



Tackling climate change, reducing poverty

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

I promise to

I promise to eat
less meat and
more vegetables

I promise to
switch to a
green energy
supplier

PLEASE MAKE TO
THINK BY THINK THINK
FOR LONGER PERIODS
AND WALK FOR SHORT
PERIODS

I promise that I
will get more
people to turn
electrical off
and make sure
con...

I promise to...

I promise to
walk to school
more often.

I promise to save
rain water for the
garden
Chelsea
Smith

We promise to.....

(our class)
We promise to
spend more time outside
and less time watching
TV + playing video games

We (my family)
promise not to
leave our
electrical equipment
on standby.

at home. We will
start a car share
scheme.

Start to grow their
own vegetables and
fruit. electronics
(family)

ley Hall Primary
at recycle
stic



This report represents the coming together of leading environmental and social justice organisations in the UK. For too long now, groups tackling poverty and protecting the environment have operated separately. The fact that climate change and poverty are connected, and must be tackled together, has not been sufficiently understood. Yet they are two of the most pressing challenges faced by our generation.

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Introduction

The need for a joint approach

Despite being a wealthy country, in the UK poverty is an ongoing problem. According to Oxfam GB today 1 in 5 people in the UK don't have enough to live on.¹ There were 2.9 million children and 2.5 million pensioners living in poverty in the UK in 2006/2007.² Children go to school hungry, or to bed without enough food. Poor communities are in poorer health and have shorter life expectancy.

On the issue of climate change, there is an emerging consensus that we have less than a decade to seriously reduce carbon emissions before potentially irreversible changes to the climate begin to happen. If we fail, we will outstrip our ability to maintain a climate conducive to supporting stable societies – with potentially disastrous effects. A future of uncontrolled climate change will mean heat waves, rises in sea level, flooding, and unpredictable weather that will create upheaval in the UK. It will affect vital systems on which we all depend, such as growing food and energy supplies. It will directly affect human health, housing and livelihoods.

These problems are also closely connected. People in poverty are the most vulnerable to the negative effects of climate change, as they tend to have a lower level of physical and mental health, live in worse housing with less access to insurance, and have fewer resources to cope with rising costs.

Equally, the measures to combat climate change – namely drastically reducing greenhouse gas emissions – unless carefully tailored will, like the effects of climate change, hit the poorest hardest. Taxing fossil fuels to reduce greenhouse gas emissions, for example, could affect the poorest most. The fuel and food price spikes of 2008 clearly demonstrated the damage that fluctuations in price have on low-income families and individuals, with many more households finding themselves living in fuel poverty.

What is clear is that tackling climate change simply through a price mechanism, without having a mechanism for transferring resources to the poor, will only worsen the already serious problem of poverty in the UK today. An equally unwise strategy would be to attempt to tackle poverty without regard to fossil fuel emissions. This would incur the serious negative impacts of climate change and the poorest, in particular, are the most vulnerable. This is not a successful way to tackle poverty in the long term. Solving the problems of climate change and poverty demands integrated thinking.

The failure to see that the problems of climate change and poverty are interrelated has meant that at times the environmental and social justice movements have worked against each other, rather than working together. Campaigns for building new homes for low-income families, for example, have appeared to be in conflict with arguments for protecting greenbelt land. Arguments to increase petrol prices have been in tension with the desire to provide affordable travel, particularly in rural areas. All too often, these apparently opposing interests have allowed policy-makers to avoid taking action urgently required on the issues of climate change and poverty.

In reality, lifting people out of poverty and creating a sustainable environment are not conflicting aims; these goals are actually mutually supportive in a multitude of positive ways. This report presents a wide range of examples which are helping to solve the problems of poverty and climate change in an integrated way. There are numerous case studies which demonstrate the types of positive feedback or 'virtuous circles' that can result in simultaneous positive social and environmental outcomes. To name a few: home insulation can be used to cut fuel bills, keep homes warm and reduce CO₂ emissions; investment in public transport can provide affordable travel and cut air pollution; and tasty, healthy and sustainable food in hospitals can help vulnerable patients recover and provide local jobs.

