Creating a climate for social justice

A guide for civil society organisations on tackling climate change and resource scarcity

By Tony Kendle, the Eden Project

MAKING GOOD SOCIETY
www.futuresforcivilsociety.org

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About the Commission of Inquiry into the Future of Civil Society in the UK and Ireland

The Commission of Inquiry into the Future of Civil Society was established to explore how civil society could be strengthened in the UK and Ireland. The Inquiry Commission was chaired by Geoff Mulgan and was also informed by an International Advisory Group.

The objectives of the Inquiry were to:

- explore the possible threats to and opportunities for civil society, looking out to 2025;
- identify how policy and practice can be enhanced to help strengthen civil society;
- enhance the ability of civil society associations to shape the future.

The Inquiry Commission's work began with an extensive futures exercise to explore possible futures for civil society. Drawing on the findings of the futures work, which are documented in two reports, *The Shape of Civil Society to Come* and *Scenarios for Civil Society*, the Inquiry Commission agreed to explore the current and possible future roles of civil society associations in relation to the following themes:

- **Growing a civil economy**
- **A rapid and just transition to a low carbon economy**
- **Democratising media ownership and content**
- **Growing participatory and deliberative democracy**

This paper was commissioned to inform the Inquiry's thinking on the roles of civil society associations in bridging social justice, climate change and resource scarcity. It focuses on the roles of non-environmental groups and illustrates how the challenges and opportunities of climate change and resource scarcity can be addressed through their work.

The final report of the Inquiry Commission, *Making good society*, was published in March 2010.

For further information about the Inquiry and to download related reports go to **www.futuresforcivilsociety.org**.

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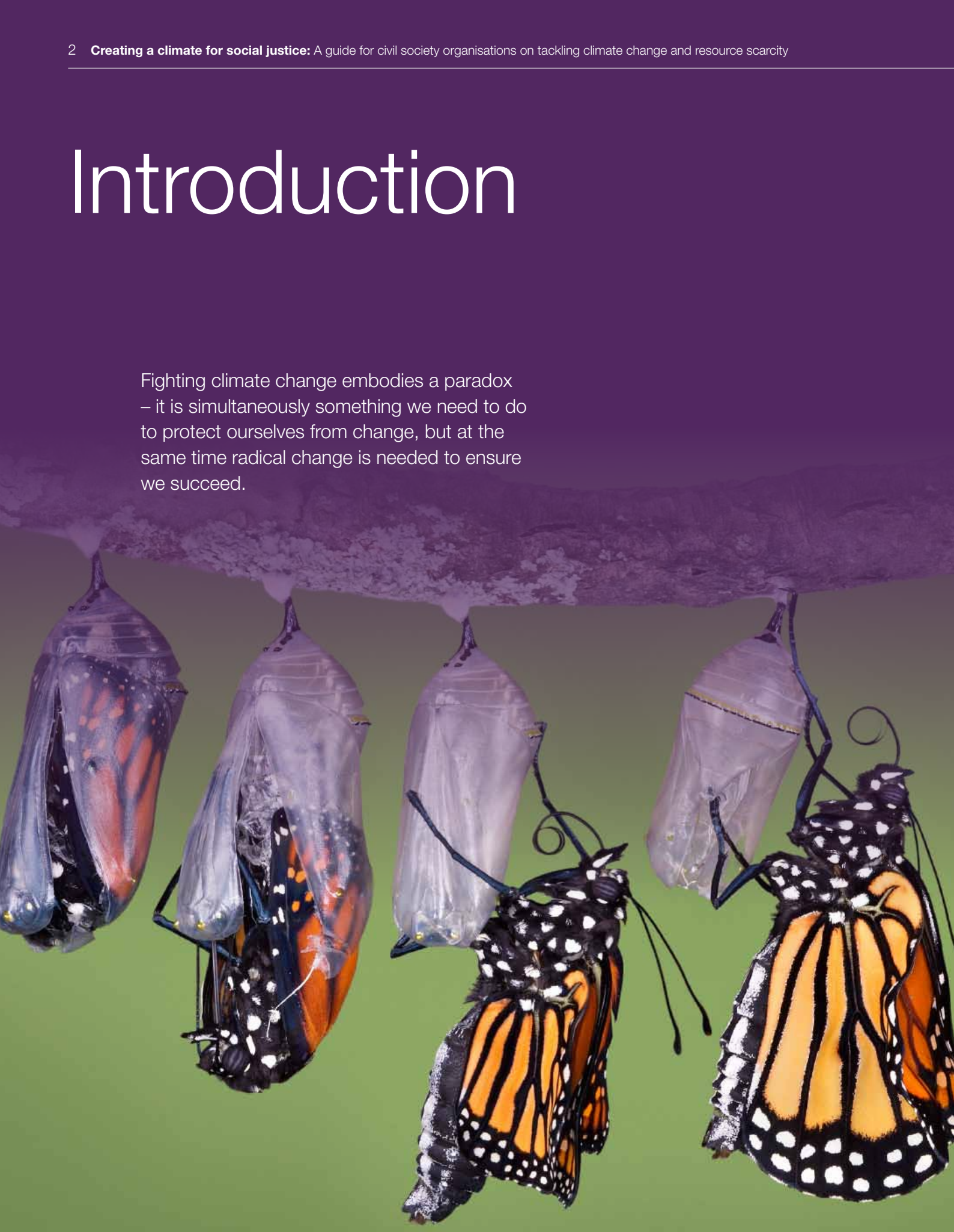
Introduction

Fighting climate change embodies a paradox – it is simultaneously something we need to do to protect ourselves from change, but at the same time radical change is needed to ensure we succeed.



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The increasingly visible impacts of climate change and of fuel and food scarcity surround us, as do the growing number of policy responses, initiatives, and calls to action that aim to tackle the problems. But look more closely at this flurry of concern and it becomes obvious that the breadth of organisations and perspectives engaged is often limited to primarily environmental and development groups. The underlying causes are doubtless complex, but a major reason is that climate change and resource scarcity are often categorised and bounded as 'environmental issues'.

This does not mean that people outside of environmental groups, including those that focus on children, older people, trade unions or faith communities are not taking the issues seriously. As the messages from research become clearer and more consistent, and as the number of statements of concern from governments, corporate heads, civil society groups and high profile individuals accumulate it is clear that there is a growing understanding that we are all stakeholders in the issue. The number of people who don't want to or don't think we need to do something about climate change is shrinking away.

But the understanding of what it will mean for different sectors of society is patchy, and the debate about how best to take action is missing key viewpoints. This limited perspective is perhaps not surprising. The huge increase in media attention and the ever-growing public and professional discourse around these themes remains caught in certain patterns. For example with regard to climate change there is constant and consistent reference to melting ice and the primary weather impacts that we can expect to see.

They are of course fundamentally important problems that underpin much of the challenge, but the point has been made and made well. In contrast there are hundreds of different conversations that need to be had that aren't happening, crucial issues such as the evolving frameworks for carbon budgets or responses to the problems of displaced people that are not receiving enough attention. There are people who are vitally important for finding good solutions who currently are not engaged – George Marshall coined the term MINGO to represent the 'missing NGOs' in the debate.[1]

A clear exception is the international development organisations such as Oxfam who have been the first to see the impacts of these challenges on the poorest people in the poorest countries.

This guide was commissioned to inform the Commission of Inquiry into the Future of Civil Society in the UK and Ireland, funded by the Carnegie UK Trust. Its purpose is to explore, understand and improve the societal response to these issues and, in particular, the response and likely impacts on civil society activity. Climate change and resource scarcity are transformative problems that will play a major role in shaping civil society in the coming decades.

The aims of this guide are simple and vitally important:

- to increase the constituency of people engaged in addressing the challenges and problems that climate change and resource scarcity will bring, so that the momentum and pressure to find solutions increases;
- to improve the level of understanding of the different problems so that better solutions are found;
- to increase understanding of why these are issues that are of core importance to non-environmental groups, so that they are empowered to contribute and understand why their contribution is so crucial.

In other words, broadening an understanding that different groups can have key roles to play, working from their own strengths and perspectives, and with their key stakeholders rather than developing new programmes.

The level of awareness of what society is facing is gradually maturing. Some important reports have recently appeared that focus less on the direct trends of climate change and resource scarcity and more on the likely social and economic consequences – some of those produced by UK civil society groups are referenced in more detail in this guide. Not surprisingly, many of these are far-reaching in their conclusions, such as the Lancet Commission report that identifies climate change as the greatest global health threat of the 21st century.[2]

There has also been some increasing attention given to the need to develop adaptation as well as mitigation strategies for climate change, in the understanding that some impacts are now unavoidable no matter how successful society may be at addressing the cause. Nevertheless, adaptation research and thinking is still the poor relative of the attention given to mitigation.[3]

Climate change and resource consumption are complex and diffuse problems – there are no clear single points of origin of the problem – everybody contributes in almost everything they do. The problem arises from social trajectories that began with settled agriculture and took a step change in the Industrial Revolution – to change these means profound changes in the patterns and modes of operation of society.

It is only by working collectively; as organisations, communities and as a society; that we can really address the structural challenges that no individual has agency over.

The debate about the nature and implications of the problem will soon shift to what may be much tougher and more contentious issues around the implications of different solutions.

Despite the widespread level of frustration that is often heard about government inaction (at national and international levels) it is also clear that the scientific advice that governments are being given is increasingly scary and consistent and that governments are listening. The responses are not always consistent, but significant moves are already taking place. The UK is living through a strange period where there is a mix of policies and practices, some of which seem to completely fail to reflect any awareness of the scale and nature of the challenge, some of which seem mired in anodyne, almost naïve, perspectives and some of which are potentially quite profound (such as the creation of a new government department and the provisions of the Climate Change Act). It's currently a dysfunctional situation clearly hugely influenced by the political difficulty of building a constituency prepared to accept the legislative and policy changes that must come, or even just prepared to have some of the difficult prospects voiced and debated.

One of the strangest failings in the current public and political discourse around these topics is the continued focus on the behaviour and choices of individuals as actors, rather than a recognition that it is only by working collectively; as organisations, communities and as a society; that we can really address the structural challenges that no individual has agency over.

Civil society associations (including voluntary and community groups, trade unions, faith groups, co-operatives and mutuals, faith groups etc) are therefore crucial in fostering and encouraging the collective action required to develop and enhance the solutions to these most pressing issues.

The key roles the authors of this guide see for civil society associations include acting as watchdog and originator of better, more just, solutions for these social challenges. Many of these probably already exist in the back catalogue of excellent ideas that different organisations have trialled, but that failed to scale or get traction. Crucially there is a need to champion, demonstrate and make space for collective action and solutions that work at a societal scale. Whilst acting on one level as a lobby and critic of government there is, as ever, also a symbiotic partnership that helps build a healthy constituency able to accept change.

And changes are coming. Some degree of climate change is now inevitable, whatever is done, and this will drive health problems and push more people into poverty. Some degree of adjustment to declining resources is also inevitable, driven by both increased global demand as well as limits to supply. Society needs to act, and act urgently, but the actions needed to avoid the worst of the problems will themselves be so transformative and radical that unless they are built on the best experience, insight and humanity, they will themselves put society, and especially the lives of vulnerable people, under enormous stress. Some repositioning of what people currently see as their natural freedoms and rights seems inevitable. Both action and failure to act are likely to have profound cultural and political consequences.

'In the wake of the Bali climate summit we have reached a critical point. Focus is now switching from the relatively settled 'problem debate' to a 'solutions debate' that is still immature and muddled. A new 'game' is about to begin ... as factions of all kinds are suddenly, and with unpredictable effect, galvanised into a passionate attempt to protect their interests.'[4]

Climate change and resource scarcity also have the potential to cause sudden and unpredictable change. There is no easy way to anticipate the precise nature and timing of the challenges that will arise and, as such, the social conditions that allow us to withstand shocks need as much attention as the need to take action. Unsettling times also risk being times of social unrest. The subtler, and perhaps most worrying, consequences of this change will include the increased likelihood of conflict and xenophobia and the potential rise of unhealthy politics.

The most profound role for civil society associations will be to help defend a vision of a 'good' society, based on healthy and just systems and values.

'Resilience relies on the energy and initiative of society as a whole, and is ultimately a matter of culture, values and identity. Policymakers will thus need to ask some uncomfortable questions. What is it about our societies that we are trying to protect?'[5]

It will be a testing time. The 21st century is going to ask the best of society's commitment, ideas, creativity and humanity. It will mean more than supporting 'evidence-based service delivery'. Civil society has to challenge whether the right frameworks, structures, deliberative spaces and points of dialogue are in place to be effective.

But at the same time there is reason for hope. Amidst the change this will also be a time of new potentials and new rules, a time when different visions of how the world could work may blossom. It will be a time when major shifts in global equity can be played for. It may be a time when civil society can reorient some people away from failed gratification through consumption to more rewarding lives based on stronger relationships and mutual support.

And hope is one of the most important assets there is because it is an engine of change. Without some belief in good possibilities action becomes impossible, and we risk fostering nihilism, or at least disengagement, and so closing options and making the worst scenarios self-fulfilling.

'There are always cracks in the inevitable and the obvious.'[6] ■

Working definition of civil society adopted by the Commission of Inquiry into the Future of Civil Society in the UK and Ireland

Civil society as associational life: civil society is the 'space' of organised activity voluntarily undertaken, and not undertaken by either the government or for-private- profit business. This includes 'formal' organisations such as voluntary and community organisations, faith-based organisations, trade unions, mutuals, co-operatives. It also includes 'informal' groups, from the very local to global social movements.

> "Civil society is the good, the bad and the downright bizarre."

It is important to note that all civil society associations are not necessarily 'good' in of themselves. As noted by Tom Carothers, Carnegie Endowment for International Peace: 'Civil society is the good, the bad and the downright bizarre'. At their best, civil society associations can fundamentally enhance the lives of the poorest in society, strengthen democracy and hold the powerful to account. At their worst they can preach intolerance and violence.

Civil society as a 'good' society: the term civil society is often used as a short-hand for the type of society we want to live in; these visions are both numerous and diverse. The values of social justice, mutuality, solidarity and sustainability are particularly important to this report.

Civil society associations do and can play a critical role in creating a 'good' society. However, they will not achieve this alone. Creating a 'good' society is dependent on the actions of and inter-relationships between the market, states and civil society associations.

Civil society as the arenas for public deliberation: we will not all necessarily agree what a 'good' society is or agree the means of getting there. Civil society is therefore also understood as the arenas for public deliberation where people and organisations discuss common interests, develop solutions to society's most pressing problems, and ideally reconcile differences peacefully. These arenas may be actual – a community centre, for example – or virtual, such as a blog. As such, these arenas for public deliberation are a key adjunct to a democratic society.

In short, civil society is a goal to aim for (a 'good' society), a means to achieve it (associational life) and a means for engaging with one another about what a 'good' society looks like and how we get there (the arenas for public deliberation).

Hope is one of the most important assets of civil society associations because it is an engine of change. Without some belief in good possibilities action becomes impossible.

Part 1: Overview

The impact of climate change challenges every corner of the 21st century state.

Friends of the Earth Scotland/Maverick

The world is facing threats from climate change and resource scarcity that threaten to transform society at every level.

People in the UK live lives that are built on the foundations of relatively cheap and abundant energy and materials, and few suffer the direct consequences of overexploitation. All of that is likely to change in coming decades.

This guide is targeted at non-environmental civil society groups in order to emphasise a particular and crucial point. Despite the language that is commonly used, and despite the typical nature of organisations that have been engaged in the first generation of debate and response, these threats have to be seen as much more than environmental challenges.

A complex process of change is taking place that will be driven not just by the direct impacts of things like changing weather or energy availability, but also by the indirect effects of how society responds – in diverse ways from cultural and political shifts through to policy development and financial investment. The steps that may need to be taken to mitigate and adapt to climate change and resource scarcity will themselves create winners and losers, and will have the potential to have a negative impact on vulnerable people and sectors in society. As Anthony Giddens puts it: 'The impact of climate change challenges every corner of the 21st century state.'[7]

Unless there is the engagement of a wider spectrum of civil society associations, focusing on the issues from their own positions of strength and experience, those potential impacts may not be identified effectively and better solutions may not be found in time.

Critically important is to recognise that these indirect effects are already taking form within society, causing radical social shifts such as proposals for personal carbon allowances.

They pose questions about how a healthy, democratic and just society can be maintained in the face of such change. There is no question that some of this change will be ugly. As well as direct impacts from declining resources, human rights issues will emerge and vulnerable people will be the victims of exploitation, corruption and social unrest.

Many people understand the scale of the challenge of threats such as climate change, but don't see it as urgent as the social ills that already stalk the Earth, such as poverty, violence and hatred. But there is an urgency, because the foundation stones of the policies and responses that will be used to address these threats, or the consequences of these threats, are being laid today – such as the carbon reduction commitments being introduced by governments. Civil society associations need to help lay these foundations, as the extent to which they are effective in avoiding yet more poverty, violence and hatred will depend on how well those foundations are built.

National legislation and international agreements currently formulated, such as the UK Climate Change Act, will set a keynote for the future evolution of society in ways that will be at least as profound as, for example, the creation of the welfare state. The challenge to civil society associations is two-fold: there are very direct and practical issues that they can help to tackle, including both doing what can be done to help avoid or reduce the risk of runaway climate change; and also doing what can be done to help society to best adapt. Civil society associations need to look beyond operational questions, such as how best to structure service delivery, and take a strategic view of how the values and qualities of a healthy, democratic and just society can be fostered throughout this radical change.

The challenge to civil society associations is two-fold: there are very direct and practical issues that they can help to tackle, including both doing what can be done to help avoid or reduce the risk of runaway climate change; and also doing what can be done to help society to best adapt. Civil society associations need to look beyond operational questions such as how best to structure service delivery, and take a strategic view of how the values and qualities of a healthy, democratic and just society can be fostered throughout this radical change.

In researching this guide, the authors spoke to many people from a broad spectrum of civil society associations, and canvassed their views on what this guide needs to address, as well as their insights into the challenges and possible solutions ahead. The most consistent thing heard was a plea for clear guidance on practical action that can be taken.

The authors believe it is heartening that there is so much will to act, but it is also clear that many people find the situation disempowering because there are such vast, complex and difficult forces at work and it is hard to discern exactly what the best thing to do is. Without being prescriptive, this guide focuses on practical and effective action. But there are changes to come that cannot be completely avoided, and many of these are unpredictable.

Society needs, to some extent, to prepare for a much more uncertain and risky future that will challenge people in ways that cannot yet be predicted. What also needs to be considered are the qualities needed to face this future in the most effective way. How do we become more adaptable and more resilient? Civil society associations need to think of themselves not just as deliverers of support or services, but also focus on evolving the models, ideas, values and capacities of a healthy society.

Below is a summary of what the authors see as they key questions raised by civil society organisations during the preparation of this guide.

John Birdshall/Press Association Images

Key questions

1. How are these issues relevant to the work of our organisation?
2. Given the work of powerful civil society organisations such as Greenpeace and Friends of the Earth, why should our organisation apply our limited time and resources to engage with this issue when it is not at the heart of our mission?
3. How do we get buy-in from our trustees or other stakeholders? How do we persuade people this is urgent as well as important?
4. As a non-environmental organisation how could we act to reduce the scale of the threats?
5. What should we do about our organisation's carbon footprint?
6. How could we target our investment funds?
7. Sometimes you hear talk of opportunities – are there any?
8. Are these problems solvable? What else can we do?

1 How are these issues relevant to the work of our organisation?

Major consequences can be anticipated in areas such as health, poverty, forced migration and social unrest, but actually there are very few areas of concern for civil society organisations where ripples won't be felt by key constituencies. Box 2 on pages 22-23 gives a brief overview of some of the different ways that climate change and resource scarcity may drive social impacts both internationally and within the UK.

