading edge groups, prepared to go with challenging aesthetics. This group tends to respond to arguments about climate change and intellectual arguments about why we should change. These may be people who are closest to the mindset of policymakers – *Motivating Prospectors, Settlers, and Pioneers* stresses that we should not assume that everyone is like this group, or that everyone needs to go through the same thought processes in order to change.
- **Prospectors** (including Now People); are, in summary, consumers who are status oriented, uninterested in 'worthy' environmental stories, and keen to have the latest consumer goods. The emotional triggers identified by most climate change communication at the moment are not ones which appeal to this group.
- **Settlers**: the last people to embrace anything new. Very broadly, they are likely to be older and focus on rules and discipline.

Reading the *Big Energy Shift* report in the light of the Value Modes model suggests that the general public in that dialogue may have naturally fallen into similar groups as the broad Value Modes segments. For example, when on visits to look at exemplar homes using renewable energy, many participants (Prospector types) were uncomfortable with the leading edge style and design of these homes. "*It looks like a Spanish holiday home... very cold...*" They wanted new products to be designed in such a way that they would fit with the 'normal' and mainstream homes they lived in; stylish and cool, yet with mass market credentials. (*Big Energy Shift*, p37)

"The results of these groups show the futility of treating 'the public' as a group or thinking that any one tactic applies to 'people'" (*Motivating Prospectors, Settlers and Pioneers...*, p27).

The authors stress that an action which might be a quick and easy behavioural change for someone in one psychographic segment might present insurmountable problems for someone in another segment. So, analysis by segment helps tailor interventions and communications to the right people.

As well as using psychographic segmentations there are other practical ways of segmenting audiences (location of home, housing stock, potential occasions when

takeup would be more likely) which make a difference to how low carbon interventions should be targeted.

The *Big Energy Shift* dialogue identified that those at different lifestages also had different attitudes to behaviour change. Research with the Now People has highlighted the role of their children in helping them make decisions and the 'nag factor' (*Motivating Prospectors, Settlers and Pioneers...*, p13) and this was also seen in the *Big Energy Shift* when families were mentioned.

Other issues also made a difference to perceptions of those low carbon interventions designed for the home; such as housing stock, location of home (urban or rural) and the difference between being a householder or renting your home.

The *Big Energy Shift* also identified some key moments in life when low carbon interventions were most likely to be successful; when work was already being done to the home, when equipment had broken (e.g. new boiler) or when homes are bought or sold (*Big Energy Shift*, p28). For example, some technologies such as heating controls were seen as functional, part of a (boring?) heating system with less immediately obvious benefits. Participants in the *Big Energy Shift* thought that they would put this in when replacing the whole heating system rather than as an upgrade. These feelings were echoed by participants in the *Consumer Power* sessions who saw heating controls as adding only a small increase in functionality of the heating system, and so would not go to the trouble of adding them as a special project. (*Consumer Power*, p24)

⁷ Money is at the forefront of people's minds. The economy remains the top issue facing the country as a whole. 55% say it is the top issue, as opposed to the 5% who say pollution or the environment is top. (*British Attitudes to the Environment*).

The public, in the same survey, are sure that the environment will move up the agenda in the next 20 years, (55% agree that there will be a lot more concern about it). But judging from qualitative discussions, this does *not* translate into individual willingness to invest in low carbon solutions right now.

⁸ For example, participants in the *Supplier Obligation* project liked the way the Energy Monitor bill linked the benefits of energy usage to saving money. (*Supplier Obligation*, p21)

⁹ The *Consumer Power* discussion of hybrid cars is illuminating here. Hybrid and eco-cars are for the moment more expensive than others. The *Consumer Power* report reveals that consumers do not necessarily think they are better designed or have greater emotional appeal than other cars; in fact, some eco-cars' environmental credentials are very offputting.

"I'm being environmental and practical, and look at me because I have this titchy witchy car and I am so amazingly environmental" (*Consumer Power*, p30)

¹⁰ *Big Energy Shift*, p66

¹¹ *Supplier Obligation*, p7. These 'carrots' need to outweigh the disruption of installing some of the new home technologies. They also need to outweigh concerns over the riskiness of new technology (*Big Energy Shift*, p36).

"...it is just this initial hurdle which stops them, so a grant would help..." (*Big Energy Shift*, p72)

“I don’t think they would want to make a big investment until they’re sure it actually works, and adds value to the house” (Big Energy Shift, p51)

¹² The *Narratives and Specifics* study underlines this in particular; *“Hopefully to save the environment but people need to see the immediate thing as well” (Narratives and Specifics, p23)*

¹³ *Consumer Power*, p19

¹⁴ Over three quarters are concerned that electricity will become unaffordable (*Public Perceptions of Climate Change and Energy Futures in Britain*, p18).

¹⁵ Participants tended to be cautious about pay as you save schemes or other ways of borrowing upfront costs and recouping the loss as money is saved on bills. In the *Supplier Obligation* project and *Big Energy Shift* dialogue participants expressed lack of trust in the energy provider and suspicion over what the provider might be getting out of the arrangement.