This report is just the first in a series of activities bringing together organisations working on the issues of poverty and the environment to try and encourage coordinated thinking and to show that the right policies can and must advance both causes at once.

Although these groups came together before the near collapse of the international banking system, the current economic crisis makes the message more, rather than less important than when this work began. At a time of rising unemployment and increasing insecurity, when many are arguing that society cannot afford the 'luxury' of protecting the environment, this report shows that now, more than ever, we can – and must – simultaneously create jobs, promote a fair society, and tackle climate change.

Themes and recommendations

Several things stand out as immediate priorities. First, there needs to be much more focus on the connected issues of poverty and climate change. Drawing on the examples in this report, we believe that tackling certain key threats and opportunities could lay the foundation for a strategy that would both alleviate poverty and tackle climate change. These include:

- Using effective methods to improve household energy efficiency, and reduce both emissions and fuel poverty.
- Learning lessons from history about resource efficiency and economic transition and learning skills and practical knowledge from older people.
- Investing in community projects that help build community resilience to climate change risks and impacts.
- 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 virtuous low-carbon circles involving health, diet and transport that support social justice.
- Promoting sustainable public service provision, including sustainable food procurement for hospitals and schools.
- Promoting decentralised, local production and distribution networks for food and fuel.
- Reusing resources where possible; improving the existing housing stock; moving towards low-carbon design in housing and urban development.
- Moving towards social justice for all in the transport system, and promoting environmental justice in the UK.

Environmental justice

'Any theory of social justice must contain a view on who or what the relevant benefits and burdens are to be divided among and between.'

Andrew Dobson, Professor of Politics at Keele University, 2001

Environmental justice is centred on the basic human right to a clean and healthy environment. In essence this right is based on the notion of social justice, equality and a healthy environment for all. Locally, nationally and globally the most vulnerable people with the least power and money often see this right denied. Whether it is to do with exposure to air pollution or flooding, the location of hazardous installations, inadequate access to clean water or simply not having access to the environment, the poorest in society are often disproportionately affected. If society is to be environmentally just it must:

- Protect basic rights and equality.
- Solve unequal distribution of environmental 'bads'.
- Provide processes of good governance.

As such, environmental justice involves tackling poor, natural and built environmental conditions from a social justice perspective, both for present and for future generations. Today in the UK there is a lack of environmental justice; people living in the poorest neighbourhoods in the UK tend to be worst hit when the environment is damaged, and they are not getting a fair share of the environment's benefits.

This fact has been only slowly realised by both campaigners and policy-makers. In 2001, the joint Environment Agency and Capacity Global report Mapping Common Ground found that environmental justice issues were clearly part of the liveability, social inclusion, urban regeneration, 'safer, green, cleaner' policy and initiatives.³ In 2001, Friends of the Earth found that 82 per cent of the cancer-causing chemicals emitted from large factories in England were from factories in the most deprived wards.⁴ Shockingly, children from poorer communities are five times more likely to be killed in road accidents than those from richer areas and this is true even though lower-income households are less likely to have a car.⁵ Deprived communities are also, on average, less likely to have access to green spaces and to services, such as doorstep recycling, and are less likely to be prepared for extreme weather events, such as floods.

People around the world – in both developed and developing countries – have founded grassroots environmental justice movements, for example in the United States and in South Africa. In the UK, the UK Environmental Justice Network was established by Capacity Global with members made up of organisations and groups with social and or environmental agendas.

Whilst there are tensions within and between environmental justice perspectives, it is safe to say that there are four main cornerstones:

1. Everyone has the right to a healthy and safe environment and the responsibility to maintain it.
2. Everyone has the right to a fair share of natural resources and the right not to suffer disproportionately from environmental policies, regulations or laws.
3. Everyone has a civil right to be able to access environmental information and participate in decision-making.
4. The most vulnerable in society, in particular the poorest, should not suffer the disproportionate, negative effects of environmental omissions, actions, policy or law.