In many ways the responses needed to tackle these threats also remain firmly within familiar territory for many of civil society organisations. It does not call for a change of mission or orientation, as it is possible to work with existing skills and expertise, within existing remits and working with existing funding and political channels.

However there are some new dimensions to consider. These are threats that will do more than simply turn up the volume on problems

that people are already engaged with; they introduce new levels of uncertainty, risk and the chances of sudden radical change with all of the social stresses that will bring. Shifts in the political domain are also likely, at the least changing the balance of support for different issues and, at the worst, undermining the values and freedoms of a healthy society. Moving forward effectively requires a mix of focusing on and reinforcing key strengths balanced with flexibility, horizon scanning and strategic review.

A number of case studies are contained in this guide to demonstrate how different civil society associations are responding to the issues discussed here.

2 Given the work of powerful civil society organisations such as Greenpeace and Friends of the Earth, why should our organisation apply our limited time and resources to engage with this issue when it is not at the heart of our mission?

Every civil society organisation, no matter its size or focus, will eventually be impacted by the direct and indirect consequences of climate change and resource scarcity. For many with social welfare and social justice aims, the impact on beneficiaries of their work and other stakeholders will emerge sooner than may be imagined. These are drivers of change that will affect the lives of vulnerable people in many ways. Any civil society group engaged in strategic planning should include these likely impacts in their thinking.

For many people the political and financial responses to the challenges of climate change and resource scarcity, such as fuel and food price volatility, may impact before the direct effects, such as changing weather patterns, are felt. These responses are being shaped now and the choices made will have widespread social justice implications. Organisations with broad experience of finding equitable solutions to social change are needed to help find the best solutions.

Organisations with broad experience of finding equitable solutions to social change are needed to help find the best solutions.

3 How do we get buy-in from our trustees or other stakeholders? How do we persuade people this is urgent as well as important?

The threats that people face are so far-reaching that they deserve at least a strategic review from most civil society associations to understand the consequences for their mission and constituencies. However interviews and workshops that took place to inform this guide confirmed that many people find it difficult to get traction for exploring these issues in non-environmental civil society associations. This will change in time as evidence of social impacts grows. Box 1, below, shows some useful approaches for engaging people in the interim.

Box 1: Ways in which civil society associations can engage with their stakeholders

- Use a checklist such as Box 2 on pages 22-23 to **encourage a strategic debate about possible impacts**. There are some case studies later in the report showing work that has already been done to explore connections between, for example, climate change and mental health or welfare of older people, that can be used as models.
- Consider how these issues are **drivers of change**, i.e. they will lead to indirect consequences in spheres such as politics or economy, rather than issues to be discussed themselves, and **encourage a review of consequences of that change** for core agendas and stakeholders.
- Explore how **climate change or resource scarcity are likely to be triggers for new policies, legislation changes in financial flows and political changes** that will themselves have a wide range of social impacts and throw up questions of social justice. Note that for many people in the UK these impacts may arrive much sooner than the direct impacts.
- In the case of climate change it is worth doing the exercise of exploring possible consequences **without mentioning the weather** – forcing the conversation towards a consideration of other changes such as the possible impact of carbon taxes.
- Use your organisation's convening power to **draw groups of stakeholders together** and start to have some of the critically important conversations that currently aren't happening.
- Recognise that, like it or not, **all individuals and organisations will in some way be affected by climate change and resource scarcity** – the question is whether your organisation is ahead of the curve in terms of being prepared and its resilience, and whether it chooses to take action now so the negative consequences are diminished.

4 As a non-environmental organisation how could we act to reduce the scale of the threats?

Some people raised questions of 'mission drift', or governance problems, if non-environmental groups engage with issues such as climate change. It is hoped this guide makes it clear that the consequences of these challenges are so profound that they will impact across all social domains and, in the broader picture, categorising them as 'environmental issues' is unhelpful.

However in the short term many civil society organisations, rightly, want to act to reduce the scale of the threat rather than deal with the consequences, and want to explore options such as finding means to reduce their carbon footprints, reduce the impact of their investments or mobilise membership.

Society is currently in transition to a place where, at the very least, there will be much greater pressure to reduce non-renewable energy use and much greater literacy about the carbon consequences of different activities and modes of operation. Increasingly there will be legislative pressure to take these issues into account in operations, especially for larger organisations (the Carbon Reduction Commitment is already coming into force for major energy users). These operating principles will become as familiar, and mandated, as health and safety requirements are today, and as such they will no longer be seen as an issue of debate or choice. In the interim though, organisations may face challenges in changing practice, especially if this diverts finance or people from core missions.

Charities must develop a broader picture of the impacts of climate change and resource scarcity amongst trustees and beneficiaries.

The Charity Commission offers some guidance on boundaries, although it also makes the key point – charities must understand the direct or indirect consequences of all of their actions for their key beneficiaries, and as such developing a broader picture of the impacts of climate change and resource scarcity, especially amongst trustees, is key (see Box 9, page 52 for an excerpt of the Charity Commission's guidance).

5 What should we do about our organisation's carbon footprint?

Why should a civil society association strive to be more sustainable? Because it makes financial sense: it can reduce energy bills; support funding applications; better integrate the organisation into the local community; build a wider audience and stakeholder base; and provide an effective platform upon which to publicise the organisation as a hub of creativity and sustainability.

There are many guides and sources of advice available to help with reducing carbon emissions, and there are increasingly resources targeted directly at civil society associations and tailored for their needs, focusing on issues such as how to fit renewable energy sources to community buildings, or developing a travel plan. These are not duplicated here but the authors wish to point out the excellent work being done by, for example, the Baring Foundation (www.baringfoundation.org.uk) and Every Action Counts (www.everyactioncounts.org.uk).

However there is an additional issue that is rarely addressed that the authors believe should be part of the strategic thinking of civil society associations in regard to carbon footprints. Every assessment of the typical or target carbon footprint of people in the UK is based on a series of choices and assumptions about what should or should not be included. The numbers quoted appear to have high precision, but they can differ widely. Some sources quote figures that account for only those factors that they believe are directly under personal control and choice and directly attributable to our actions. Others include things that are outside of direct influence, for example a proportion of the national overhead of government carbon emissions.

By their very nature civil society associations need to take a more joined up view than focusing just on direct footprints. Mostly the advice given reflects what appears to be almost an obsession in today's society about individual choice and individual action. This can only take society so far. There are many major issues that can only be tackled, by a focus on collective action and by working together, whether this is

through community level infrastructure change, lobbying for policy and legislative action, or by demonstrating the presence of a constituency for change. These approaches reflect the core skills and methodologies that civil society has always used to drive social change.

As well as collective action a strong sense of collective interest is needed for effective solutions.

'In a high resilience system, risk – and response to that risk – is distributed throughout the system. Individuals and their groups see their interests as compatible with the collective interest. They have a common understanding of the challenges a society faces, and take decisions accordingly, but this understanding is not a straitjacket. Different actors play to their strengths and will often compete fiercely. But there is a balance between initiative and co-ordination, and broad buy-in to overarching institutional frameworks.'[8]

For global risks it is crucial that the common understanding also has global perspectives, and yet almost never included in footprint analysis is any assessment of UK society's share of the global carbon footprint; those factors that drive climate change that are fuelled by society's economies and lifestyles but don't take place in the UK. This includes direct embodied energy in, for example the food that is imported from overseas. It also includes indirect but major causes of climate change such as rainforest loss for meat and soya production.

It may be hard to attribute any proportion of these to people's own actions and choices, but what is beyond any doubt is that unless these major drivers of climate change are tackled at a global level, people will be wasting their time worrying about their own light bulbs. Civil society associations have to think global and local, and encourage action at both these levels.

The authors believe that civil society associations should be developing more sophisticated models of action to achieve changes at the scale required. Strategies for emissions reduction should reflect both the scope and need for collective action, and the scope and need for changes that will make the greatest difference at a global level. These can be easily tailored to the particular skills and focal points of civil society organisations and promoted to members and supporters without concerns of mission drift.

The major impacts come from energy efficiency measures, conversion of fuels and energy supply to non-carbon sources, from changing how food is produced and what people eat, from changing travel patterns by removing the need to travel, from addressing the national carbon footprints of governments and industry, and from addressing problems at a global level such as deforestation.

Box 3 on pages 39-40 gives more guidance and a checklist of options for carbon emissions reduction.

6 How could we target our investment funds?

Between them, civil society associations have many billions of pounds of investment assets. These financial assets that could be screened or deployed in a manner that addresses the issues of climate change and resource scarcity.

Using the financial investment power of civil society organisations to drive change is not surprisingly a contentious and difficult subject. The responsible and ethical investment debate is a long-standing one, but it is likely that the issues of climate change and resource scarcity in particular may bring a new dynamic. Increasingly, the development of carbon reporting and carbon reduction commitments is likely to mean that for many investments some of the choices that are currently seen as driven by ethical considerations are likely to trend towards being obligations and expectations. High carbon investments could be expected to carry higher financial burdens or become subject to frameworks that cap and drive down their use of fossil fuels.

In addition the degree of public and media scrutiny of high carbon activities can only grow, and ideas of 'polluter pays' mechanisms being applied to fossil fuels will continue to be heard, such as Cap and Dividend models (www.capanddividend.org).

This means that over time the nature of the investments that are seen as low risk and with high confidence of return is likely to shift, giving greater room for alignment between financial and ethical goals.

There are many major issues that can only be tackled, by a focus on collective action and by working together, whether this is through community level infrastructure change, lobbying for policy and legislative action, or by demonstrating the presence of a constituency for change.

Investor Carbon Disclosure Project is a civil society association that provides critical climate change data from thousands of the world's largest corporations to inform the global market place on investment risk and commercial opportunity. It requests information on greenhouse gas emissions and climate change strategies on behalf of 475 institutional investors with a combined $55 trillion in assets under management.

It is also within the reach of civil society associations to try to change the rules of money and investment more directly, and to develop their own investment instruments that drive change faster by helping the establishment of innovative new approaches and organisations. See, for example, Big Issue Invest (www.bigissueinvest.com), a specialised provider of finance to social enterprises or trading arms of charities that are finding business solutions that create social and environmental transformation.

Various new models of community ownership and management of resources such as energy generation are beginning to appear, demonstrating innovative practical solutions. Community Power Cornwall is an example (see Case study 10 on page 43).

It is a profound challenge to find ways to finance the changes we need to make to create a low carbon society. We face issues such as committed budgets and financial structures, sunk investment and siloed systems that aren't necessarily best adapted to the needs of the 21st century. Even the private sector has its own barriers based on perceptions of risk, expected return, discount rate and so on that all create substantive barriers to investment in a more adaptable society. A key role of civil society associations, and especially the social enterprise sector, is both to provide new sources of finance but also new sets of rules for how that finance is deployed.

A key role of civil society associations is to provide new sources of finance but also new sets of rules for how that finance is deployed.

7 Sometimes you hear talk of opportunities – are there any?

During conversations with the authors, some people found it difficult to reconcile the discussion of these challenges with the idea of opportunities. Certainly there has been an early flush of enthusiasm in the corporate sector in particular to talk about the opportunities that climate change will bring, such as new markets for greener goods, that smack of cant, naivety and short sightedness at best.

But dig deep enough and there are some strands of positive possibility within the whole picture – especially for those who believe that some refocusing away from consumption may be no bad thing in contemporary society.

For civil society this is a time to press for the implementation of new ideas, approaches and solutions. New models and projects that demonstrate possibilities are needed that can respond to the unpredictable nature of future threats. It is a good time to revisit the back catalogue of excellent projects and initiatives that showed great promise in the past but failed to find traction or the ability to scale. These could include:

- community solutions, for example community energy trusts;
- co-operative systems, such as the Westmill Wind Farm Co-operative;[9]
- mutuals and other mechanisms for releasing capital, such as The Children's Mutual.[10]

The social enterprise and social investment sector in particular could provide not only new sources of finance but also explore new sets of rules for how that finance is deployed – for example, linking the commercial rigour of the private sector to public benefit and without shareholder concerns, to allow new interpretations of issues such as rate of return or efficiency of invested capital.

But if people have the creativity, strength and vision, another and more fundamental opportunity may exist – to use a period of rapid change to tackle some entrenched and endemic ills, and to play for a healthier, more just and values-based society.

8 Are these problems solvable? What else can we do?

There is nothing people can do now to avoid all effects of climate change and resource scarcity impacting on the world, no matter how effective society is at mobilisation for mitigation. What's more, the scale of change that effective mitigation will demand will be itself transformational for society, and will throw up major challenges and stresses. Every civil society organisation with a concern for its stakeholders needs to incorporate some of these prospects into their strategic planning.

Some of the questions ahead are very practical ones of policy implementation. For example, many ideas and frameworks are already under debate at national and international levels focused on finding ways to cap carbon emissions. The first generation schemes such as the EU Emissions Trading Scheme have hardly been exciting, but there are radical ideas embodied in some of the proposals for future approaches – particularly with regard to the distribution of emissions rights and also distribution of revenues that could accrue from trade – at the heart of which is a question of whether the atmosphere is a global commons. Conversely, the mechanisms that are chosen may miss the opportunity to safeguard or benefit poor and vulnerable people. Somehow civil society associations need to be represented in the debate so that the most socially just and workable options are identified and supported.

It is a time to be creative and ambitious to reconcile different aims. Society needs mitigation in forms that do not entrench poverty and disadvantage; adaptation in ways that do not limit social transformation; and people need to foster a vision of a 'good' society in the face of political threat.

There is no question that this period of change will throw up some challenges to society's ethics and values. The currently accepted boundaries of rights and responsibilities are bound to shift. Change will bring many winners and losers and unhealthy political and cultural shifts are a constant threat.

Not surprisingly, people will look to civil society associations to help maintain healthier and more inclusive narratives, nurturing visions of a localised future that are founded on strong ideals of human connection and community such as:

- increasing human connection, interaction, and interdependence;
- resurrecting or developing shared stories, for guidance into the future and definition in times of uncertainty;
- placing stronger focus on group effort and building/bridging social capital;
- shifting and redefinition of values;
- increasing local control of assets and resources.

Civil society can be, and must be, a source of hope, inspiration and effective solutions. But to deliver is going to ask the best of people – it challenges civil society associations to ensure that they aren't just posturing. Current traditions, working practices and conservatism will be put to the test. Can civil society associations develop as innovators and risk takers – roles that are sometimes assigned to the private sector? Civil society associations need to live up to their tradition of being drivers for change, ahead of how society defines its norms. To do this the visions of a good society need to be looked at to see where they are really being shaped and nurtured, and how they are being realised. ■

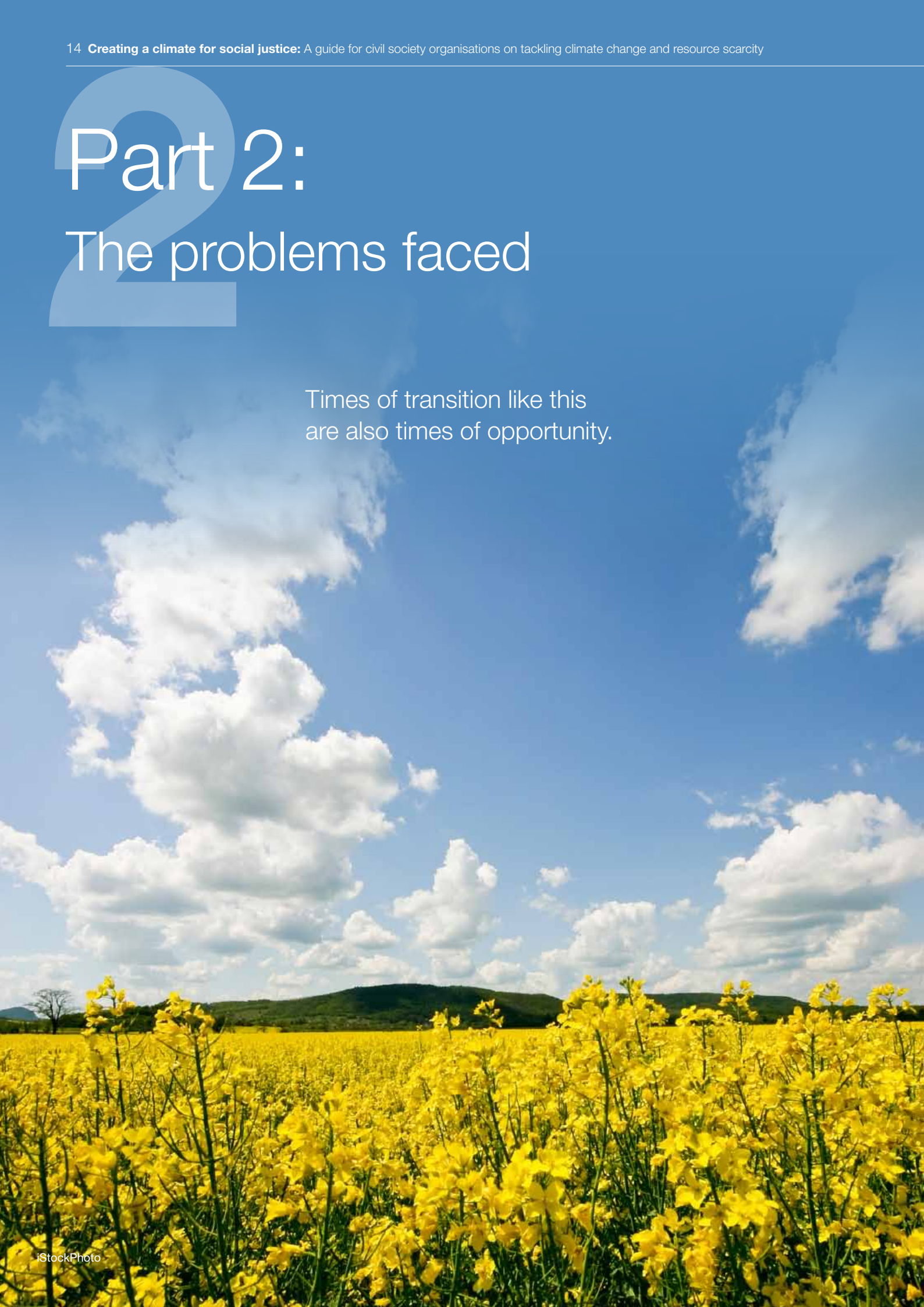
Civil society can be, and must be, a source of hope, inspiration and effective solutions.

Friends of the Earth Scotland/Maverick

Civil society associations need to be represented in the debate so that the most socially just and workable options are identified and supported.

Part 2:
The problems faced

Times of transition like this
are also times of opportunity.



iStockPhoto

The increasing national and global concerns about issues of resource scarcity and climate change cluster around several key issues, which are described here.

Peak oil

Rising global demand, linked to the gradual depletion of reserves, means that the world is close to the point where conventional oil availability will begin to decline relative to demand.

It was not inevitable that the impact of peak oil and a step change in critical awareness of climate change would be coincident, but they have turned out to be, and the way that the two issues are interacting has positive and negative effects.

2008 saw high oil prices that were at least in part due to temporary interruptions in supply that have since eased. But the International Energy Agency is predicting a peak of non-OPEC oil production within two years (which some believe could drive oil prices as high as $250/barrel or more) and so energy price rises are clearly unlikely to disappear – driving both short term stresses and strains in society but at the same time increasing interest and viability in alternatives.

The likelihood is that carbon regulation policies will also have an increasing impact on energy costs. The adoption of energy taxes as a means of incentivising a reduction in fossil fuel use has been on the horizon for years, albeit politically difficult. Rising prices are likely to reduce the need or scope for this sort of intervention, but in ways that perhaps have less room for mitigating impacts on those in most need.

Although they incentivise, rising energy costs are also going to make it harder to find capital to finance infrastructure changes or invest in new technology. Costs will constrain delivery of social services, as well as having direct impact on cost of living and business overheads, driving unemployment.

