

Ready, willing and able?

**Responding to climate change and peak oil –
participatory approaches to behaviour change**

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1. INTRODUCTION

1.1 Research overview

The research will explore the need for behaviour change as an effective and necessary response to the twin threats of climate change and peak oil (CC/PO). Based on this analysis I will investigate how psychology of change models and good facilitation practice can inform the development of participatory approaches to behaviour change. Having designed an engagement approach I will test this out and evaluate its effectiveness by working with a number of community groups and work teams. The research is UK focused but the conclusions are likely to have wider resonance given the global impact of CC/PO.

Firstly, the research will describe the key characteristics of CC/PO and the consequent imperative for behaviour change. I will then explore the need for a collective and '*whole-system*' response and review the barriers this presents to change at both an institutional and personal level. Within this context the research will then undertake a brief review of current approaches to behaviour change focused participation work, identifying the strengths and limitations of the different strands in addressing the barriers to change.

One of the approaches, Transition Initiatives, is worthy of further analysis as it is in the early stages of exploring an interesting behaviour change focused engagement model, drawing on and reframing theory and practice from behavioural psychology, facilitation and consensus building. It is doing this within a framework of resilience thinking which again challenges barriers to

change and a number of common assumptions and perceptions about how best to respond to CC/PO. I will use the *'Transition approach'* to illustrate how participatory approaches are starting to be developed with the desired outcome of pro resilience behaviour change. A discussion of this approach provides the departure point for the remainder of the research as I further develop practice and contribute to this emerging field of work.

The engagement methodology of Transition Initiatives draws specifically on theory and practice from the psychology of behaviour change field, in particular DiClemente's *'Stages of Change Model'*¹ and Miller and Rollnick's Motivational Interviewing (MI) approach.² Although the psychology of change field is very broad, these key texts provide this research with its main inspiration and intellectual input. This pioneering work is *"transtheoretical"*, with a deliberate focus on supporting an approach that can be used across a wide range of topic areas by people with different theoretical backgrounds.³ Some work has already been undertaken in making the links to CC/PO issues through the work of Hopkins and Johnstone.⁴

The research will set out in some detail the process and rationale of combining the stages of change model and counselling techniques of MI with group engagement and facilitation practice, to develop a process that enables

¹ DiClemente, C. (2006). *Addiction and Change: how addictions develop and addicted people recover*, Guildford Publications.

² Miller, W.R. and Rollnick, S (2002). *Motivational Interviewing: Preparing People for Change*, (2nd Edition), Guildford Press.

³ DiClemente, C. (2006). op cit. pp.22-25., Also explained in Hopkins, R. (2008) *The Transition Handbook, from oil dependency to local resilience*, Green Books. pp.84-85.

⁴ Hopkins, R. (2008). op cit. pp.84-93; Johnstone, C. (2006). *Find Your Power: Boost Your Inner Strengths, Break through Blocks and Achieve Inspired Action*, Nicholas Brealey Publishing. pp. 250-257.

groups to explore behaviour change in relation to CC/PO issues. Having piloted the process in practice, the research will analyse the findings and set out learning points and recommendations to inform the further development of both research and methodology.

1.2 Research questions

The research will explore the following key questions.

- i. What are the barriers to change, which deter a response to the issues of climate change and peak oil?
- ii. What are the strengths and limitations of existing engagement models that aim to engage individuals and communities in dialogue and change in relation to CC/PO issues?
- iii. How can an understanding of the psychology of change and group facilitation be used to assist in designing engagement strategies in relation to CC/PO?
- iv. Can participatory methodology, informed by an understanding of psychology of change models and facilitation practice, motivate and enable a cross section of groups and individuals to enter into change focused productive dialogue?
- v. To what extent can this methodology effect behaviour change to enable a sustained reduction in carbon emissions and the building of lasting

resilience at an individual and group level?

- vi. What follow up research and methodological development will be needed?

1.3 Structure of the report

The report structure is framed by the research questions. Chapter 2 relates to questions (i) and (ii), setting out the stark challenges of CC/PO and the need for, and barriers to, behaviour change across all sectors. The strengths and limitations of existing behaviour change focused engagement models in addressing the barriers to change are then considered, exploring in particular the contribution of Transition Initiatives in drawing on theory and practice from behavioural psychology, facilitation and resilience thinking.

Chapter 3 will address research question (iii), exploring how existing approaches can be built upon in developing a new engagement process. It shows how the process is constructed, describes the rationale informing the selection and recruitment of participants and sets out the detailed design of the two-hour interactive workshop that is at the heart of the process.

Chapter 4 undertakes an analysis of the collated findings from the engagement process and responds to research question (iv) that demands a review of the process '*outputs*', and question (v) which focuses on process '*outcomes*'. Key learning points are drawn out relating to '*dialogue*' and '*change*' processes.

Finally, chapter 5 concludes by addressing research question (vi) to comment on the main findings of the research and make recommendations for further research and methodological development.

2. CLIMATE CHANGE AND PEAK OIL – BARRIERS, RESPONSES AND TRANSITION

2.1 The challenge of Climate Change and Peak Oil

Climate change (CC) is widely recognised as one of the preeminent global challenges of our time. The consequences of run-away climate change could threaten the very existence of life on earth. The fourth assessment report from the Intergovernmental Panel on Climate Change (IPCC) during 2007 set out the science and future scenarios in stark terms. The Synthesis Report stated that “*the warming of the climate system is unequivocal*”⁵ and that this effect was “*very likely due to the observed increase in anthropogenic GHG [Greenhouse Gas] concentrations*”.⁶ These reports have built a global consensus among scientists and policy makers that global warming is real, is the result of human activities and that an urgent response is needed.⁷ As Hopkins points out, the world still hasn’t broken through the 1°C threshold but we are already seeing dramatic changes. Through the inertia of GHG emissions we are committed to a rise in global temperatures of 1.4°C.⁸ Although working in the terrain of known unknowns, unknown unknowns, constant updating of threats, critical thresholds and tipping points, agreement is emerging that a rise in excess of 2°C in global temperatures takes us into a very dangerous area where whole ecosystem collapses are likely, provoking

⁵ IPCC, *Climate Change 2007: Synthesis Report, Summary for policy makers* http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf. p. 2.

⁶ *Ibid.* p. 5.

⁷ The reports go on to graphically chart global sea level rises, wind pattern changes, increases in violent storms, heat waves, droughts and heavy rainfall events and the consequent impact on agriculture, water resources, ecosystems, settlement patterns and human health.

⁸ Hopkins, R. (2008). *op.cit.* p. 33.

any number of positive feedback events that could trigger a run-away scenario.⁹

Although the concept of '*peak oil*' (PO) has not entered the UK public's consciousness in the same way, the fundamental importance of oil as a driver of the global economy is becoming increasingly apparent. Peak oil represents the point where reserves of oil globally, or in a particular country or oilfield, are half used and they will, from that point, be in decline. It will then progressively become an increasingly scarce and costly commodity. A number of expert commentators predict that world production is nearing its peak.¹⁰ Estimates of recoverable oil vary; some suggesting the peak is imminent (around a trillion barrels) to those that suggest the peak is a little way off (around 2 trillion).¹¹ As petroleum geologist Colin Campbell points out however, the precise date is not important, "*what matters — and matters greatly — is the vision of the long remorseless decline that comes into sight on the other side of it*"¹².

Factoring together an oil dependent world economy, the prospect of energy scarcity and the causal link between the burning of fossil fuels and climate change we have a sobering vision of a complex and unprecedented crisis that demands similarly unprecedented action and change.

⁹ Hare, B. (2006). *Relationship Between Increases in Global Mean Temperature and Impacts on Ecosystems, Food Production, Water and Socio-Economic Systems* in Schellnhuber, H. J. (Editor in Chief). *Avoiding Dangerous Climate Change*. pp. 177-185. <http://www.defra.gov.uk/environment/climatechange/research/dangerous-cc/pdf/avoid-dangercc.pdf>

¹⁰ For more detailed analysis and references to peak oil resources see. <http://www.richardheinberg.com/museletter/184>

¹¹ Homer-Dixon, T. (2006), *The Upside of Down, Catastrophe, Creativity, and the Renewal of Civilisation*, Souvenir Press, London. p. 88.

¹² Campbell.C.J. *Understanding Peak Oil*, ASPO International, <http://www.peakoil.net/about-peak-oil>

2.2 A collective response

A response to these global stresses will require behaviour change. The impetus will need to come from individuals, communities and organisations, as well as through government led fiscal and legislative measures. How exactly this change will occur however and who will lead or legislate is still largely unclear. Recent IPPR research commented.

*“Climate change is a new kind of challenge – a problem that requires collective action on an unprecedented scale, that brings with it massive uncertainties and involves impacts over long time periods. It’s a problem that government can’t solve on its own, but rather one in which everyone must engage in deciding a way forward – ‘doing their bit’ not only in terms of behaviour change but also in terms of political engagement”.*¹³

Similarly the Tyndall Center frames the response as a “*whole systems*” approach to problem solving.¹⁴ They feel that ‘*solutions*’ will be multifaceted, conditional and must be framed in terms of both political and social acceptability.¹⁵

IPPR consider the relationship between government, civil society and business to be very important in setting the speed and direction of a

¹³ Institute for Public Policy Research (IPPR) (2008). *Engagement and political space for policies on climate change*, A report for the Sustainable Development Commission. p. 10

¹⁴ Tyndall Centre (ed.) (2006). *Truly useful ... doing climate change research that is useful for both theory and practice*. Tyndall Centre, UK. p.7.

¹⁵ *Ibid.*, p.7.

significant response. They argue that government is constrained in policy and action by a lack of *“political space”*.¹⁶ One special adviser described government as *“hemmed in a triangle created by public opinion, the media and environmental groups”*.¹⁷ Although government may be aware of the urgency to act they are unlikely to take the radical action needed without a reasonable cross-sectoral consensus for change.

Few, Brown and Tompkins provide a rationale for stakeholder engagement at a local level considering adaptive actions *“context and place specific, with implications for relatively delimited sets of stakeholders and requiring a knowledge base tailored to local settings.”*¹⁸ Even the United Nations Framework Convention on Climate Change (UNFCCC) calls on signatories to *“promote and facilitate at the national, and as appropriate, regional and subregional levels.....public participation in addressing climate change”*¹⁹. The IPCC’s Third Assessment Report considers that the enhancement of adaptive capacity can only be delivered through *“active participation by concerned parties”* and similarly the United Nations Development Programme’s *‘Adaptation Policy Frameworks’* advocate multi-level stakeholder engagement including *“grassroots stakeholder participation.”*²⁰

¹⁶ Institute for Public Policy Research (IPPR) (2008). op.cit. pp.5-7

¹⁷ Interviewed as part of the research. Institute for Public Policy Research (IPPR) (2008), op.cit. p. 6.

¹⁸ Few, R; Brown, K; and Tompkins, L. (2006) *Public participation and climate change adaptation*, Working Paper 95, Tyndall Centre for Climate Change Research, p. 2

¹⁹ UNFCCC, (1992). The United Nations Framework Convention on Climate Change, Article 6, United Nations p. 10.

²⁰ Cited in, Few, R; Brown, K; and Tompkins, L. (2006) *Public participation and climate change adaptation*, Working Paper 95, Tyndall Centre for Climate Change Research, p. 3.

Steffen backs up these points, highlighting the importance of change and action outside the political realm. He identifies the research community as another important player that needs a broader role. Research knowledge, he suggests, “hasn’t sunk through to the main stream populace and until it does it makes it very difficult for the public sector to respond.”²¹ He considers that government is only willing to act within the broad boundaries of mainstream knowledge and opinions, therefore it is important to change and develop that mainstream knowledge.

IPPR point out that effective action is likely to involve controversial, drastic and perhaps unpopular measures.²² This may be a contributing thought, as the sentiment of collective responsibility was put forward by Gordon Brown in a recent speech to launch a cross-sectoral “*environmental contract*”.

*“All of us; government, business, civil society and individuals; have a part to play in this momentous task. Working apart we will surely fail, but working together I have no doubt that this is a challenge to which the human spirit and all our powers of ingenuity and enterprise will rise.”*²³

²¹ Steffen, W., Director, The Fenner School of Environment and Society, Australian National University, interview on radio broadcast (April 2008) *Resilience: Adaptation and Transformation in Turbulent Times*. Programme, *A World of Possibilities*, The Mainstream Media Project. <http://www.aworldofpossibilities.com/details.cfm?id=328>.

²² Institute for Public Policy Research (IPPR) (2008), op.cit. p.5.

²³ Gordon Brown’s speech to the World Wildlife Fund, 19 November 2007. <http://www.number-10.gov.uk/output/Page13791.asp>. In the speech Brown confirmed his support for a three way “*environmental contract*” between citizens, business and government set out originally by David Miliband, 11 July 2006, as a priority for Defra.

Given the complexity and interrelatedness of CC/PO cause and effect and the dynamic of policy development that is influenced by powerful positional lobbying, charting an incisive route toward measures that will combat CC/PO issues becomes very difficult. It is clear in the UK that leadership on the issue cannot be the sole responsibility of government and shifts in public opinion and the behaviour of societal groups can influence the development of pro environment political space at local, regional and national levels. Before we consider the mechanism to shift behaviour however it is first necessary to review the main barriers to behaviour change.

2.3 Barriers to behaviour change

A range of barriers will need to be overcome to depart from a *'business as usual'* approach to behaviour change. An understanding of the reasons for inertia in the system is an important prerequisite for the development of focused and effective responses. The barriers outlined below represent some of the main obstacles to change; they are often mutually reinforcing and interact in a range of complex ways.

Anticipatory action

The nature of CC/PO itself largely requires *'anticipatory action'* rather than the tackling of immediate threats. Homer-Dixon suggests that it has been shown time and again that the status quo must *"fail dramatically before the wrenching psychological transition to a new approach can be justified"*.²⁴ He considers that a *"harsh threshold event, breakdown, or surprise"* is necessary before we

²⁴ Homer-Dixon, T. (2006). op.cit. p.268

are “willing to accept that we can’t continue the way we’re going”.²⁵ Action research by Few et al. similarly suggests that “temporal scales” are a major barrier²⁶. In their study, conflict emerged within groups, between short and long-term needs. It was a tension driven by long-term uncertainty of outcome against the perceived burden of short-term costs, both financial and in terms of lifestyle and behaviour change. Even though their research related to sea defences, which would seem a reasonably tangible threat, they found that most people would rather rely on reactive responses later than preventative action now.²⁷

These findings resonate closely with broader surveys of public behaviour in the UK. Recent polls report that citizens are aware of climate change issues and say they would take action if others did.²⁸ Defra found however, that support for behaviour change slips considerably when respondents are questioned more closely about the specifics of car use, flying and buying locally produced food.²⁹ IPPR reported that, “*data on actual behaviour shows increases in flying, holidaying abroad, driving, and consumption of household appliances*”.³⁰ Defra’s work suggests that ‘pro-environment’ behaviour is frequently associated by the public with “sacrifice”, “higher cost” and “poor quality” and there was a reluctance across all respondents “to make any

²⁵ Homer-Dixon, T. (2006). op.cit. p.268.

²⁶ Few, R; Brown, K; and Tompkins, L. (2006). op.cit. p.7

²⁷ Ibid. p.7.

²⁸ Ipsos, Mori (2007), *Tipping point or turning point, Climate change survey*, <http://www.ipsos-mori.com/polls/2007/climatechange.shtml>.

²⁹ Department for Environment Food and Rural Affairs (Defra) (14 August 2007), *2007 Survey of Public Attitudes and Behaviours toward the environment*, p.6-8.

<http://www.defra.gov.uk/environment/statistics/pubatt/download/pubattsum2007.pdf>

³⁰ Institute for Public Policy Research (IPPR) (2008). op. cit. p. 6.

changes that fundamentally impact on present lifestyles and standards of living”.³¹

Scales of interest

There is often uncertainty and ambivalence about whether CC/PO is an international, national, regional or local problem and at what level and through which institutions decision-making should be coordinated. This can make the role of a facilitator, working with groups at a local level on these issues difficult. Few et al. found a tension between group sentiments that *‘locals know best’* and that of *‘CC/PO being an issue to be tackled by the strategic, technical and financial capabilities of government’*.

Managerial culture

A managerial culture may consciously or unconsciously limit responses and debate. According to Few et al. there is, even in the environmental field, *“a retained appeal of ‘expert’- driven styles of environmental management”*³²

This culture of not trusting the public to make the right decision may manifest itself in a number of agency behaviours. The level of engagement may be deliberately ambiguous or the public are led to believe that they are equal partners in a decision making process when, in actual fact, the decision has already been made or lies with the agency. They suggest that agencies may attempt to *“steer stakeholder participation towards support for predetermined goals by forcing tactical alliances, blocking dissent and avoiding scope for*

³¹ Dresner, S., McGeevor, K, and Tomei, J. (2007). *Public Understanding Synthesis Report: A report to the Department for Environment, Food and Rural Affairs*. Policy Studies Institute. Defra, London. p.i, iii.

³² Few, R; Brown, K; and Tompkins, L. (2006). op.cit. p. 10.

conflict".³³ They further assert, "*there is a strong danger that the dictates of 'required outcomes' will act to constrain the role of participants to tokenism*".³⁴

A good example is the recent high court challenge by Greenpeace to the government's energy review; the judge stated that, "*the consultation exercise was seriously flawed*" and that the process was "*manifestly inadequate and unfair*."³⁵ Agencies can also act as gatekeepers to participation allowing only an '*inner circle*' to participate or those that are deemed to be legitimate.

Difficult reactions

A significant barrier to change is the reaction of people to the distressing information about future consequences. Hopkins defines the reaction to awareness of CC/PO issues as "*post-petroleum stress disorder*".³⁶ He includes in his list of observed reactions that of fear, bewilderment, nihilism, denial and the desire to grasp at unfeasible solutions.

Johnstone describes a "*blocked response*" where humans "*block out essential information if they find this inconvenient or disturbing*". He cites four psychological hurdles that stand in the way of addressing PO/CC issues – *denial, apathy, hopelessness and overwhelm*.³⁷

Macy develops this analysis suggesting that we all have an instinctive "*response-ability*" when faced with danger or challenges, however this response depends upon an "*unblocked feedback loop*". This loop is

³³ *Ibid.* p.10.

³⁴ *Ibid.* p.10.

³⁵ Greenpeace, press release, Thursday, 15 February 2007, *Government's nuclear plans declared unlawful by High Court*, <http://www.greenpeace.org.uk/media/press-releases/governments-nuclear-plans-declared-unlawful-by-high-court>

³⁶ Hopkins, R. (2008). *op.cit.* p.80

³⁷ Johnstone, C. http://www.chrisjohnstone.info/great_turning.htm

increasingly distorted by the complexity and quantity of information; corporations encouraging lifestyle-forming consumption, governments oscillating between growth and environmental awareness and environmental activists who “*scold and preach*”.³⁸ She feels that it is not that we don’t appreciate the threat to our very survival but that we repress our acknowledgement of it.³⁹ It is this repression of a response that she feels leads people to doubly victimise themselves being “*impeded in thought as well as in action*” and becoming “*as powerless as we fear to be*.”⁴⁰

Inclusiveness

Change and progress can be constrained by the inability to engage a broad cross section of the community. Reaching the already motivated may only have a limited impact in either behaviour change or policy/political influence. Recent research by The Carnegie Trust, found that participation in community based CC focused groups was largely white, middle aged and middle class even in areas with large minority ethnic populations such as Brixton.⁴¹ Clearly any strategy to consider behaviour change requires an analysis of inequality to be built in that would take account of dimensions such as class, race, gender and income.