Over 50 countries recognise the right to a clean and healthy environment as part of their constitutions. The UK Government has included environment justice and environmental equality as an essential indicator for quality of life and sustainable development. In addition, the Government has been a signatory to the Aarhus Convention since 2005.⁶ The convention establishes a legal duty on the Government to protect the public right to environmental participation and decision-making.

All too frequently, however, these legally established rights are neglected in practice. At times the UK Government has failed in its duty to ensure environmental justice for all; often the most vulnerable people are the least aware of their rights and the least empowered to act on them.

Rights and Justice Centre

Knowing your environmental rights

People suffering the affects of environmental damage need to know what rights they have and how to exercise them. When people know about their rights and are empowered to use them, they can act to improve the environment in which they live.

The Wilton chemical complex in Teesside, northeast England, is the site of Friends of the Earth's first Action for Justice project. This community had long suffered from environmental inequality. As one resident, Dean Axford, says:

'In Dormanstown you'd come out of the house and this filth would be on the car, everywhere. There's lots of asthma around, my brother is 32 and can't walk with it. We cannot be poisoned without any comeback. Our environment is as important as anyone else's and it's worth fighting for.'

Through its Action for Justice projects and the legal Rights and Justice Centre, Friends of the Earth gives people access to information on their rights and provides avenues for action against environmental injustices. A series of events trains people in using the planning system, environmental regulations and the law, and lawyers in the Rights and Justice Centre provide free professional legal advice and representation.

One event is Power Up, an annual weekend training session on environmental rights and how to take action. With the help of Power Up, residents from the London Borough of Newham have been working to save Queen's Market from being demolished. A resident affected by severe industrial pollution in Port Talbot in Wales also attended Power Up and after working with the Rights and Justice Centre has forced the Welsh Assembly to produce a proper plan to improve air quality in the area.

This work demonstrates that given the right tools people can take action to improve their environment and fight for environmental justice.



George Eric James;
Food Awareness Project.
Photograph: Capacity
Global's environmental
justice projects.



Juthsana Begum tends her plot at the Wapping Women's Centre gardens. **Photograph:** Women's Environmental Network.

Environmental Justice Activists

Advice and training for community activists

Capacity Global and Friends of the Earth Scotland established the Environmental Justice Activist project, which was funded by the Big Lottery Fund. The project works with individuals from vulnerable community groups on health, environment, equality and human rights issues.

To date it has worked with over 200 communities and trained 30 activists. The project is now providing free workshops for unemployed and low-income community activists run by Capacity Global in partnership with Ruskin College and the Foundation for International Environmental Law and Development. As a result of the project, a number of small grassroots projects have been developed at local level including Nasafa 3, which aims to tackle food poverty and health problems with Black, Asian and Ethnic minorities.

Whilst environmental justice encompasses basics rights to health and information, it is not only about environmental law and enforcement. While the legal system is important, there also needs to be an equal focus on social inclusion and equality. For a number of environmental grassroots movements, environmental justice refers to situations where environmental decisions, directly or indirectly, have the most negative impact on poor, Black, Asian or minority groups.

Research in both the USA and South Africa suggests that some environmental problems have a disproportionate impact on these groups. There are indications that some of these issues, such as the location of hazardous facilities, are also evident in the UK, for example, this is supported by the findings of the report Environmental Justice and Race Equality in the European Union.⁷

Equalities impacts assessments and the Heathrow expansion

Examining the differential impacts of development

The EU Racial Equality Directive of 2000 aimed to ban all forms of discrimination. In the UK, Capacity Global used the Race Relations Amendment Act to raise awareness of anti-discrimination law and how it could be used to challenge the unjust negative impacts of environmental policy. Capacity Global launched a report with a workshop for policy-makers and activists. The recommendations in the report have since been used to support the campaign against the further expansion of Heathrow Airport.

The expansion of Heathrow affects one of the most diverse communities in London, including the Borough of Hounslow, and will have a significant environmental and social impact. The negative effects do not necessarily affect all groups equally. In November 2007, however, when the Government began consultation on the expansion, it failed to address the effects of the airport in terms of race, disability, age or gender.