Times of transition like this are also times of opportunity; developing major energy sources need large capital investments and rest mostly in the hands of multinationals or state organisations. There are key questions around energy alternatives and options that civil society associations aim to influence. The choice of whether to invest in nuclear is fairly widely debated, as is the viability of rolling out renewable energy technologies at scale, but it is hard to find evidence that the debate is having a meaningful input into government thinking. Less frequently discussed is the role of coal which some analysts are predicting will be the key fuel of the 21st century. A decline in oil may not mean a decline in fossil fuel use or carbon dioxide emissions.

The influence that civil society associations can have on many of these options is often limited to campaigning and education. Historically this has been to great effect in influencing investment in the nuclear industry in the UK, but the effect was largely circumvented by moves to source energy from other countries where nuclear technology was widely used. More effective may be to use the collective investment power of civil society associations to promote active growth in new solutions.

> The collective investment power of civil society associations should be used to promote active growth in new solutions.

There is an important point of intersection with food scarcity issues – the promotion and development of biofuels. Here civil society organisations have been quick to develop oppositional stances.

Rising fuel costs will also drive the question of how to reduce energy demand and this is an area where civil society is very active. They will also create powerful incentives to plan communities based around efficiency of transport of goods and people, with a possible consequence of more social interaction (in everything from increased public transit use to formation of co-operatives).

Water scarcity

Along with oil, water is likely to be a commodity with rapidly decreasing availability in coming decades. Globally water is seen as a critical issue – more significant for many than even oil. There are widespread predictions that water shortages will fuel conflict, food shortages and more.

The direct effects of water shortage in the UK does get public attention, particularly in the drier east, but most often this is seen in context of constraints on uses such as gardening, washing cars and so on. The more frequent serious issues in the UK have been in relation to flooding, which makes it even harder to

have conversations about local water shortage that most people will see as credible. There are risks though, and some element of risk awareness has to be fostered. It is also an issue that is taken increasingly seriously by development planning systems, and the UK is moving towards much more sophisticated water harvesting and retention models for new buildings. There are also grassroots interests in water harvesting, and increasing pricing and more extensive metering by water supply companies is supporting this trend. A missing piece of the picture is an absence of community-level water ownership and water management options – with solutions resting in the hands of individuals, planners and developers or utility companies.

Unquestionably, the more critical issues that are likely to impact UK societies will be the indirect results of water shortages elsewhere in the world – mediated through policies, prices and public opinion. Water shortages will undoubtedly fuel political instability and displace people.

Developing means for supplementing or getting the best from a poor food supply has been one of the core skills that people have needed throughout history, but these abilities have fallen away in developed countries in the last few decades.

Water is not just used directly, by a growing and more affluent global population; it is used indirectly in industry and especially in agriculture. So when the UK exports food and industrial production overseas, it usually means cutting into those countries' water supply.

Climate change will have an impact. Some areas of the world will become drier, and others will have more unsettled weather with periods of intense rain and others of drought. This makes water capture harder to manage.

Growth in demand for water has often been met by exploitation of reserves that have taken a long time to accumulate – specifically underground aquifers – but these are running out in many regions. Pollution and fouling of sources is also widespread. As well as possible crop failures through drought, irrigation will become more expensive and both will impact food prices. The water use of different crops is gaining attention and campaigns are starting to evolve around the issue of embodied water in different foods.

Of all of the various resources that may become in shorter supply, water comes with the greatest potential to fuel cross-boundary disputes, and is widely predicted to be the root of many conflicts in the coming century.

Food scarcity

The underlying problem is that the world population is growing rapidly, and so is food demand. The diets of countries that are becoming wealthier become more like diets in the West. A rise from extreme poverty means that nutrition and health improves but, as disposable income increases, there is also an increase in consumption of meat, dairy and heavily processed foods that are much less efficient in their production (and have bigger carbon impacts).

The increase in global population through the 20th century was largely matched by an increase in agricultural productivity that meant more people were able to be well fed than in previous centuries. This increase was based on a scientific programme called the 'Green Revolution', that linked crop breeding with the use of fertilisers and pesticides, and also to revolutions in distribution and storage technologies such as freezing food.

But for decades some food and agricultural scientists have been concerned that the further increases to sustain a growing population will be harder to achieve, and at the same time many countries in the world have seen a major retraction and dismantling of agricultural research capability. This is by no means a firm consensus – others forecast increasing production, especially if new biotechnologies are introduced.

The gains that the 20th century saw were largely underpinned by fossil fuels and also in many countries on sources of water that are not easily replenished, such as underground aquifers. As oil gets more expensive, so will fertilisers, pesticides, transport, processing and storage and also water, if it remains available, will become more expensive to extract. As a final twist, the interest in biofuels has taken land away from food production, driving high prices and lower availability of staple crops such as wheat. And hanging over the picture is the high likelihood that climate change will disrupt food production in the short term, usually through floods and droughts, and cause a shift in what grows where in the long term. The net result is a high probability that per capita food supply will fall not grow in the 21st century.

But the world food system is huge and complex, and the actual availability and price of food at any one time is determined by many things, including the nature and effectiveness

of the harvesting and distribution systems and especially ownership, and opportunities for speculation or other influences over pricing (ownership of the distribution systems and supply chains and so on). Even in times of relative global abundance of food, people have been suffering and dying because of resource shortages at a personal or community level – the efficiency of the market and global trade usually bypasses poor people. Increasingly, people in developed countries are dying from diseases related to overabundance of food and the scope for a more just redistribution of access to food is compelling.

At the same time, in wealthy capitalist economies the drive to more efficient supply chains, 'just in time' deliveries and reduced stockholding in retail stores, has meant that the ability to withstand even temporary disruptions in supply has rapidly diminished, leading some people to worry about the risks of social unrest.

Arising from this picture is a greatly renewed interest in and focus on local food production. It is hard to actually quantify how much food could be produced at home and how disruptive this may be, because it depends on how it is farmed and what people eat.

It is actually relatively easy to devise food production systems that are more productive than industrial agriculture, based on intelligent mixed cropping, but these are systems that are harder to mechanise and demand more people on the land – which usually means that the higher productivity is unprofitable.

Although in absolute terms food supply can't be substituted, the possible composition of a person's diet has an enormous amount of flexibility. Absolute food shortages are of course part of the consequence of extreme poverty, but for most people in developed countries the issues of concern around food poverty are mainly associated with access to suitably nutritious food and balanced diets.

Developing means for supplementing or getting the best from a poor food supply has been one of the core skills that people have needed throughout history, but these abilities have fallen away in developed countries in the last few decades. The same is true of the knowledge and research base for agriculture and horticulture. So not only has the supply of food globalised but so has people's knowledge of how to feed themselves. Relocalisation of food production faces a significant skills gap.

Even so, the decline in mainstream farming, and problems with food supply, have lead to the creation of a space of opportunity that has been vigorously colonised by civil society associations, and there are countless projects underway that promote growing, cooking, and alternative food supply options. Farming, growing and cooking remain domains where a great deal of innovation and social enterprise can happen. Generally, however, the distribution chains and processing capacity for foods is centralised and under private sector control, and supported by legislation and food standards systems well adapted to mass production.

Farming, growing and cooking remain domains where a great deal of innovation and social enterprise can happen.

The most profound changes may yet come from the interaction with climate change. The contribution that animal farming makes to greenhouse gas emissions is huge, and there is a convergence of interests related to health, energy and climate change mitigation that is likely to raise the need to dramatically reduce the amount of meat and dairy food consumed.

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Population rise

Scarcity comes from a combination of supply and demand, and rates of emissions of greenhouse gases are related to the scale of human activity – so it's never long before conversations about resource scarcity come round to pronouncements about the need to control population levels because 'there are simply too many people'.

The most plausible models for future development highlight the need for access to resources to continue to grow for the very poorest, not least because this is part of the key to reducing birth rates, but at the same time there has to be a reduction in consumption by the wealthiest.

It's an easy headline statement but the underlying issues are perhaps surprising. For many countries in the world the underlying transition to low birth rates has already taken place and, in some cases, these have fallen rapidly in just a few decades.[11]

Birth control programmes of various kinds have been introduced in many countries and with varying degrees of effectiveness, but on the most part they work when they are culturally appropriate and when people have no reason to subvert them. The underlying cause for high birth rates is usually when there is no confidence that children will survive. Most consistently, the evidence is that the best route for reducing population growth is: to raise people from poverty to reduce infant mortality; and provide education, especially for women. Increasingly, the two biggest world populations – China and India – have these conditions and population growth is already under control.

That doesn't mean there won't be a huge increase in the numbers of people in the short term. Because many countries have more young people than old, and because the death rate is falling, an increase in the numbers of people is inevitable even if the underlying population growth trends fall away.

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And any further decrease in birth rates that will lead to reduced population numbers will eventually create the opposite problem – more old people than young people in society. This is the challenge now facing many highly developed countries, especially those with ambitious health care for the elderly. The hard truth is that the only way that we will see a rapid reduction in world population levels is if there is a significant increase in the rate that people die.

The more meaningful question is to consider the interaction of population and consumption. The most plausible models for future development highlight the need for access to resources to continue to grow for the very poorest, not least because this is part of the key to reducing birth rates, but at the same time there has to be a reduction in consumption by the wealthiest. The challenge is to explore ways of maintaining quality of life, and yet to break the linkage with consumption of resources and fossil fuels.

Climate change

The basic principles of climate change are not complex – mainly as a result of our use of fossil fuels such as oil, gas and coal, the atmosphere now has higher concentrations of gases that retain more of the sun's energy, gradually increasing global temperatures.

Carbon dioxide is the most significant gas by volume, but other gases such as methane have a greater greenhouse effect and can be serious problems even if present in lower volumes. Monitoring the changes in concentration of these gases is not complex, and scientists are developing greater levels of confidence over the nature of the problem – but a lot still remains unknown.

The difficult part relates to the fact that there may be feedback mechanisms that mean that the increasing concentrations of gases may not have simple linear effects on temperature and weather. Because of this, scientists are increasingly worried about 'tipping point' changes that could rapidly magnify the change in climate. For example, methane trapped beneath permafrost in Siberia is released as the ice melts, adding a potent greenhouse gas to the atmosphere in large quantities. This could mean a rapidly increasing climate change that feeds on itself rather than on society's actions

and becomes irreversible. This concern is driving much of the current sense of political urgency.

National and international efforts are increasingly focused on reducing the risk of this runaway change, recognising that some climate change is now inevitable. As each year passes, scientists revise their understanding of what they believe is happening based on new research and modelling. The authoritative source for most people are the reports of the Intergovernmental Panel for Climate Change (IPCC).[12]

The IPCC reports show increasingly alarming evidence that not only is climate change real, the rates of change and risks of runaway climate changes are revised upwards each year, and the calls for action become more urgent – as do the estimates for the scale of the carbon emissions reductions needed.

For those who want to understand more about the scientific evidence for climate change, the causes and direct impacts on weather and sea levels, there are many excellent resources; for example the Met Office, IPCC and the Royal Society.

However, odd as it may sound, the consequences of climate change can no longer be understood just by thinking about changes in the weather. This is not just an issue for technologists and scientists; it has ramifications that will affect the basic fabric of society in countless ways, and identifying the implications and possible solutions needs input in every spectrum of civil society association and those involved in social change.

The biggest variables in predicting impacts are not to do with climatology – they depend on:

- how rapidly and effectively people respond;
- what sorts of societies are built and how vulnerable they are to change;
- the secondary consequences of the threat such as political shifts;
- the changes that are made in response that will send ripples through society.

To effectively engage a spectrum of society a much greater diversity of conversations about climate change is needed; conversations that move beyond climatology and Arctic science and focus in on other key questions where a broader range of people have something to contribute.

Consensus and uncertainty

Although there is increasing consensus about the nature and seriousness of these problems, there are still important points of disagreement and uncertainty.

- Some scientists still dispute the relative scale of different drivers of climate change.
- There are still points of disagreement about the likelihood and scale of the 'tipping point' impacts.
- It is not yet possible to give accurate definition to the likely weather changes for any given location for any given emissions scenario.
- Solutions are disputed, especially the distribution of effort between mitigation and adaptation. Many environmental groups have been reluctant to discuss adaptation, feeling that it weakens the drive to find solutions based on mitigation.
- Many economists argue that developing wealth will be a more effective tool for increasing our future ability to withstand climate change than impacting the economy through mitigation measures. This is the thinking behind what is known as the Copenhagen Consensus.[13]
- The likely impact, wisdom and ethics of different policy responses, such as carbon capping schemes, are bitterly disputed.[14]

The important message from this guide is that scepticism or uncertainty is no longer a licence for disengagement. UK society has already changed and radical shifts are underway because of these problems. Crucially, the risks of ineffective or poor solutions being implemented can best be reduced by active engagement from a breadth of civil society associations.

Scepticism or uncertainty is no longer a licence for disengagement.

The consequences of climate change can no longer be understood just by thinking about changes in the weather. This is not just an issue for technologists and scientists, it has ramifications that will affect the basic fabric of society in countless ways and identifying the implications and possible solutions needs input in every spectrum of civil society association and those involved in social change.

Case study 1: Climate change mitigation policies and social justice in Europe

The King Baudouin Foundation (KBF), an independent public benefit foundation which supports commitment to create greater justice, democracy and diversity in society, has launched a three-year European level project with the objective of promoting the integration of social justice priorities into climate change mitigation policies. KBF is bringing together experts in climate change and social justice to debate the importance of a joint approach to achieve social fairness in mitigation policies in Europe.

These experts will identify top social justice priorities in the climate change mitigation debate, define policy goals and options, and propose recommendations and guidelines for the integration of social justice concerns into climate change mitigation policies.

www.kbs-frb.org

Mitigation or adaptation; and the impacts of the solutions

Some of the climate change impacts expected in 2050 are already here!

Mitigation is defined by the International Panel on Climate Change (IPCC, www.ipcc.ch) as 'intervention to reduce the sources or enhance the sinks of greenhouse gases'. This means, for example, reducing energy use or switching to non-carbon fuel sources. Adaptation is: 'adjustment in natural or human systems to a new or changing environment'; so adaptation is any move people make to reduce the damaging impacts of climate change, such as changing housing systems to avoid the risk of flooding, or changes to welfare support.

The question of whether society should focus on mitigation or adaptation has been highly political. Many environmental groups have been reluctant to hold open discussions about adaptation, feeling that it weakens the drive to find solutions based on mitigation. Although there is no question that adaptation is needed.

It is time for a more sophisticated understanding. Everyone has a stake in promoting mitigation – and in doing what they can. Going forward, adaptation will be equally important.

Effective mitigation is adaptation.

This is in part because climate changes that have already been set in motion will impact in the coming decades however successful the mitigation is. It is also because some of the mitigation steps that we may have to take are themselves so radical that they will require major adaptations in how people live. The society of the developed world is so reliant on abundant fossil energy that any move to reduce its use will require dramatic change now and into the future. Effective mitigation is adaptation.

Climate change will impact on society in different ways and through different means and the changes will themselves precipitate new changes, impacts and consequences.

In the primary instance there are:

- direct effects of changing climate, i.e. weather effects such as flooding;
- indirect effects of policy or investment changes or actions taken to mitigate, such as the introduction of carbon taxes;
- effects of attitudinal or cultural shifts as a consequence of the above; for example mental health or intolerance.

Change will then precipitate change, for example migration will follow weather impacts. This will in turn have direct impacts such as pressure on welfare systems, indirect impacts through policy responses and cultural impacts through changing social perspectives.

It is likely that policy and investment changes, driven by forecasts of what climate change and resource scarcity will bring, will have earlier impacts on many communities and individuals in the UK than actual shifts in the weather. For example many people will find that the

loss of asset value of houses prone to flooding will come through the mediation of insurance companies before it comes through water. Similarly programmes of incentives and punitive measures to reduce energy use are being drawn up now, and will rapidly start to be applied.

Some of the climate change impacts expected in 2050 are already here!

Many people that the authors spoke to from socially-focused civil society organisations have found it difficult to accept that climate change and resource scarcity issues are as urgent and pressing as the daily problems they wrestle with. But policy responses to climate change are being drawn up now – often with only the engagement of environmental civil society groups or no civil society groups at all. The UK government's Committee on Climate Change consists of energy technologists, meteorologists and economists.

The UK's Climate Change Act looks for an 80% reduction in the levels of greenhouse gas emissions by 2050. The point is very simple but the ramifications are complex – achieving change of this magnitude is a systems problem of a scale we have never attempted before. It will not only give us technical and methodological challenges; it will also provoke wide-ranging challenges to our concepts of justice and a 'good' society.

And that move for a reduction has already begun. The simple reality is that there are changes underway now (driven by the threat of climate change) that will transform society. There are already decisions being made that will impact on people's lives – especially those who are most vulnerable and poor – and it is crucial that civil society associations are active and engaged to ensure just solutions, and that the best opportunities are taken for positive rather than negative change, and that the outcomes reflect the principles and best practice of promoting social justice and protecting vulnerable people. It is important to promote better engagement with the policy and financial decisions that will set a framework of response to climate change.

Policy responses to climate change are being drawn up now – often with only the engagement of environmental civil society groups or no civil society groups at all.

Moving beyond 'environmental perspectives'

There is a deep and persistent tendency to categorise issues such as climate change and resource supply as 'environmental'. Although there is a kind of logic to this it is hugely unhelpful because it traps people into assumptions about the nature of the impacts and the relevance to their lives, and also into assumptions about who needs to engage and help find solutions.

In 2007 the Mental Health Foundation commissioned a groundbreaking study on the possible impacts of climate change on mental health. A survey was also conducted as part of this work to investigate how highly people rated this as a worry in their lives.

In a YouGov survey commissioned by the Mental Health Foundation (www.mentalhealth.org.uk), 70% of people said they were most worried about terrorism and 58% by immigration. In contrast, environmental issues were less of a concern – only a third were worried about climate change (38%) and a quarter by the threat of a natural disaster (23%).

Commenting on the research, clinical psychologist Dr Michael Reddy said:

'As social animals, we are sensitive to dangers from other humans that are intentional, such as terrorism. Accidental dangers, such as natural disasters fail to motivate us in the same way. Immigration ranks highly as a worry because humans identify themselves as belonging to particular groups who share the same values and codes of behaviour – this is one of our main ways of feeling secure. Feeling a threat to one's group from an unknown force, such as immigration, can threaten this sense of security and make people feel anxious.'

The critical point though is that climate change and resource scarcity are not isolated issues; they are drivers of change at many levels that are likely to impact through social unrest, immigration, policies and prices as much as through storms or drought. People constantly fall back into the language and narratives that maintain a dichotomy.

Box 2 on pages 22-23 explores the different ways in which climate change and resource scarcity will impact on people's lives in ways that will be of concern to civil society associations.

Box 2: Some social impacts of climate change and resource scarcity

Increasing costs aggravating poverty:

- greater food costs (arising from increased energy costs): crop disease; crop failures – drought, flooding and so on; biofuel expansion (and policy) causing competition for food crops and arable land;
- greater costs of any commodity needing high input of fossil energy, for example water;
- greater transport costs (food, commodities and people commuting to work);
- greater insurance costs;
- costs of housing;
- green taxes, for example tax on energy inefficient houses could disadvantage low quality housing stock.

Recession and unemployment (indirect effects):

- greater market volatility and uncertainty, reduced investor confidence leading to job losses, reduced investment, less philanthropy;
- competition for jobs (especially unskilled labour) at the local level due to influx of climate migrants (compare to current impact on the EU with workers from Eastern Europe, influx of workers from Africa and so on), which can decrease social tolerance;
- loans withdrawn (or rates raised dramatically);
- greater pressure on weak financial systems and institutions.

Increasing opportunity:

- creation of 'green jobs' in response to government policies/initiatives, birth of niche markets in energy and adaptation services; but jobs for whom?
- potential for social enterprise solutions;
- social justice, the need for effective access to these growth sectors; training, development, engagement skills, locational issues.