Business as usual

³⁸ Macy, J., Brown, M.Y. (1998). *Coming back to Life, Practices to reconnect our lives, our world*, New Society Publishers. p.26.

³⁹ *Ibid.* pp. 25-27.

⁴⁰ *Ibid.* p.32

⁴¹ Carnegie Trust (2008), *Civil Society and Climate Change*, research undertaken by the New Economics Foundation.
<http://democracy.carnegieuktrust.org.uk/files/Civil%20society%20and%20climate%20change.pdf>.

An important barrier to change at all levels is the tendency to carry on in the same way as things are already being done. Change requires effort and inertia is built into the system. Business as usual can also have more strategic, political and ideological aims being focused on maintaining the status quo in terms of power, wealth and beneficial relationships. There is however an increasing challenge to the assumption that economic growth is a prerequisite to societal health and well-being and that economic growth can somehow be decoupled from the life support systems of the natural world.⁴² Porritt writes, *“there is still no challenge to the dominant model of progress; no fundamental questioning of the idea of permanent economic growth; and no serious interrogation of the mounting societal and moral costs of debt-driven consumerism”*.⁴³ He feels UK government is only engaging with change strategies that don't challenge fundamental economic relationships.

“These naked emperors would still have us believe that we can ‘decouple’ the worst effects of permanently rising per capita income from the kind of environmental damage that it is causing. A mix of smart technologies, resource efficiency and ‘responsible/ethical consumption’ will somehow reduce emissions of CO2 by 80% by 2050, overcome resource shortages, prevent further damage to biodiversity, eliminate the build up of toxic chemicals, and deliver all nine billion of us (by 2050) into a global green nirvana where we can all go on getting richer even as the environment gets greener”.⁴⁴

⁴² Homer-Dixon, T. (2006). op.cit. p. 292-93; Macy, J., Brown, M.Y. (1998). op.cit 16-17.

⁴³ Porritt, J. (July 16 2008). *An end to infinite growth and blind consumerism*, Guardian article.

⁴⁴ Ibid.

2.4 Engagement for behaviour change - responding to the barriers

Previous sections have explored the imperative for collective action and change and the significant barriers that stand in the way. Behaviour has cultural, psychological, political and perceptual dimensions and these must all be addressed if barriers are to be overcome.

Fundamental to challenging the issues of *'anticipatory action'* and *'scales of interest'* will be the inclusion of PO into the debate. Energy and fuel issues bring the problem down to an individual level that, in the short term, will engage with a much broader cross section than CC. Solutions can't be dictated through a managerial approach; rather they must emerge from an understanding of the threat. Presenting doomsday scenarios can provoke denial and repressive reactions whereas a motivating positive vision of where behaviour change could lead needs to be created in order to achieve sustained behaviour change. Engagement must be inclusive and approaches developed that motivate not just of the green activists but a broad cross section of society.

Although there are a wide range of organisations and campaigns working for behaviour change in relation to CC issues (less make the link to PO) an analysis of what promotes and hinders change is less well developed. The most common behaviour change method, used extensively by government and environmental NGOs, has been the provision of information through communication strategies. This works on the premise that awareness, once raised, will lead to behaviour change. Government information campaigns

such as Defra's, Climate Change Communications Initiative, which is spending £12 million over 3 years, and the cross government 'Act on CO2' campaign typify the approach.⁴⁵ The NGO sector has a wide range of organisations giving information about green behaviour. For example, The Energy Savings Trust⁴⁶ focusses on energy and climate change while organisations such as Friends of the Earth have local groups who are involved in a range of public information, lobbying and educative work.⁴⁷ There are also groups and organisations that demonstrate ways in which we can be greener, one of the best known is the Centre for Alternative Technology who have a well developed visitor centre and course programme in Wales. Direct Action groups, such as the Climate Camp and Plain Stupid adopt a related but different methodology. They aim to provide a strong informational message but draw on an analysis of power structures to directly challenge policy and institutions that are identified as the problem.⁴⁸

Interestingly, one of the strongest critiques of the information/communication approach comes from marketing strategists who were concerned at the way in which climate change communications were being handled by government and NGOs. Rose et al. published a paper in 2005 outlining why many *"assumptions about what will convince the public to act on climate change are seriously misconceived."*⁴⁹ They considered that government and NGOs were

⁴⁵ Act on CO2. <http://actonco2.direct.gov.uk/index.html>

⁴⁶ The Energy Savings Trust. <http://www.energysavingtrust.org.uk/>

⁴⁷ Friends of the Earth, local group campaigns.
http://www.foe.co.uk/campaigns/local_groups_and_campaigns/

⁴⁸ Climate Camp. climate camp <http://www.climatecamp.org.uk/node/2>

⁴⁹ Rose, Dade, Gallie and Scott (2005), *Climate Change Communications – Dipping a toe into public motivation*. p.1.
www.compassnetwork.org/images/upload/climatechangecommunications.pdf

wasting a huge amount of time and resources without undertaking any research into the psychology of why people change behaviour and what sort of messages would appeal to different types of people. They define a range of motivational groups in society and suggest that for information to have an effect on behaviour there needs to be a more subtle analysis of motivations, otherwise these campaigns are an *“uncontrolled and costly stab in the dark”*⁵⁰ A particular mistake by NGOs and activist campaigns is, they feel, the tendency to *“project what works for them onto the rest of society”*.⁵¹ People running the campaigns are often experimentors and activists, so called *“pioneers”*⁵², but the majority of the population are not and so the information falls outside their motivational frame of reference.

The field of behaviour change is large and complex and outside the scope of this research to analyse thoroughly. Among lobbying and campaigning groups, direct action approaches, practical demonstrations of change, academic research, think tanks, journalists, commentators and private sector companies there is potentially a huge pool of *‘change agents’*. If government is constrained and ambivalent through the lack of political space and is largely reduced to using market mechanisms and broad based information campaigns to effect change then there is likely to be an important role to play for civil society groups and institutions in supporting behaviour change and opening up greater *‘political space’* at a governmental level. Future research could explore in more detail the methodologies and analyses of organisations

⁵⁰ Ibid. p.7

⁵¹ Ibid. p.5.

⁵² Ibid. p.5.

across all sectors who are working for change in relation to CC/PO, to explore whether a '*psychology of behaviour change*' analysis could support their work.

Transition Initiatives – an innovative model of behaviour change

The '*Transition model*', emerging over the last 2 years, offers some innovative perspectives on engagement and change that genuinely attempts to address the barriers outlined above. It is a grass-roots, self-organised model of public/stakeholder engagement whose fundamental starting point is that CC and PO issues must be tackled together. The approach has taken inspiration from the creation of an energy decent action plan for Kinsale, Ireland in 1995.⁵³ The tutor, Rob Hopkins, subsequently developed the first initiative in the UK, in Totnes, and refined the model to be replicable in any settlement.⁵⁴ There are now over sixty initiatives in the UK and many more in the process of forming.⁵⁵

The model is significant as it has reframed the prevailing view of CC/PO; rather than considering these stresses as threats to economic growth/current lifestyles, it frames the issue as an opportunity to move towards a different and positive vision of a post oil society. Key to the model is the assumption that not only do we need to reduce energy consumption, to avoid damaging emissions, but there is also an imperative to build local '*resilience*' to withstand current and future energy shocks. This involves deploying a

⁵³ Hopkins, R. (2008). op. cit. pp. 122-130.

⁵⁴ The Transition Initiative primer describes the origins and development of the model in some detail. <http://transitionnetwork.org/Primer/TransitionInitiativesPrimer.pdf>

⁵⁵ List of official initiatives see; <http://transitiontowns.org/TransitionNetwork/TransitionCommunities>. Those '*mulling it over*' <http://transitiontowns.org/TransitionNetwork/Mulling>

motivational, social capital based approach to create low energy lifestyles and economies based on more locally sourced resources and skills.⁵⁶ Collective action is seen as a driver of the process and also a desirable outcome as communities take more responsibility and build their capacity to act. It draws on behavioural psychology, community development and participation theory and practice in regarding individuals and groups as self-actualising drivers of their own change who can work towards more sustainable, meaningful and satisfying lifestyles. Delivery vehicles are local groups of people who establish Transition Initiatives as part of a national network.⁵⁷

In considering '*engagement for behaviour change*', this model challenges many conventional approaches while providing a range of tools that could help address blocks and barriers. It is inclusive and self-actualising by nature, not managerial or impositional. It is concerned with the inner reaction to information about the stresses and draws on psychological models to work with issues of overwhelm and denial. It has been critiqued for not addressing issues of power and not considering the root causes of CC/PO issues.⁵⁸

Unlike many campaigning organisations or direct action groups however, it focuses its attention not on who's to blame but on how to motivate self-actualising change processes based on a positive vision of a more resilient

⁵⁶ Social Capital. Although not inventing the term Robert Putnam's name has become synonymous with its development and analysis. He asserts that, like physical or human capital, social networks, and the reciprocity and trust that arise from them, have value both individually and collectively. They are part of the indicators of community resilience. See, Putnam, R.D, (2000), *Bowling Alone: The collapse and revival of American Community*, Simon And Schuster, New York. p.19.

⁵⁷ Hopkins, R. (2008). op. cit. see also; <http://www.transitiontowns.org/>

⁵⁸ Trapeze Collective (2008), *The Rocky Road to a Real Transition*, <http://trapeze.clearerchannel.org/>. An online debate is taking place between Transition Initiatives founder Rob Hopkins and contributors to his web site, including authors of a critique of Transition, The Trapeze Collective. See. <http://transitionculture.org/search/the+rocky+road+to+transition>.

post oil future. Hopkins considers '*Transition*' complimentary to more activist approaches but attributes its rapid take up as evidence of its more inclusive and engaging characteristics.⁵⁹

2.5 Resilience thinking

The concept of resilience is at the heart of the Transition Model. It compliments the self-actualising approach and provides, at the same time, a motivational goal, an analysis tool and a methodological driver. Resilience thinking suggests that simply reducing carbon emissions will not be enough if communities don't have the ability to live well in a low energy society.

It draws its inspiration from natural systems. The Resilience Alliance⁶⁰ describes the concept as the capacity an ecosystem has to withstand disturbance and shocks without collapsing into a different state. Systems with reduced resilience will be more vulnerable to small stresses whereas an increased resilience will require greater forces of change and stress before breakdown occurs.

The concept was soon being applied to the analysis of social, economic, behavioural and political systems. Many commentators argue that these systems have progressively been losing resilience since the start of the

⁵⁹ Hopkins' response to *The Rocky Road to Transition*.
<http://transitionculture.org/search/the+rocky+road+to+transition>.

⁶⁰ The research group founded by Holling and colleagues to develop and promote the concept. <http://www.resalliance.org/576.php>

industrial revolution, which marks the beginning of a huge rise in the use of fossil fuels.⁶¹

A key task of '*engagement for behaviour change*' processes is to explore how people and groups can be motivated to make sustained changes that will build resilience. Before moving on to an exploration of the methodological development in chapter three, it will be useful to set out key indicators of a resilient community/organisation. The indicators described in Table 1 will support both the methodological development and the analysis of whether the groups I work with are able to engage with and commit to pro-resilience behaviour change.⁶²

⁶¹ Homer-Dixon, T. (2006). op.cit. p.222; Hopkins, R. (2008). op. cit. p.57. Steffen, W. (April 2008) *Resilience: Adaptation and Transformation in Turbulent Times*. Op.cit.

⁶² These indicators have been compiled from a review of a range of sources.

Table 1. – Indicators of a resilient community/organisation

Indicator	Notes
<p>A reconnection of human and natural systems The disconnect between human activity and the carrying capacity of natural systems is repaired at an economic, political, social, cultural and psychological level. Ecosystem services are valued.</p>	<p>Macy asks the rhetorical question, “<i>Why does society persist in destroying its habitat?</i>” and suggests that western psychology has virtually ignored our relationship to the natural world.⁶³ Steffen considers that a new narrative needs to be created to challenge the current culturally embedded storyline that the environment exists to provide resources and services to fuel economic growth. This will recognise the planet’s resources are finite and that we have to find “<i>an earth systems space</i>” which will define the boundaries within which we can live. The emphasis will be more focused on the social, relational, spiritual, innovative and playful aspects of life rather than the economic and material. It is a process he cites as a shifting of the driver from “<i>wealth to well-being</i>”.⁶⁴</p>
<p>Diversity and Modularity There is diversity and modularity at all levels – ecological, social, economic, cultural and psychological.</p>	<p>Diversity builds functional resilience by reducing the need for external inputs and increasing the quantity and diversity of skills and knowledge.⁶⁵</p> <p>Modularity will distribute functions across the whole system reducing dependence on large-scale distribution systems such as food, water and power. Projects will emerge such as local food growing, renewable energy, credit unions etc.⁶⁶</p>
<p>Functional redundancy Efficiency is sacrificed for shock absorbing contingency and precaution.⁶⁷</p>	<p>Local food and services may be less efficient than external provision but resilience will be enhanced.</p>
<p>Decision-making Responses are formulated quickly and efficiently when problems are identified.⁶⁸</p>	<p>Quality resilience-building decisions require free flowing information, the ability to collaborate across disciplinary, cultural, ideological and political boundaries and the ability to act. A shift from individual competitive self-interest to collective systemic self-interest will improve feedback loops to the whole system. There will be more adaptive and responsive governance structures.⁶⁹</p>
<p>Chaos/structure balance A system sufficiently unstable to create</p>	

⁶³ Macy, J., Brown, M.Y. (1998). op.cit. p 48-49.

⁶⁴ Steffen, W. (April 2008) *Resilience: Adaptation and Transformation in Turbulent Times*. Op.cit.

⁶⁵ Homer-Dixon, T. (2006). op.cit. p.294; Hopkins, R. (2008). op. cit. p.55.

⁶⁶ Homer-Dixon, T. (2006). op.cit. p.294; Hopkins, R. (2008). op. cit. p.56.

⁶⁷ The Resilience Alliance. <http://www.resalliance.org/576.php>

⁶⁸ Hopkins, R. (2008). op. cit. p.56.

⁶⁹ Macy, J., Brown, M.Y. (1998). op.cit. p.55

the possibility of experimentation and innovation but structured enough to be able to learn from and evaluate successes and failures. ⁷⁰	
Social Capital Trust, reciprocity, social networks, civic behaviour and inclusiveness are promoted and valued.	In times of crisis mutual support and reciprocity with friends and neighbours will be a valuable commodity. ⁷¹
A prospective mind Ability to operate well in a non-linear future where surprise, instability and massive social and economic changes are likely. ⁷²	This quality will need to be developed through activities, training, experiential workshops etc.
Advance planning Structures are in place to plan for resilience.	Resilience will mainly be build by taking deliberate action. This will require advanced planning. ^{73 74}

⁷⁰ Homer-Dixon, T. (2006). op.cit. p.294

⁷¹ The building of social capital and promotion of civic behaviour is now cited by a wide range of writers and researchers to have beneficial effects on economics and labour market performance, health and well being, crime, education and the participation in politics and local decision making. The more social capital the more resilient a community; see; Halpern.D. (2005), *Social Capital*, Polity Press. Chapters 2-6. Putnam, R.D, (2000), Op cit., Section IV. Reinigorating the Civic: Manchester Uni paper. Putnam, R.D, (2007), *E Pluribus Unum: Diversity and Community in the Twenty-first Century*. The 2006 Johan Skytte Prize lecture, Scandinavian Political Studies Vol. 30, No2 2007. Putnam, R.D, (2000), *Bowling Alone: The collapse and revival of American Community*, Simon And Schuster, New York.

⁷² Homer-Dixon, T. (2006). op.cit. p.29.

⁷³ Homer Dixon advocates “*out of the box*” thinking where we try to “*imagine the unmanageable*” as in a non-linear world we cannot just extrapolate current trends. Homer-Dixon, T. (2006). op.cit. p.29.

⁷⁴ The Carnegie Trust’s ‘Future of Civil Society’ inquiry is undertaking an advance planning project at the moment, developing future scenarios and formulating possible responses. Carnegie UK Trust (2007), *Inquiry into the future of civil society* in the UK and Ireland, Futures for Civil Society, Summary. <http://democracy.carnegieuktrust.org.uk/files/Futures%20for%20Civil%20Society%20-%20Summary.pdf>

3. ENGAGEMENT FOR BEHAVIOUR CHANGE – FROM THEORY TO PRACTICE

3.1 Introduction

The previous chapter set out the need for '*engagement for behaviour change*' processes that encourage a reduction in carbon emissions while at the same time building resilience in the face of the major global stresses of CC and PO. I described how the response needed to be '*whole system*' and inclusive, developing a mutually reinforcing relationship between the widening of political space and individual and group behaviour change processes. I explored a number of the barriers to change and the effectiveness with which current '*change agents*' such as government and NGOs are dealing with these challenges. I singled out one approach, Transition Initiatives, as being particularly significant in developing an '*engagement for behaviour change*' model that is showing early signs of success in overcoming some of the blocks to a genuine engagement with CC/PO issues.

This chapter builds on this analysis, exploring how the principles and approaches of '*Transition*' can be translated into a process that will enable groups to explore behaviour change. The process will reflect the ethos of Transition; framing CC and PO as two sides to the same problem, a motivational focus on a positive vision of the future, personal and collective responsibility for change and a valuing of trust, reciprocity and social relationships. Part 1 describes how insights from the psychology of change field and group facilitation practice can provide the theoretical underpinning to the '*change journey*'. The second part of the chapter explores how this

understanding can then be translated into a practical group process, including the detailed design of a two-hour facilitated workshop.

PART 1. THE CHANGE JOURNEY

3.2 The psychology of change

In considering the development of a practical group process I was inspired by the '*Transtheoretical Model of Behaviour Change*' (TTM) developed by DiClemente and Prochaska.^{75 76} and the related theory and methodology of '*Motivational Interviewing*' (MI) pioneered by Miller and Rollnick.⁷⁷ The TTM supports an understanding of the dynamic and staged nature of change while MI provides a clear methodological approach to guiding people through these stages of change. Hopkins feels that these approaches can be usefully translated from the addictions field to support change-orientated discussions in relation to CC/PO. He explores the similarities between an addiction to alcohol, drugs or gambling and the way society uses and depends upon fossil fuels,⁷⁸ suggesting that, "*addictions refer to stuck patterns of behaviour that can be difficult to change even when we know we are causing harm*".⁷⁹ As awareness increases of the link between oil use, the consequences of resource depletion and CC our behaviour could be described in such terms. Although the majority of people perceive oil use as normal, our behaviour exhibits increasingly addictive characteristics as we become more aware of the consequences. Three dimensions can be identified – '*hazardous*

⁷⁵ cited in, Hopkins, R. (2008). op.cit. pp.84-93

⁷⁶ DiClemente, C. (2006). op.cit. pp.22-43.

⁷⁷ Miller, W.R. and Rollnick, S (2002). op.cit.

⁷⁸ Hopkins, R. (2008). op.cit. pp.84-93

⁷⁹ Ibid. p. 86.

behaviour' (there are future risks), *'harmful behaviour*' (CC is already causing problems) and *'dependent behaviour*' (we carry on using oil even though we know the consequences).⁸⁰ This analysis, combined with an understanding of how people tackle addiction, provides the raw material from which approaches and tools to enable people to engage with the issues can be developed.

3.3 The stages of change model

Hopkins argues that the environmental movement has failed to engage people and groups in the stages of change, often moving straight from information to desired action. This, he suggests, only addresses the external dimensions of change and can lead to a blame culture. Incorporating the internal and external dimensions will, he feels, support a more rounded analysis, a deeper understanding of the issues and more insightful and sustainable responses.⁸¹ An *'addiction'* to a lifestyle which involves the unsustainable consumption of oil is not going to be changed by merely telling people about the damage that is resulting and the risks involved.⁸²

The stages of change model gives an insight into the journey that people and groups need to undertake and provides a map to support the design of a group change process. DiClemente presents the stages of change model as an iterative process (see figure 1).⁸³ Progression through the stages will lead

⁸⁰ Ibid. p.86-87.