Some of these groups were already suffering from environmental injustice due to the existing airport. For example, one study found that 91 per cent of the 35 schools in the area it looked at already had noise levels which exceeded World Health Organization guidelines.⁸ Noise, in particular, is one problem that can compound existing social deprivation. For example, studies have shown that noise levels can negatively affect the educational performance of children, impacting in particular on pupils with English as a second language. There is also evidence that noise leads to impaired reading comprehension and recognition memory in children, as well as to reduced motivation and poor long-term memory.



Photograph: Capacity Global's environmental justice projects.
This photo is taken from the Global Capacity report: "Environmental Justice and Race Equality in the European Union".

Hounslow Race Equality Council (HREC) asked Friends of the Earth's Rights and Justice Centre to lodge legal proceedings against the Department for Transport, arguing that the serious race equality effects of Heathrow expansion had not been

'We... want to be sure, given the socio-demographic mix in the Heathrow area, that we fully understand how airport development might affect different groups in terms of race, disability, age or gender.'

properly taken into account or consulted on. Following a legal letter before action, the Government accepted that a detailed equalities assessment needed to be carried out. Then Secretary of State for Transport Ruth Kelly said:

When the equalities assessment was published in September 2008, the evidence indicated that all the expansion options being considered by the Government would result in increased noise and poorer air quality and that different groups in the Heathrow area would experience different effects. For example, eight out of the nine wards in the London Borough of Hounslow that would experience increased noise have disproportionately high levels of Black and Asian Minority Ethnic (BAME) groups. Three of these wards also have disproportionately high numbers of children.

Impact assessments like this are important to show the links between social and environmental conditions. It is only when the links are known that something can be done to make sure that development does not have a disproportionate negative impact on BAME groups, children, older people, disabled people or women.

The Up in Smoke coalition

Five years ago, an alliance of the UK's major environment and development groups set out to assess the effects of climate change on efforts toward poverty reduction internationally. The approach was to look from the point of view of practical, community-based organisations engaged in designing responses to a changing environment. The unequal and unfair distribution of impacts between nations has been a continuing theme of the reports of the Working Group on Climate Change and Development (also known as the Up in Smoke coalition).

So far the Working Group has produced five publications, including three regional reports from communities around the world on the front line of climate change. The reports catalogue the threat climate change poses to human development, and the growing consequences of inaction on the issue. They show how across Africa, Latin America and the Caribbean, and Asia and the Pacific, people and communities are already acting to reduce the worst effects of climate change. The work of the coalition has consistently stated that unless a decisive international agreement is reached – and soon – the lives of those living on the front line of climate change will go up in smoke.

The environmental and development community, like the rest of humanity, is faced with three overarching challenges:

1. How to stop and reverse further global warming.
2. How to live with the degree of global warming that cannot be stopped.
3. How to design a new model for human progress and development that is climate proof and climate friendly and gives everyone a fair share of the natural resources on which we all depend.

The Working Group suggests that urgent priorities should include:

- A global risk assessment of the likely costs of adaptation to climate change in poor countries.
- Commensurate new funds and other resources made available by industrialised countries for poor country adaptation, bearing in mind that rich-country subsidies to their domestic, fossil-fuel industries stood at \$73 billion per year in the late 1990s.
- Effective and efficient arrangements to respond to the increasing burden of climate-related disaster relief.
- Development models based on risk reduction and incorporating community-driven coping strategies in adaptation and disaster preparedness.

The Working Group is currently collating opinions on, and practical examples of, alternative development models that are capable of meeting these priorities in a carbon constrained world.

Virtuous circles

Throughout this report a number of opportunities for new approaches based on virtuous circles are identified. Social, economic and environmental objectives need to be pursued coherently, so that the wax of one agenda is not the wane of the other. Across the different areas looked at in this report – such as energy, health and transport – there are opportunities for virtuous circles that deliver positive, self-reinforcing results.