Loss of assets or asset value:

- damage to or loss of housing on marginal land, for example flood zones;
- loss of insurance cover;
- loss of workplace, equipment, loss of farmland and so on;
- loss of market value of vulnerable assets (and follow-on impacts, for example negative equity);
- loss of assets through policy-driven obsolescence, for example old machines that can't meet strict emissions requirements.

Social equity and welfare issues:

- aggravation of the long-standing conflict between the perceived needs of labour and environment;
- redirection or shrinking of social investment from government or other sectors, for example philanthropy;
- compensation and choices of investment to protect against climate; who wins, who loses?
- loss of mobility options (rising costs, penalisation of car ownership without adequate transport choice);
- failure of service delivery to keep up with mobility changes;
- loss of security; insurance, health insurance;
- green taxes hitting people least able to invest in life changes;
- increased pressure on welfare and emergency services;
- loss of civil rights? Could we see a 'war on climate change' in the tradition of the 'wars' on drugs and terror?

Changes in the political sphere:

- weakening and paralysis of government in the face of complex challenges
- inability to balance complex and competing demands
- inability to communicate decision-making rationale sufficiently to citizens
- inability to control/appease negative responses (by citizens, industries and so on) to (necessary but unpleasant) policies
- continued or increased dedication of government funds to large-sum, single-initiative fixes rather than (much more administratively complex) dispersed, local solutions
- potential reductions in funding for civil society
- minor overriding of democratic process – for example, new initiatives overriding town planning systems
- major overriding of democratic process – totalitarianism in government
- greater impetus for privatisation of public goods and loss of public rights – 'disaster capitalism'.

Demographic change (indirect impacts):

- influx of environmental refugees; political fallout, conflicts with existing refugee frameworks;[15]
- pressure on welfare and homeless services;
- international conflict;
- influence on immigrant populations of disasters in their countries of origin;
- decreased extra-national involvement and mediation by strained governments;
- changes in economic balance between nations and between industries.

Health challenges

- new disease patterns;
- more disability and veterans; victims of conflict, disaster and health problems;
- mental health problems driven by cumulative effects of pressures such as unemployment;
- loss of hope for the future, depression at uncertainty;
- stress related social disruption, for example child welfare affected by poverty and/or unemployment;
- higher health-care costs.

Weakening (or continued absence) of community cohesion:

- growth of unhealthy localism such as survivalist mentality;
- promotion of 'individual behaviour change' rather than collaboration and collective action;
- isolation of people living in 20th century housing patterns built on assumptions of easy transport;
- racism and xenophobia;
- conflicts between environmental activists and wider society;
- intolerance of immigrants and so on driven by unstable societal/economic conditions;
- 'green terrorism', for example anti-car driving;
- backlash against climate initiatives by people who 'lose'.

Whether these are really significant, or even credible, impacts is difficult to say, mostly because the people who may know are only patchily engaged. It is rare to find many of these issues on the agenda of any climate change conference. Are they receiving any focus from the people who have experience and insight in these different domains?

80% ***reduction in the levels of greenhouse gas emissions needed by 2050.***
(UK Climate Change Act)

How civil society associations are identifying the social impacts of climate change

There are an increasing number of civil society associations that are seeking to understand the social and political consequences of climate change and resource scarcity. The case studies on the following pages present work by civil society associations who are pioneering new perspectives on the wider societal impacts of climate change and the responses to climate change, looking at the issues of climate change impacts on:

- an ageing society;
- health, including mental health;
- the interaction with poverty;
- how climate change may impact unevenly across society;
- the likelihood of corruption developing around this issue at many levels.

Case study 2: Growing old in a changing climate

Meeting the challenges of an ageing population and climate change

Gary Haq, John Whitelegg and Mervyn Kohler
Stockholm Environment Institute, 2008

This report draws on the outcomes of a workshop held in March 2008 entitled 'Growing Old in a Changing Climate: Meeting the Challenge of Climate Change'. The themes that emerged were that: individuals are willing to make a change and contribute to tackling climate change but they think governments should do more; older people should be more involved with policy-making; and a new national policy framework is needed to link climate change interventions and other policies in order to improve the quality of life of older people.

This report looks at the policy challenges which need to be addressed to ensure a safe, secure, equitable and sustainable future for an ageing population in a changing climate. It states how risk and harm resulting from climate change will not be evenly distributed; certain groups in society will be more affected than others. People in old age may be physically, financially and emotionally less resilient to dealing with the effects of a changing climate than the rest of the population. The report highlights how the over-65s showed less awareness and concerns about climate change, yet they have some of the highest carbon footprints of any age group. They are therefore contributors to and casualties of climate change as well as potential campaigners to tackle the problem.


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The report outlines five recommendations and calls on government agencies and older people's organisations to make a concerted effort to reduce the vulnerability of older people by improving their ability to cope with future effects of climate change. It calls on governments to:

- risk assess all future policies so they do not undermine government targets to reduce UK greenhouse gas emissions and put older people at risk;
- climate change-proof the homes of older people – both new and existing – to increase energy efficiency and tackle fuel poverty;
- enrich local accessibility to deliver safer, stronger and healthier communities for older people;
- provide better transport for older people to ensure they can maintain independence and connect to friends, family and wider community;
- provide leadership on these issues by setting up an older people and climate change group to outline a national policy framework to focus and co-ordinate action.

For more information, see:
http://sei-international.org/?p=publications&task=view&pid=830

Case study 3: Small steps lead to big changes

National Children's Bureau

The National Children's Bureau (NCB) ran a successful Health Challenge Programme, created within the context of rising concern about the impact of poor diet and significantly reduced levels of physical activity on children and young people's health and well-being now and in later life.

Children, young people and their families' active participation in decisions about their health is central to increasing their motivation and taking responsibility for their own health: 'Getting more people motivated will help improve the nation's health' (Choosing Health, 2004).

The 'small steps lead to big changes' principle resonated strongly with students, reminding them that small, simple and achievable changes can make a big difference to their well-being, and those around them.

Health challenges included walking to school instead of using the car. The programme also involved more targeted environmental challenges such as sourcing local produce, growing food, energy saving and efficient energy use, and ecology and conservation.

This approach could also work well in engaging vulnerable children and young people in other settings for whom sustainable development is not a priority, for example by identifying the hooks that matter to them the most: housing, money, relationships. Links with other issues could also be explored such as health and well-being, which is a key strand of sustainable development.

NCB is now developing and implementing a new Climate Challenge approach in local authorities, based on the learning from the Health Challenge.

For more information, visit:
www.ncb.org.uk/projects/health_and_well-being.aspx

Case study 4: Climate change and mental health in the 21st century

Andrew Lyon and Maddy Halliday, International Futures Forum, 2005

This report highlights the connection between climate change and mental health. In it, Lyon and Halliday argue that there is reason to believe that the status of our surrounding nature is reflected in the growing levels of mental ill health witnessed across the world.

The report claims that the stress and anxiety associated with the direct and indirect consequences of climate change (such as the threat of repeated flooding or the withdrawal of insurance cover and the increasing difficulty of selling houses at risk of flooding) are likely to adversely affect the mental health of many people facing such risk.

According to the World Health Organization, mental health problems are set to increase significantly by the year 2020, and will be the second greatest cause of illness after heart disease by 2050 if present trends continue.

This, the report says, shows the importance of providing a 'mentally healthy response', characterised as a transformative social and political process in which we acknowledge the challenge exists, take a good look to see what it consists of, and decide to change what we do in order to make the most of what the possibility of change offers.

Lyon and Halliday conclude by saying that appropriate changes to dominant Western beliefs, values, and behaviours could significantly reduce the scale of climate change and its negative consequences for human well-being, including mental health, but that such a view ultimately depends upon our world view and the mental states which support it. Finally, they call for further discussion regarding the connection between climate change and mental health.

Access the full report online at:
www.internationalfuturesforum.com

Case study 5: Tackling climate change, reducing poverty

The first report of the Roundtable on Climate Change and Poverty in the UK

New Economics Foundation, London, 2008

A recent report resulting from a roundtable bringing together some of the UK's leading environmental and social justice organisations emphasises that poverty and climate change are interrelated issues and urges the UK government therefore to take action against poverty and climate change simultaneously.

The report states that the failure to see that tackling climate change and poverty are interrelated issues has caused environmental and social justice movements to work against each other rather than working together to find a solution. If this misperception continues, we may see that policies aimed at addressing each of the issues will come at the expense of the other: one in five people in the UK still live in poverty, often without enough money to heat their homes or to eat healthily. The report shows that the poorest people in the UK will be most affected by the effects of climate change. They tend to live in poorer housing, have poorer health, less access to home insurance, and less money to adapt to price rises. Their situation could be worsened by measures to combat climate change such as higher taxation on fossil fuels. Similarly, campaigns for building new homes for low-income families, for example, have appeared to be in conflict with arguments for protecting greenbelt land. To avoid either increasing inequality or undermining of efforts to address climate change, it is vital that the government develops policies that advance both causes at once.

The report presents a number of examples where addressing climate change issues go hand-in-hand with addressing poverty issues. One example is implementing home insulation which reduces the cost of fuel bills, keeps homes warm and reduces CO_2 emissions. Another example with simultaneous positive social and environmental outcomes, or what the authors refer to as 'virtuous circles', is investment in public transportation, which provides affordable travel while cutting air pollution.

The report recommends a list of actions:

- improving household energy efficiency, reducing both emissions and fuel poverty;
- planning for an equitable transition to a low carbon economy; paving the way for the UK to capitalise on the opportunities and reap the benefits of the new low-carbon economy including the creation of new 'green collar' jobs;
- promoting sustainable public service provision, including low-carbon food procurement for hospitals and schools;
- improving the existing housing stock; moving towards low carbon design in housing and urban development;
- investing in a public transport system, which is better for the environment and more equitable.

The roundtable included the following environmental and social justice organisations: nef (the new economics foundation), Oxfam GB, Friends of the Earth, The Royal College of Nursing, Sustain, Climate and Health Council, WEN (Women's Environment Network), Medact, Capacity Global, bassac

For more information, see: **www.neweconomics.org/gen/z_sys_PublicationDetail.aspx?pid=278**

Bassac

Case study 6: The Global Corruption Report 2010

Climate change and corruption – building accountable, effective climate governance for a sustainable future

Transparency International

Tackling climate change will require far-reaching adaptation and mitigation efforts from local to global level, vast financial and knowledge transfers and public policy changes. The corruption risks inherent in the new institutions and governance processes designed for these purposes are extremely high and threaten to undermine their success. On the mitigation side, for example, markets for trading carbon permits are prone to serious conflicts of interest, efforts to control deforestation have long been undermined by corruption, while policy shifts to clean energy and green technologies can be stymied or exploited by vested interests if undue influence and the risks of policy capture are not addressed. On the adaptation side, experience with significant incidences of corruption in large-scale infrastructure projects, in emergency relief operations and with regard to the administration of large development funds, all bode ill for the essential climate-proofing of vital water infrastructures, for increased emergency relief and recovery activities due to extreme weather situations, and for the accountable use of large adaptation funds.

Responding proactively to these challenges, Transparency International's (TI)'s Global Corruption Report 2010 (GCR10) will focus on climate change and corruption, and will catalyse a dialogue between the anti-corruption and climate change policy communities in view of establishing high-impact coalitions for accountable and effective climate governance.

The GCR10 on climate change and corruption will bring together the foremost experts from academia, civil society and business to discuss the major corruption and governance risks that societies face when implementing a comprehensive collective policy response to global warming. The Report will identify major areas of concern and present innovative solutions and recommendations. As the first comprehensive publication to address the corruption dimension of climate change, the GCR10 will be a significant milestone in moving towards effective implementation of climate change commitments and will serve as an important launch-pad for related advocacy and monitoring efforts by TI National Chapters and their partners around the world.

The expected impacts of these coalitions and the GCR10 analysis and recommendations that underpin them include: policy communities at international, regional and local level that are fully aware of the corruption risks related to climate governance mechanisms; anti-corruption experts and their expertise are fully utilised in devising effective climate governance integrity mechanisms and civil society groups and communities are sufficiently equipped with tools and strategies to monitor the integrity and accountability of climate governance arrangements and the flow or related funds in their countries.

www.transparency.org.uk

Case study 7: Differential social impacts of climate change in the UK

Scotland and Northern Ireland Forum for Environmental Research (SNIFFER), January 2009

This report is based on the findings of a UK-wide workshop held in Birmingham in September 2008, an extensive literature review, and four case studies. The work, carried out by CAG Consultants for SNIFFER, aims at identifying: social impacts of climate change; how climate change affects different people within the UK, and affects them differently based on their level of exposure and sensitivity; and adaptation measures that consider these differential social impacts.

With climate change, we will experience warmer temperatures with milder and wetter winters, hotter and drier summers, as well as more extreme conditions such as flooding, storms, heatwaves and heavy rain. The change in climate will not only affect the environment, but will have serious social implications worldwide. As stated in the Stern Review, the impacts of climate change are unevenly distributed and will hit the poorest countries and people first and most. This is also true within a country such as the UK, as presented in the SNIFFER report. The vulnerability of people to climate change is based on their exposure to climatic changes, their sensitivity to its impacts, and their capacity to adapt.

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The people most vulnerable to climate change are:

- **those living in places at risk of being affected most, for example those living in poorer areas;**
- **people who are already deprived of health, mobility, have low incomes and/or poor quality housing;**
- **people who lack the awareness of the risks of climate change, the capacity to adapt, and who are less well-supported by families, friends and agencies.**

Based on the conclusion that deprivation often increases the vulnerability to climate change and that climate change increases deprivation, the report goes on to suggest ways to ensure adaptation policies and action that take vulnerable groups into consideration. The report identifies three types of strategic adaptation responses: policy, management and operational, and community-led adaptation. Response is needed on three levels: nationally and regionally, locally and, most importantly, by and within communities. In the 'Social Vulnerability to Climate Change Adaptation Framework', the report sets out the measures needed on all three levels to address social implications of climate change with a focus on vulnerable people.

The report concludes that UK policy on climate change adaptation recognises the social justice implications but offers little to address the issue. The report attempts to identify action that can be taken to ensure vulnerable people are not neglected in the attempt to address climate change, and states that there are tools and mechanisms available to help ensure an inclusive response to climate change adaptation in the UK.

To access the full report, case studies, literature review, and workshop summary, see: **www.sniffer.org.uk/Resources**

A time of radical change

The inter-relating issues of resource scarcity and climate change threaten to alter our world in bewildering ways. Whether driven by declining availability or by a need to reduce greenhouse gas emissions, we are set to transition away from an easy and cheap exploitation of fossil fuels and the resources that we have been able to exploit as a result. This means transitioning from an abundant life that has become the norm for many of us in the UK, and away from easy access to the different products, services and expectations that have their roots in those cheap fuels.

And there is no question that some of this change will be ugly – as well as direct impacts from declining resources human rights issues will surround us, and vulnerable people will be the victims of exploitation, corruption and social unrest. The crucially important questions of who wins, who loses and how we build more effective and just systems require that a broader range of issues are addressed by a broader range of people.

Successful human societies have evolved in the context of a huge range of different patterns of resource availability. It is when conditions suddenly change that times become dangerous. Some of that danger arises because change puts pressure on cultural health, for example by encouraging extremism or creating conditions that allow loss of civil liberties. Civil society associations need to engage to help mitigate against those risks as well.

Part 3 will take a broader perspective on some of these changes and what they may mean for society. ■

The crucially important questions of who wins, who loses and how we build more effective and just systems require that a broader range of issues are addressed by a broader range of people.

Bassac

Part 3:
A bigger picture

The 21st century is going to ask the best from society.

www.flickr.com/photos/heskettk

The wider role of civil society in a transforming world

Society faces a radical transformation over the coming years. This section addresses some of the underlying questions about how this transformation may impact on UK society and the roles that civil society can play in looking for the best outcomes.

In the face of what the coming decades will bring, UK society may need to foster certain fundamental qualities: adaptability, creativity, equity and resilience. The 21st century is going to ask for the best from society.

At the heart of the problem are complex questions of social justice within and between communities and countries, and also between generations – issues that have bedevilled the development of sustainable development policies and practices for decades. At a grassroots level it means that any scenario is littered with winners and losers, ethical problems, conflicting interests and complexities, and reasons why policies may stall or have no effective link into action.

Even when there are ways to build new economies and incomes, who will be the beneficiaries? Many of the economic and societal changes needed offer the opportunity for a more equitable and widespread distribution of benefits. If there is an increase in Green Collar Workers, or a Green New Deal, approaches need to be developed that will ensure that the benefits do not just flow to established professional classes and established investors.

Although in fine detail the impacts of global change are likely to manifest as familiar problems – poverty, mental health issues and so on – both climate change and resource scarcity add a new dimension of unpredictability and the threat of sudden radical change, with all of the social stresses that this may bring.

Any period of rapid change is testing for society. Change is rarely embraced or seen as positive; however, successful human societies have evolved in the context of a huge range of different patterns of resource availability. Times of sudden change put pressure on all dimensions of cultural health, for example by encouraging political extremism.

This is no surprise. At times when the past is no guide to the future, not only are there countless technical and functional issues and economic problems, the role of traditions, heritage and culture and the very fundamental questions of personal and social identity and purpose are put under enormous strain. Societies that are robust and adaptable will be the ones that cope best with unpredictable and extreme changes. Of particular concern is that climate change and resource scarcity are fertile grounds for the seeds of dangerous politics. Naomi Klein (www.naomiklein.org) argues that climate disasters such as Hurricane Katrina have been the vehicle for covert advancement of a right wing agenda for privatising public services and avoiding democratic scrutiny in the US. In the UK, localisation is heralded by the British National Party.

In the face of what the coming decades will bring UK society may need to foster certain fundamental qualities: adaptability, creativity, equity and resilience.

Climate change is daunting not only because of the scale of the challenge, but also because it may ask us to give up things that we currently see as important. We have to find a way of viewing the future that makes it feel both possible and worth fighting for. As well as the functional questions that radical change will ask of us, we also have a challenge of facing, maybe even welcoming, such change without losing the basis of a 'good' society. The alternative may be that a cultural denial will magnify the challenge or add new stresses, such as increased isolationism or fundamentalism. Arguably, many of the great conflicts of the 20th century were the results of not knowing how to change, how to move forward without betraying the past. A cultural transformation is needed as well as a technical one.

As we develop the narrative that explains the connections between climate change and resource scarcity to the core agendas of civil society groups, we are likely to see the sudden emergence of conflicts and problems that may be hard to reconcile.

One example is the issue of people who will be displaced by environmental change such as flooding in their own countries. Refugee organisations are keen to discourage the terminology 'environmental refugees', fearing the possible degradation of rights of political refugees if the definitions

We have a challenge of facing, maybe even welcoming, change without losing the basis of a 'good' society.

come under debate. However, even if the words prove avoidable, the displaced people will not be. Not surprisingly, it is the Maldives who have led the development of a UN programme addressing the human rights issues surrounding climate change, including a major focus on migration.[16]

These changes have dramatic ramifications for society, and for civil society, but they are happening without sufficient engagement or scrutiny. Civil society associations are not fulfilling their role as a watchdog and as originator of better, more just, solutions for social challenges. Engaging civil society doesn't mean that everyone will agree on priorities or solutions – it's crucial to the mosaic of civil society that some people hold hard to the particular issue they champion or lobby they represent. The first and most important step is that the breadth of civil society recognises that climate change is an issue that is relevant to them, and that a greater range of voices is heard.

These are issues that are certainly well understood by international development civil society groups, if not more widely. However, when it comes to climate change the lack of recognition that indirect responses matter and are happening now seems to be the biggest blind spot – there is limited evidence that this is in the debate at the UN level, or is a focus for the international development civil society groups, even those who have been amongst the first to highlight the links between climate change and social justice.