⁸¹ Ibid. p.89

⁸² Ibid. p.86

⁸³ DiClemente, C. (2006). op.cit. p.30

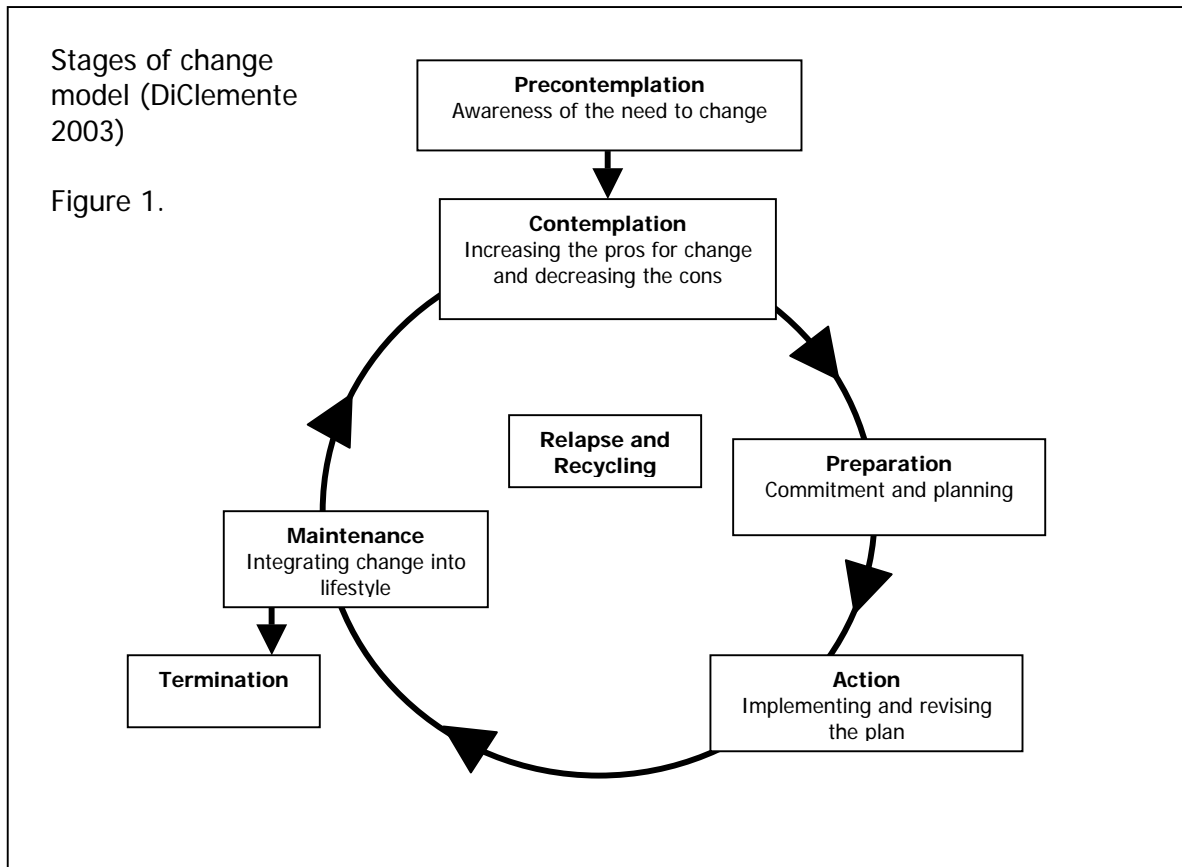
to change but it can be a slow process and often *'planning'* doesn't progress to *'action'* or action fails and the person moves back to an earlier stage.⁸⁴

DiClemente sets out the key characteristics of each stage and the tasks that need to take place to move people on.⁸⁵ The *'precontemplation'* stage represents a state where there is no consideration of change. Here the tasks are ones of building awareness that change needs to take place, which in turn will increase the concern about current behaviour. If this is successful individuals enter the stage of *'contemplation'* where the possibilities for change will be weighed up, working out the likely risks and rewards. The task at this stage is to analyse the pros and cons and make a decision to change. The third stage is *'preparation'*, where the commitment to change is built upon and a *'change plan'* is created. *'Action'* implements the change plan and changed patterns of behaviour emerge and need to be sustained. Finally *'maintenance'* describes the new pattern of behaviour and becomes the norm, the *"established, habitual pattern"*.⁸⁶ Individuals may *'relapse'* and need to *'recycle'* through the stages again to build the long-term stability needed to maintain the new behaviour.

⁸⁴ Ibid. p. 30.

⁸⁵ Ibid. pp. 26-30

⁸⁶ Ibid. p. 29.



Usefully DiClemente sets out additional dimensions of the model. Supporting the transition are “*processes of change*” which he describes as “*the internal and external experiences and activities that enable individuals to move from one stage to the next*”.⁸⁷ The facilitator can provide the enabling environment and design exercises to empower change but it is the individual or group that has the responsibility to activate the process. They do this by being open to taking on board new information, feeling the emotional reaction to it, reflecting on personal values and the pros and cons of change, deciding on action, making choices and seeking support.⁸⁸ If people are not motivated to do this then change will not happen. Some of these self-actualising traits will be cognitive and experiential whereas others will relate to specific behaviours.⁸⁹

⁸⁷ Ibid. p.32

⁸⁸ Ibid. pp.32-36

⁸⁹ Ibid. pp.32-36

Throughout the process “*markers of change*” enable an evaluation of the commitment to change and influence the session design.⁹⁰ The first is a “*decisional balance*”; a weighing of the pros and cons of change against the status quo. The positives for change must increasingly outweigh the benefits of the status quo.⁹¹ Exercises can be designed to review participants’ ‘*decisional balance*’ and therefore the likelihood of change. The second marker is “*self-efficacy*” which DiClemente describes as “*an individual’s confidence about performing a specific behaviour*”.⁹² Declarations of confidence in the ability to change are also high predictors of success.

The final dimension is the context within which change happens. Five contextual areas can influence change processes – current life situation, beliefs and attitudes, interpersonal relationships, social systems and enduring personal characteristics.⁹³ Resilience building/emissions reducing change such as using more public transport may have to deal with a whole range of contextual issues apart from the personal desire to change. The quality of service, proximity of a station, a person’s job, the need for mobility at different times, health, cost and so on will all require consideration. If there’s a contextual blockage to change then those factors also need to be brought into the deliberative process.

DiClemente’s model provides both a broad process guide that can support the design of a facilitated session and also an evaluative framework that can help

⁹⁰ Ibid. p.36

⁹¹ Ibid. pp.36-37

⁹² Ibid. p.37

⁹³ Ibid. pp.39-43

develop an understanding of success and failure as individuals or groups make progress or encounter barriers. I now describe the key principles and methods of Motivational Interviewing, which starts the process of translating the ‘*change model*’ into a ‘*change session*’.

3.4 Motivational interviewing

MI operationalises the stages of change model. Indeed, DiClemente describes the two models as a “*natural fit*” and suggests that “*motivation is what provides the impetus for the focus, effort, and energy needed to move through the entire process of change*”.⁹⁴ Just as the stages of change model offers a conceptual framework and overall structure, MI provides the practitioner with approaches and specific facilitator behaviours to support the change process. Although predominantly used in one-to-one counselling, there are a number of evaluated examples of group processes.⁹⁵ Transition initiatives are also embracing the principles of MI and have been trying out some elements of the approach in workshop settings.⁹⁶ MI also shares many principles and practices with group facilitation work, which resonate with my own experience (see 3.5).

⁹⁴ DiClemente, C., Velasquez, M.M. in Miller, W.R. and Rollnick, S. (2002). op.cit p.203

⁹⁵ LaBrie, J.W., Thompson A. D., Huchting, K., Lac, A., Buckley, K., (2007). A group Motivational Interviewing intervention reduces drinking and alcohol-related negative consequences in adjudicated college women. Loyola Marymount University, United States. *Addictive Behaviours* 32, pp.2549-2562;

Richards, A., Kattelman, K.K., Ren, C. (2006) *Motivating 18- to 24-Year-Olds to increase their fruit and vegetable consumption*. *Journal of the American Dietetic Association*. 2006;106:1405-1411;

Kurt, D.M., Curtin, L., Kirkley, D. E., Jones, D. L., Harris, R. (2006). *Group-Based Motivational Interviewing for Alcohol Use Among College Students: An Exploratory Study*. *Professional Psychology: Research and Practice*, 2006, Vol. 37, No. 6, 629–634.

No evaluated group MI processes could be found relating to CC/PO issues.

⁹⁶ Some elements of the MI approach have been used in group processes by Transition Initiatives. See, Hopkins, R. (2008). op.cit. p.88. No examples could be found of a more comprehensive group approach. See, Hopkins, R. (2008). op.cit. p.88.

Miller and Rollnick define MI as “a client centred, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence”.⁹⁷ Significantly they say “it is not a bag of tricks for getting people to do what they don’t want to do” but rather “a way of being with and for people – a facilitative approach to communication that evokes natural change”.⁹⁸ This directive but facilitative quality makes it a highly appropriate approach for change-focused discussions about CC/PO. In marked contrast to more confrontational and educational approaches to behaviour change MI seeks to create a spirit of collaboration and evocation when working with individuals or groups.⁹⁹ It honours rather than challenges. Motivation is drawn out and the responsibility for change is left with the individual or group.

Miller and Rollnick set out four principles; the ‘*expression of empathy*’, the ‘*development of discrepancy*’, ‘*rolling with resistance*’ and ‘*supporting self-efficacy*’.¹⁰⁰ Each is described in turn, drawing out the main attitudes and facilitator skills needed to put principle into practice.

Expressing empathy

A key attitude is “*acceptance*”, “a respectful listening to a person with a desire to understand his or her perspective.”¹⁰¹ The ‘*facilitator/counsellor effect*’, is crucial in building an empathetic environment, and more successful change outcomes are achieved when the facilitator/counsellor offers “*accurate*

⁹⁷ Miller, W.R. and Rollnick, S (2002). op.cit. p.25

⁹⁸ Ibid. p.25

⁹⁹ Ibid. p.25

¹⁰⁰ Ibid. p.36

¹⁰¹ Ibid. p.37

empathy, non possessive warmth and genuineness".¹⁰² A key skill is reflective listening which "*clarifies and amplifies the person's own experience and meaning.*"¹⁰³ This is an important but challenging skill for a facilitator, confirming the meaning of what is being said while encouraging the person to continue with their train of thought. The idea is to elicit '*change talk*' (i.e. the change that the person wants to make).¹⁰⁴

A reflective listening conversation in a CC/PO context may go like this.

Participant: "*I really want to use my car less but I need it for work*"

Facilitator: "*You'd prefer to use it less*"

Participant: "*Yes, I'm bothered about the emissions it's causing and the cost*"

Facilitator: "*The environmental impact bothers you*"

Participant: "*Yes, it doesn't seem right to be sitting in a jam every day with so many other cars all with just one person*"

Facilitator: "*You're wondering if you should do something about it*"

Participant: "*Yes, I've been looking into whether I could take the train a couple of times a week*"

The idea is to not block the line of thinking by telling, persuading, agreeing with, giving advice or analysing what has been said. All of these are likely to produce a reactive response.¹⁰⁵ The skill is not just in reflecting back, but also

¹⁰² Ibid. p.6

¹⁰³ Ibid. p.7

¹⁰⁴ Ibid. p.71

¹⁰⁵ Ibid. p.68

guessing the unspoken meaning or how the person might be feeling about the issue. Miller and Rollnick suggest that reflective listening will encourage personal reflection, new perspectives and change talk.¹⁰⁶

These “*nonspecifics*” such as facilitator behaviour, warmth, genuineness, the willingness to listen and not to judge, and even factors such as the comfort of the room, refreshments, the friendliness of greeting can all encourage change, whereas their absence can have the opposite effect.¹⁰⁷

Develop discrepancy

MI is intentionally directive. It is about getting people unstuck and moving them towards a different, more positive, behaviour. Creating discrepancy between the present behaviour and personal goals or values is an important approach as it magnifies the importance of change.¹⁰⁸ Again, the intention, in enabling people to perceive this “*behavioural gap*”, is to encourage them to make their own arguments for change.¹⁰⁹

Once discrepancy has been established an analysis of this gap could use a ‘*decisional balance*’ approach, using DiClemente’s ‘*marker of change*’ as a change inducing, ambivalence reconciling method. The benefits and costs of the status quo are weighed against the benefits and costs of achieving goals or values. Inevitably there will be attractions in the status quo as well as the possible change and this may induce the ambivalence of a ‘*I want to, but I*

¹⁰⁶ Ibid. p.72

¹⁰⁷ Ibid. pp.7-9

¹⁰⁸ Ibid. pp.38-39

¹⁰⁹ Ibid. pp.38-39

don't want to' dilemma. Miller and Rollnick suggest this is crucial in enabling change.¹¹⁰

“Without some discrepancy, there is no ambivalence. For some people, then, the first step towards change is to become ambivalent. As discrepancy increases, ambivalence first intensifies; then, if the discrepancy continues to grow, ambivalence can be resolved in the direction of change. Conceptualised in this way, ambivalence is not really an obstacle to change. Rather, it is ambivalence that makes change possible.”¹¹¹

Someone may be contemplating giving up flying or starting cycling. Both the status quo and change may have strong attractions. Creating and exploring the discrepancy between the current and desired behaviour will be a key workshop tool in building motivation for change.

Roll with resistance

The phrase provides a good analogy to describe the role of the facilitator in enabling and motivating change.¹¹² Arguing for change could actually have the opposite effect as the attack is resisted and returned. In *'rolling with resistance'* Miller and Rollnick suggest that the *“resistance that a person offers can be turned or reframed slightly to create a new momentum toward change”*.¹¹³ In offering no resistance the individual or group is supported in

¹¹⁰ Ibid. p.14

¹¹¹ Ibid. p.23

¹¹² Ibid. p.39

¹¹³ Ibid. p.40

formulating their own views, goals and opinions and the idea of the facilitator as an expert is deflected. There are a number of “traps” to be avoided; resistance is likely to increase if the facilitator is perceived to be “taking sides” or “playing the expert”.^{114 115} Similarly telling the group that they have a problem with their lifestyle, energy use etc., or directing blame before the group has had a chance to do any thinking of its own could increase resistance. For example, a formal presentation about the causes and effects of CC/PO could instigate defensiveness, reluctance to share opinions and resistance before the group has had an opportunity to debate the issue or take responsibility for the analysis.

Supporting Self-efficacy

Reflecting DiClemente’s marker of change, MI considers that building a personal/ group belief that change is possible is crucial to success.¹¹⁶ Self-efficacy is about the confidence to change and eliciting ‘change talk’ becomes an important part of the process. Techniques include simply asking open questions such as “how would you like things to be different?” or “what would you be willing to try?”. People could be asked to elaborate; “in what way”, “when”, “how much” and to give examples.¹¹⁷ Exercises that shift time can be effective, looking back to a period before the problem emerged or casting forward to a time when the problem has been solved. People are asked to describe how it feels, what they did and how they got to be in that situation.

¹¹⁴ Ibid. p.55

¹¹⁵ Ibid. p.60

¹¹⁶ Ibid. pp. 40-41

¹¹⁷ Ibid. pp. 79-80

Miller and Rollnick advocate this technique and similar methods are used in Macy's work.¹¹⁸

MI provides a raft of methodological insights that can be integrated into the design and delivery of group change processes. Particularly useful is the concept of MI as a way of being with people and the strong emphasis on facilitator attitude and approach. Significantly, for the process I have designed, Miller and Rollnick cite research that demonstrates the disproportionate benefits of brief intervention; people making significant progress towards change from the initial and limited input from the counsellor/facilitator.¹¹⁹

3.5 Group facilitation and engagement

The third influence on the development of a group process is that of public engagement, consensus building and conflict resolution practice. I draw on my own experience as a facilitator and the influences that have guided my practice.¹²⁰ Although some group facilitation practice may be more exploratory and not as goal focused as MI, the elicitive, non-judgemental and empathetic approach resonates. The stages of change model also reflects the

¹¹⁸ Ibid. p. 82; Macy, J., Brown, M.Y.(1998). op.cit. pp. 135-148.

¹¹⁹ Miller, W.R. and Rollnick, S. (2002). op.cit. p. 5.

¹²⁰ Influences include: Kaner. S. with Lind L, Toldi. C, Fisk. S and Berger. D (1998). *Facilitators Guide to Participatory Decision-Making*, New Society Publishers; Dukes. E. F. (1996). *Resolving Public Conflict, Transforming community and governance*, Manchester University Press; Dukes, E. F., Piscoish., M. A., Stephens, J. B. (2000). *Reaching for the Higher Ground, Tools for Powerful Groups and Communities*, Jossey-Bass, San Francisco; Involve (2005). Involve (2006). *People and Participation – how to put citizens and the heart of decision making*; Fisher.R, Ury.W, (1981). *Getting to Yes*, Random House; (2007), Icarus Collective (2007). *Community Engagement: Tools, Techniques and Strategies*; Interact Networks (2007). *Building Trust With Communities*, Environment Agency; Boal, A. (1992). *Games for Actors and Non-Actors*, Routledge.; The National Consumer Council (2008), *Deliberative Public Engagement: nine principles*; Susskind. L, McKearnan. S and Thomas-Larmer. J (eds.), (1999). *The Consensus Building Handbook*, Sage Publications.

progressive and iterative change model of consensus building or conflict resolution.¹²¹ The facilitation experience provides insight into how best to translate the stages of change and MI approaches into practical methods and approaches that will work in a group situation.

Kaner's definition of facilitation resonates with my own practice; he suggests *"the facilitator's job is to support everyone to do their best thinking"*, by *"encouraging full participation, promoting mutual understanding and cultivating a shared responsibility"*.¹²² Successful goal orientated conversations are more likely to be achieved when:

- The purpose of the session/conversation is clear
- There is sufficient information equally accessible
- There is trust between participants
- Ideas and opinions can be communicated honestly
- Everyone can contribute as much as necessary
- There is quality mutual listening
- There is sufficient time to explore the topic
- The environment is comfortable and conducive
- Power differences are addressed
- Session design and facilitation is appropriate to defined goals.¹²³

¹²¹ For example, Icarus Collective (2007). *Community Engagement: Tools, Techniques and Strategies*; engagement strategy pp.14-15.

¹²² Kaner. S. with Lind L, Toldi. C, Fisk. S and Berger. D (1998). op.cit. p. 32.

¹²³ Draws on: Icarus Collective (2008), Evaluation, Design and Management Framework; Influences include: Kaner. S. with Lind L, Toldi. C, Fisk. S and Berger. D (1998) op.cit.; Involve, (2006), *People and Participation*. op.cit.; Icarus Collective (2007). *Community Engagement: Tools, Techniques and Strategies* op.cit.; Icarus Collective (2006). Facilitation skills; Interact Networks (2007). *Building Trust With Communities*, op.cit.; The National

A participative approach is able to embody some of the characteristics of a resilient system. Through creating a forum, which has a diversity of input, free flowing, unbounded discussion and trust between participants, there is potential for high levels of creativity and innovation and the development of what Dukes describes as “*self-organising learning systems*”.¹²⁴

The group format has a number of advantages. Macy suggests that workshops provide “*an island in time where, removed from other distractions and demands, we can focus long enough and reach and explore our deep responses to these dangers*”.¹²⁵ Groups offer mutual support when dealing with difficult issues. Sharing also fosters “*a deep sense of community and collective power*.”¹²⁶ Workshops can be safe places to try out new ideas or to express deep felt fears or anxiety without having to explain or justify them. Groups can also be “*profoundly collaborative*”, innovative and provide a future support structure.¹²⁷ This will be particularly important for the action and maintenance phases of the change model.