A policy which only subsidised energy use, for example, might help to alleviate fuel poverty but it would only exacerbate climate change; alternatively, using a simple price mechanism to tackle climate change by restraining the growth of energy consumption would result in millions more struggling to pay their energy bills.

Policies that promote virtuous circles can also bring additional social benefits. Improving insulation in homes, for example, is one way to lower CO₂ emissions and relieve the burden of fuel poverty at the same. On top of this, if the local workforce and local materials are used to make the necessary upgrades, local economic gains can be generated. Community energy schemes are one more example of a way to provide wide-ranging and coordinated social, economic and environmental gains.

Virtuous circles are also crucial to establishing health-promoting, low-carbon societies. In a low-carbon future, we will use more of our own human effort, prompting those of us living in rich industrialised societies to get much more exercise in our everyday lives. This in turn will help reverse the obesity trends of industrialised societies. The psychological health benefits of exercise are also substantial and increasing the entire population's exercise levels will lower the incidence of arterial disease, for example.

Cycling is a further example of a personal virtuous circle, giving low-cost mobility and improving health without any noxious environmental effects. Another virtuous circle with regard to cycling is the 'demonstration effect' – the more cyclists there are on the streets, the more people see cycling as a feasible option and thus more people are encouraged to cycle themselves. There are also systemic benefits; for instance, the fact that cycling reclaims the streets from cars, improving safety whilst encouraging urban planners to make places people- rather than car-friendly. Planning based on walking and cycling improves access to facilities whilst promoting the localisation of activity, which is important to building communities.

It can be seen that virtuous circles are relevant at personal, local, regional, national and global levels. It's the only approach that can successfully tackle the interrelated issues of climate change and poverty.

Energy

Peak oil and gas– the end of cheap energy

'Peak oil' describes a point in the path of the extraction and depletion of conventional oil and other fossil fuels at which world oil production will soon reach a peak, level off and then rapidly decline. Most estimates suggest that we are either at, or very close to this point. At most it is one or two decades away. Peak oil is coupled to climate change and overlaps in terms of time frame. The peaking of the gas supply is predicted to happen only slightly later than the peaking of oil. UK gas fields have already peaked and begun the journey towards decline.

Against a background of rising demand for oil, 'peaking' will result in a major shock to the global economy. Long-distance transport, industrialised food systems, urban and suburban systems and many commodities from cars to plastics are all dependent on abundant, cheap energy. The decline in the availability of oil, gas and later coal, means that unless a systemic transition to a post-carbon society is initiated and planned for now, it is likely to happen without our choosing and with serious consequences for poverty reduction.

Fuel poverty

The average household expenditure on energy is around 3 per cent of income but for households classed as fuel impoverished over 10 per cent of income is spent on energy. Fuel poverty damages the health of those living in cold homes and affects quality of life. The old, children and those who are disabled or have long-term illness are particularly vulnerable. Coping strategies for people in fuel poverty include the rationing of energy and balancing competing priorities; for example, sacrificing heat and warmth for food.

In January 2008, the consumer group Energywatch reported that there were 4.4 million fuel-poor households in the UK, with just over 3 million in England alone. This means that one in six British households are fuel poor and is the highest figure for ten years, despite the Government's target to eradicate the problem by the end of the decade. The causes of fuel poverty are a combination of poor energy efficiency in homes, low incomes and high energy prices. In particular, the UK's housing stock is old and has relatively poor insulation; this is the main reason why the UK has a more serious fuel-poverty problem than other European countries.

Although oil is not directly used to heat homes, the issues of fuel poverty, peak oil and climate change are all closely interrelated and these problems must be addressed together if they are to be solved. Household emissions have grown by more than 5 per cent since 1997 and the number of households in fuel poverty in the UK doubled between 2002 and 2007.⁹ In the UK 2.5 million pensioners – 23 per cent of the pensioner population – live below the poverty line.¹⁰ Forecasts modelled by the Institute for Fiscal Studies in 2006 showed that the levels of pensioner poverty will be much the same in ten years time.