¹⁶ Having said that, participants generally liked being in control of their choices, but there was some concern expressed by participants in the *Big Energy Shift* that they would not know enough to make the best choices, especially when buying new sorts of products or services. Overall, the participants in this study wanted a gradual move towards more guided choices – the government taking the burden of choice from individuals and helping ensure that the range of products on offer (be they insulation, leisure products, or microgeneration) were all up to an environmental standard so the consumer did not have to feel responsible for the choice. (*Big Energy Shift*, p69)

This may have been a result of the dialogue session being longer than the average group discussion, and people becoming aware of the complexity of information which could be brought into play when making low-carbon choices. Getting the balance right, between providing choice, and hand-holding, is likely to help people take up new low-carbon solutions successfully. (*Big Energy Shift*, p71)

¹⁷ Energy monitors are liked across the board for their low upfront cost, and the quick and tangible benefits of cutting out meter readings, helping save money, and seeing what energy you are using. This applies to Now People particularly (*Consumer Power*, p22). These were also seen as a good symbolic giveaway by government or energy companies to demonstrate the need for behaviour change; they are a good entry level product into considering behaviour change. (*Big Energy Shift*, p40)

¹⁸ Now People especially enjoy the process of learning, and all participants across studies were interested in independent advice which is tailored to their household. Household audits which show you your home in a new way, for example with thermal imaging, were liked by both Now People and the participants in the *Big Energy Shift*.

¹⁹ For example participants felt that the demand management tariff explored in the *Supplier Obligation* study would need a higher level of financial incentive than 10% off bills, consumers perceived the trade off to be loss of control, set against the money saved. (*Supplier Obligation*, p23)

²⁰ Now People, in particular, respond better to experiential and tangible examples than they do to abstract ideas. (*Motivating Prospectors, Settlers and Pioneers...*, p28)

²¹ *Narratives and specifics*, p23

²² People also liked the idea of a product which could link underfloor heating, seen as stylish, with underfloor insulation, seen as energy efficient. Products which can link the two ideas may be likely to succeed. (*Big Energy Shift*, p46-47)

²³ For the Now People, cost is not necessarily the biggest barrier (indeed they sometimes see saving money as 'boring'). They might consider expensive 'big ticket' items such as hybrid cars, as long as product and offers are available which fit their consumer needs. But they have a fear of making the wrong decision and spending money on 'wrong' or low status items. (*Consumer Power*, p37)

And if products and services are not attractive, saving money or energy will not motivate them to buy. "For example, they may know their sash windows are energy-sinks but might want to keep them for the aesthetics" (*Motivating Prospectors, Settlers and Pioneers...*, p22)

This is a challenge to the commercial interests who are currently keen to increase take-up of low carbon products. For example, there are not a large number of appealing UK holiday packages, or rail-travel holiday packages, which are cheaper and seem more attractive to consumers than the competitor products – cheap flights to hot countries. So, being an early adopter in these immature markets has little incentive, currently, for the consumer. Though he is helping the market to mature, he gets little out of it himself. The challenge is for the producer of these products to make them appealing.

²⁴ *Motivating Prospectors, Settlers and Pioneers...* p27, The authors recommend David Attenborough or Robert Winston as the kinds of authority figures that their target audience would relate to. The ippr also recommend satirising high carbon living as part of the process of making low carbon living high-status and appealing (*Consumer Power*, p37).

²⁵ For the Now People, the story about domestic energy security and the significance of UK emissions is the only really motivating story within climate change, so these themes could tie up into one narrative (*Motivating Prospectors, Settlers and Pioneers...*, p13).

²⁶ Across the public as a whole, solar power is the most positively received form of energy (88% prefer it) followed by wind power (82%) and hydroelectricity (76%) (*Public Perceptions of Climate Change and Energy Futures in Britain*, p11).

In the same survey the public mostly agree that renewables should be part of the energy mix – three quarters agree that Britain needs a mix of energy sources to ensure a reliable source of electricity. This would include both renewables and nuclear.

In Scotland, almost half believe that Scotland's energy should *only* come from renewables, not coal, gas, or nuclear (*SEABS*, p28). While this perhaps reflects the greater availability of wave and wind power in rural areas of Scotland, it still shows high levels of support for the technologies. Having said this, the majority (53%) in this survey would not be prepared actually to pay more for renewable energy (although 30% *would* be prepared to pay more).

²⁷ *Supplier Obligation*, p40

²⁸ The *Consumer Power* report recommends that solar panels could be offered to Now People in the context of a story about control and self-sufficiency, and also recommends direct subsidies, discounts on stamp duty, or very cheap loans

underwritten by government. (*Consumer Power*, p42). It may be that the new feed-in tariffs come on-stream they will encourage uptake sufficiently to make this technology even more 'normalised'.

Biomass is not as popular as other renewables in quantitative studies, but in the *Big Energy Shift* when people had the chance to understand and investigate it, it was liked more. Similarly, there was much interest in this approach within the *Geoengineering* dialogue and participants kept returning to biomass, biochar and biofuels as interesting methods of mitigating climate change while potentially also having geoengineering benefits.

On a household level, however, biomass was seen as not really practical except for rural off-grid householders who had great interest in bypassing the national grid altogether. (*Big Energy Shift*, p48)

29 Narratives and Strategies, p25. The *Consumer Power* report also contains ideas for different ways to communicate on low-carbon living; for example using ironic or humorous reference to austerity times of the 40s and 50s, or using the right celebrity.

David Attenborough is seen as the most influential figure in the climate change debate, with 14% of the votes. (*British Attitudes to the Environment and Climate Change*). He is followed by Al Gore (11%) and Prince Charles (8%). However, *Motivating Prospectors, Pioneers and Settlers...* argues that the messenger should be chosen according to their appeal to consumers rather than their environmental credentials.