3.6 The whole model - a transformational approach

The drawing together of the stages of change model, MI and facilitation practice aims to inform a participative process that can respond to the weaknesses of more managerial, business as usual, pro status quo

Consumer Council (2008), op.cit.; Susskind. L, McKernan. S and Thomas-Larmer. J (eds.), (1999). op.cit.

¹²⁴ Dukes.E.F. (1996), op cit. p.169.

¹²⁵ Macy, J., Brown, M.Y. (1998). op.cit. p.63

¹²⁶ Ibid. p. 64.

¹²⁷ Ibid p. 64.

engagement processes. Drawing on Dukes' analysis, I aim to design and test a process that aspires to move away from the limited, managerial debate that often typifies responses to CC/PO to provide the space and opportunity to engage on a more transformational agenda. I hope to find out whether groups can think about practical but limited actions, such as changing their light bulbs or taking the bus as well as imagining a radically different world with new values and ways of relating to each other that CC/PO may well require.¹²⁸

PART 2. THE DEVELOPMENT OF THE FACILITATED GROUP PROCESS

3.7 Process aim and objectives

Within the context of the overall research questions the aim of the engagement process was to work with existing groups to motivate sustained pro-resilience/carbon emission reduction behaviour change.

By the end of the engagement process I wanted participants to have been able to:

- Explain broadly the challenges of climate change, peak oil and resilience building.
- Describe the difference between their values and goals and their current carbon reduction/resilience behaviour.
- Explore possible behaviour changes that would move the group towards desired goals that would incorporate a reduction in carbon emissions and a building of resilience.
- Commit to personal and group change commitments.

¹²⁸ Dukes, E.F. (1996). *Op.cit.* pp. 5 and 7.

3.8 Selection of groups and follow up phone interviews

The sample of groups was initially limited to three. I invited community groups to participate who were based where I live in West Yorkshire. This made recruitment and delivery straightforward and I was able to offer progression routes for participants through my involvement with the local Transition Initiative, MASTT.¹²⁹ Three groups offered to host a workshop; Slaithwaite Women's Institute, the governors of Slaithwaite Junior and Infants School and the River Colne Project and Friends of Slaithwaite Spa who hosted a joint session.¹³⁰ These groups gave a good age, gender, interest and attitude spread. The type of groups chosen was deliberate, involving people who had a civic behaviour motivation, reflecting Miller and Rollnick's motivation criteria of being ready, willing and able to change.¹³¹ People were also likely to be at the minimum change stage of '*contemplation*', recommended by Walters et al.¹³² In addition I was contacted by and invited to undertake the process with two work teams; The Design and Property Service at Kirklees Council and the Environment Team at Grontmij.¹³³ These additional workshops provided the

¹²⁹ Marsden and Slaithwaite Transition Towns (MASTT) details: www.mastt.org.uk

¹³⁰ Information about community groups: The River Colne Project, <http://www.rivercolneproject.org.uk/>; Friends of Slaithwaite Spa, <http://www.kirklees.gov.uk/community/localorgs/orgdetails.asp?OrgID=3373>, Slaithwaite Junior and Infants school, <http://www2.kirklees.gov.uk/community/education-learning/edresult.asp?dfec=3016>; Slaithwaite Women's Institute, <http://www.thewi.org.uk/institute.aspx?id=2058&fed=87&inst=9049>

¹³¹ Miller, W.R. and Rollnick, S. (2002). op.cit. p. 10.

¹³² Walters, S.T., Ogle, R. and Martin, J.E. in Miller, W.R. and Rollnick, S. (2002). op.cit. p. 389. see also; Department for Environment Food and Rural Affairs (Defra) (14 August 2007), 2007 *Survey of Public Attitudes and Behaviours toward the environment*, p.6-8. <http://www.defra.gov.uk/environment/statistics/pubatt/download/pubattsum2007.pdf> (shows that a high percentage of population say they would like to adopt green behaviours)

¹³³ Information about The Design and Property Service, Kirklees Council. (manages energy use of the Council's buildings). <http://www.kirklees.gov.uk/you-kmc/kmc-services/department/estates.shtml>. Information about Grontmij (international consultant engineering company), <http://www.grontmij.co.uk/site/en-gb/About+Grontmij/About+Grontmij.htm> -

opportunity to test the methodology in work teams and large organisational settings.¹³⁴

In total, five engagement processes were delivered involving contact and briefing, delivery of the workshop and follow up. Forty-four people participated and I undertook fifteen post workshop phone interviews.¹³⁵ These enabled evaluative feedback and also gave an opportunity to continue the change process in an MI style, encouraging a further exploration of change commitments and motivation. I could also provide further information about progression routes.

3.9 Ethical considerations

Initial contact was made with each group's coordinator to discuss the aims of the work, participation required and outcomes. Each participant was sent a briefing note explaining the purpose and nature of the workshop (see appendix 1). Participants were informed that opinions and data recorded in the workshops would not be attributed to individuals, but the collective findings would be in the public domain. All groups gave their consent. I made clear my involvement in a Transition Initiative¹³⁶, my professional background as a facilitator¹³⁷ and that the findings would inform the MA research.

¹³⁴ Both the Design and Property Service and Grontmij were interested to explore how behaviour change among the staff team and the institution could enhance the work they did and build the resilience/carbon reduction capacity of the organisation.

¹³⁵ These interviews represented close to a 30% sample. Participants were interviewed from across the 5 groups. Sampling was random (in that I talked to people who were available during the week allocated for the interviews) and the interview was designed as a semi structured conversation with guide questions and prompts (see appendix 2). With agreement all interviews were recorded and transcribed.

¹³⁶ Marsden and Slaithwaite Transition Towns (MASTT) 'www.MASTT.org.uk'

¹³⁷ Details of my organisation, Icarus Collective; www.icarus.uk.net

3.10 Overall structure of the process

Figure 2 demonstrates the link between the theoretical framework discussed in part 1 and the practical task of incorporating this thinking into a deliverable participative process. The diagram reworks a participatory decision making model first developed by Kaner, representing the whole process by incorporating the additional elements of stages of change, MI and facilitation practice.¹³⁸ It shows how these three influences combine to inform the process design. The band at the top shows the progression through the five stages of change while the diamond figure integrates MI and facilitation practice to describe the engagement process. The process develops from left to right and the stages of change track the process of the diamond. There are three main stages; pre workshop, the workshop itself and the follow up. Each has a role to play in supporting the achievement of the overall aim and objectives and the process should not be seen as a stand-alone workshop.

Pre workshop

The pre-workshop period is important as participants need to understand the aim and objectives and be prepared for the working style and subject matter.

The stage of change that participants may relate to at this point is

'precontemplation' or more likely, *'contemplation'*.¹³⁹

¹³⁸ Kaner. S. with Lind L, Toldi. C, Fisk. S and Berger. D (1998). op.cit. see esp. pp. 237-245

¹³⁹ This is a broad categorisation as certainly individuals and groups can be at different stages of change in different areas of their lives and activities, however, given the level of knowledge and debate at a local level about CC/PO issues, this analysis mainly holds true.

Workshop

The diamond has a three part structure; zones of *'exploration'*, *'ambivalence'* and *'change'*. These represent a progression in thinking and deliberation through the workshop and reflects practice in facilitated problem solving as well as a possible route through an MI process.

The facilitator's role within the *'exploration zone'* is to move the group on from *'business as usual'* into a broader consideration of the issues. Business as usual decisions are characterised by limited participation and information. Only immediately presenting dimensions are explored and decisions draw on habit and customary behaviour. A consideration of CC/PO demands more divergent thinking. Time, space, trust, an empathetic environment and appropriate information is needed for a group to get beyond obvious problems and solutions. Here the multiplicity of information, views and ideas are drawn out and juggled by the group. Kaner suggests that this phase is characterised by a *"suspension of judgement"*.¹⁴⁰ Information to be introduced about CC/PO during this phase but must be presented in a way that elicits the group's own knowledge, fills gaps and brings everyone to a similar level of understanding. As DiClemente comments, the group should not be protected from feeling the emotional reaction to the issues that present.¹⁴¹ Macy agrees, acknowledging that feeling pain for a *"threatened and suffering world"* is a necessary prerequisite to action, change and an effective response.¹⁴² The facilitative skill is in judging the extent to which the problem needs to be explored and

¹⁴⁰ Kaner. S. with Lind L, Toldi. C, Fisk. S and Berger. D (1998). op.cit. p.240.

¹⁴¹ DiClemente, C. (2006). op.cit. p.33-34.

¹⁴² Macy, J., Brown, M.Y. (1998). op.cit. p. 27.

experienced before guiding the group towards an analysis of information and reaction in the second stage of the workshop, the *'ambivalent zone'*.

There is broad agreement that an ambivalent type zone is a necessary prerequisite for change. MI is clear; no discrepancy and ambivalence then no motivation to change. Exercises need to deliberately explore discrepancy and ambivalence opening up the prospect of unease, confusion and multiple possibilities. Innes suggests that, although counterintuitive, complexity and confusion can be creative and productive states that can enhance problem solving potential.¹⁴³ Kaner too cites his *"Groan Zone"* as a place of creativity where groups can experiment and try out different ways forward until a productive one emerges.¹⁴⁴ Dukes points to a similar stage where *'self-organised learning systems'* are created while Homer-Dixon describes a group dynamic where there is extraordinary diversity, instability and flexibility; a situation chaotic enough to create unexpected innovations but orderly enough to learn and move on.¹⁴⁵ ¹⁴⁶ This zone needs careful management by the facilitator, allowing the group space and time to explore, but choosing the right time to move towards the *'change zone'*. As Miller and Rollnick comment, *"ambivalence is a reasonable place to visit, but you wouldn't want to live there"*.¹⁴⁷

¹⁴³ Innes. J.E. (1999), *Evaluating Consensus Building*, in Susskind. L, McKearnan. S and Thomas-Larmer. J (eds.), *The Consensus Building Handbook*, Sage Publications, p.645.

¹⁴⁴ Kaner. S. with Lind L, Toldi. C, Fisk. S and Berger. D (1998), op.cit. p.19.

¹⁴⁵ Dukes.E.F. (1996), op cit. p.169.

¹⁴⁶ Homer-Dixon, T, (2006), op.cit. p.294; Innes.J.E. (1999), op. cit. p.646.

¹⁴⁷ Miller, W.R. and Rollnick, S. (2002). op.cit. p.14.

It is in the shift from *'ambivalence zone'* to *'change zone'* where the transition between *'contemplation'* and *'preparation'* is likely to take place. Here, the facilitator encourages *'change talk'* and *'self-efficacy'* through the exercises and group discussions. Participants are supported in developing more convergent thinking the framing of individual and group change commitments.

The subject matter of CC/PO can be emotionally charged and the discussion of behaviour difficult. Overall it is important to create an empathetic environment where people feel comfortable to talk. It is also crucial that the elicitive approach runs throughout giving people the space and time to hear themselves make their own arguments for change.

Post workshop



This period is also an important part of the process and aims to support participants in maintaining their commitments. All workshop generated materials and commitments are sent back to participants and short semi-structured phone conversations support the maintenance of the change process. (see appendix 2, interview question schedule).

3.11 Workshop: Detailed design


The detailed design is informed by the analysis of the theory and practice outlined above. Within a two-hour timeframe participants are taken through the three stages. The full facilitation plans can be reviewed in appendix 3. Table 2 outlines the key activities in each stage. The *'notes'* column describes the thinking and rationale in translating the theory into group activities and the

'zone/outcome/time' column provides a link to Fig. 2 demonstrating how the detailed facilitation activities match the broad process stages in terms of zone and desired outcome.

Table 2. Workshop - key stages, activity and analysis

Zone / outcome /time	Activity	Notes	
<p>Exploration</p> <p><u>Key outcomes:</u></p> <p>Empathetic environment</p> <p>30 mins.</p>	<p>Set up</p> <p>Workshop room is set out cabaret style.</p>	<p>Facilitator aims to establish a friendly, empathetic environment. The “<i>nonspecifics</i>” are important in creating a space that will enable trusting discussion. People are welcomed personally. Refreshments are available.</p>	
<p>Exploration</p> <p><u>Key outcomes:</u></p> <p>Facilitator not seen as expert</p> <p>Explore problem</p> <p>Elicit diversity of perspective</p> <p>Feel emotional reaction</p> <p>30 mins</p>	<p>Introduction to the theme of CC/PO</p> <p>The facilitator asks the group to consider a selection of objects and consider what they have in common. Responses elicited lead a discussion relating to the fact that that they were all made from oil. The group is asked to look around the room to see if there’s anything that has not been manufactured or transported using oil. and whether there is anything made locally.</p> <p>A short discussion is conducted about reliance on fossil fuels.</p> <p><u>Did you know - mingle</u></p> <p>Participants receive a card each with information about CC/PO (see appendix 4. for examples). They circulate freely talking to as many people as possible to exchange and discuss their information.</p> <p>Brief feedback is requested – group discusses whether any of the information surprised them, if they have any different opinions etc.¹⁴⁸</p> <p>Concluding input from facilitator explaining the need to reduce emissions and build resilience.</p>	<p>The workshop aims to provide sufficient information to inform the session, but strikes a balance between telling and eliciting information.</p> <p>The objects exercise and card mingle are fun, equalise knowledge/ information levels and enables people to be the expert themselves – using their own knowledge or that provided on the cards. A shared set of information is quickly acquired.</p> <p>The group is being gently moved beyond familiar discussions and business as usual conclusions into areas of more diverse perspectives.</p> <p>Facilitator acknowledges complexity of information and if resistance emerges asks for a response from other members rather than playing the expert.</p>	

¹⁴⁸ Hopkins, R. (2008). op.cit. p.26 (describes the exercise). Transition training cards on PO and CC provided the resource.




Zone / outcome /time	Activity	Notes	
<p>Ambivalence</p> <p><u>Key outcomes:</u></p> <p>Create feelings of ambivalence and discrepancy</p> <p>Promote change talk</p> <p>Inspire people for change</p> <p>Explore complexity of actions that need to be taken</p> <p>30 mins</p>	<p>What do you value / what's your collective vision?</p> <p><u>Community group</u> – participants are asked to prioritise what they value in life and discuss this with a partner or in a small group.¹⁴⁹</p> <p><u>Work team</u> – in small groups participants are asked to imagine their organisation in 10 years time, the world having survived/found solutions for CC/PO issues. They complete segmented concentric circle sheets and describe the organisation in the outer circle, the barriers they experienced in the next circle and then the human qualities necessary to have made that change in the inner circle (examples are reproduced in appendix 5).</p> <p>Facilitator asks for brief feedback and responds reflectively, not venturing an opinion.</p>	<p>Here I piloted one method with community groups and another with work teams. Both exercises however had the aim of asking people and teams to think about and state how they would like things to be. Values reflect their ideal self. This may create feelings of ambivalence and discrepancy between a perceived ideal self and actual behaviour. Miller and Rollnick comment, <i>“when a behaviour comes into conflict with a deeply held value it is usually the behaviour that changes”</i>¹⁵⁰ The exercise also elicits change talk. <i>“Once citizens have publicly expressed their values and attitudes say in a neighbourhood meeting, it becomes much more difficult for them to be modified and their behaviour is more likely to change”</i>¹⁵¹</p> <p>The work team exercise adapts Macy’s <i>“30 years hence”</i>¹⁵² It serves the same purpose as the values exercise but allows a focus in on organisational functions and policies and is better suited to group work.</p>	




¹⁴⁹ The Rokeach Values survey was used to guide the exercise. Taking an adapted selection of Rokeach’s *‘instrumental values’* and asking participants to rank these in priority order. Rokeach, M. (1973). *The Nature of Human Values*, Free Press.

¹⁵⁰ Miller, W.R. and Rollnick, S. (2002). op.cit. p.23

¹⁵¹ Dawney, E and Shah, H, (2005). *Behavioural Economics: seven principles for policy makers*. London, New Economics Foundation. p.8.

¹⁵² Macy, J., Brown, M.Y. (1998). op.cit. p.142

Zone / outcome /time	Activity	Notes	
<p>Ambivalence</p> <p><u>Key outcomes:</u></p> <p>Create feelings of ambivalence and discrepancy</p> <p>Undertake decisional balance</p> <p>Promote change talk</p> <p>Inspire people for change</p> <p>Explore complexity of actions that need to be taken</p> <p>20 mins</p>	<p>Behaviour review</p> <p>Participants review their current carbon reduction/resilience building behaviour on charts (see appendix 6) They have the option to consider positive and negative behaviour and map this in any way they choose.</p> <p>Facilitator asks the group to reflect on contradictions between their actual behaviour and the ideal behaviour that they explored in the previous exercise. A short whole group discussion takes place with reflective listening used to draw the discussion out and elicit change talk.</p>	<p>This exercise links directly with the previous one and is specifically designed as a counter point to the exploration of the ideal. The two exercises enable participants to develop discrepancy through undertaking a '<i>decisional balance</i>' activity. A consideration of the pros and cons enables a consideration of how they might move towards their ideal outcome/behaviour.</p>	  

Zone / outcome /time	Activity	Notes	
<p>Change</p> <p><u>Key outcomes:</u></p> <p>Promote change talk</p> <p>Inspire the group for change</p> <p>Create collective analysis</p> <p>Review importance and confidence for change</p> <p>Enhance self-efficacy</p> <p>30 mins</p>	<p>Change options</p> <p>Participants are asked to reflect on the whole workshop. They consider individually the changes they would like to make (either individually or as a group) to reduce carbon emissions or to build resilience. They write each change on a <i>'change card'</i> (see appendix 7.) The card records what might assist change and barriers and also ranks confidence and importance.</p> <p>One by one, participants present the change they are proposing and plot it on a large graph on the wall according to levels of <i>'importance'</i> and <i>'confidence'</i> (see appendix 8 for full list of change commitments).</p>	<p>This concluding part of the workshop focuses on change commitments and change talk. It aims to develop individual and group commitments for change through the presentations and plotting of the cards on the chart. The group gets instant feedback about their collective <i>'stage of change'</i>. Group <i>'change talk'</i> is elicited through the final discussion.</p> <p>This culminating exercise is designed to be a collectively motivational experience and to bring the workshop to an end on a positive and energising note.</p>	 
<p>Change</p> <p><u>Key outcomes:</u></p> <p>Elicit confidence that support will be available</p> <p>Enhance self-efficacy</p> <p>10 mins</p>	<p>Concluding remarks</p> <p>The facilitator thanks participants for their participation and commits to sending back a write up of their change commitments and all the collective work.</p> <p>A handout is distributed giving details of further information and progression routes. (see appendix 9)</p> <p>The facilitator confirms that a sample of the participants will be called by phone to provide feedback on the workshop and review commitments.</p> <p>Evaluation sheet is distributed.</p>	<p>A follow up to the workshop is important. Ideally each participant would receive a phone call.</p>	

4. PROCESS ANALYSIS AND LEARNING OUTCOMES

4.1 Analysis structure

Previous chapters set out the need for group behaviour change processes, the barriers to change in relation to CC/PO issues and possible ways forward through the development of methodology that draws on psychology of change and facilitation theory and practice. Having described the detail of preparation, workshop and follow up, this chapter reviews the strengths and limitations of this '*engagement for behaviour change process*'. The focus is on learning so that future processes can be refined and improved. The analysis is structured into two parts by the broad '*success criteria*' implicit within research questions (iv) and (v). I first explore research question (iv); the achievement of change focused dialogue, and then question (v), reviewing whether resilience building and emissions reducing change has been achieved. Each section breaks down the headline questions into constituent parts that reflect different dimensions of the overall process. Section 4.2, '*productive dialogue*', reflects on process work that occurs mainly pre-workshop and within the '*exploration*' and '*ambivalence*' zones, while 4.3 reviews '*making and sustaining change*' focusing on the dynamics of the '*change zone*' and follow up activities. Having reviewed strengths and limitations within each of the dimensions I then set out key the learning points in 4.4 that draws the two parts together. The division into '*dialogue*' and '*change*' dimensions enables a structured review however participative processes cannot be neatly compartmentalised the dialogue/change dynamic will interweave in an iterative cycle. Bringing the

learning points together makes for a more comprehensive analysis and avoids repetition and false divisions being made.