Engaging civil society doesn't mean that everyone will agree on priorities or solutions – it's crucial to the mosaic of civil society that some people hold hard to the particular issue they champion or lobby they represent. The first and most important step is that the breadth of civil society recognises that climate change is an issue that is relevant to them, and that a greater range of voices is heard.

Climate change may also break down some existing perceptions. Although there is a widespread narrative that argues that the poorest people will be the most vulnerable, the picture is more complex. Developed societies have more complex infrastructures, and chains of service delivery and supply, that are potentially easily disrupted, and generally, people are much less skilled at knowing how to function without support – there is a risk that these societies may fall faster and fall harder than is believed. Despite this, somewhere woven in the picture is a political opportunity – a chance to really engage the protected developed world in global problems.

Widespread in the calls to action to address climate change is an assumption that the liberties that people have become used to will need to be curtailed. Analogies to wartime and rationing approaches abound. It is a compelling image, but inaccurate. Climate change is a complex and diffuse problem – there are no clear single points of origin – people contribute in almost everything they do and its roots stretch back to the advent of settled agriculture and the Industrial Revolution. The areas of debate lie in different conceptions about how to tackle the issue, and how much to prioritise one intervention over another.

If climate change is to be seen as a war, who is the enemy and how much must be sacrificed to win? Implicit in the analogy to wartime is often an assumption that social value could be strengthened by pulling together. But does society have the right safeguards and frameworks in place to ensure the proactive enhancement or protection of a good society through the changes? Everyone has a stake in promoting mitigation – and in doing what they can. At the same time people have to recognise that, as much as climate change itself, the acts of mitigation may have scope to cause violence to vulnerable people, and to find good solutions the very best thinking, experience and support of civil society is needed.

Collectively, civil society stands for certain principles, such as the vision of a 'good' society and the need for citizen engagement and collective action emerging from a diversity of voices. In particular, a re-invigorated notion of collective action is needed at the core of this diversity of voices. The mitigation programmes that have dominated so far focus on personal behaviour change, arguing that a thousand small actions add up to a powerful whole. They do, but not enough. Individuals do not have agency over enough aspects of society for their cumulative actions to impact on everything that needs to change. Collective action solutions to bigger questions are needed, like how towns and cities, or transport systems, are designed or funded. Collective action is needed to build a political constituency for change.

Given the clear need for a community and societal range of responses to the challenges of climate change and resource scarcity, why is it that the role of the individual is so dominant in the discourse? The rise of individualism and a focus on personal consumption in the 20th

century helped create the challenges now faced, but perhaps this has also weakened any sense of collective action. Einstein once said 'we cannot solve our problems with the same thinking we used when we created them'. Collective action also has the effect of supporting community creation and of building new networks and new social capital – a transformative effect that may be badly needed.

The war on climate change will never be won; it will be an ongoing challenge for society to face from here on in. Social change organisations will have a different approach that helps to frame this challenge in ways that are not disempowering – as a constant dance of evolution, action and reaction. Problems are never likely to be static; some ills may never be resolved and will require constant investment in processes and systems to tackle them – that is the continuing adventure of forging a 'good' society.

But in one way the wartime analogy for climate change really is accurate – because it is a battleground of ideas and values. Will it be found that the ways used to try and solve the problem have furthered the values and systems that caused it, such as hyper-individualism and loss of common and shared community values? Or will it be the chance to explore new models of a good society, based on new ideas and projects that demonstrate possibilities that can synergise or scale to address a major challenge? Mitigation is needed in forms that do not entrench poverty. Adaptation is needed in ways that do not limit social transformation.

With these thoughts in mind, civil society groups need to encourage visions of solutions that are based on collective action – focusing on the big social changes that are beyond the reach of individual action, such as encouraging changes in planning policies to produce liveable environments that reduce the need to travel, or lobbying for changes in energy regulation, investment and grid management that encourage local community-level energy schemes.

Civil society groups also need to act as watchdogs for the policies and solutions that are being developed to ensure that they in turn work to foster and protect a 'good' society, and embody principles of justice across local to international scales.

Dealing with unpredictability and long horizons

If the social impacts of climate change can be mapped onto social problems that already stalk the Earth, what is new? Are civil society groups best focused if they keep to core activities?

To a certain extent this is true – but there are also reasons why climate change and resource scarcity are not simply a turning-up of the volume of existing problems. One of the reasons that mobilising effective solutions is difficult is because although there are clear trends regarding the global level of the scale and nature of threat, there is still uncertainty about what will happen locally, and when it will happen. There is the likelihood of an increased number of extreme events that will destabilise systems and lives, but it is not precisely known when or where they will happen.

There is a need for a more sophisticated approach to planning. Not only do today's choices create the future, the perceived future dictates choices today. Problems don't just need to be solved; they need to be solved in ways that proactively help shape the sort of society that is needed.

The time-frames for action that are required go beyond any meaningful planning horizon for most contemporary organisations – including governments. So how can it be done? What barriers exist and what methodologies could be explored? Suggestions are needed on where to look, such as learning from some of the leading thinking on intergenerational contracts.

Civil society groups need to encourage visions of solutions that are based on collective action – focusing on the big social changes that are beyond the reach of individual action, such as encouraging changes in planning policies to produce liveable environments that reduce the need to travel, or lobbying for changes in energy regulation, investment and grid management that encourage local community level energy schemes.

Civil society groups also need to act as watchdogs for the policies and solutions that are being developed to ensure that they in turn work to foster and protect a 'good' society.

Even with this work done it has to be accepted that the world of 2050 or 2080 may be so hard to anticipate that to frame 'impacts' in today's terms will be of limited value. Models of sustainable societies have a tendency to try to identify the steps needed in order to attain a relatively stable, secure, society. But the changes set in motion by climate change and resource consumption may mean that achieving stability may no longer be in the gift of the generations alive today. Society faces the prospect of sudden radical collapses of some systems. The past may not be a guide to the future.

The challenge is that as frameworks for moving into the future are looked for, the future is already unfolding. The contribution of civil society associations has to work at different levels. Developing visions and models of a good society is an ongoing endeavour – vitally important but never ending and always in evolution. At the same time there will be losers – and defending rights, providing services and developing new systems for transforming the lives of vulnerable people forms the backbone of grassroots action.

Increasingly there is a focus on the question of social resilience. This means identifying the core conditions that are needed for a society to be able to withstand shocks and resolving possible structural weaknesses in society. Resilient societies are generally seen as requiring shorter chains of supply and demand, supporting diversification of systems and ownership and especially more localisation of production. These include obvious issues of local food or energy supply, but also an examination of 'buffering' capacity, or what is sometimes called redundancy – the way that 'just in time' business models have made it seem foolish to have stocks or reserves – has actually also made society much more vulnerable to collapse.

Resilient societies are generally seen as requiring shorter chains of supply and demand, supporting diversification of systems and ownership and especially more localisation of production. These include obvious issues of local food or energy supply.

Underlying this is the challenge to many of the assumptions and policies adopted by successive UK governments that have favoured global trade as the solution to resource needs, rather than the protection or development of local systems. It is also a challenge to the efficiency of free markets and the aim of maximising returns on investment. The resilience movement has *de facto* become largely grassroots and locally-focused.

Not surprisingly there are shades of this debate that approach survivalism, isolationism and individualism. The possible negative dimensions of this perspective hardly need mentioning. To ensure that such perspectives do not become dominant they need to be balanced by more inclusive and healthier narratives, nurturing visions of a localised future that are founded on strong ideals of human connection and community, such as:

- increasing human connection, interaction, and interdependence;
- resurrecting or developing shared stories for guidance into the future and definition in times of uncertainty;
- placing stronger focus on group effort and bridging social capital;
- shifting and redefinition of values;
- increasing local control of assets and resources.

Although predictable long term trends may be seen in aspects like energy or resource pricing, it is likely that the short term will be characterised by volatile and fluctuating prices. In the face of this it becomes apparent that even the private sector, lauded by governments as efficient and flexible, struggles to get past the constraints of perceived risk, expected return, discount rate and so on that create substantive barriers to investment in a more resilient or adaptable society.

The reality is that both the private and public sectors are controlled by set rules and beliefs about how money should be deployed. A key role of civil society could be to drive financial innovation, where itself it is not constrained by the perspectives of charity legislation or innate conservatism.

The social enterprise sector in particular could provide not only new sources of finance but also explore new sets of rules for how that finance is deployed – for example linking the commercial rigour of the private sector to public benefit, and without shareholder concerns, to allow new interpretations of issues such as rate of return or efficiency of invested capital.

The need for inspiration

Climate change and resource scarcity cast terrifying shadows over many corners of the world, but they don't stand alone as transformational issues that society faces. Demographic changes, health threats, economic turmoil and political instabilities come together to make a daunting whole, and for many people they create an underlying fear about whether a bearable future is possible.

The paradox is that without some faith in good possibilities, society risks fostering nihilism, or at least disengagement, and so closing options and making the worst scenarios self-fulfilling. To face this future one of the most fundamental engines of positive social change is needed – hope.

It is almost impossible to write of hope without sounding sentimental, but it is important to understand that hope is not an 'apple pie' word. Hope is not the same as naivety, denial or ignorance. Hope does not mean that positive outcomes are assumed; in fact hope is only a relevant word when things look dark. But hope is the fuel, the inspiration, the shield that lets people face things that otherwise can't be faced. In times of difficulty a good society has to be a hopeful society, or it has nothing.

And hope is another asset that civil society brings to the climate change debate – it is, after all, a foundation of all that civil society associations try to achieve. And there is perhaps the most important reason why we need the widest perspective of different voices – to have hope that people can rise to the test, to give what the future will ask of us.

Civil society associations can be, and must be, a source of the necessary inspiration and ideas, values and perspectives that ensure these challenges can be addressed with hope and with effectiveness.

Moving forward

Civil society associations can be, and must be, a source of the necessary inspiration and ideas, values and perspectives that ensure these challenges can be addressed with hope and with effectiveness.

There are fundamentally difficult problems to solve.

Society needs:

- **new models, new ideas, projects that demonstrate possibilities;**
- **mitigation in forms that do not entrench poverty;**
- **adaptation in ways that do not limit social transformation;**
- **to foster a vision of a 'good' society in the face of political threat.**

Engagement is needed to achieve these things – a much wider breadth of civil society thinking focused on the problems, and especially on the solutions that are being devised today.

Civil society associations also need to address whether the right activities and conversations are happening, and to ask where these visions of a good society are being shaped and nurtured, and where the deliberative spaces are where the social impacts of these threats are being explored.

Supporting the evolution of an adaptable society, able to face change in healthy ways, will be a test for civil society itself, with challenges to current traditions, working practices and conservatism. Can civil society associations strengthen their roles as innovators and risk takers? How can civil society be a driver for change ahead of how society defines its norms?

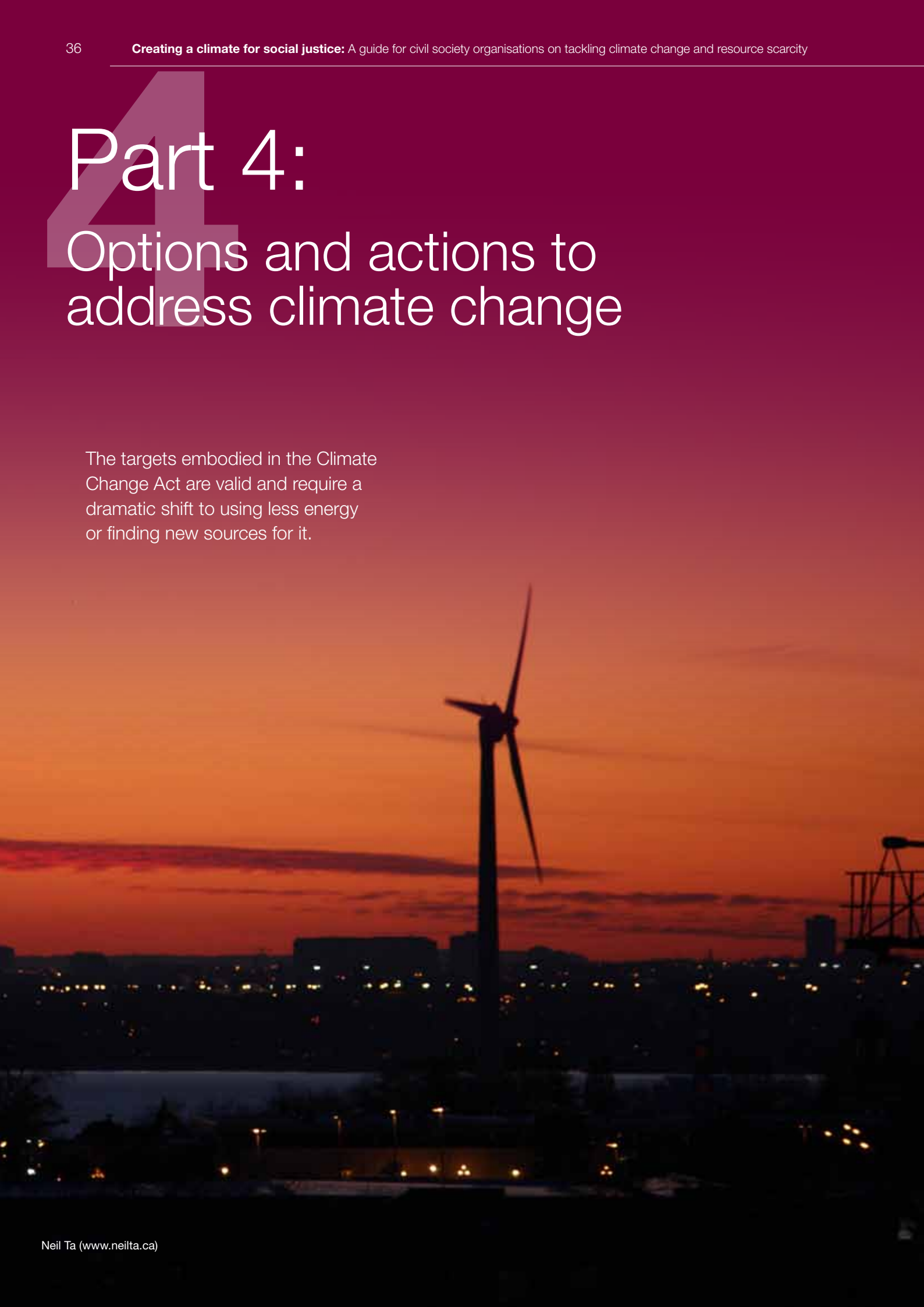
Several important new initiatives are underway to try and answer these questions, and to build momentum around an engaged civil society focus. Some of them are referenced in this guide, but things are going to change and evolve quickly and, like any active and fast-moving campaign, it is crucial to keep an eye on events and websites for updates.

In the meantime, people are of course hungry for ideas of practical action and steps that they can take. Part 4 explores in more detail some of the practical options for action and shows what some people are already doing. ■

To face this future one of the most fundamental engines of positive social change is needed – hope.

Part 4:
Options and actions to address climate change

The targets embodied in the Climate Change Act are valid and require a dramatic shift to using less energy or finding new sources for it.



Neil Ta (www.neilta.ca)

Climate change mitigation options

This section reviews the scale of the challenge and the mitigation possibilities that are available. The authors of this guide have taken as their starting platform the principle that the statements of the Intergovernmental Panel for Climate Change (IPCC), and the targets embodied in the Climate Change Act, are valid and require a dramatic shift to using less energy or finding new sources for it.

However, it is worth remembering that many of these approaches, and even the need for them, are still bitterly contested in some areas. This is especially true when it comes to finding alternatives to fossil fuels: one of the most vigorous and active areas in civil society in recent years has been the development of associations opposing wind power, ranging from hundreds of new grassroots groups campaigning against individual developments, through to new charities (such as the Renewable Energy Foundation; www.ref.org.uk) and activities by established think tanks representing a free market and pro-nuclear perspective; (see the Centre for Policy Studies, www.cps.org.uk).

Understanding the scale of the challenge: carbon footprints and greenhouse gas reduction targets

The internet abounds with carbon calculators, of varying levels of sophistication or ease of use, that allow individuals to calculate their own emissions of greenhouse gases, or carbon footprint. This guide does not look in detail at how emissions levels are measured. Talking about invisible gases in terms of tonnes makes many peoples' eyes roll in their heads, and can reinforce the idea that addressing climate change is all about technology, which it is not.

Also confusing is that the figures given by different calculators for typical individual carbon emissions can vary depending on what assumptions they make and what they include. A good indication of the order of magnitude and contributing factors is given by the Stockholm Environment Institute (SEI), which allocates the UK's entire carbon emissions, including emissions by the government, on a per capita basis and comes up with a figure of around 12 tonnes per capita. This is higher than many calculators that restrict their focus to emissions that are regarded as being under more direct influence by individuals.

Even the comprehensive SEI work cannot deal with how to allocate exported greenhouse gas production. So if a factory in the UK closes, and replacement goods are bought from China, the UK's carbon footprint goes down,[17] but the UK is still in many ways responsible for the energy that is being spent. International flights and shipping and other activities that fall outside of country boundaries are also often excluded altogether from estimates of national greenhouse gas production. Calculators also do not deal with the embodied energy associated with different products and materials we use.

The SEI breaks down the carbon footprint of a UK citizen as:

- home and energy 27%;
- government and fixed capital 26%;
- travel 17%;
- consumables 12%;
- services 11%;
- food and drink 7%.[18]

Even less tangible, but vastly important on a global scale are emissions from sources that can be attributed to specific nations, but are actually the reflection of global economic or political patterns. Rainforest destruction is estimated to contribute between 10% and 30% of global greenhouse gas emissions, which is greater than that of transport.[19] This source of carbon falls outside of any per capita figure allocated by carbon calculators, but is driven in many cases by the economic activity of the developed world.

The IPCC[20] identifies seven broad categories of sources of greenhouse gas emissions at a global level (see Box 3 on page 39).

At national levels these figures vary depending on whether they are industrial, post-industrial or agricultural nations. Making sense of relative responsibility is complex because of the global web of trade (and because very few data sources use the same categories). The UK has much lower industrial emissions than Australia but relies upon Australia to provide much of its minerals and metals, which are energy intensive operations.

10-30% ***the estimated amount of global greenhouse gas emissions contributed by rainforest destruction.***

(Eliasch Review, 2008)

Reduction targets

The Climate Change Act calls for an 80% reduction in carbon emissions by 2050, relative to 1990 levels, with an interim step of a 26% reduction by 2020. The government's planned steps to move towards these targets are set out in a carbon budgeting process that has been led by the Committee on Climate Change.

The UK has nearer targets of 12.5% reduction (against 1990 levels) set for 2012 by the Kyoto Agreement, and a target set for itself by the Labour government's election manifesto of a 20% reduction by 2010. The Labour target will not be met, but the UK is expected to declare that it has met its Kyoto targets.

That sounds reasonably encouraging, but the bad news is that the emission drops that have happened so far took place in the early 1990s and were mainly attributable to a decline in heavy industry in the UK and a switch from coal- to gas-fired power plants. It's especially hard to quantify how much of the reduction has come from exported carbon production, but some commentators believe that if these were factored in, the real UK footprint would have risen by as much as a third. It is also known that UK targets for the development of renewable energy are nowhere close to being met. The easy hits are probably over and only tougher challenges remain. The big picture remains simple. Emissions are still increasing ever faster. The relative difference between the quantities of greenhouse gases currently emitted, and the levels that they need to get to, are huge and will mean radical changes to the way society operates.

This is a critical point – the scale of the challenge for mitigation is such that even if it succeeds, it will be through social changes that are themselves transformational. The world has such a high dependence on fossil fuels and consumption of resources that meaningful reduction will let loose waves of social change and social tension. Fighting climate change therefore embodies a paradox – it is simultaneously something we need to do to protect ourselves from change but, at the same time, radical change is needed to ensure we succeed.