Low-income households are doubly disadvantaged when it comes to energy bills, as they tend to be housed in less-energy-efficient homes and are less likely to have gas central heating. The price differential between customers using different payment methods also disadvantages low-income households. Customers who use prepayment meters for gas and electricity are generally those on low incomes and they pay as much more than those paying by direct debit or online.¹¹

With this in mind, the Government made a commitment not to tax the household use of energy – as it prioritised tackling fuel poverty first. The fear of exacerbating the problem of fuel poverty has thus been a hurdle preventing the Government from acting on climate change. It is vital to promote virtuous circle thinking to prevent the measures

designed to tackle climate change from worsening the problem of fuel poverty and vice versa. Insulation in the home and community energy schemes are examples of the types of integrated solutions which tackle climate change in conjunction with poverty, rather than resorting to inaction or dealing with one agenda at the expense of the other.

There are a number of government grants and schemes to help individuals to insulate their homes, such as the Warm Front Programme, aimed at households on income or disability-related benefits. Not only do programmes such as this help to tackle fuel poverty and reduce emissions, they are also an important method of job creation. Information about the schemes must be widely disseminated, especially to at-risk groups, such as the elderly.

Fuel poverty has risen against a background of extraordinary profits made by power companies in 2007 due to free allocation of emissions permits by the European Emissions Trading Scheme. In January 2008, Ofgem estimated that this free allocation had been worth £9 billion. In addition to this windfall, the energy companies appear to have increased their prices by considerably more than their costs. Gas and electricity customers in 2006 spent as much as 60 per cent more for their energy than in 2003 and nearly one-third of this increase appears to be attributable to improved profit margins, especially in electricity.¹² The Government must protect the interests of customers much more tenaciously with more priority given to safeguarding the interests of low-income customers.

The Meadows Ozone community energy company

Nottingham community power

Different types of community power generation can benefit an area and local residents for the long term, as well as helping to cut greenhouse gas emissions. Currently, one barrier that prevents households from reducing their energy consumption and energy bills is the fact that people in fuel poverty may not be able to afford the up front costs of energy-reducing measures. This leaves people trapped in fuel poverty and means that carbon emissions remain high.

People in the Meadows district of Nottingham had been living on the brink of fuel poverty; domestic energy bills made up 9.3 per cent of net household incomes. The situation was getting worse until a partnership of local groups (including The Meadows Partnership Trust, the Nottingham Energy Trust and National Energy Action) took action to find ways to make energy savings. At the same time as cutting their bills, they also reduced greenhouse gas emissions.

A partnership of local groups and individuals set up Meadows Ozone, a community-owned energy company. A key element of Meadows Ozone offers interest-free 'green loans' to local people so that they can take measures to achieve cheaper energy and reduced CO₂. Energy-reducing appliances like an 'A'-rated fridge, solar water heaters, a new boiler or putting in more loft insulation may make sense in the long run, but for many people without the loan the necessary steps would be unaffordable.

The Meadows Ozone loans often lead to savings on energy bills worth more than

the loan repayment itself. As the loan repayments are made, the loan fund is recycled, enabling more new loans to be made available to more residents. Meadows Ozone is planning to offer all those taking up a 'green loan', an interest rebate in November 2008 to help people in the build-up to Christmas and to discourage defaulting.

The new community company is now also working towards installing a wind turbine in the area. The wind turbine will be managed on behalf of Meadows residents and will produce excess energy to sell back to the National Grid. This will generate carbon savings and financial income, estimated to be around £60,000 profit each year. The money raised will then go towards reducing people's fuel bills.

Meadow Ozone hopes to put in place mechanisms that will ensure social, economic and environmental returns well into the future.

Braunstone solar streets

Generating power and regenerating a community

The installation of solar energy systems was an important part of the regeneration of the 'Six Streets' area, a deprived community in Braunstone on the western edge of Leicester.