Evidence is drawn from the collated data generated by participants, transcribed interviews from a sample of fifteen participants, session evaluation sheets and my own review notes as designer/facilitator. The analysis also locates the findings and learning points within the context, theory and practice set out in the preceding chapters.

4.2 Productive dialogue

A wide range of process elements impacted upon the potential for productive dialogue. Participants commented on the information about CC/PO, the benefits of a group work approach, facilitator attitudes/skills and the success of the exercises. They also fed back feelings about discussing the issues, the emotional reaction to the subject matter and the ambivalence of their own decision-making.

Information

Peak oil was mentioned a number of times as new information and a new way of considering the issue.

*“The issue of Peak Oil was new, definitely made me think more.”*¹⁵³

¹⁵³ Taken from recorded and transcribed telephone interviews with workshop participants – Slaithwaite Women’s’ Institute.

*“The information about peak oil inspired me to look into it a bit more on the internet.”*¹⁵⁴

*“The peak oil thing, I wasn’t aware of that. It makes you think a bit more doesn’t it about how things have got to change really.”*¹⁵⁵

This closely reflects Hopkins’ findings, that PO *“can focus the mind more than climate change because it can seem to be more obviously relevant to people’s everyday lives”* and that it helps people *“to think about the vulnerability of their oil-dependent state”*.¹⁵⁶ Dialogue about PO helps challenge the barriers of *anticipatory action* and *scales of interest*, as conversations and actions relating to fuel conservation and vulnerability of food supply were tackled in each workshop.

The way in which information was introduced through the *‘objects’* and *‘did you know’* exercises was well received.

*“How we did the cards exercise was great as everyone took ownership of that information and then passed it on. That made the information stick with them. Pitching it at the right level in a mixed group is a very difficult job.”*¹⁵⁷

¹⁵⁴ Taken from recorded and transcribed telephone interviews with workshop participants – Design and Property Service, Kirklees Council.

¹⁵⁵ Taken from recorded and transcribed telephone interviews with workshop participants – Design and Property Service, Kirklees Council

¹⁵⁶ Hopkins, R. (2008). *op.cit.* pp.39-40

¹⁵⁷ Taken from recorded and transcribed telephone interviews with workshop participants - Design and Property Service, Kirklees Council.

Opening the sessions with these exercises was successful across all the groups, working as both an energiser and developing sufficient shared knowledge to focus on the issues and open up a debate. Participants could choose to accept, challenge or add new information, ensuring that groups were immediately taken beyond the *'business as usual'* discussion.

A number of comments suggested a more detailed pre-workshop briefing would be useful. Given the participative demands, the emotive subject matter and the intention to elicit change commitments a more detailed briefing may increase the motivational and change potential. Unlike MI, where initial contact with a therapist is usually client led, people will often be participating in these workshops without the same level of commitment or precontemplation.

Group work

Group work was widely endorsed as a good way to generate ideas and discussion, a motivational prompt, and a source of future support.

“What’s really important for me is about developing shared values between people, the group thing is very important. It gives support afterwards and it just increases peoples interest in each other, being more caring and sharing.”¹⁵⁸

¹⁵⁸ Taken from recorded and transcribed telephone interviews with workshop participants – River Colne Project

*“I work better in a group. To bring ideas together you do need a group. You need to talk to people and see how you’re getting it wrong compared with them. What method are they using, is it a better system? Seriously I found it very good.”*¹⁵⁹

MI is currently experimenting with group formats and there is mixed evidence of its effectiveness¹⁶⁰. Walters et al. discuss the potential for *“discrepancy diffusion, non participation, resistance and collective argumentation”*. They also suggest that *“talk time”* per person may be limited and in turn the potential for change talk.¹⁶¹ They recognise however the potential benefits in terms of peer influence and the power of a more public commitment.¹⁶²

These comments are from within the addictions field and the focus on CC/PO issues shifts the context somewhat. CC/PO has a broader societal focus and needs to present collective as well as individual change commitments. Non-participation, argumentation and the lack of *‘talk time’* can be largely addressed by good session design and facilitation practice. The workshop is structured to maximise participation and quality dialogue and deliver the group experiences set out in 3.5 above. This way of working increases *“talk time”* and the potential for change talk. Walters et al. also suggest two facilitators, *“one can be expressing empathy while the second monitors and rolls with*

¹⁵⁹ Taken from recorded and transcribed telephone interviews with workshop participants – Friends of Slaithwaite Spa

¹⁶⁰ LaBrie, J.W., Thompson A. D., Huchting, K., Lac, A., Buckley, K., (2007). op.cit. Richards, A., Kattelman, K.K., Ren, C. (2006) op.cit. Kurt, D.M., Curtin, L., Kirkley, D. E., Jones, D. L., Harris, R. (2006). op.cit. Walters, S.T., Ogle,R. and Martin,J.E. in Miller,W.R. and Rollnick, S. (2002). op.cit.

¹⁶¹ Walters, S.T., Ogle,R. and Martin,J.E. in Miller,W.R. and Rollnick, S. (2002). op.cit. p.381

¹⁶² Ibid. p.382

resistance”¹⁶³. This is good advice and although not possible within the piloting phase, should be standard practice for future sessions. The complex, interactive nature of the group work and the emotional and practical elements could be managed more effectively with two facilitators. Group numbers and the stage of change starting point is also discussed by Walters et al. who consider 20 participants to be a maximum and the entry point for group deliberation to be ‘*contemplators*’ and above¹⁶⁴ so that the group reflects Miller and Rollnick’s dictum of being “*ready, willing and able*” to change.¹⁶⁵ Experience from the sessions and facilitation practice would concur with the upper limit and suggest a minimum of 8 to create a sufficiently dynamic for group discussions and exercises. Most people were contemplators or above in terms of CC but consideration of PO issues were new to many people.¹⁶⁶ As discussed, adding PO to the discourse appeared to focus and galvanise motivation rather than increase resistance. It would be interesting to run this process with more sceptical groups where a more input pre-workshop may be beneficial.

Certainly there are efficiency gains in group work and experience from the pilots would suggest that groups who have a longer term connection can enhance their potential for future peer support and effectiveness as they move into the action zone. All of the groups confirmed that they had discussed the

¹⁶³ Ibid p.384

¹⁶⁴ Ibid p.389

¹⁶⁵ Miller, W.R. and Rollnick, S. (2002). op.cit. p.10

¹⁶⁶ Ipsos, Mori (2007), *Tipping point or turning point, Climate change survey*, <http://www.ipsos-mori.com/polls/2007/climatechange.shtml>.

issues after the workshop with colleagues/group members and some have planned to meet again to review progress.¹⁶⁷

A multiplier effect

Related to the group process is a noticeable '*multiplier effect*' of people and teams seeking action from others. Feedback across the workshops suggested that people were sufficiently motivated to try to influence others.

*"I've got a team meeting tomorrow – and I'm going to talk to them about the workshop – probably not very well but I'm going to have a go. I'm going to ask them what little changes they thought they could make at home and at work."*¹⁶⁸

"I've found that really useful and I'm preaching to my son and daughter now".¹⁶⁹

*"It's been good as we're discussing things at home too and we've started to monitor what uses what at home."*¹⁷⁰

¹⁶⁷ The Design and Property Service and the Women's Institute will return to the issues formally; Grontnij have invited me to run the session again with a cross-section of their clients.

¹⁶⁸ Taken from recorded and transcribed telephone interviews with workshop participants – Design and Property Service, Kirklees Council.

¹⁶⁹ Ibid.

¹⁷⁰ Ibid.

Future research could focus on the issues and resistance people encounter, their impact and whether they use similar elicitive, non-judgemental and empathetic methods as they aim to involve and influence others.

A whole organisation approach

People did perceive barriers in influencing others. The two work teams in particular proposed a whole organisation approach to behaviour/culture change. They proposed ‘rolling out’ the process across different teams/services to open up both people and policy to influence and change.

“I actually think everyone would benefit from going on something like this. You come away quite fired up. But when you go into your office areas you don’t really feel confident enough to go and challenge folk about turning lights off and so on. I’m sure if everyone had had the same experience then it’s more of a collaborative thing.”¹⁷¹

“If there were small cells of this type of activity happening across an organisation there would be quite a lot of pressure from the bottom up for the organisation to be responding to it and do something about it.”

¹⁷²

Interestingly, one participant related that Kirklees Council is taking bold steps to improve its environmental performance but often the vehicle for change is

¹⁷¹ Taken from recorded and transcribed telephone interviews with workshop participants – Grontmij

¹⁷² Taken from recorded and transcribed telephone interviews with workshop participants – Design and Property Service, Kirklees Council

an imposed policy decision from senior management. This can produce unwillingness to operationalise the policy, not because employees disagree with it but because they have been told to do it. It reflects MI's discourse on resistance to change.¹⁷³

Facilitator attitude and ability

As discussed, the stages of change model, MI and facilitation practice demand not just 'a box of tricks' but also the ability to be with and motivate a group using a range of attitudes and interpersonal skills. No matter how good the structure or exercises the facilitator interaction with the group is key if the benefit of these approaches are to be maximised. Miller and Rollnick's traps such as "taking sides", "playing the expert" or "labelling" the group need to be avoided. Specific skills such as reflective listening must be learned and practiced and the "nonspecifics" such as facilitator warmth, genuineness and the willingness to listen must be deliberately applied.¹⁷⁴ ¹⁷⁵ Within a complex, time limited workshop, applying the above and dealing with fact laden and emotive issues such as CC/PO is very demanding, reinforcing the point made that two facilitators are necessary.¹⁷⁶ Feedback from participants emphasises how important facilitator attitude is to successful outcomes.

*"I thought you were very non-judgemental, and it was very non-competitive."*¹⁷⁷

¹⁷³ Miller, W.R. and Rollnick, S. (2002). op.cit. pp.46-51.

¹⁷⁴ Miller, W.R. and Rollnick, S. (2002). op.cit. p.60

¹⁷⁵ Ibid p.7-9

¹⁷⁶ Walters, S.T., Ogle, R. and Martin, J.E. in Miller, W.R. and Rollnick, S. (2002). op.cit. p.384

¹⁷⁷ Taken from recorded and transcribed telephone interviews with workshop participants – Design and Property Service, Kirklees Council.

“I think people really enjoyed it and felt it was a very open place where they could express any views or opinions”¹⁷⁸

“You got everyone interacting, and I know it’s hard to do with things like that, it was just pitched right.”¹⁷⁹

Workshop exercises / design

A range of different exercises supported the ‘change journey’. Overall there were positive comments from different people for all of the different stages and exercises. Some participants found particular tasks difficult or hard to understand but no one found the whole process impenetrable. Facilitation practice suggests different people will respond to different ways of tackling a topic and so a mixture of different styles will ensure that engagement across the whole group is maximised.¹⁸⁰ A number of commented that two hours was too short a period to develop the necessary group dialogue. Most people suggesting a half-day would work better.

Feeling the emotional reaction

A number of participants commented on their concerns for the future, feelings of worry and apprehension about the impact of CC/PO.

¹⁷⁸ Ibid.

¹⁷⁹ Ibid.

¹⁸⁰ see for example, Kolb’s Learning styles,
<http://www.businessballs.com/kolblearningstyles.htm>

*“The statistic on renewable energy – even if we quadrupled what we do now, it would still only be 3%. I found that quite worrying because I don’t know where that leaves us. I haven’t really stopped thinking about it, it’s really made an impression.”*¹⁸¹

*“I was really quite horrified and frightened when we had that lorry strike and I could see the shelves emptying in the shops and I could see the army being called in and thought people would be fighting over a loaf of bread”*¹⁸²

*“It makes you think what lies ahead for the children”*¹⁸³

The feedback reflects DiClemente and Macy’s contention that people should not be protected from this emotional reaction as it cuts the “*feedback loop*” and stifles debate and action.^{184 185} In a short workshop however the facilitator needs to be conscious of taking people through this ‘*ambivalence zone*’ and ensuring that there are support options beyond the workshop. Working towards ‘*change statements*’ appeared a positive concluding activity and people welcomed the progression routes information. The format of working with existing groups and work teams certainly added a substantial support structure and the telephone interviews and collated results were also perceived by a number of interviewees as positive support.

¹⁸¹ Taken from recorded and transcribed telephone interviews with workshop participants – Design and Property Service, Kirklees Council.

¹⁸² Ibid.

¹⁸³ Ibid.

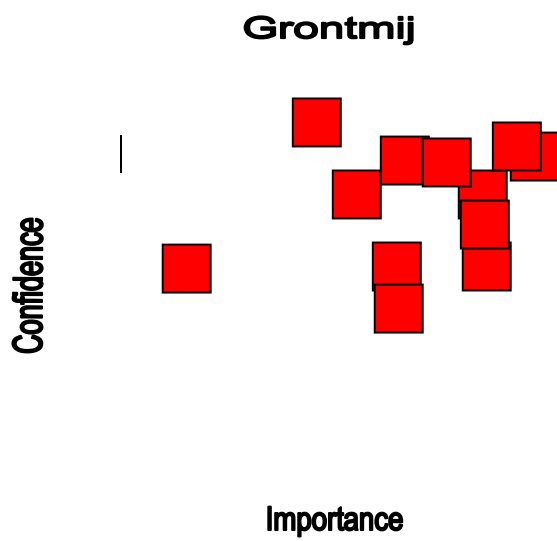
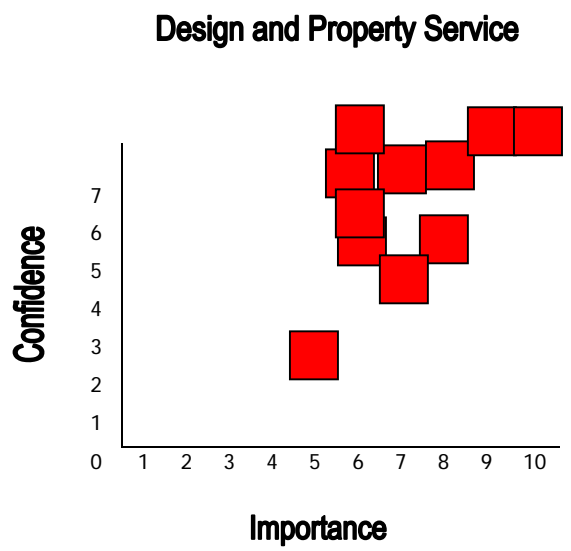
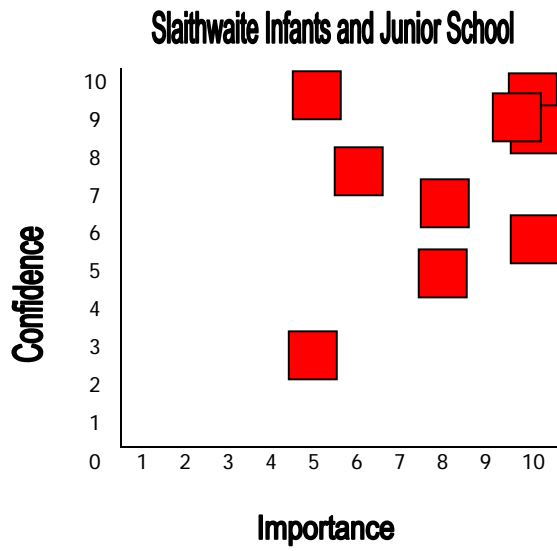
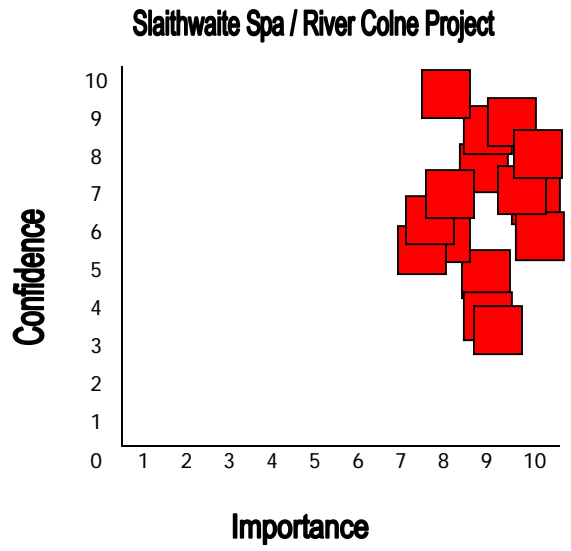
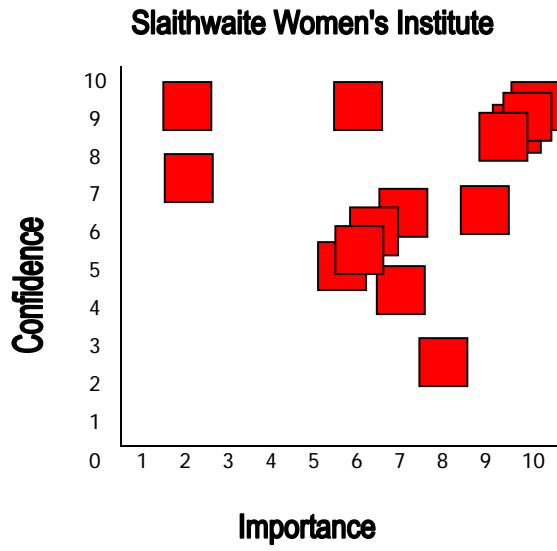
¹⁸⁴ DiClemente, C. (2006). op.cit. p.33-34 .

¹⁸⁵ Macy, J., Brown, M.Y. (1998). op.cit. p.27

Team change profile

All groups concluded the workshop by plotting a *'team profile'* of the levels of importance/commitment of their change cards (shown in figure 3). The profiles provided the basis for a final motivational discussion where groups could consider whether and how they could increase the confidence/importance to change. All groups showed a broadly similar profile with the cards clustering towards the top right, indicating high levels of confidence/importance. This profile is a predictor of group self-efficacy and an ability to translate *'preparation'* into *'action'*.¹⁸⁶ Slaithwaite Spa/River Colne project were very clustered in this part of the graph whereas the W.I had a more dispersed profile. The discussion in the Grontmij session was about how confidence to change could be increased across the board and how internal culture and policy could respond.

¹⁸⁶ DiClemente, C. (2006). op.cit. p.37.



4.3. Making and sustaining change

The desired outcome from the whole engagement process is self-actualising and sustainable change; change to reduce carbon emissions and build resilience at personal, group, organisational and ultimately societal levels. The previous section reviewed the effectiveness of change focused group dialogue. Dialogue, is clearly integral to the '*change journey*' and underpins and informs change itself. This section focuses predominately on the activities and dynamics of the '*change zone*' (Fig 2.), considering the success of the process in motivating shifts in behaviour from '*preparation*' through '*action*' to '*maintenance*'. Key change components analysed below include change talk, thinking differently, motivation, the change commitments themselves and barriers to change.