12.5% ***target reduction of UK carbon emissions by 2012.***

(Kyoto Agreement)

The 'discretionary' carbon footprint and how to reduce it

Carbon calculators are intended to allow people to track relative emissions year on year to help drive reductions, and any one of them will help to do that within the limits of what they include. Reductions of emissions can come from avoiding energy use, from making the use of energy more efficient, or from switching to non-carbon sources.

At a personal and domestic level there is no shortage of guides on how to go green and lower carbon footprints, but many of these also focus on just those actions that are seen as within the discretion of individuals – usually small-scale domestic actions, such as changing to energy-efficient light bulbs. These will achieve some change, but are only able to address a small fraction of the challenge ahead (see Box 3 on pages 39-40).

People should do everything they can even if some of the changes suggested have really low impacts, like changing lightbulbs and unplugging standby devices. This is important for two reasons:

- because everything makes a difference if enough people do it – it needs to be acknowledged that only collective or political action can tackle the big unsolved problems;
- because a body of people which is prepared to make a commitment to lower carbon lifestyles is needed as a signal to governments and the rest of society that the will to change is there.

Fighting climate change embodies a paradox – it is simultaneously something we need to do to protect ourselves from change but, at the same time, radical change is needed to ensure we succeed.

Box 3: Mitigation

A checklist of some of the things that make a big difference to carbon emissions

Most advice given on reducing carbon footprints takes a particular focus that assumes that the points of greatest interest are domestic, related to people as individuals and excluding their contribution to the wider national carbon load – especially their share of international carbon emissions that come from the demand for resources that have been exported from the UK, such as the manufacture of goods in China.

In reality, climate change is a problem of the commons. Everyone has a vested interest in driving reduction in carbon emissions in every country, and to use resources to do so in as intelligent a way as possible.

Imagine if UK civil society embraced a vision of mitigation that was a testament to a belief in collective action; in helping others rather than focusing just on ourselves; on making the biggest difference possible to the problem with limited resources; on being prepared to think globally as well as locally. What would the list look like then?

The IPCC identifies the main human global sources of greenhouse gases as follows:	
Electricity and heat generation	26%
Agriculture	19%
Deforestation and changing land use	17%
Industry	14%
Transport	13%
Buildings	8%
Waste	3%

This guide draws on a number of sources[21] to identify a range of solutions for effective mitigation action that could form the focus of civil society activity.

What we can do on a global scale about the big five:

Electricity and heat generation

- Make everything more energy efficient: buildings, appliances, cooking, heating, cooling, heat and electricity generation and distribution.
- Transfer supplies to low carbon energy sources: renewables, nuclear, fossil fuels with carbon capture and storage.

Big barriers to change: fossil fuel dependency, huge investment in existing infrastructure and geopolitics.

Deforestation and changing land use

- Learn to measure emissions from this sector better as at the moment there is much uncertainty as to how much deforestation contributes. Estimates vary between 10 and 30% of the global total.
- Prevent deforestation.

Big barriers to change: deforestation closely linked with poverty and land ownership: property rights in many forests difficult to define, forests undervalued, need to agree an international framework for investment in keeping forests standing.

Industry

- Make all processes more efficient.
- Sell services instead of products.
- Reduce consumption, have less stuff, share more stuff.

Big barriers to change: industrial growth as a basis of the economy and the problem of recession if growth stops.

Agriculture

- Take up low-till and no-till planting.
- Improve fertilizer, water and manure management.
- Improve crop varieties.
- Reduce (or at least stop growth) in livestock farming.
- Improve wetland rice management.

Big barriers to change: the tendency for greater wealth to lead to a diet high in meat and dairy, and 20% of the world population dependent on the livestock industry for employment.[22]

Transport

- Make all transport more efficient, especially cars that have room for 90% improvement.[23]
- Introduce electric engines, so there is competition among fuels and technologies, and transport can benefit from decarbonisation of the electricity supply.
- Re-think manufacturing, distribution and trade patterns, so goods and people don't have to travel so far. Use alternative technology, for example videoconferencing.
- Tax airline fuel.

Big barriers to change: fossil fuel dependency (portable fuels are the hardest to substitute), huge investment in existing manufacturing processes and infrastructure, people like to travel, existing built infrastructure and working patterns force many people to travel.

Box 3: Mitigation (cont.)

Actions that can be taken by civil society associations, their members, supporters and beneficiaries:

Electricity and heat generation

- Turn down your thermostat, buy efficient appliances, monitor your energy use. Insulation is generally the best single step that can be taken for reducing emissions from any building.
- Generate your own and avoid the inefficiencies of energy transport across the grid. Invest in renewables (either through community power schemes or domestic micro-generation) this is increasingly making financial sense and it liberates additional financial capital towards a decarbonised world. Solar hot water often pays back really quickly.
- Lobby for removing barriers to renewable energy, for example planning constraints. Lobby for government and industry to develop a credible green tariff system, and then use it (see Box 4 on page 44).
- Share more – invite people round to share the same light and heat, have fun.

Agriculture

- Eat less meat and dairy.

Deforestation and changing land use

- Don't buy intensively reared meat, anything with palm oil in it, or non-certified timber; support forest conservation campaigns.

Industry

- Buy less stuff, lobby for more efficient products and less packaging, share stuff more.

Transport

- Travel less, especially flights, share transport more, lobby for better designed places and local service delivery.
- Engage in finding global solutions.
- Find ways to invest in low carbon solutions and climate impact compensation for developing countries.

Relative effectiveness of some different measures:[24]

Cutting out one long haul return flight a year	35 points
Driving less, car sharing, having an efficient car, using public transport where possible	20 points
Don't buy clutter, avoid packaging	20 points
Turn down heating, don't heat when you're not there, insulate	20 points
Eating meat-free, six days out of seven	10 points
Monitor gas and electricity use and always turn everything off	4 points
Change light bulbs	4 points
Hang on to electronic stuff until it really is obsolete	4 points

The biggest challenge of all is unravelling the closely interwoven relationship between the economy and the consumption of resources and fossil fuels. Critically, society needs to transition livelihoods and infrastructure to those that can be supported in a low carbon world. This requires a new economic vision that is built on the opportunities that such a transition can bring, and it requires the unlocking of as many sources of financial and intellectual capital as possible.

Individual actions can make a difference. That said, many of the carbon saving actions recommended are only able to address a small part of the challenges faced. As individuals, if people turned off everything, gave up everything and sat naked in a cardboard box for the rest of their lives that still would not be enough. The changes that will make a big difference are things that are hard to do alone.

The major impacts come from energy efficiency measures; conversion of fuels, especially home heating and lighting, to non-carbon sources; from changing how food is produced and what people eat; from changing how clothes are produced and what people wear; from changing how buildings are built; from changing travel patterns; from addressing the national carbon footprints of government and industry; and from addressing problems at a global level, such as deforestation (and the underlying consumption and poverty patterns that drive it), which can only be achieved by collective action.

There are many important attempts to encourage people to drive less or promote cycling and walking, such as the work of the National Children's Bureau (see Case study 8, below).

But encouraging walking is not enough of a solution by itself. Many people make unnecessary trips in cars and these can be reduced, but they make up only part of the journeys made. People who do not live in cities well served by public transport often have to drive because of the way that regional and urban planning has, for decades, distributed workplaces, shops and schools away from where people live. Addressing driving will be best served by reducing the need to drive, which in turn needs a revolution in planning. To reduce travel there is also a need to explore ways to localise the delivery of services, an issue that has occupied many civil society groups for decades.

Case study 8: Talkin' Transitions – getting kids active

National Children's Bureau

The National Children's Bureau worked in partnership with two secondary schools and some of their feeder primaries to develop new creative approaches to support parents, pupils and schools to participate more in sustainable and active travel. The project focused on the transition from primary to secondary school as this is a time when families normally establish new patterns of travel to and from school, and therefore provides a window of opportunity to engage with them about sustainable and active travel.

The way children and young people travel to school has huge implications for their health, well-being and the development of life skills such as independence; furthermore, transport contributes 20% of the average school's carbon footprint.

The project aimed to increase awareness among children and their parents/carers of the importance of positive travel choices, and to provide them with the information, skills and confidence to choose sustainable travel upon starting secondary school. The project also aimed to develop activities and resources to support schools throughout the project, which was a significant factor in the project's success.

The issue of active and sustainable travel was taken up across the whole curriculum; for example, some pupils used a pedometer while doing different activities during a physical education lesson, analysed the data in maths and looked at the effects on the body in biology. In another example, pupils created route maps so they could find somebody to walk or cycle with, and to encourage car sharing.

The project found that in general there was a good understanding of the arguments for sustainable and active travel, and knowledge of health and environmental issues, but that people need support to overcome the barriers to making healthier travel choices. Safety, comfort and social contact were the most significant issues that impacted on travel choices. Health and environment factors were deemed the least important.

20% ***of a school's carbon footprint is contributed by transport.***

(National Children's Bureau)

Even a small change in the number of flights taken has a big effect. A single intercontinental return flight is comparable to running an average car for a year in terms of damage to the environment.

One of the reasons it is crucial to have social change organisations engaged in this debate is because they often have experience of how behaviours do, or could change.

The only chance of meeting the UK targets, let alone changing global trends, is by working at a societal as well as an individual level. Decades after Margaret Thatcher denied that there was such a thing as society, many people still seem to see the world with her eyes. But she was wrong – working together is the key to everything.

One of the reasons it is crucial to have social change organisations engaged in this debate is because they often have experience of how behaviours do, or could change.

They understand the complex interaction of personal and community motivation and the system society is in, as well as the need to ask core questions such as 'whose behaviours?', 'who holds the levers?' and 'is there equity and justice in the ideas being proposed?'.

For a long time the missing element of focus has been at a community level with relatively few attempts to explore what can be done through collaboration at different scales, such as co-ordinating the investment potential of people to drive solutions.

There are important exceptions such as the Transition Towns and Every Action Counts movements where a welcome focus on community and third sector level possibilities has started to emerge (see Case study 9: Transition Towns, below).

Crucial is the insight that collective action can mean more than just the scaling of individual action. It is possible to achieve certain types of things by working collaboratively together in ways that individuals, even when massed, could not do. This is true of action that needs to be taken at local or regional level, for example through the planning system or through local authority investment and also for innovative models of social change that can be driven by civil society such as community led (energy trusts), co-operatives and mutuals. Collective action is also a tool for community creation and for building new

Case study 9: **Transition Towns**

The Transition Towns movement responds as much to the challenge of peak oil as it does to the challenges of climate change. The primary focus is to rebuild approaches to living, building, feeding ourselves, getting around and other energy intensive aspects of our lives. This includes some attention to renewable energy sources, but the underlying principle is that there must be an 'energy descent' that constructs alternatives to current lifestyles. The transition movement promotes a strong localisation agenda, linked to careful design of both physical structures and systems, such as permaculture. Connections are also made to the value of local currencies as a means of bypassing some of the structural biases of how money works.

Totnes: Transition Network

One of the most important features of the Transition Towns model is that it has a clear and strong focus on community level responses, and strengthening collective action. Rob Hopkins writes '... people are often only able to conceive two scales of response; individuals doing things in their own homes, or the government acting on a national scale. The Transition model explores the ground in between these two: what could be achieved at a community level'.[25]

The approach is also built on careful consideration of the psychology of change and how to promote shared visions. There is an explicit recognition that transition will not be easy or comfortable and there is a signposting of the need for a diversity of civil society engagement to address this.

networks, new social capital and releasing financial capital. This transformative effect of collective action may be what is needed above all else (see Case study 10, below).

Taking action performs a vitally important second role of demonstrating a constituency; a body of people who are prepared to make a commitment to lower carbon lifestyles as a signal to governments and the rest of society that the will is there.

Government action through policy, legislation and the choices made for investment of funds and services also need a wider social partnership. Proposals need to be grounded in public (and civil society) confidence and support the role of different actors in delivering solutions. Even where the action falls to governments alone, a constituency of support is often required before there is political confidence to act.[26]

Case study 10: **Community Power Cornwall**

Over the last few years there has been an increasing appetite amongst local communities in Cornwall to own and generate their own power in an effort to secure clean green energy and to tackle climate change, thus taking responsibility for their own energy consumption. Whilst a number of communities were able to identify a suitable site for the installation of a wind turbine (the most financially viable of the renewable energy technologies) they were struggling to find a way to take the idea further.

Community Energy Plus (CEP), an organisation which has been supporting and promoting the use of renewable energy in Cornwall for the last ten years, and Social Economy and Co-operative Development Cornwall were in a position to support and encourage the aspirations of these local communities. Together these two organisations have formed Community Power Cornwall (CPC), an independent organisation which is wholly focused on supporting the emergence of viable community owned renewable energy assets.

Through a public share issue scheme CPC will seek member investors who share its goals and wish to share the risks and benefits associated with the initiatives. Whilst investors can expect some interest on their shares, CPC is primarily looking for investors who see this as an ethical investment opportunity. Any surpluses will be re-invested into local renewable generation capacity, low carbon community grants and interest payments to shareholders. Members will have the opportunity to make decisions at general meetings and will elect directors who will manage the business.

In order to get projects off the ground, Community Power Cornwall will provide support in a number of areas, including: planning support, funding support, community engagement, links to policies, and technical and legal support. Each community will be responsible for identifying suitable sites, making decisions about appropriate level of installation, promoting the public share issue within their locality, and trying to engage as many local people and organisations as possible. All future loans and investments made by CPC will also be peer reviewed, with local communities making the decisions on how the project can best proceed and succeed.

A key aim of CPC is to build the capacity, skills and knowledge within local communities to advance the delivery of renewable energy and low carbon technologies, and to further reduce CO_2 emissions across the county. It is anticipated that, as the initiative moves forward, increasing levels of skills and knowledge will be developed by the communities themselves, which can be shared with others allowing the program to expand as widely as possible.

Community Power Cornwall is prepared to share its resources and experience with any groups who are interested in setting up a community owned renewable energy generation scheme.

For more information see:
www.communitypowercornwall.coop

Box 4: Green tariffs

Ideally, a relatively simple system for reducing carbon emissions would be to switch to a green tariff energy supply that is sourced from renewable energy sources. However, many green tariff schemes offered may do little or nothing to deliver the environmental benefits they claim to, be it reducing carbon emissions or increasing the demand for green electricity.

There is a legal requirement in the UK (2002 Renewables Obligation Order) that forces electricity suppliers to source a specific and growing portion of their electricity from renewable energy sources. The cost of doing so is indirectly paid for by consumers through their (normal) electricity bills. In 2005/6, this equalled £7 of each household's electricity bill, and will rise to £20 in 2010/11. This means that suppliers promising to match green tariff customers' demand by buying green electricity do not necessarily create additional demand as they are already obliged by law to buy 4.9% from renewable sources, a figure that by far outweighs the current demand for green tariffs (less than 1% of the total market for electricity).

A report by the National Consumer Council (NCC) that examined 12 green tariff suppliers found that only two of them go further than they are required to by law. For the green tariffs that do go beyond the legal requirement, only 6% of an average household's CO_2 emissions are reduced.[27]

£20 ***of each UK household's electricity bill will come from renewable energy sources by 2010/11.***

For the many consumers that are keen on reducing their carbon footprint by buying green tariff electricity, there is no way of knowing whether they are buying additional renewable electricity or not.

If consumers choose one of the small niche renewable energy suppliers, this supplier, although buying 100% renewable electricity to meet the consumer's demand, may still not necessarily create additionality on the renewable energy market: suppliers will receive Renewables Obligation Certificates (ROC) for every unit of electricity derived from renewable energy sources. If it fails to meet the requirement, which is the norm due to excess demand, the supplier can purchase ROCs from companies that exceed the required level, such as the niche supplier of green energy, or they can buy out the remaining amount. The buy out fund is divided between the suppliers that presented ROCs. If the niche renewable energy supplier decides to sell its ROCs, which it often does due to the ROCs' monetary value, it will help other suppliers meet their obligation but will not help create additionality on the renewable electricity market. The niche renewable energy supplier can decide to retire its ROCs, meaning they will not be for sale: this creates additionality, but very few suppliers can afford to retain 100% of the ROCs they generate and will sell a percentage of them.

Some green tariffs also offer consumers the option to invest in green funds or carbon offsets by paying a little extra for the electricity. It is important to read the small print and find out exactly where this money goes.

This seems a perfect opportunity for civil society associations to exercise their skills – to do what the NCC has started, which is to expose misinformation and lobby for change to a more effective mechanism.

Stephen Hale of Green Alliance highlights the weaknesses in current political systems that make it difficult for governments to take effective leadership for change (see Box 5 on page 45), but is also clear that only action at government level will be effective at meeting the scale of the challenge. Resolving this impasse requires an understanding of the inter-related nature of today's social landscape. Action by individuals will be matched by action from governments only if people succeed in forming a constituency that signals a need for, and endorses, political action. Business has a leadership role to play in achieving this social contract, but Hale especially identifies the crucial role of civil society, emphasising how effective change is rooted not in individuals but in networks and groups with shared values or interests.

Action by individuals will be matched by action from governments only if people succeed in forming a constituency that signals a need for, and endorses, political action.

The difference is profound between a focus on personal and individual action as a desperate alternative to political action, which leads to confusion, cynicism and disempowerment, as opposed to encouraging citizens to act to provide a platform and demonstrate a need for equivalent ambitious government action.

Broadening the range of civil society associations, stakeholders and alliances engaged in creating this constituency also

Box 5: The new politics of climate change

Why we are failing and how we will succeed, Stephen Hale, Green Alliance, 2008

Climate change is not just an environmental issue; it connects to issues such as poverty, housing, health, security and well-being. If this connection is communicated and understood, more groups will find it is in their own interest to push governments to take action against climate change. Hale identifies five main reasons why governments are failing to address the issue of climate change:

- The separation between the polluter and those who suffer from that pollution: from a geographical, political and time point of view, along with short-term horizons of political strategies.
- The public's cynicism and distrust towards political actions. Climate-related policy initiatives are seen as having dubious motives.
- Limited power of national governments and fear of losing market confidence. This makes governments more wary of new taxes and regulations, two critical policy tools for tackling climate change.
- Ideological handcuffs. Hostility in mainstream politics to increased state intervention in business.
- Weak global and national institutions and processes. They are not designed to address something of the scale of climate change and thereby fail to deliver effective responses to climate change.

What Hale stresses is that if individuals come together in groups and communities they can exert influence over political action. He identifies four major elements of civil society association (referred to here as 'third sector') action that could transform the politics of climate change:

- The commitment and leadership of a wide range of national third sector organisations.
- The growing trend for independent action on climate change at the sub-national level. Great potential for community, local, and regional action with an essential role to play in establishing the conditions for national action and leadership.
- A mass-movement of people living the low-carbon lifestyle is critical to securing the political action needed.
- Strong third sector networks at the regional and global level, international alliances outside government that work together to press for national action.

Climate change requires sustained political mobilisation. The solution therefore to make governments take action to address climate change is to mobilise the full power and influence of those outside government to drive political action and public behaviour, paving the way to a low-carbon society. More and more third sector groups embrace climate change. Civil society now needs to dramatically accelerate this trend; therein lies the key to success.

See the full report at:
www.green-alliance.org.uk

creates the potential to broaden the range of political entry points, widening engagement beyond politicians and staff engaged in climate change or environment focused departments to include those with different responsibilities, such as social welfare or health. All of this helps to make effective action more likely.

What is certain is that many agencies and government bodies, especially local government, will soon begin to feel the influence of carbon reduction and carbon budgeting commitments; and this in turn is bound to filter down to operational decisions that will drive changes in service delivery, including those run in partnership with civil society groups.

How civil society associations are reducing their carbon footprint

The case studies below present examples of organisations that are taking direct action to reduce the carbon footprints of their own operations or of their beneficiaries.

Moving into sustainability does not have to be difficult. Whether an organisation is small, like Arcola Theatre (see Case study 11 on page 46), or larger like Oxfam or Amnesty International; through both in-house changes (more recycling, staff engagement), to public facing campaigns about climate change, civil society organisations are in the perfect position to influence the behaviour change of members and supporters.