Change talk

The motivation of '*change talk*' is central and is seen as a key predictor of a commitment to behaviour change. Miller and Rollnick suggest that if you "*ask people how confident they are that they can succeed in making a particular change, their answer is a reasonably good predictor of what will happen*".¹⁸⁷ As we have seen the workshop design and style of facilitation is an important component in eliciting change talk. Conduct a session in a "*directive, confrontational manner, client resistance goes up*" whereas facilitate in "*a reflective supporting manner, and resistance goes down while change talk increases*".¹⁸⁸ Feedback from participants gives a strong indication that the

¹⁸⁷ Miller, W.R. and Rollnick, S. (2002). op.cit. p.9

¹⁸⁸ Miller, W.R. and Rollnick, S. (2002). op.cit. p.9

specific moment when change commitments were written and presented to the rest of the group was a powerful motivator to actual change.

“That end bit where you had to put a statement down, if you’d just gone round and we’d just said something off the top of our heads, I don’t think it would have had the impact to having to actually make a statement and saying this is what we’re going to do. You want to do it and it’s something to aim for.”¹⁸⁹

“Writing down the pledges was good as you have to engage with people in different ways and then you’re put a bit on the spot. It’s a different approach to going to lectures where you just internalise the information. Drawing your own personal conclusion and action does make a difference; it makes you think a little bit more deeply about it.”¹⁹⁰

Change talk appeared to be the nudge a number of people needed to enable movement from ‘preparation’ to ‘action’ stages of change.

“Turning off PCs and lights and so on, and that’s something else I’m aware that I don’t do, and I’ve kept thinking, I should, I should. And

¹⁸⁹ Taken from recorded and transcribed telephone interviews with workshop participants – Design and Property Service, Kirklees Council.

¹⁹⁰ Taken from recorded and transcribed telephone interviews with workshop participants – Grontmij.

*again that's helped, actually making a statement, I'm going to do this."*¹⁹¹

*"Making a statement and saying, I'm going to do this, because I've actually been thinking of doing it for a long time and like everything else you don't."*¹⁹²

A different way of thinking

The process enabled some people to shift perspective and view their behaviour through a different lens, whether that were carbon reduction, resilience or just providing increased clarity in being able to understand their own motivations and barriers to change.

*"The workshop did help me to think about what I was doing and what I was not doing and why I wasn't doing it. Because I'm aware of these issues and I think I'm pretty good in terms of what I do, but there are still areas – because you highlighted that there's barriers to change - for me the barrier was myself. That made me think, why am I the barrier. I came to the conclusion that it's fairly easy to change, it's about the thought processes and the planning."*¹⁹³

¹⁹¹ Taken from recorded and transcribed telephone interviews with workshop participants – Design and Property Service, Kirklees Council.

¹⁹² Ibid.

¹⁹³ Ibid.

*“Sometimes when you rush and are busy you don’t really think about what you’re doing at work, and you just want a quick solution to sort it out, but now I seem to make all the links about where things impact down the line. Instead of seeing it as a short line I now see how everything links together. It’s highlighted all sorts of things for me really.”*¹⁹⁴

Another participant describes how a simple purchase provoked a different way of thinking.

“Using local things, for example, we went strawberry picking the other day. We thought rather than buy it from the supermarket, we’ll go strawberry picking. It’s just a different way of thinking.”

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A decision to cycle more is also framed in the ability to think differently.

“This thing about cycling more and not using the car; it’s more about just letting go, we’ve all got cycles and helmets, it’s more in terms of me worrying about them [the children]. You think you’re being a better mother to shove them in the car and take them, so it’s about letting go and thinking about things in a

¹⁹⁴ Ibid.

¹⁹⁵ Ibid.

*different way. Shifting habits. The workshop prompted us to do this more.”*¹⁹⁶

Other comments suggested a developing understanding of resilience thinking, with around 20% of proposed changes embracing this way of thinking (see ‘*change commitments*’ below). Feedback suggested however that resilience thinking had shifted some people through stages of change; not necessarily to the point of action but certainly from ‘*precontemplation*’ to ‘*contemplation*’, or ‘*contemplation*’ to ‘*preparation*’. The following could be described as ‘*resilience talk*’.

*“The workshop made me think about the value of talking more to other people and the things one can do as a group, or encouraging one another to do things individually just by the fact of discussing them with others. We’ve talked about it since as a group. It’s made me think particularly about getting people together to work a piece of land for example. There seems to be quite a few possibilities.”*¹⁹⁷

Here reflections on hay making exhibit a range of resilience characteristics – functional redundancy, local decision making, building social capital, reconnecting with nature and generating feelings of well-being.

¹⁹⁶ Taken from recorded and transcribed telephone interviews with workshop participants – Slaithwaite Infants and Junior School.

¹⁹⁷ Taken from recorded and transcribed telephone interviews with workshop participants – Slaithwaite Spa/River Colne Project.

*“We used to cut hay, it was hard work in some ways but in others it wasn’t hard work because you were all doing it and there wasn’t really a deadline. Somehow I used to feel at the end of a day doing it, tired but very relaxed and comfortable.”*¹⁹⁸

Another example of ‘resilience talk’ reflected on a family holiday in France taken just after the workshop.

*“When we were in France we were talking about it and looking at how much more self sufficient the villages can be. You look at what we’ve got here and how we’ve developed and we’re reliant on those lorries coming in, I wasn’t really aware of it all before. When you look to where we may go in the future the villages in France are far more resilient. I’m wondering how we’re going to function in the future”.*¹⁹⁹

Finally, a reflection on local action.

“I’d like to find more ways into the local community – linking groups together. We need to start thinking how we can start

¹⁹⁸ Ibid.

¹⁹⁹ Taken from recorded and transcribed telephone interviews with workshop participants – Slaithwaite Infants and Junior School.

*getting our community pulling together and moving in the right direction”.*²⁰⁰

Motivation and stage shifting

Feedback suggests that the overall process had a motivational effect for many people, enabling a shift through stages of change. The motivation came from different process elements and different trigger points. For some people it was the written feedback or the phone call, for others the impact of information about PO/CC, while some people cited a particular exercise, the group experience or the public commitment to change making.

*“When you sent the bits and pieces back for me to look through, that was the first time I started to reflect whether or not my behaviour had changed. I found it very useful. That was the thing that worked for me.”*²⁰¹

*“When you said I’ll be ringing you, I thought, oh right, I better do something as otherwise I’ll let you down as well as ourselves.”*²⁰²

“It’s good to attend with colleagues; one colleague she’s mentioned stuff to me. I know what she’s committed to and she knows mine so I think its good we can give each other a bit of a push.”

²⁰⁰ Taken from recorded and transcribed telephone interviews with workshop participants – Slaithwaite Infants and Junior School.

²⁰¹ Taken from recorded and transcribed telephone interviews with workshop participants – Design and Property Service, Kirklees Council.

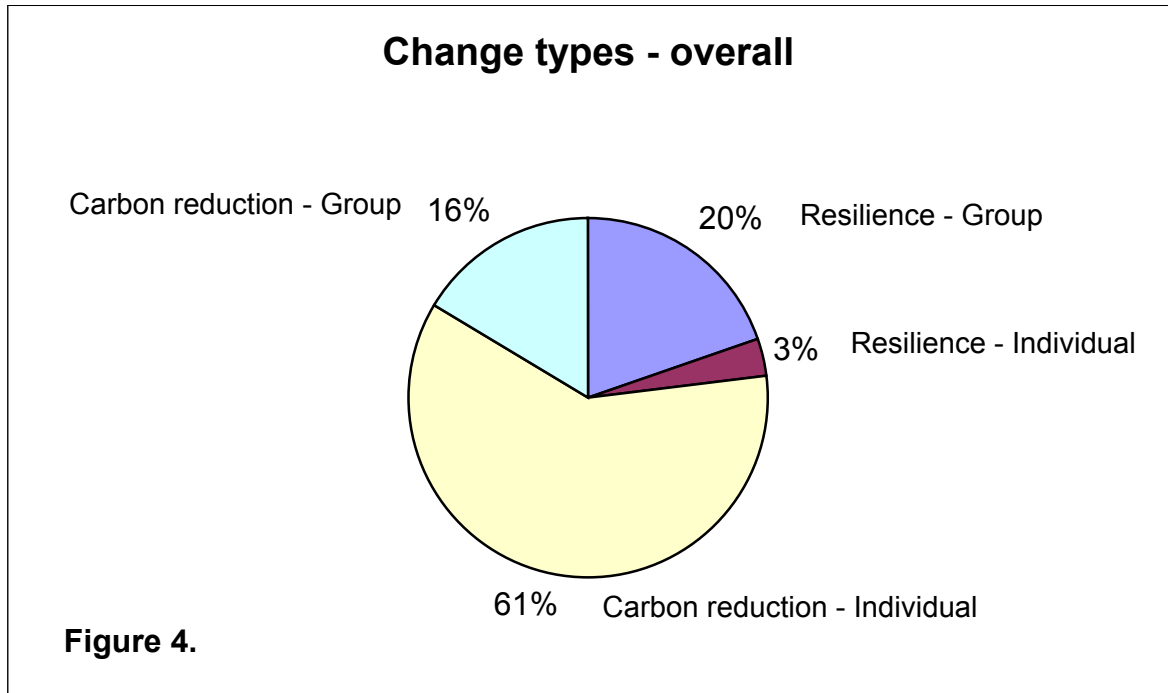
²⁰² Ibid.

Change commitments

Overall, the five workshops produced 61 formal change commitments. They were reviewed in terms of importance, confidence, barriers and motivators (see appendix 8). Although difficult to categorise precisely there was a significant split between actions that focused on carbon reduction and those that had broader resilience outcomes.²⁰³

Figure 4 shows that carbon reduction focused change commitments accounted for around 80% of the total with the majority of these being individual actions such as recycling, consuming less, turning things off, not using plastic bags etc. Collective carbon reduction activities included group composting, energy awareness campaigns, organisational carbon audits and whole family change activities. Among group resilience actions were projects to involve people in change; whole school sustainability projects, a green transition from junior to high school, communal food growing projects and CC/PO focused community work. Finally, a couple of individual resilience actions focused on supporting local shops.

²⁰³ The categorisation was made by reviewing the outcome of each proposed change. If it principally had a carbon reduction outcome it was categorised as such whereas, if it contributed to broader resilience characteristics (as set out in chapter 2) it was labelled as a resilience action. Group and individual characteristics were allocated depending on whether the action would be undertaken by an individual or as a communal project.



This categorisation is perhaps unsurprising. Individual carbon reduction actions are often easier to implement and people are more tuned in to ‘*recycle, reduce, reuse*’ type messages. Interestingly, the resilience type actions still made up a significant percentage of commitments and these did tend to be more complex and ambitious, and requiring the collaboration of more people. The number of resilience commitments and feedback also suggests that among some people the concept of resilience and the need for broader based change has been recognised. Greater scope, more time and a longitudinal study would be needed for the research to develop a more accurate understanding of the relationship between process inputs and the nature of change commitments. The sample of participants and groups was also not sufficiently large to discern significant variations between groups, or

even between the work teams and the community projects, each having a distribution of both resilience and carbon reduction type commitments.

Feedback from phone interviews was encouraging and gave some insight into the process of change. Each of the 15 people interviewed had made changes as a direct result of the workshop.

“I went to Somerset and we drove at less than 70mph. It was absolutely a conscious decision because of the workshop. It felt good and we saved a bit of petrol.....Yes will maintain it into the future.”²⁰⁴

I’ve stopped using the lift at work²⁰⁵

“I’ve done some further thinking about my personal behaviour and its shifted it a bit. I’ve been looking at using my car less, getting the train a bit more and getting the bike out this week. Trying to buy less stuff.”²⁰⁶

“I’m on Jury service at the moment and going entirely on public transport, I would probably have taken the car before. Trying to buy locally. Yes, the workshop made an impact.”²⁰⁷

²⁰⁴ Taken from recorded and transcribed telephone interviews with workshop participants – Slaithwaite Women’s’ Institute.

²⁰⁵ Taken from recorded and transcribed telephone interviews with workshop participants – Design and Property Service, Kirklees Council.

²⁰⁶ Taken from recorded and transcribed telephone interviews with workshop participants – Grontmij.

²⁰⁷ Taken from recorded and transcribed telephone interviews with workshop participants – Slaithwaite Spa/River Colne Project.

*“One of my big things was bringing food from home. Since we had that meeting I’ve done it everyday, using sandwich boxes and everything. This morning I did it for the first time without having to think about it, it was more of a natural thing.”*²⁰⁸

Having made the change, the challenge is to move into DiClemente’s ‘maintenance’ stage where the *“new behaviour pattern becomes automatic, requiring little thought or effort to sustain it”*.²⁰⁹ The feedback above, describing the change process in preparing a packed lunch every day, illustrates this well. The change has been integrated into *“the total life context so that it becomes normative, familiar and integral”*.²¹⁰ Another participant describing the same packed lunch commitment sums up the process. *“It’s taking the time to stand back and to reflect on why I wasn’t doing it every day and finding that it just takes a couple of minutes of planning and now I don’t even have to think about that any more, it’s fixed.”*²¹¹

The resilience focused changes were generally more complex and long term and so more difficult to evaluate within the time available. Feedback suggests some progress had been made on more straightforward tasks. One participant joined the core group of MASTT²¹², putting into practice his commitment to join a local CC group. The River Colne Project discussed how it could

²⁰⁸ Taken from recorded and transcribed telephone interviews with workshop participants – Design and Property Service, Kirklees Council.

²⁰⁹ DiClemente, C. (2006). op.cit. p.29

²¹⁰ Ibid. p.30

²¹¹ Taken from recorded and transcribed telephone interviews with workshop participants – Design and Property Service, Kirklees Council.

²¹² Marsden and Slaithwaite Transition Towns. www.mastt.org.uk.

increase community involvement in its tree nursery project. A range of other projects, such as the sustainable school initiative, the Design and Property Service's energy intranet site, carbon foot printing and green audits in Grontmij were all existing ideas or projects underway, but feedback suggests that additional impetus and commitment has been provided through participation in the process.

Barriers to change

Barriers to change range from the individual; *"laziness", "affluence", "time"*,²¹³ to expressions of *'anticipatory action'* and *'scale' of change*; *"the hard thing is people taking ownership of things. You find yourself thinking – why should I be concerned about going on a lengthy car trip when people are going off on aeroplanes"*.²¹⁴ Some feedback cited the need to change the overall culture of the group or organisation to make it more conducive to applying and maintaining change (see 4.2).

4.4 Learning points - productive dialogue and making and sustaining change

The summarised key learning points, set out below, are drawn from an analysis of the process' potential to develop productive dialogue and make and sustain change.

²¹³ Taken from recorded and transcribed telephone interviews with workshop participants and change cards – Slaithwaite Spa/River Colne Project and Slaithwaite Infants and Junior School.

²¹⁴ Taken from recorded and transcribed telephone interviews with workshop participants – Design and Property Service, Kirklees Council.

- a. Input of information about CC/PO issues is essential to promote quality discussion and equalise understanding of the issues. An elicitive methodology should be used.
- b. A comprehensive pre-workshop briefing for participants, outlining process objectives and style of working, will enable groups to enter into productive dialogue more readily when they come together in the session.
- c. Previously associated groups, who meet on a regular basis, will maximise the potential for ongoing peer support and dialogue.
- d. The process is more likely to enable productive dialogue within the relatively short contact period if participants have at least contemplated CC and/or PO related behavioural change.
- e. Sufficient time needs to be allocated to the workshop to ensure quality dialogue can take place. A half-day session would be more effective.
- f. Two facilitators would enable roles to be split, improving the opportunity of effectively managing processes such as developing discrepancy, reflective listening and promoting change talk.
- g. Productive dialogue works best with between 8 and 20 participants.

- h. The three main stages of the process; pre-workshop, workshop and follow up are all integral and linked parts of the motivational process. The process must be delivered as such to maximise change potential.
- i. High-level interpersonal facilitator skills are essential in maximising the potential of the session. The methods and exercises are insufficient on their own. An empathetic, non-judgemental and elicitative style will create space where *'change talk'* can happen.
- j. It is important to ensure that the workshop maximises individual *'talk time'* to ensure the potential for *'change talk'* is maximised. The workshops must elicit *'change talk'*; this is a key driver of actual change.
- k. The process motivates people to work with other groups and individuals on issues of change re. CC/PO outside the process. This produces a *'multiplier effect'*.
- l. The formal writing and verbal presentation of change commitments is a powerful motivational device.
- m. Resilience building is a more complex concept than carbon reduction. Its inclusion as a key concept in the workshop is important however as it raises awareness generally while allowing those people who are ready to embrace it a lens through which to construct and analyse their options for change.

- n. It is difficult to predict the process element that will '*connect*' and elicit the biggest impact for different people. People will also start at different stages of change on different issues. All process elements have potential to motivate change and people will find different motivational triggers. A variety of approaches should be used.

- o. The process works. Although more research and piloting will refine the methodology it is clear that a translation can be made from stages of change and MI theory and practice to group based processes dealing with CC/PO and resilience issues.

- p. The relatively short contact time still enables change processes to occur.

- q. Moving people/groups into the '*maintenance*' stage is important. The follow up contact, both written and over the phone added to the motivating and sustaining impact.

5. CONCLUSIONS AND RECOMMENDATIONS

This concluding chapter reflects on the research process, summarises key learning points and sets out recommendations for further research and methodological development that will build on the findings.

5.1 Research overview and reflection

The intention of the research project was to establish the need for behaviour change as a practical response to the twin threats of climate change and peak oil. This was explored through viewing these stresses as '*whole system*' issues requiring problem solving that was both collective and inclusive. Individual, group and organisational behaviour change was identified as having a mutually reinforcing relationship with policy change at a governmental level and potentially creating the '*political space*' within which government could act more boldly. Barriers to change were identified and reviewed, and the methods that '*change agents*', such as NGO's and government, are deploying to engage people in CC/PO related change were briefly reviewed. One approach, Transition Initiatives, was explored in greater detail as its frame of reference and methodology is distinctive. The incorporation of PO into its analysis alongside CC and its grass roots, inclusive and viral way of working enables a number of the key barriers to be addressed. The shift in focus to view CC/PO as an opportunity for societal change based on the principle of resilience building was of particular interest. Equally, the focus on behavioural psychology as a context within which this opportunity for change could be operationalised provided the platform and inspiration for the practical elements of the study.

Drawing on this analysis, and within a *'Transition/Resilience'* frame of reference, I designed and delivered an engagement process that drew on DiClemente's stages of change model, MI and facilitation practice.²¹⁵ Five groups offered to pilot a process that involved participation in a facilitated workshop that aimed to elicit change commitments. The key research outputs include the detailed design of the process itself and an analysis and review of the process delivery, which is set out in chapter 4. In addition, 44 people participated in a process that has had some significant impacts in terms of behaviour change on an individual and group basis.

The points set out in 4.3 and 4.5 summarise the learning from the process itself and make a significant contribution to the overall findings of the research. Having reflected on this process learning, the points that relate to facilitator skill in creating an empathetic, non-judgemental and elicitive environment for deliberation and dialogue appear key to success. Miller and Rollnick's assertion that MI is *"not a bag of tricks"* but *"a way of being with and for people"* rings very true.²¹⁶ An understanding of the stages of change and an ability to design a group process with appropriate exercises is important but without the right facilitator attitude and an ability to create an environment where change talk can happen, group engagement in change processes are likely to be limited. The facilitation plans and related materials included in the appendices to the dissertation represent a valuable resource as the process is potentially replicable in multiple group settings. These materials will only

²¹⁵ DiClemente, C. (2006). op.cit. p.30; Miller,W.R. and Rollnick, S. (2002). op.cit

²¹⁶ Miller,W.R. and Rollnick, S. (2002). op.cit. p.25

maximise their potential however in the hands of a facilitator who has the skill, understanding and confidence to enable groups to undertake a motivational *'change journey'*.

5.2 Next steps - research and methodological development

This chapter and the study conclude by considering *'next steps'*. The research has demonstrated that an *'engagement for behaviour change'* approach has potential but there is clearly additional work to be done. Drawing on the action research completed, I set out below possible routes for both further research and a development of the group based methodology.

- a. A study to track group participants over a longer period of time to assess the impact of the approach and whether or not there is benefit to an extended process with additional contact and follow up. More insight would be gained about motivations for individuals and groups to move through the stages of change and normalise new behaviours.
- b. A refined understanding of the relationship between process inputs and type and value of change commitments (e.g. carbon reduction and/or resilience focused). Refinements could then be made to methodologies to match the aims of the process.
- c. Having explored (b) above, develop of a range of processes/methodologies to target groups and organisations at

different stages of change; for example, more sceptical groups as well as groups who are highly motivated to change.

- d. Action research to consider the effectiveness of a whole organisational approach to behaviour change and how this could best be carried out. For example, to *'roll out'* the process across a local authority to determine the extent to which it could change individual, team and whole organisational behaviour/culture. Explore also the potential for enhancing whole organisation sustainability/resilience audits and environmental policy development in both the public and private sector. A review of *'Social Marketing'* approaches would be beneficial.²¹⁷
- e. Determine the extent to which *'the multiplier effect'* takes place and the effect it has. Explore whether people pass on the change approach (elicitative, non judgemental etc.) as well as the need to change. Determine whether participant training is needed to increase effectiveness.

²¹⁷ See for example, McKenzie-Mohr, D., Smith, D. (1999) *Fostering Sustainable Behavior: An Introduction to Community-Based Social Marketing* (New Society Publishers). Jackson, T. (2005) *Motivating Sustainable Consumption*. Centre for Environmental strategy, University of Southampton. Sustainable Consumption Roundtable (2006). *I will if you will, towards sustainable consumption*, concluding work of the Sustainable Consumption Roundtable, jointly hosted by the National Consumer Council (NCC) and the Sustainable Development Commission (SDC).

- f. Explore the potential to train facilitators in the specific techniques of *'engagement for behaviour change'* in relation to CC/PO. Establish the potential for facilitator networks.²¹⁸
- g. Undertake more in depth collaboration with government and NGOs to assess how this approach could support and enhance the behaviour change work they are undertaking.
- h. More research on the relationship between this work and the development of *'political space'* for CC/PO action and policy development.²¹⁹

5.3 End note

Change will happen, and the direction of change will depend upon the collective behaviour of everyone alive today. As the planet potentially faces its most challenging years, I hope that, in some small way, this study will contribute to this process of change by showing that, given the opportunity, people can reflect, plan, adopt and sustain behaviours that will see a transformation of our relationship with the world that sustains us all.

²¹⁸ Facilitator networks are group who are trained as facilitators and then meet regularly to offer mutual support, guidance and sharing of the design of sessions and processes. Some facilitate for each other's groups/organisations using a LETS type exchange system. Interact networks has pioneered this approach in the UK.

<http://www.interactnetworks.co.uk/whatisnetworks.htm>

²¹⁹ Building on IPPR's work. Institute for Public Policy Research (IPPR) (2008). op.cit.

Bibliography

Arnstein, Sherry R. *A Ladder of Citizen Participation*, JAIP, Vol. 35, No. 4, July 1969, pp. 216-224.

Boal, A. (1992), *Games for Actors and Non-Actors*, Routledge.

Brook Lyndhurst (2004). *Bad habits and hard choices: In search of sustainable lifestyles*. www.brooklyndhurst.co.uk.

Campbell.C.J. *Understanding Peak Oil*, ASPO International,
<http://www.peakoil.net/about-peak-oil>

Carnegie UK Trust (2007), *Inquiry into the future of civil society in the UK and Ireland*, Futures for Civil Society, Summary.
<http://democracy.carnegieuktrust.org.uk/files/Futures%20for%20Civil%20Society%20-%20Summary.pdf>

Carnegie Trust (2008), *Civil Society and Climate Change*, research undertaken by the New Economics Foundation.
<http://democracy.carnegieuktrust.org.uk/files/Civil%20society%20and%20climate%20change.pdf>.

Cooke.B, Kothari.U (eds.) (2001), *Participation: The New Tyranny?* Zed Books, London, New York.

Creasy, S., Gavelin, K., Fisher, H; Holmes, L., Desai, M. (2007), *Engage for change: The Role of Public Engagement In Climate Change Policy*, Involve.
<http://www.involve.org.uk/index.cfm?fuseaction=main.viewSection&intSectionID=592>

Dawnay, E and Shah, H, (2005). *Behavioural Economics: seven principles for policy makers*. London, New Economics Foundation.

Department for Communities and Local Government (CLG). (2008),
Community Power Pack, Crown Copyright.
<http://www.communities.gov.uk/documents/communities/pdf/743378>

Department for Environment Food and Rural Affairs (Defra) (14 August 2007),
2007 Survey of Public Attitudes and Behaviours toward the environment,
<http://www.defra.gov.uk/environment/statistics/pubatt/download/pubattsum2007.pdf>

DiClemente, C. (2006) *Addiction and Change: how addictions develop and addicted people recover*, Guildford Publications.

Dresner, S., McGeevor, K, and Tomei, J. (2007) *Public Understanding Synthesis Report: A report to the Department for Environment, Food and Rural Affairs*. Policy Studies Institute. Defra, London.

Dukes, E. F. (1996), *Resolving Public Conflict, Transforming community and governance*, Manchester University Press.

Dukes, E. F., Piscochish., M. A., Stephens, J. B. (2000), *Reaching for the Higher Ground, Tools for Powerful Groups and Communities*, Jossey-Bass, San Francisco.

Few, R; Brown, K; and Tompkins, L. (2006) *Public participation and climate change adaptation*, Working Paper 95, Tyndall Centre for Climate Change Research.

Fisher, R, Ury, W. (1981). *Getting to Yes*, Random House; (2007),

Gudykunst, W. B. (2004), *Bridging Differences, Effective Intergroup Communication*, 4th edition, Sage Publications.

H.M. Treasury, (2006). *Stern Review: the Economics of Climate Change*, Cambridge University Press. http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report.cfm.

Hare, B. (2006). *Relationship Between Increases in Global Mean Temperature and Impacts on Ecosystems, Food Production, Water and Socio-Economic Systems* in Schellnhuber, H. J. (Editor in Chief). *Avoiding Dangerous Climate Change*.

<http://www.defra.gov.uk/environment/climatechange/research/dangerous-cc/pdf/avoid-dangercc.pdf>

Heinberg, R. (2007) *The view from oil's peak*, Richard Heinberg's blog, a joint publication with the Journal Public Policy Research.

<http://www.richardheinberg.com/museletter/184>

Halpern, D. (2005), *Social Capital*, Polity Press.

Homer-Dixon, T. (2006), *The Upside of Down, Catastrophe, Creativity, and the Renewal of Civilisation*, Souvenir Press, London.

Hopkins, R. (2008), *The Transition Handbook: From oil dependency to local resilience*, Green Books, Dartington.

Intergovernmental panel on climate change (IPCC) (2007), *Working group reports I, II and III and Synthesis Report*. <http://www.ipcc.ch/>.

Icarus Collective. (2007), *Community Engagement: Tools, Techniques and Strategies*. Icarus Collective Ltd.

Icarus Collective. (2006), *Facilitation skills*. Icarus Collective Ltd.

Institute for Political and Economic Governance, Manchester University (2008), *Reinvigorating the Civic: Searching for a rationale for our research programme*, Departmental paper.

Institute for Public Policy Research (IPPR) (2008), *Engagement and political space for policies on climate change*, A report for the Sustainable Development Commission.

Interact Networks (2006), *Building Trust With Communities*, Environment Agency.

Involve (2005), *People and Participation – how to put citizens and the heart of decision making*, Involve.

IPCC, *Climate Change 2007: Synthesis Report, Summary for policy makers*
http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf. p. 2.

Ipsos, Mori (2007), *Tipping point or turning point, Climate change survey*,
<http://www.ipsos-mori.com/polls/2007/climatechange.shtml>.

Jackson, T. (2005) *Motivating Sustainable Consumption*. Centre for Environmental strategy, University of Southampton.

Johnstone, C. (2006), *Find Your power: Boost your inner strengths, break through blocks and achieve inspired action*, Nicholas Brealey Publishing.

Kaner, S. with Lind L, Toldi, C, Fisk, S and Berger, D (1998), *Facilitators Guide to Participatory Decision-Making*, New Society Publishers.

Kurt, D.M., Curtin, L., Kirkley, D. E., Jones, D. L., Harris, R. (2006). *Group-Based Motivational Interviewing for Alcohol Use Among College Students: An Exploratory Study*. Professional Psychology: Research and Practice, 2006, Vol. 37, No. 6, 629–634.

LaBrie, J.W., Thompson A. D., Huchting, K., Lac, A., Buckley, K., (2007). A group Motivational Interviewing intervention reduces drinking and alcohol-related negative consequences in adjudicated college women. Loyola Marymount University, United States. Addictive Behaviours 32, pp. 2549-2562

Macy, J., Brown, M.Y. (1998). *Coming back to Life, Practices to reconnect our lives, our world*, New Society Publishers.

McKenzie-Mohr, D., Smith, D. (1999) *Fostering Sustainable Behavior: An Introduction to Community-Based Social Marketing* (New Society Publishers).

Miller, W.R. and Rollnick, S (2002), *Motivational Interviewing: Preparing People for Change* (2nd Edition), Guilford Press.

Monbiot, G. (2006), *Heat: How to stop the planet burning*, penguin, Allen Lane.

National Coalition for Dialogue and Deliberation; <http://www.thataway.org/>

Porrit, J. (July 16 2008). *An end to infinite growth and blind consumerism*, Guardian article.

Putnam, R.D, (2000), *Bowling Alone: The collapse and revival of American Community*, Simon And Schuster, New York.

Putnam, R.D, (2007), *E Pluribus Unum: Diversity and Community in the Twenty-first Century*. The 2006 Johan Skytte Prize lecture, Scandinavian Political Studies Vol. 30, No2 2007.

Richards, A., Kattelman, K.K., Ren, C. (2006) *Motivating 18- to 24-Year-Olds to Increase their fruit and vegetable consumption*. Journal of the American Dietetic Association. 2006;106:1405-1411.

Rokeach, M. (1973). *The Nature of Human Values*, Free Press.

Rose, C. A Values-Dynamic Tipping Point

Rose, Dade, Gallie and Scott (2005), *Climate Change Communications – Dipping a toe into public motivation*.

Susskind. L, McKearnan. S and Thomas-Larmer. J (eds.), (1999) *The Consensus Building Handbook*, Sage Publications.

Sustainable Consumption Roundtable (2006). *I will if you will, towards sustainable consumption*; Sustainable Consumption Roundtable, jointly hosted by the National Consumer Council (NCC) and the Sustainable Development Commission (SDC).

The National Consumer Council (2008), *Deliberative Public Engagement: nine principles*

Transition Network, (2008). *The Transition Initiative Primer*.

<http://transitionnetwork.org/Primer/TransitionInitiativesPrimer.pdf>

Trapese Collective (2008), *The Rocky Road to a Real Transition*,

<http://trapese.clearerchannel.org/>

Tyndall Centre (ed.) (2006) *Truly useful ... doing climate change research that is useful for both theory and practice*. Tyndall Centre, UK.

Appendices

Appendix 1. Briefing note for participants (community group version)

Community, Environment and Behaviour

A workshop to discuss how you could make changes that would be good for the environment, your community and you.

I am undertaking a piece of action research over the summer to help me find out whether short motivational workshops could help people and groups to discuss their concerns about environmental issues and to plan personal and group changes that would be positive both for themselves, as well as the wider community. The research will contribute to my MA in Conflict Resolution that I have been studying for this year within the Peace Studies Department at Bradford University. I live and work in Marsden, near Huddersfield and have been involved in developing the Marsden and Slaithwaite Transition Towns Initiative (MASTT), which works to bring people together at a community level to consider how we can respond to the challenges of Climate Change and a future beyond cheap oil.

The workshop

I'm hoping to work with 3 groups who are interested in discussing their concerns about environmental and resource issues and what they could do to become more environmentally friendly in their own lives, group / work context. The workshop will last for around 2 hours and I will facilitate it in a friendly and participative style. Participants don't need any prior knowledge of environmental issues, will not be put under any pressure, will only discuss things that they want to talk about and decide on personal / group pro-environmental actions that they feel comfortable with. I want to find out whether a facilitated group discussion is motivating and whether it can inspire people to think about things they could do that they would not have been motivated to do on their own.

The only other commitment I'd like to ask for is to be able to phone people up a few weeks after the workshop to ask them what impact the discussion had and whether they have made any changes in what they do that they feel is benefiting the environment.

The results

I will write the results up as an academic report during August. I will analyse the workshops but will not name anyone individually in my report. The results will be anonymous. On a more practical level I hope to develop a workshop plan and materials that can be used by others to help motivate pro-environment change. This could then be used by groups and organisations locally and nationally and in particularly through the fast developing transition Initiatives. ([http://www.transitiontowns.org/.](http://www.transitiontowns.org/))

About me

I am a founding director of Icarus Collective, an organisation that specialises in stakeholder engagement and participation projects. I work with a wide range of groups to help them plan, take decisions, resolve disagreements and form plans. Much of my work is focussed on environmental issues; supporting groups to plan how land is managed, develop air quality and green travel plans and consider responses to climate change. This year I have been taking a break from my usual work to do the MA in Conflict Resolution at Bradford University.

Contact details: [removed]

Appendix 2. Follow up interview questions – to guide semi structured phone interview.

	Notes
1. Have you reflected on the workshop and the follow up mailing of your materials?	
2. How would you describe the impact it had in terms of getting you to think about behaviour change in relation to the threats of CC/PO?	
3. In terms of the changes you suggested – have you made any progress? - [read out changes.] [ask about scoring of importance and confidence]	
4. Have you talked about the workshop issues with other people?	
5. Was it useful to undertake the workshop with a group of people you know?	
6. Is there any way the workshop / follow up could increase your motivation to change behaviour?	
7. Anything else you would like to mention about the process....	

Appendix 3. Workshop Facilitation Plan²²⁰

Community, Environment and Behaviour

Process Objectives – Participants will:

- Explain broadly the challenges of climate change, peak oil and resilience building.
- Describe the difference between their values and goals and their current carbon reduction/resilience behaviour.
- Explore possible behaviour changes that would move the group towards desired goals that would incorporate a reduction in carbon emissions and a building of resilience.
- Commit to personal and group change commitments.

Mins	Activity	Resources	MI objectives / rationale
20	<ul style="list-style-type: none"> ▪ Set up room; cabaret style ▪ refreshments 	<ul style="list-style-type: none"> ▪ Flip chart and pad – welcome ▪ Quote displayed ▪ tables ▪ chairs ▪ refreshments ▪ cake / tea / coffee etc. ▪ MASTT banner ▪ MASTT postcards ▪ Blue tac ▪ Masking tape ▪ String for MASTT banner ▪ Pens - biros ▪ camera 	<ul style="list-style-type: none"> ▪ Set empathetic environment
30	<p><u>Welcome / introduction</u></p> <ul style="list-style-type: none"> • Introduce myself • Thanks for inviting me along– for me it’s quite an experimental session – looking at issues of motivation in relation to pro-environment behaviour. 	<ul style="list-style-type: none"> ▪ Question and intro script. ▪ Assorted bag of objects made from oil. ▪ Brief flip chart stats / info 	<ul style="list-style-type: none"> ▪ Need to focus the group onto the theme and the issues for individuals and

²²⁰ This facilitation plan was for my own use only in guiding the facilitation of the sessions. It reflects my personal planning style, uses shorthand and is not intended to be guide for other facilitators in running this session. It should however give an indication of the level of detail needed when planning and running a session of this type.

	<ul style="list-style-type: none"> Will explain background to the work in a minute and what we hope to achieve <p><u>Series of questions</u></p> <ul style="list-style-type: none"> What do you think all the things you have on your table have in common? <ul style="list-style-type: none"> Group has a minute to confer and then feedback. All used oil to make them or to get them here. Is there anything you can find in the room that hasn't used oil to make it or get it here? There's two major stresses that we're experiencing at the moment and both have quite a lot to do with oil – Climate Change and Peak Oil. <p><u>CC/PO mingle – Did you know?</u></p> <ul style="list-style-type: none"> Card each – half PO half CC – have to go round to others saying “did you know?” – can add your own stuff in too. Feed back some issues re. CC/PO while I have charts displayed. <p><u>Resilience</u></p> <ul style="list-style-type: none"> Explain that CC + PO = need for local resilience 	<p>about PO / CC</p> <ul style="list-style-type: none"> Resilience – flip Cards 	<p>communities.</p> <ul style="list-style-type: none"> Need to provide some information in a balanced way. Asking elicitive questions here to establish some of the issues we are going to deal with / discuss as a group Eliciting their concerns not mine.
5	<p><u>Formal introductions</u></p> <p>Reason I'm doing this –</p> <ul style="list-style-type: none"> Personal motivations We need to ask ourselves how can we live well in an era with 2 key stresses.... of less and more expensive oil and how respond to CC. Show objectives of the session <ul style="list-style-type: none"> I'm not an expert in this field and don't have a zero carbon lifestyle – so this process is hopefully a motivational journey for me too. It will inform my MA studies and help MASTT 	<ul style="list-style-type: none"> Intro script Objectives flip 	<ul style="list-style-type: none"> Establishing that I'm not an expert “Expert trap” and will not tell people what they should be doing. “Righting reflex” p.271. Set empathetic environment
5	<p><u>Requests / notices</u></p> <ul style="list-style-type: none"> Be honest Can I ring you up in a couple of weeks Take photos 	<ul style="list-style-type: none"> On flips 	

	<ul style="list-style-type: none"> • Non attributability 		
30	<p>For community groups - What do you value?</p> <p>Values sort exercise Ask people to think about what they really value.</p> <p>Put value cards in order of priority on the values board. Any pattern you like – values that have higher level of importance towards the top, lower level of importance towards the bottom.</p> <p>People discuss with each other briefly...</p> <ul style="list-style-type: none"> • Did the levels of importance surprise anyone? • Are there any tensions or conflicts between any of the values? • Any tensions or conflicts between values that are about the environment and consideration for future generations and any other values? 	<ul style="list-style-type: none"> • Values board – circular - based on Rockeach values survey. Add in couple of environmental ones and couple of blanks for new values. • Value Cards and board (3x A3 sheet) • Prompt questions for the participants to ask each other about their values. 	<p>Values being important as preferences to guide behaviour.</p> <p>Creating discrepancy between values and behaviour.</p> <p>Getting people to “speak their own truth” – p.290.</p> <p>Starting the process of people considering whether there is consonance between their values / ideals and their behaviour.</p> <p>“A focus on values may help clients view behaviour change more as a desired movement towards a more fulfilling lifestyle than a undesired loss of familiar and reinforcing habits and ways of being.” P.296. MI</p>
30	<p>Alternative exercise for work teams</p> <p>Time travel – The organisation in 10 years time? 2018.</p> <ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • Recording flips (dissected circles) – double flips.. 	<p>Starting the process of people considering whether there is consonance between their values / ideals and their behaviour.</p>