Civil society organisations are in the perfect position to influence the behaviour change of members and supporters.

Why should civil society organisations strive to be more sustainable? Because it makes financial sense: it can reduce energy bills; support funding applications; better integrate the organisation into the local community; build a wider audience and stakeholder base; and provide an effective platform upon which to publicise the organisation as a hub of creativity and sustainability.

Mechanisms for driving global change

Encouraging voluntary reductions in carbon emissions is only a stage in a political process that involves building a constituency that sees change coming and helps lobby for it, devising and consulting on the most effective and socially acceptable mechanisms for enforcing and driving reductions.

Case study 11: Arcola Theatre, a Hackney-based off-West End theatre

Innovation in sustainability, through the arts…

London's Arcola Theatre aims to be the world's first carbon neutral theatre, trailblazing sustainability projects as part of its core business. A renowned, off-West End theatre, Arcola has a powerful identity both within the local community and British theatre.

Arcola's commitment to, and belief in, its responsibility for making environmentally sustainable art was declared with the launch of its environmental sustainability pillar, Arcola Energy, in 2007. With little money and time, Arcola has built a strong reputation for action on sustainability. By partnering with representatives from London's theatre industry, equipment manufacturers, the Mayor of London's Office and central government, to name just a few, Arcola has demonstrated that it has both the will and the way to become more sustainable, despite working within the constraints of being a cash-strapped charity.

Arcola Theatre

Arcola's 'greening' goes from the stage to the box office. The installation of the organisation's fuel cell in February 2008 made the venue the first theatre in the world to power its main house shows and bar/café on hydrogen; the bar/cafe is illuminated by low-energy LED lighting, reducing bills by 60% whilst improving the quality of lighting. Arcola Energy, among other things, produces a green staff newsletter, is working to install a bike rack for staff and audiences, is enhancing the sustainable food and drinks range on offer to audiences, recycles wherever possible, and displays green messaging throughout the theatre.

Arcola's achievements have been recognised by the British Renewable Energy Association, naming it a Renewable Energy Pioneer alongside recognition in the Charity Awards, Clarion Awards, CBI Growing Business Awards, London's Green Tourism Awards and the TMA Awards.

For further information, visit **www.arcolaenergy.com**.

> "I congratulate Arcola Theatre for showing leadership in taking this innovative creative approach to the greatest challenge we face today – climate change."
>
> Colin Challen MP, Chair of the All Party Parliamentary Group on Climate Change

Case study 12: The church and climate change

Church of England: Church and Earth strategy

In November 2009, as part of the preparation for the Copenhagen Conference, the Church of England launched a seven-year environmental strategy, Church and Earth. The strategy was commissioned by the Archbishop of Canterbury, the World Wildlife Fund (WWF) and the Church Commissioners and was developed by the Shrinking the Footprint Task Group, chaired by the Bishop of London.

Church and Earth includes emissions reduction targets for the Church as a whole, in line with the national target of 80% by 2050, and with an interim aim of reducing the Church's carbon footprint by 42% by 2020.

www.shrinkingthefootprint.cofe.anglican.org

Church of Scotland: Responding to Climate Change project

The Church of Scotland has established a project called Responding to Climate Change, which grew out of a moral imperative to take action to help prevent climate change and thus save people's lives.

The project supports the Eco-Congregation programme and helps it respond effectively to climate change by working with churches and their congregations to enable them to assess and understand their environmental impact, particularly their contribution to climate change, and encourage them to take steps to reduce it. The project also works with the Councils of the Church to help them identify and address the impacts of climate change.

Through the Responding to Climate Change project, the Church of Scotland contributes to the wider debate in Scotland, for example through the Stop Climate Chaos coalition. The Church welcomes the Scottish Climate Change Bill and is participating in the national debate to ensure that the commitment to an 80% reduction in greenhouse gases is taken forward across Scotland.

Supported by the Scottish Environment Protection Agency the project now includes over 180 congregations across Scotland, both Church of Scotland and other denominations, forming one of the largest networks of voluntary environmental groups in Scotland.

www.churchofscotland.org.uk/councils/churchsociety/csclimate.htm
www.ecocongregation.org/scotland

Options for governments include carbon or energy taxes or banning the sale of certain products (sometimes referred to as choice editing). But crucial to the effective introduction of any of these measures is an understanding of how they are likely to play out across different sections of society.

To date, research is limited and the sophistication of insights therefore lacking, but some issues are clear; notably, the introduction of unmodified energy taxes will aggravate fuel poverty issues. Not surprisingly, there has been an extensive interest in more equitable systems and frameworks for driving carbon reduction.

These usually work on the basis of allocation of carbon emission rights, linked to a process that gradually reduces these over time. To reflect the often unavoidable differences between the need to use energy, these rights are usually tradeable providing options, at a cost, for those who need more and providing rewards for those who use least (one of the consequences is that they make carbon emissions rights into a form of currency).

Several variants of this basic model exist (see Box 6 on page 48). Some have integral international components focused on integrating international equity with carbon reduction emissions and some can be implemented within a single country, some focus on individuals, allocation and some target other levels for example by capping the rights of fossil fuel companies to sell their products. The differences between the schemes proposed often relate closely to the practical and logistical challenges of implementation – but they may also differ radically in the fine detail of how they manifest and the impacts they have on different sectors.

Box 6: Examples of carbon emission reduction schemes

Cap and Share
www.capandshare.org

Cap and Dividend
www.capanddividend.org

Cap and Trade
www.johnmccain.com/Informing/Issues/da151a1c-733a-4dc1-9cd3-f9ca5caba1de.htm

Personal Carbon Rations
http://news.bbc.co.uk/1/hi/uk_politics/7419724.stm

Tradable Energy Quotas
www.teqs.net

Carbon Taxes
www.agf.org.uk/cms/upload/pdfs/WP/200902_WPcsge_e_carbon_taxes.pdf

Contraction and Convergence
www.gci.org.uk/contconv/cc.html

A review document, including SWOT analysis of some of the different models has been produced by AEA Energy and Environment for Comhar Sustainable Development Council, Ireland, available to download from: www.feasta.org/documents/energy/AEA_cap_and_share.pdf.

Case study 13 shows how the Fair Shares Fair Choice scheme, promoted by Sustainability South West, uses a personal carbon allowance model.

The decisions of insurance companies and investors to mitigate their own risks or maximise returns are already bringing some of the costs of climate change to bear today.

Although the headline principles of these systems are simple, the devil does lie in the detail and it is hard to encourage a breadth of civil society groups to see this as something they should engage with rather than leave as the domain of specialists. Nevertheless, there are radical ideas embodied in some of these schemes, particularly with regard to the distribution of emissions rights and also distribution of revenues that could accrue from trade – at the heart of which is a question of whether the atmosphere is a global commons. It is essential that civil society associations are represented in the debate and that the most socially just and workable options are identified and supported. It would be a valuable piece of work if an enabling foundation or voluntary sector umbrella body could commission overview papers concerning the social implications of each model, to allow civil society associations to identify what models they should lobby for (or against).

For example, personal allocations could be a fairer system of driving change than taxes, but scope for undesirable effects still exists. An allocation of personal tradeable carbon allowances will be a significant distribution of equity for someone who is homeless and without assets, but could still penalise low income individuals in rural low quality housing if their carbon footprint is high in ways that are out of their control. There are, of course, systems for mitigating the impact of taxes on the poorest – see for example the submission on carbon tax income redistribution produced by Combat Poverty Ireland: www.combatpoverty.ie/publications/submissions.htm.

Outside of the government sphere the financial markets also drive change earlier than expected. The decisions of insurance companies and investors to mitigate their own risks or maximise returns are already bringing some of the costs of climate change to bear today.

For many people the consequences of climate change and resource scarcity, although important, seem less pressing than the challenges of ensuring social welfare and social justice. But the indirect impacts – effects of these policy, financial and political shifts – are taking place around us now. Decisions made today determine outcomes in the future, and the future arrives today through expectations that drive the behaviour of stakeholders and policymakers.

Diversity in carbon footprints

Crucial to an understanding of how socially just carbon reduction policies are likely to be is an appreciation of what the footprints of different sectors of society are and how much agency they have to make change. Again there isn't much research or data. Of the little that does exist, some confirms expectations that affluence brings a higher carbon footprint because of increased consumption and higher likelihood of discretionary travel.

But there are some counter trends that can outweigh this; low housing quality and inadequate funds to invest in improvements;

Case study 13: **Fair Shares, Fair Choice**

Fare Shares, Fare Choice is a charitable campaign supporting the idea of a globally fair and climate safe carbon share for everyone. The 'Fair Share' is based on a global model supported by the UN called Contraction and Convergence (C&C) which calculates the total CO_2 limits people need to stay within in order to avoid really dangerous global warming, and calculates a per capita share for everyone on the planet. It also takes account of the carbon needs of developing countries to reach reasonable levels of health care, education, housing, and so on.

The campaign aims to creatively promote fair carbon budgets to a wide cross-section of society and show who supports this principle. This complements Sustainability South West's mission to champion action now to achieve genuine sustainability – that is, living and working in ways that are healthy, productive, socially just and within environmental limits.

Whilst the most urgent sustainability priority is to significantly reduce carbon emissions in order to reduce dangerous climate change – this priority must be achieved in the most socially just way. To be truly sustainable, economic progress must likewise support a low carbon economy that also enhances social welfare.

The Fair Shares, Fair Choice campaign promotes positive, socially just and environmentally sound, low carbon choices for individuals, businesses and public and voluntary sector organisations.

A mock-up Fair Shares carbon budget card provides individuals with their annual carbon budget for the next ten years. An interactive website offers a sign-up facility for the campaign and free advice from virtual carbon coaches.

Those signing up to the Fair Shares campaign demonstrate wide ranging support that transcends sectors, ages and party politics. Supporters include celebrity/expert endorsements, MPs, councillors, local authorities, schools, the South West TUC, businesses from many sectors, residents and visitors.

Lesley Stephenson of Sustainability South West, explains:

'Fair Shares, Fair Choice has the common good at its heart but recognises that we are all individuals and need some freedom to make our own choices. It translates a relatively complex scientific model for tackling climate change (contraction and convergence) into an idea that everyone can understand, support and act on positively in our own way. There are lots of initiatives that calculate carbon footprints but Fair Shares, Fair Choice offers a fair and safe carbon budget that everyone can be personally creative with.

Fair Shares, Fair Choice is an awesome idea for a little sustainability charity with more goodwill than funds but once we discovered the idea we felt we simply had to do our very best to promote it.'

For further information, visit:
www.fairsharesfairchoice.com

living in cold areas, and especially in rural car-dependent locations, makes for a high carbon footprint. Living alone also magnifies the carbon footprint, a factor that significantly influences the carbon footprint of elderly people. As a result of these factors a medium income southern county urban dweller can have a footprint of nearly half that of a person living in poor housing in the rural north of the UK.

Important work has been done by Sustainable Energy Ireland (SEI) showing how the components of carbon footprints change with age, with a drop in the contribution from 'consumption' compared to home energy use as people reach retirement age.

The other critical factor in determining individual carbon loads is the method by which the national overhead of carbon emissions is allocated to individuals. Will the impact of centres of government activity such as London or centres of industry be evened out or allocated more locally?

Determining the most effective and equitable method needs the focused input of civil society associations, especially social change and social welfare groups. For any initiative to reach public acceptance will be a complex journey, one fraught with challenges of developing literacy through to loss of popular support or even legal challenges. There is hardly a conceivable way for this to happen without active and co-ordinated support from civil society leaders.

Tradeable carbon and offsets

A key feature of almost all frameworks of carbon allocation and reduction is to allow distribution and trade between those who need more and those who can use less. This trade has been a critical element in Kyoto and other inter-governmental frameworks as well. As long as it is well structured, trade can incentivise further reductions by innovators and provide a capital return for their efforts. Trade can also provide a means for wealth distribution between high-carbon using and low-carbon using countries or individuals. The provision for trade is also a key element in the UK Climate Change Act.

Many civil society associations, especially those from the international development sector, were key players in formulating the principles of trading, and also in devising the idea of voluntary offsets to extend the mechanism further and faster than is set by regulation.

Today it is not uncommon to find some organisations taking positions of absolute antagonism against the use of offsetting as a means of tackling climate change. Box 7, below, details the arguments around carbon offsetting.

Early implementation of trading schemes have been flawed, but the challenge going forward is whether better alternatives can be found, or whether the core philosophies that lie behind the mechanisms need to be rethought. Finding better mechanisms is a problem that needs effective scrutiny, trust and identification of appropriate action. Furthermore, potential consumers of offsets need guidance in sorting through these issues and determining if and what types of offsets to buy.

These are all areas where civil society could play an active role in finding solutions. A current example is the Worldwide Fund for Nature (WWF), which has been active in developing and promoting a Gold Standard offset protocol that aims to ensure that all projects invested in are rigorous and also meet sustainability goals (see www.cdmgoldstandard.org/index.php).

Box 7: Arguments around carbon offsetting

The arguments against are essentially:

- technical – that the methodologies used are flawed or unproven;
- corruption – projects are misrepresented or do not even exist or replace investments that companies or governments should have made from core funds;
- values – the projects are profit-driven rather than solution-driven;
- displace effort – they allow people to avoid action and buy off guilt;
- uncalculated secondary effects – offset projects may compete or conflict with the livelihoods of often the poorest of people by raising prices of land, commodities and so-on, or diverting existing resource streams, upon which people depend, to a carbon-reducing alternative, for example CO_2 offsetting trash incinerators taking away the waste upon which rag-pickers rely.[33]

The arguments in favour are that:

- offsets provide critically-needed investment for practical change – a kind of venture capital fund for world-changing;
- they drive action globally in developing countries that could not afford change, and provide a possible avenue for combining development with carbon emissions reductions in such countries;
- there is no evidence that voluntary offsetting is actually used as an avoidance mechanism – or even if it is, people may be making a decision between either buying offsets, or doing nothing at all.

Civil society's operational contribution to carbon emissions reduction

Major charities can have huge operating footprints that offer substantial potential for reduction in carbon emissions, but even for small organisations change is worth considering as a symbol of commitment and signposting of options for members, networks or beneficiaries.

One of the typical ways that a large organisation would develop a strategy for operational improvements is by commissioning an environmental audit. Many consultancies exist that would undertake this work, and support is also given through the government's Envirowise programme (www.envirowise.gov.uk); although this is targeted towards resource use rather than energy.

Environmental audit has its roots in addressing the operations of large industries with major resource impacts and substantive need for careful tracking of activities with high levels of risk, such as the chemical industry. The approaches and techniques and requirements for in-depth and regular reporting and monitoring assumes a substantial administrative capacity and access to technical expertise.

This of course does not match the need of different sectors. The requirement for focused support for small businesses is increasingly recognised and supported by subsidised schemes such as those run in the south-west of England by Envision (www.envisionsw.org.uk). Central guidance is given to small businesses by organisations such as the Carbon Trust (www.carbontrust.co.uk) and the Energy Savings Trust (EST). Of particular interest is the Community Action for Energy initiative accessed through the EST website: www.energysavingtrust.org.uk/cafe.

On the whole though, focused advice to civil society associations and charities is less easy to find than business support, however the Baring Foundation (www.baringfoundation.org.uk) has taken a lead in highlighting this gap and encouraging better support for small social organisations. The City Bridge Trust (www.bridgehousegrants.org.uk/citybridgetrust) is also engaged in this area through a project assisting a group of its grantees to make their organisations more sustainable. It has embarked on a pilot scheme providing eco-audits to a representative cross-section of twelve organisations it currently supports. The pilot is offering these London charities a review of their organisation's current position on waste, energy use, water, transport, raw materials and carbon emissions.

Box 8: Online advice

There are many sources of advice found on the internet that look beyond the direct energy consumption related to the estate and equipment of an organisation. The organisation of sustainable or carbon neutral events, for example, can also be a focus of change, see: **www.davidsuzuki.org/Climate_Change/What_You_Can_Do/carbon_neutral_events.asp**.

Investing for change

Civil society associations have between them many billions of pounds in investment assets. Another critically important technique for driving change, therefore, is targeting financial investments in directions that support climate mitigation or the evolution of new solutions for social and environmental problems. The scope for responsible investment and the challenges it throws up are not new issues for civil society associations. In the short term there are some development issues to address, as not all green or ethical funds have taken carbon footprints into account in devising the portfolio.[39]

Of course the main challenge with ethical investment funds is that they may not give as high a return as funds with fewer constraints.[40] However, it is increasingly likely that public and stakeholder scrutiny of the impacts of civil society investment portfolios will continue to grow, and those with an eye to longer term economic trends may wonder whether the current state of the financial markets really reflects which industries are likely to thrive and which ones decline in a low carbon world.[41]

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Certainly, over time, the nature of the investments that are seen as low risk and with high confidence of return is likely to shift, giving greater room for alignment between financial and ethical goals, although those who want to drive change rather than simply reflect it will continue to face trade-offs.

Guidance on ethical investment is available from various sources, including: www.fairpensions.org.uk, www.ethicalinvestment.org.uk and www.trucost.com

As well as their own investments it is possible for civil society groups to encourage their membership, networks or constituencies to take action. Usually this takes the form of encouraging people to consider targeting discretionary spend in directions that make a difference (for example subscribing to premium tariffs, buying goods that carry an ethical or environmental label, encouraging household level investment in micro-generation and so on).

Of course, it is also within the reach of civil society innovators to try to change the rules of money and investment more directly, and to develop their own investment instruments that drive change faster, by helping the establishment of innovative new approaches and organisations (such as Big Issue Invest: www.bigissueinvest.com).

The barriers to financing the changes we need to make to create a low carbon society are profound. We face issues such as committed budgets and financial structures, sunk investment and siloed systems that aren't necessarily best adapted to the needs of the 21st century. Even the private sector has its own barriers based on perceptions of risk, expected return, discount rate and so on that all create substantive barriers to investment in a more adaptable society.

A key role for civil society associations is to provide new sources of finance but also new sets of rules for how that finance is deployed – for example linking the commercial rigour of the public sector to public benefit, and without shareholder concerns, to allow new interpretations of issues such as rate of return or efficiency of invested capital.

Lobby for change

In most cases, the most effective means for civil society associations to drive change will be to lobby, disseminate information and mobilise a constituency. Governments' ability to act often depends on the work done in building awareness and preparedness amongst the public, even when this is initially framed as a critical attack on current policies. There are some existing umbrella campaigns that will welcome additional support, such as Stop Climate Chaos and Every Action Counts (see Appendix 1).

Overcoming governance barriers

The problems of engaging a broader range of people in climate change can operate at many different levels. For many organisations there are governance barriers. The authors of this guide have heard many anecdotal examples of situations where initiatives from non-environmental groups have been blocked or slowed by highest level management or trustee intervention because the relevance to the core agenda has not been understood. Box 10, below, details the UK Charity Commission's guidance on this issue.

So, there is a key link to the level of trustee understanding, and if the trustees of an organisation see climate change and resource scarcity as 'environmental issues' then in many cases they cannot act. This is why it is critical that the problems are reframed in a language that clarifies them as drivers of change across society.

Box 9: Excerpt from Charity Commission's guidance

The Charity Commission sets out some answers to questions aimed at charities that are thinking of getting involved in environmental work.

In deciding whether or not to undertake environmental activity, trustees must apply precisely the same principles that they must apply in considering any other possible means of carrying out the charity's purposes. It is ultimately for the trustees to decide which activities best further the charity's objects, although the Commission can provide advice and guidance to trustees who are unsure. Some examples of charities which do not have objects for the preservation of the environment, but which may nevertheless carry out environmental work which furthers their existing objects, could include:

1. A charity with 'relief of poverty' objects delivering environmental projects because they have evidence that the effects of climate change are contributing to poverty in certain parts of the world, and their efforts can help to reduce these effects.
2. A charity with 'relief of sickness' or 'promotion of health' objects researching the effects of pollution on the causes of sickness, or how environmental factors affect the recovery of those with a particular illness.

www.charitycommission.gov.uk/Charity_requirements_guidance/Charity_governance/Environmental_responsibility/enviro_qandas.aspx

So what can civil society associations do?