	<p>governments to addresss CC, Tories got in with a new green agenda, New president in US, Green parties coming to power or holding the balance of power in a number of countries – coupled with spiralling oil prices and scarcity. Climate change negotiations have been largely successful. We've reduced emissions globally and are genuinely tackling the threat of CC and are well on the way to a much lower dependency on fossil fuels. Still major issues but data seems to be telling us that we've stabilised temperature rises just below 2C.</p> <ul style="list-style-type: none"> • look like? What does it look like, feel like, smell like to work here, how does it interface with your non work life? • prompts plus some blanks. Outer circle • • • 		<p>“A focus on values may help clients view behaviour change more as a desired movement towards a more fulfilling lifestyle than a undesired loss of familiar and reinforcing habits and ways of being.” P.296. MI</p>
<p>20</p>	<p>Environmental behaviours</p> <p>I'd like to find out where you feel you are now in terms of your behaviour that affects the environment.</p> <p>Part 1. Quick worksheet to complete. Explain this with an example of how to fill it</p> <p>1. Review of behaviour over the last few weeks/months/years.</p> <p>Asking you to put contact details on form so I can ring you up – optional.</p> <p>Part 2. Ask people to share in twos – threes...</p> <p>Is there any ambivalence / contradictions between values and behaviour?</p>	<ul style="list-style-type: none"> ▪ Example of how to fill in on flip worksheet schedules ▪ Question / recording sheets for p'pants [one side and name / address etc on other side. ▪ Question sheet to talk to each other about / values / behaviour..... 	<ul style="list-style-type: none"> ▪ Develop discrepancy between where are now and would like to be – what actually do and their values. ▪ Developing 'change talk' ▪ Exploring resistance but not arguing back"

	<p>Is there anything you may consider changing?</p> <p>How important is it to reflect your values in what you do?</p> <p>How confident are you that you could do this?</p>		
20	<p><u>Change options analysis</u></p> <p>Reflect on all the work you've just done. Ask people to think about the things they already do (time line) that are positive. Think again about their values analysis. Think about overall importance and confidence to make changes. Think about changes that you would possibly like to make as an individual, those for the group / team / organisation that you're part of and finally for the wider society / external orgs / stakeholders etc.</p> <p>Now we're going to move towards being more specific and look at the possible changes we could make the advantages / disadvantages, things that could help to achieve them and things that might work against.</p> <p>Group start on their own but then if necessary get some prompts across a range of possible lifestyle areas – e.g. food, travel, home, work, leisure etc. This is a list of ideas set out in a table across 3 categories.– might be graduated from easy to difficult or small to large change.</p> <p>From these prompts individuals – working in pairs again – fill out individual 'change cards' – which ask for people's name (on back) and the possible change to be made, the relative importance / confidence they have in achieving it (rulers).</p> <p>Then 4 boxes – advantages / disadvantages and things that could help me achieve it and barriers to change.</p> <p>We do a whole group analysis by plotting the cards on a large graph with axes of Importance / confidence and a scale of 1-10 along each axis.</p>	<ul style="list-style-type: none"> ▪ Prompt sheets (if needed) to help people think about the changes they could / would like to make. Divided into 3 sections – individual / group / wider society ▪ Change cards – A5 size – 2 tick boxes for ind, group activity. ▪ Large graph to plot change cards ▪ Key questions prompt card for facilitator 	<ul style="list-style-type: none"> ▪ Explore ambivalence ▪ Decisional balance type exercise. ▪ Developing a change plan

	<p>This will show, as a group the things where there is a great deal of confidence to achieve and those things where there is less confidence / importance.</p> <p><u>Analysis</u> Look at the patterns on the graph and the relative distribution of card colours – ask why x colour are higher / lower etc.</p> <p>What would increase confidence / importance of these actions</p> <p>What would make it more likely that change would take place.</p>		
5	<p><u>Concluding</u></p> <p>Many thanks for your input to help me test out this way of working. Hope it has been stimulating a useful.</p> <p>I'd like to collect in your materials (in piles from each person) but will send these back to you.</p> <p>Hand out contact/resource sheet - if you are interested in taking any of the change plan action forward or just want to get more involved in work towards building community action at a local level. MASTT may be a good start. Give details of next Transition meeting.</p> <p>Confirm that I'd like to speak with them after a couple of weeks just to ask a few questions about whether the workshop has had any impact on behaviour.</p>	<p>Next steps sheet</p> <ul style="list-style-type: none"> • Contacts • MASTT postcard • Transition books – if want to buy. • Useful info / books / web sites 	<ul style="list-style-type: none"> • Feel valued and positive about the session
5	<p><u>Evaluation form</u></p>	<ul style="list-style-type: none"> • Evaluation form 	

What are the main problems with out of control Climate Change?



- Severe 'one in a hundred year' weather events becoming common
- Sea level rises, leading to increasing land loss and climate change refugees
- Species loss - 50% or more loss of life on earth
- Increased droughts/desertification
- Increased floods- like this year in the UK
- Loss of vast areas of agricultural land
- We are depended on the web of life for our own survival.

²²¹ These 2 cards are part of a larger set produced by Transition Training.

Why is oil so important?

How many men does it take to push a car?



Why is it so important?

The phenomenal energy in petrol

A tank of petrol contains 8,000 human hours work!

If you worked for 8 hrs/day, 52 weeks a year, 7 days a week that equates to about 3 years' work.

Most of us take for granted the amount of energy we have at our disposal instantly, everyday. No human society had anything near the amount of energy before the discovery of fossil fuels.

Appendix 5. Vision – summary sheet (example) ²²²

Theme	Purchasing	Personal Development	Healthy workplace	Internal / external contacts and relationships	Waste	Energy	Travel for work	Travel to work
Vision	<ul style="list-style-type: none"> • EMAS purchasing expansion • Local sourcing / green products / re-use • More independent local businesses – subsidised rates • Schemes for staff buying lunches from local businesses • Policy only to use certain suppliers • Better use of technology – paperless office • Hot desking – 21st century 	<ul style="list-style-type: none"> • Green awareness training 	<ul style="list-style-type: none"> • Subsidised gym membership 	<ul style="list-style-type: none"> • Green policy • Video conferencing • Conference calling • Send info by email 	<ul style="list-style-type: none"> • Paperless office • More and Clearer recycling systems – ability to recycle more varied things • Composting bio-waste • Eliminate waste • Fewer waste collections 	<ul style="list-style-type: none"> • More renewables • Awareness – know what your personal energy use is • Carbon footprint pledge • More automatic systems – lighting, water • Newer more energy efficient heating • Better energy controls • Design • Better education of staff • Centralised billing – intelligent 	<ul style="list-style-type: none"> • Walking between council buildings • Council bus service – internal • Travel pass • Bikes • Hybrid pool cars • Travel plans • Project is based in the area you live in • Technology – less need for site visits • More people cycling – separate cycle lanes • Park and ride schemes • Alternately fuelled 	<ul style="list-style-type: none"> • Incentive schemes • Cycling / walking to work • Better travel infrastructure • Car sharing • Work from home (more!) • Technical advances – so don't have to come into the office • Car shares • Public transport • Energy efficient cars •

²²² This represents one example of the written up data from a visioning exercise. This one is the work of the Design and Property Service, Kirklees Council

	<ul style="list-style-type: none"> working • Whole life cost • Stimulating local markets / economies • Continued use of e-purchasing • More resource efficient • Supply chain management • Encouragement to buy renewable sources 					<ul style="list-style-type: none"> metering • Stricter building regulations • Intelligent buildings • Improvement in technology – solar chips 	<ul style="list-style-type: none"> fuelled transport hydrogen / electricity • Congestion charges in urban areas • General move away from using lorries to transport goods – canals, railways etc. • More home working More city / town living 	
Barriers	<ul style="list-style-type: none"> • Policy only to use certain suppliers • Imported goods cheaper • Economies of scale • Resistance to change • Cost • Availability • Procurement rules • Cost of initial investment 			<ul style="list-style-type: none"> • Cost • Resistance • Habit change • Who'd responsible • Behaviour / expectations 	<ul style="list-style-type: none"> • Cost • Technical advances / limitations • Lack of commitment • Behaviour • Cost of renewables • Political considerations 	<ul style="list-style-type: none"> • Resistance to change • Weather • Cost • Time factor • Lack of flexibility and convenience • Cost • Changing behaviour / habits • Infrastructure 	<ul style="list-style-type: none"> • Flexible working may work against car sharing • Resistance to change • Frightened of new technology • Lack of joined up working • Facilities • Weather • Pollution 	

	investment • Political considerations						• Political considerations	• No incentive • Personal safety Changing behaviour / habit • Infrastructure • Political considerations
Characteristics to ensure success	Open to change, Committed, Responsible for self and others, Actions influencing and encouraging political commitment, champions, ownership, leadership, technical skills, determination, strong willed, engagement, education awareness raising, need to think long term, complimentary ideologies / policies.							

Appendix 8. Complete list of change commitments

Possible change to be made	Importance	Confidence	Advantages	Disadvantages	Help achieve	Barriers
Slaithwaite W.I						
shared allotments						
shared gardens - anyone who needs help signs up in the community shop, someone offers to help in their garden and can grow a patch of vegetables	7	5	local produce	People like privacy in their garden	organising and managing the list	
Don't use bubble bath or anything like that	10	10				
Grow organic vegetables ad fruit	10	10	Home grown, no transport needed			
Always have a shower instead of a bath	7	7	Saves heat and water	I prefer a bath		
Take Bottles to the recycling	6	6	Less landfill			
Buy less, only what I can use	6	6	More money			
Drive under 70 mph	9	7	Less carbon emitted			Other road user's speed
use the 2nd side of the paper in the printer	2	10	less waste, less landfill	Takes more time		
Compost more	2	8	less waste		be more organised	Garden not big enough
Plan food shopping better and use more local shops	10	10				
Reduce the number of 'things' and take excess to the charity shop	10	10				

Replace light bulbs with low energy bulbs	6	10	use less energy		someone to do it for me (ask a friend)	hopeless at doing it myself.
Raising awareness within the community about recycling	8	3	Less landfill			time

Possible change to be made Importance Confidence Advantages Disadvantages Help achieve Barriers

River Project / Slaithwaite Spa

Going to take up cycling again and go out on regular bike rides with friends (get fit and healthy and improve friendships)	9	8			encouragement from friends / family	time
make all light bulbs in our house energy saving ones	9	5			Someone to arrange the change	cost, availability
Turn appliances off at plugs when go to bed	9	9			reminder at night - alarm	remembering
Use bike instead of car as much as possible	8	6			cost of fuel, health improvements	storing bike at home, weather, convenience

Recycle in the Kitchen at RCP (get ACORP to agree as well). Use compost bin in kitchen at RCP	10	7	Support from Acorp. Getting larger / extra green bin	Habit. Altering existing actions / habits. It being seen as a dirty or an inconvenience. Information.
Always have spare shopping bags in the car or in my bag	8	10	sense of achievement	being lazy, time restrictions, remembering to take them back to car.
Energy in home - change all light bulbs to low energy bulbs	8	6	Knowledge that they are cost effective, will last longer, therefore less need to change bulbs so often.	Already have a stock of 'high energy' light bulbs. Stick out of lamp shade - need t be made smaller.
Regular car sharing to work	10	6	Will be much cheaper now that petrol is so expensive - will be company in the morning.	will need to get up at 6.20 instead of 6.30. Not always convenient as sometimes have to do shopping errands after work.

Get involved in climate change / energy use / conservation groups	8	6	support of group members. Own strong motivation to raise awareness. Promote simple practical changes.	possible lack of community interest. Laziness.
Continue to reduce home energy consumption (inc. use of car)	10	7	availability of public transport / friends to share lifts / continue walking / take up cycling again.	More difficult with increasing success. Temptation to self-indulgence. Increased use of power tools.
Make sure we're not doubling up with what other groups are doing.	8	7	Better networking with other groups	More outward looking
Make sure I always sort rubbish out to be recycled.	9	9	stickers on the fridge and rubbish bins	Laziness
Move to home that is smaller and more energy efficient	10	8	Sell present large, energy wasting house. Buy / rent smaller one.	Difficult to sell house. Availability of new house in the same area.
Communal Allotment to encourage group to grow veg and share produce.	9	4	discuss with others the possibility	Finding land, given or to buy, effort in getting off the ground.
Adapt behaviour in shopping / travel habits to consume less	9	4	Availability of local produce	Laziness, time constraints.

Possible change to be made	Importance	Confidence	Advantages	Disadvantages	Help achieve	Barriers
School						
try to walk more often	5	3			more time, being organised	time, often people in the family may not wish to walk
change all the bulbs to energy saving	6	8			buy the bulbs	waiting for other bulbs to go
Reduce Family's carbon footprint - use car less, walk / cycle	8	5			Information	time,
Continue initiatives for the Sustainable Development of the school... Green Flag award +	10	10			Professional Advice, time, local support, Planned for - School Development Plan.	Time, habit, attitudes
Use car less - walk more often	8	7			Leave earlier, healthier lifestyle	takes longer
Transition Y6-Y7, Further discussion with the high school re. educating children for a sustainable lifestyle.	10	6			Pyramid heads discussion	academic achievement - pressure of
walk more - to work? / home from work	10	9			change of attitude	
Encourage younger members of family to walk / use public transport more	10	9				
Reduce energy consumption at home	5	10			family to agree	lethargy / affluence

Possible change to be made	Importance	Confidence	Advantages	Disadvantages	Help achieve	Barriers
Design and property service						
switch off monitor and lights when not required	7	8			could help me do the same at home	others in the office forget
Bring food from home instead of being pre packed food from shop	6	8			cost much cheaper - healthier	time to prepare, remembering
Go back to using the train on days that working pattern permits	8	6			review start and end times for working day, check train timetables, don't book meeting near the start and end of day.	train times don't fit with school times some meetings can't be avoided / rearranged. Train service is only hourly. Reliability of train service.
make packed lunches every day and reuse plastic bottles for drinks at work	6	6			a more efficient memory - need to remember t make lunches more varied and enjoyable. Become more organised and plan the night before.	myself.

create a greater awareness about energy within the council by attempting to create an energy intranet site - to link in with good housekeeping and encourage individuals to conserve energy or invest in energy saving measures within their buildings.

have a clear idea about council energy policy and targets. Support from energy team and other departments.

Possible no funding to implement this. Low on a list of priorities. Been attempted before and not achieved. Lack of support.

make use of paper in the recycling bin for taking notes / scrap paper

6

7

availability of note books. Don't print things off - though habit.

walk to work one day a week

5

3

less pollution from cars on the road to work - the road to work is very busy

will take more time to get to work and not nice walking in the rain or dark mornings or nights

Work towards a paperless office

7

5

not print what can be held electronically

need paper copies when not at computer (e.g. minutes to meetings)

Use less paper in the office - less print outs, more electronic filing

7

9

It's easy, it's council change of habit policy

Cycle to work at least once a week	8	8	It will help me get fitter	will result in a longer working day. Weather may be a put off. It's a change of habit.
Commuting to work from Manchester: - try to use the train more than I currently do. Sort my home working out - 1 day a week.	9	9	moving house - near to a train station. Currently in process of doing this. Public transport accessibility key factor.	time / cost (although not similar)
Ensure our new house is as energy efficient as possible - draughts / insulation / lighting. 'A' rated goods etc.				infrastructure of house (cold house)
Don't turn the radiator up in the office during winter when it's cold - put a jumper on etc.	10	9	keep a jumper at work so I don't have to remember to bring one everyday.	none
To engage staff more and increase awareness on issues such as energy use, recycling etc. (both at home and at work)			Encourage staff and set and example. Provide statistics and more information - see bigger picture.	staff to take responsibility of own actions so not rely on others

Possible change to be made	Importance	Confidence	Advantages	Disadvantages	Help achieve	Barriers
Grontmij						
I wont let email dictate my working day. I will plan my day and stick to it. Less wasted time - more efficiency - more time = I can ride my bike to work occasionally.	7	5			That people accept that they won't get an instant answer	unrealistic expectation that email = instant answer.
Continue to try to promote sustainable design in my professional career as best practice and encourage some of our less like minded colleagues to make the same choice	9	5			Recognition within the company that best practice should be the way forward in comparison to short term gain.	Resistance of other sectors in the Grontmij business
Travel to work by public transport 2 x per week	7	4			Personal commitment	Rain, reluctance to get on a bus after work
Facilitating approach to corporate responsibility in Grontmij, UK. Concentrate on our own foot print and the delivery of sustainability in our design and services.	9	7			Top down support. Buying in at all levels down the organisation. Personal focus.	Behaviours embedded to resist change. Lack of institutional process to effect change.

Cycle to work at least 1x per week	2	5	<p>somewhere to store lap tops overnight so they don't have to be taken home. Better bike racks (covered!)</p> <p>Habit of driving. The need to go straight from work to other activities some distance away. Requirement to take (heavy) lap top to / from work daily.</p>
Incentivise energy saving in the office - publish the results of regular green audits - change habits e.g. leaving the lights on at night.			
When I'm the last to leave my area of the office I will switch off all lights.	5	9	
I will work with other people within the company to formulate a proactive approach to our carbon management.	10	8	<p>senior management buy in. Commitment and buy in from the rest of the company.</p> <p>Other priorities (personal and group). Financial constraints.</p>
Become more proactively involved in development and implementation of CSR policy / strategy	6	7	<p>More people in my team support / drive from SMT</p> <p>Time</p>
Positively influence development of sustainability CSR process / outcomes in Grontmij during 08	9	6	<p>awareness raising in Grontmij - the right tools to tackle the barriers.</p> <p>Resistance / lack of understanding in the organisation. Not my day job.</p>

Reduce the carbon footprint of the whitelaw turkinton by 10% within the next 2 years	10	8	need to measure existing behaviours. existing behaviours. Identify potential areas for improvement. Develop a plan to tackle - implement the plans.
Seek to explore innovative learning and development activities that rely less on didactic traditional workshops and harness technology / local knowledge to deliver effective training locally.	7	8	investment of my own knowledge and technology where appropriate time and culture.
To work with the management systems team to set achievable environmental targets (long term and short term) to improve performance internally	8	8	taking inspiration from aims staff want to achieve incremental changes to achieve overall goal. Backing and publicity. Non acceptance by senior management.

Appendix 9. Progression routes information²²³

Next steps.....

People

“Collective Genius” – an informal gathering every last Monday of the month in the Riverhead Tap, Marsden. A chance to meet up with like-minded people to chat about where we live and how we can build local resilience.

Web

Marsden and Slaithwaite Transition Town www.mastt.org.uk

Information about MASTT, what’s on, links to other local groups, information, comment, debate.

<http://transitionculture.org/> web site of author of The Transition Handbook. Lots of information and links about the transition idea.

<http://www.transitiontowns.org/> Information about all the other Transition Towns around the country and around the world.

<http://www.storyofstuff.com/> The Story of Stuff is a 20-minute, fast-paced, fact-filled look at the underside of our production and consumption patterns.

Books

Hopkins, R. (2008), The Transition Handbook – From Oil Dependency to Local Resilience. Green Books.

Heinberg, R (2007), Peak everything: Waking Up to the Century of Declines

Homer Dixon, T (2003), The Upside of Down, Catastrophe, Creativity and the Renewal of Civilisation, Souvenir Press.

Strahan, D. (2007) The Last Oil Shock: A survival guide to the imminent extinction of petroleum man, John Murray Publishing.

DVD

There are a wide range of inspiring and depressing films about tackling Climate Change, Peak Oil and building resilience. MASTT has a good range to lend. Please ring or email for a list.

My contact details: [removed]

²²³ This handout was prepared for the community groups session, a different sheet was used for the work teams with more general resources listed.