No one can have missed the increasing calls for urgent action on climate change and resource scarcity. Climate change, in particular, has gained in political urgency following the scientific guidance that indicates that dramatic changes in carbon emissions must be made in a very short time frame to avoid the worst consequences. Civil society groups across the world are working to support the move to a lower carbon, more resource-constrained world by demonstrating good practice in carbon reduction and lobbying government.

Clearly, many environmental groups, including Greenpeace and Friends of the Earth, have played a critical role in bringing concerns about climate change or resource scarcity to the fore. But the challenge is now to broaden both the debate and the nature of the organisations that are involved in taking action, given the social, political and economic consequences of change, and in the interest of finding and implementing socially-just solutions.

Actions for non-environmental civil society organisations

Without being prescriptive, this guide has illustrated or implied a variety of ways in which organisations that do not have environmental concerns at their core can take action. Broadly speaking, such actions can be divided in to how organisations think and act 'internally' and 'externally'.

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Internal organisational change

- **Incorporating concerns about climate change and resource scarcity in to your strategic thinking and planning**. Considerations of climate change and resource scarcity can be made in strategic planning processes, perhaps taking into account some of the social impacts of climate change and resource scarcity as outlined in Box 2 (page 22).
- **'Greening' your organisation to reduce your organisations carbon footprint**. Using tools and guides produced by, for example, Every Action Counts, the Trades Unions Congress or Friends of the Earth, you can review issues such as governance, procurement and the running of offices to help reduce your carbon footprint and act in the interest of sustainable development.
- **Reviewing and targeting your investments**. Civil society associations with investment assets can review their investment policies and encourage fund managers to take environmental, social and governance factors in to account. Joining investor coalitions should also be considered, such as the 2010 FairPensions campaign that brought together shareholders to challenge BP plc. and Royal Dutch Shell about their involvement in the tar sands. Organisations with investment assets could also seek to actively invest in the development of local energy schemes, many of which are being run by civil society groups.

Externally-facing change and action

- **Informing and mobilising your constituency**. Given how daunting and disempowering the language of climate change can be, conveying the social, political and economic consequences and opportunities in a manner that is relevant to, and appropriate for, your constituency is critical. Translating the challenges into opportunities and action relevant to diverse constituencies is a key role that can be played by non-environmental groups.
- **Actively engaging in discussions and decision-making processes** that relate to future policy changes, such as proposals for carbon taxes, personal carbon allowances, urban planning and the many other future policy proposals that relate to transition (adaptation and mitigation) and that, in turn, will stem from the commitment to reduce emissions by 80% by 2050 (Climate Change Act), etc.
- **Holding state and market to account** using levers such as the Aarhus Convention provisions and/or Equality Impact Assessments to ensure your stakeholders are not unduly impacted by policy decisions and that they have proper engagement in the formulation of policies.
- **Engaging in broad-based coalitions and forging global alliances**, such as Stop Climate Chaos, Every Action Counts or the Global Campaign for Climate Action, to lend the voice of your organisation and the voice of your constituency so that the collective power of civil society is strengthened and greater pressure is placed on governments to act.

As this guide has illustrated, climate change and resource scarcity will affect civil society associations in all their guises. By activating wider civil society, beyond the green movement, more can be done to limit the detrimental affects and to ensure that the solutions are developed in the interest of a fairer distribution of the costs and opportunities.

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Appendix 1: Useful resources

The authors of this guide have identified some of the major trends and challenges that are going to face civil society in the coming years. The issues outlined will to unfold in unpredictable ways and it is important that civil society organisations become informed and knowledgeable about the information, polices and movements that are developing and evolving.

Many individual sectors such as trade unions and faith groups are increasingly active in this field, but it can be overwhelming to list the diverse activities underway so we have focused more on cross-sectoral initiatives, such as the ones below.

Capacity Global

Capacity Global is a voluntary sector organisation that is looking at why the environmental sector has often failed to engage with diverse groups. The organisation is pioneering environmental justice research in the UK. It uses research to identify connections between social and environmental issues and uses funding to identify unmet community needs and policy gaps; these in turn become the foundation for new research projects.

www.capacity.org.uk

Climate Outreach and Information Network

Climate Outreach and Information Network (COIN) is a charity that dedicates itself to helping people to communicate about climate change. It aims to facilitate the process by which people overcome denial about climate change, act collectively to cut greenhouse gas emissions and offer democratic legitimacy to elected leaders to negotiate successfully for strong regulation at a national and international level.

In late 2008 COIN was awarded one of four grants by the Baring Foundation to undertake a joint Third Sector Initiative. COIN's involvement in this initiative is focused on the refugee and human rights movement and builds upon two years of strategic engagement with organisations across this sector. The initiative sees COIN working with five project partners – Asylum Aid, The Refugee Council, The Welsh Refugee Council, Amnesty International (international secretariat) and Refugee Action – to support them to assess and address how climate change will affect their fundamental principles and charitable aims.

www.coinet.org.uk

Community Workers Co-operative, Ireland

The Community Workers Co-operative (CWC) is a national membership organisation committed to promoting and supporting community work as a means of achieving social change. CWC set up the Community Work and Sustainable Development Subgroup for community workers and environmentalists who share a commitment to developing a community response to the issues of sustainable development and climate change. The main work of the CWC Community Work and Sustainable Development Subgroup is a project, funded by the Environmental Protection Agency, to produce a strategy guide on climate change for community organisations to support and encourage them to respond to climate change. The objective of the project is to give information on climate change and to encourage community workers, their organisations and the communities with which they work to engage with climate change. The report will be published in 2010.

www.cwc.ie

Every Action Counts

Supported by Defra, Every Action Counts is an initiative which assists voluntary and community organisations looking to reduce their impact on the environment, tackle climate change and improve their local area. The ethos of Every Action Counts is based on the understanding that it is often easier to try new actions or make choices which help the environment if people work together as a collective. The support offered includes free access to information, action planning tools and publications. Groups are encouraged to save energy, travel wisely, save resources, shop ethically and care for their local areas. Every Action Counts also provides training for community champions who work with local organisations to introduce easy environmental actions that can be taken. Together with this the initiative supports community development workers to learn more about sustainable development and how to make the links between environmental issues and community development work.

www.everyactioncounts.org.uk

Green Alliance

The Green Alliance has a series of projects that are all working to combat climate change and includes a political leadership project that pulls together several pieces of work, with a focus on securing the political leadership and action needed to tackle climate change and other environmental problems. This work includes:

- engaging with key political figures in the run up to and after the general election;
- co-ordinating collective action in the green standard coalition;
- convening a joint initiative with development and environment groups to raise the issue of climate change in marginal seats.

The Climate and Energy Futures project includes a two year programme of analysis, engagement and advocacy looking at the challenge of developing a low carbon infrastructure for the UK and the development of a series of case studies to show how the current transport appraisals are favouring car use over more sustainable transport options.

Their Green Living Project works to create alliances with business, the third sector and academia to persuade politicians to raise awareness of policy opportunities that can help drive pro-environmental behaviour change. This project engages government, researches policy and promotes public debate around the scale of response needed to deal with climate change.

www.green-alliance.org.uk

International Council on Human Rights Policy (ICHRP)

There is a growing body of work on the human rights implications of climate change, much of it being led by the United Nations. The work of the ICHRP is particularly interesting however because it focuses not just on weather impacts on vulnerable people but also on the likely impacts of policies and solutions to climate change that may be adopted. In 2008 it published a Rough Guide to Climate Change and Human Rights which can be downloaded free from their website. Research has continued through 2009 and will be reported on in 2010.

www.ichrp.org/en/projects/136

Muslim community guide on how to be greener

Lifemakers UK and the Islamic Foundation for Ecology and Environmental Sciences (IFEES) have published a green guide to help Muslim households reduce climate change with the support of Nottingham-based charity, Muslim Hands. The Green Guide explains the impact of climate change, using Islamic references to engage organisations and communities and inspire behaviour change. This is a simple, practical handbook that looks at different aspects of the Muslim household and proposes a series of small changes.

www.ifees.org.uk

New Economics Foundation and Oxfam

New Economics Foundation and Oxfam have convened a UK roundtable on Climate Change and Poverty and both organisations (and their partners) are at the forefront of new initiatives.

Oxfam advocates on a national and international level for measures against climate change. It has been responding to climate change both on the ground and at strategic levels. It has carried out their own research into the effects of climate change in poor communities while helping to develop practical approaches that can help communities to adapt, such as better flood defences or drought resistant farming techniques.

Oxfam has launched its own climate change campaign that calls for a UN deal that is fair to both rich and poor countries and it is calling on world leaders to support this.

The Oxfam climate change campaign includes a 'Help stop catastrophic climate change' petition, and a series of 'climate hearings', a project that gives people who are suffering from the impact of climate change a chance to be heard locally, nationally and internationally by decision-makers who have the opportunity to influence systems and polices that could help and support them.

www.oxfam.org/en/campaigns/climatechange/climate-hearings

http://climatehearings.org

The new economics foundation is a 'think and do tank' which has an increasing range of resources available for understanding the possible interactions of global resource use, climate change, financial and political policies on social health. It publishes a diverse range of proposals for new mechanisms and policies that could move us to a more just and environmentally secure world.

www.neweconomics.org

Operation Noah

Operation Noah, founded in 2001 by Christian Ecology Link (CEL), is the first Christian campaign focused exclusively on climate change. It is made up of an inclusive group of committed Christians from across Britain. Operation Noah is now a joint project of CEL and the Environmental Issues Network of Churches Together in Britain and Ireland. Its mission is to encourage Britain and Ireland's churches and governments to lead a radical transformation in both cultural and economic systems; a transformation towards simpler, liveable and supportable lifestyles that will increase happiness and well-being, while safeguarding the whole of God's creation for future generations. The organisation encourages action at all levels, from the individual level right up to the international scale. Its current activity is focused around the ARK Campaign, which is calling for an agreement at the Copenhagen Conference in December 2009 for cuts in power station emissions.

www.operationnoah.org

Shared Energy

Shared Energy is run by bassac in association with the Community Development Foundation, Groundwork UK and the new economics foundation (nef). Funded by the Baring Foundation, the project aims to help community organisations take practical actions to become more sustainable while retaining their own mission and vision. At the time of writing this guide, nine community organisations were working together in three local clusters in Bristol, the Yorkshire and Humber region, and London. The findings from the project will be available, together with a scenario planning toolkit, in early 2010.

www.bassac.org.uk/our-programmes/sustainability/what-are-bassac-and-its-members-doing/shared-energy

SNIFFER

The principal focus of the Scotland and Northern Ireland Forum for Environmental Research (SNIFFER) is on addressing knowledge gaps relating to environmental issues, and increasingly where there are interdependencies with the economy and society. Within its climate change work stream, SNIFFER has published work on the differential social impact of climate change in the UK.

www.sniffer.org.uk/our-work/climate-change.aspx

Stop Climate Chaos

Stop Climate Chaos is a coalition that brings together a broad range of organisations to campaign on climate change. The members include environment and development groups, faith groups, humanitarian organisations, women's groups, trade unions and many others. Its mission is to build a massive coalition that will create an irresistible public mandate for political action to stop human-induced climate change.

Stop Climate Chaos believes that by working collectively with a diverse, broad-based coalition, it is in a unique position to mobilise public concern and, through this, the necessary political action to stop climate chaos. It also stresses that collectively results can be delivered that no individual organisation would be able to achieve alone.

www.stopclimatechaos.org

www.stopclimatechaos.org/scotland

Third Sector Taskforce on Climate Change

The Taskforce was launched in spring 2009 and brings together a wide range of representatives from civil society with ministers and civil servants from the Department for Environment, Food and Rural Affairs, The Department for Energy and Climate Change, the Department for Communities and Local Government and the Cabinet Office. Secretariat support is provided by Green Alliance and the National Council for Voluntary Organisations. Background information and work programme are presented on the Green Alliance website.

www.green-alliance.org.uk

Transparency International

Transparency International is the global civil society organisation leading the fight against corruption. It has identified the likelihood that climate change and the responses to it will provide fertile ground for corruption at local through to international levels, and will be publishing work on this theme in 2010.

www.transparency.org

UK Third Sector Declaration on Climate Change

The Third Sector Declaration on Climate Change encourages third sector organisations to sign a statement of intent to tackle issues of climate change by taking actions within their organisations or communities. The purpose of the Declaration is to make a public statement and create a framework for change. The Declaration has two main sections: the first recognises the crucial role of the third sector, and the importance of understanding the link between social justice and climate change reduction; the second section deals with the commitment of tackling climate change and provides a plan of action to be taken by those signing up to the Declaration.

www.everyactioncounts.org.uk/declaration

Also invaluable is the work of those enabling foundations which commission work intended to support the development of an effective societal (and civil society) response to these challenges. At the time of writing in the UK these included:

Baring Foundation

The Baring Foundation was one of the first to work on the ways that climate change will impact on the roles and functions of non-environmental civil society groups. It has pioneered support for such groups to understand how they can reduce their environmental footprints, and have new programmes of work looking at the implications of climate change on different sectors.

www.baringfoundation.org.uk

Carnegie UK Trust

The Independent Commission of Inquiry into the Future of Civil Society in the UK and Ireland, funded by the Carnegie UK Trust through its Democracy and Civil Society Programme, has been focusing on broad questions around the future of civil society, of which this study plays just a part. Many of the core questions in the Commission's work, such as exploring where there are deliberative spaces for new thinking, are of direct relevance to the challenges of climate change and resource scarcity. Identifying and responding to the challenges and opportunities presented by climate change is also vital to the Carnegie UK Trust's Rural Community Development Programme, which seeks to help build sustainable and resilient communities in rural areas.

www.carnegieuktrust.org.uk

Joseph Rowntree Foundation

Amongst its portfolio of interests, the Joseph Rowntree Foundation supports the development of socially just responses to climate change in the UK. Through its research programmes and seminars, it seeks to provide evidence on the social impact of climate change in the UK and supports the development of fair responses to it, with a specific focus on the interaction of climate change and poverty.

www.jrf.org.uk/work/workarea/climate-change-and-poverty

Appendix 2: Methodology

The information and concepts discussed in this guide were based on a programme of desk research undertaken by the Eden Project (www.edenproject.com) and the Sensory Trust (www.sensorytrust.org.uk), complemented by a series of workshops and telephone interviews which were carried out over a period of four months, primarily with representatives of non-environmental civil society groups that were developing interests in climate change and resource scarcity. The workshops were held in different locations across England and Scotland and participants were invited from a diverse range of non-environmental civil society organisations. These workshops and interviews discussed challenges, impacts and possible solutions to climate change. The telephone interviews were used to target influential individuals within these organisations who were not able to attend the workshops. The authors also attended workshops and meetings organised by other groups on similar themes. The authors would like to thank all the participants for their time, and for generously sharing their ideas and insights.

For all that, the authors confess a strong sense of empathy with George Marshall's concept of the MINGOs. They found it fantastically difficult to get a strong response from non-environmental groups who clearly either felt unable to prioritise the time or had some other barriers to engagement.

Some of those who did attend did talk of the uncertainty they felt beforehand. A kind of 'climate change fatigue' was heard several times and people were wary that the workshops would be yet another chance to hear about temperature projections and risks of sea level rise. The authors remain convinced that a wider engagement from civil society will only happen when the focus of debate moves beyond direct effects of changing weather.

There was a strong response from faith groups, many of whom showed a high level of concern, vision and determination to engage with these challenges. Nationally there is a growing and important swell of activity arising from faith groups and the authors expect them to play a major role in moving forward, it should also be noted that the authors specifically set out to listen to groups who were not active in environment or international development fields. They are grateful to those participants from those sectors who refused to pay any attention to these plans and attended anyway – to help the clarity of argument in this report there is sometimes a clearer distinction between 'environmental' and other groups. In reality many individuals who work for environmental international civil society groups have a deep concern for social justice and sophisticated insights into equitable solutions.

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About the Eden Project

The Eden Project is an educational charity whose primary focus has been to find approaches to increase public understanding of our dependence on natural resources, and of the issues and challenges that arise from the need to steward and sustain the things that sustain us. The main audience for this work is the 'disengaged' public, ordinary people who have at best a patchy appreciation of the diverse networks of people and natural resources that underpin our lives. The primary themes of the Eden Project may be classed as 'environmental', but its focus is naturally on the significance for people, from individual through to global levels.

About Dr Tony Kendle

Since 2000 Foundation Director of the Eden Project overseeing the public and formal education programmes, scientific research and sustainability partnerships and programmes. This team leads the 'content' development for the Eden Project and devises the exhibits, events, projects and approaches that underlie the delivery of the Eden Project Mission. Tony is a member of the Cornwall Climate Change Action Partnership; strategic reviewer of the South West Climate Change Action Plan; and lead researcher for the New Ground strand of the Carnegie UK Trust Rural Action Research Programme. Prior to joining the Eden Project, Tony was lecturer in the University of Reading researching and teaching social and community dimensions of environmental management.

About the Sensory Trust

The Sensory Trust promotes social inclusion and accessibility to the natural world. In doing this work, the Trust walks the bridge between social and environmental perspectives regularly, and has specialised in developing approaches to engagement and involvement that are ground breaking. The Sensory Trust advocates that diversity is a crucial part of building sustainable futures. Excluding sections of society from the dialogue weakens potential solutions. The work of the Sensory Trust frequently involves consultation with stakeholders and community groups and focus groups with public, other organisations and agencies, government and experts (academic and professional). The Trust has a growing reputation for a unique approach to workshop and event design.

About the Carnegie UK Trust

The Carnegie UK Trust was established in 1913. Through its programmes, the Trust seeks to address some of the changing needs of the people in the UK and Ireland, in particular those of the less powerful in society. The Trust supports independent commissions of inquiry into areas of public concern, together with funding action and research programmes. There are currently two active programmes: the Democracy and Civil Society Programme and the Rural Programme.

The Democracy and Civil Society Programme has two elements to its work. The main focus of the programme is the Trust's Inquiry into the Future of Civil Society in the UK and Ireland. The second focus of the programme is the Democracy Initiative, which aims to strengthen democracy and increase the ability of citizens and civil society organisations to collectively influence public decision-making.

The Rural Programme helps rural communities across the UK and Ireland to respond to and influence social, environmental and economic change. The programme works to ensure that rural priorities are fully recognised by decision-makers. This is done through: securing the practical demonstration of asset-based rural development; testing Carnegie UK Trust's Petal Model of Sustainable Rural Communities; and hosting a Community of Practice for rural activists and professionals.

eden project

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CHANGING MINDS • CHANGING LIVES

"Climate change is one of the most significant challenges facing humanity. It is an issue which affects each and every person on this planet now and in future. Faith communities have a superb opportunity to lead efforts to make our planet both safe and sustainable and so the work of the Inquiry has begun to mobilise faith communities to work together. This guide is an important contribution towards this."

Riaz Ravat , St Philip's Centre Leicester

"The slightly technocratic and solution-based narrative of the climate change movement does not work with the social justice narrative. If we are able to develop a narrative which does link up the two discourses then we will vastly strengthen the appeal of climate change action."

Tim Baster, COIN

"It is now widely understood that climate change affects us all but the most vulnerable in our society, as globally, are particularly exposed. Whatever their mission, all voluntary organisations have a role to play in addressing the impact and mobilising for change. This guide highlights the need for collective action across society to address the challenge - we all need to pay attention."

Martin Sime, Chief Executive, SCVO

"This guide will hopefully help organisations begin engaging with the very important issues of climate change and resource scarcity."

Contributor

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