Braunstone, an estate of 13,000 people and 5000 homes, qualified as one of the 39, most-deprived areas in the country. The 'Six Streets' area of 250 homes, was in such a badly dilapidated and vandalised state that the City Council had signalled its intention to demolish the area. However, a ballot to determine residents' views on these plans attracted an 80 per cent turnout, with two-thirds of residents saying the houses should be refurbished.

Following negotiations facilitated by Braunstone Community Association (BCA) the stock was transferred from the City Council to Leicester Housing Association (LHA). A £9.5-million comprehensive refurbishment scheme funded by LHA and a New Deal for Communities (NDC) grant was announced in 2003.

BCA was aware of the serious problem of fuel poverty in the area and in partnership with a local environmental charity, Environ (now Groundwork), it raised funds from the Department of Trade and Industry (now BERR – the Department for Business, Enterprise & Regulatory Reform) with complementary NDC funding and money from the Neighbourhood Renewal Fund to cut emissions and help households with their excessive energy bills. They raised enough funds to allow for 50 south-facing homes on the 'Six Streets' to have photovoltaic systems fitted, and training was given to local small building firms to install the systems.

The homes fitted with the photovoltaic systems are now able to convert sunlight to power ordinary electrical equipment, such as household appliances, computers and lighting, thus reducing residents' electricity bills. Carbon emissions have been cut, fossil fuel dependency has been lessened and fuel poverty has been reduced. The community has benefitted from new jobs and training and residents have a new-found sense of pride in their homes, as one said:

'We love our new home – it's warm, bright and beautifully decorated, and has a good-sized garden. It's fantastic!'

The whole scheme was completed in 2005, and the improvements have significantly improved people's quality of life, bringing training and job opportunities to 70 local residents. Indeed, information from LHA and the City Council's Housing Department shows dramatic improvements in rent collection and a rapid reduction in 'turnover' of tenants. There are very few houses empty at any one time and there is now even a waiting list of people wanting to move into the area.

The project, however, has not been problem free. Residents are limited to remaining with the designated electricity supplier, if they wish to continue to take advantage of the scheme. In addition, there was the intention that the value of any surplus electricity returned to the grid would be brought back into the BCA to help fund other projects. For technical reasons, this is proving difficult. Despite some problems along the way, however, Braunstone residents have benefited significantly.

London Borough of Haringey

Tackling fuel poverty

Lack of information may mean that disadvantaged groups do not take up opportunities to have insulation and heating improvements in their homes. Widespread communication is needed to increase uptake of grants and loans and to ensure that all those eligible receive the improvements to which they are entitled. By making these improvements, residents will be able to decrease both their energy bills and their carbon footprints.

In 2006, Haringey Council applied for funding from the Neighbourhood Renewal Fund for a project entitled Tackling fuel poverty, to address the high levels of fuel poverty and deprivation found in the borough. The statistics are bleak: Haringey is the tenth, most-deprived district in England.¹³ In London, Haringey ranks in the top five, most-deprived districts:¹⁴ 9 per cent of household spaces within Haringey do not have central heating¹⁵ and 25,540 households out of 85,281 in fuel poverty.¹⁶

With funding approved, the Council was able to begin a programme to tackle fuel poverty: a process that would also help to reduce emissions. First, a full-time Fuel Poverty Officer was appointed, whose role was to promote the various grant schemes available within the borough. Secondly, an aerial thermographic survey of the borough was undertaken to pinpoint those properties losing the most heat. This meant that specifically tailored information could be sent out.

Data from the survey were also processed and placed on the internet, enabling anyone to log on and discover how much heat their property (or that of a neighbour) was losing on the night of the survey. The publication of the data made Haringey Council the first English council to undertake such an exercise and this received publicity in The Times, The Daily Telegraph, The Daily Express and several local newspapers.

Pages on the Council website gave residents information on the grants available to them and also supplied general advice on how to better heat and insulate their homes. Other initiatives work with residents' groups to promote energy efficiency, for example through Home Energy Audit Training, whereby interested residents are trained on how to conduct simple energy audits and disseminate information on making home improvements.

Figure 1 illustrates how successful Haringey Council has been in increasing the take up of Warm Front grants.

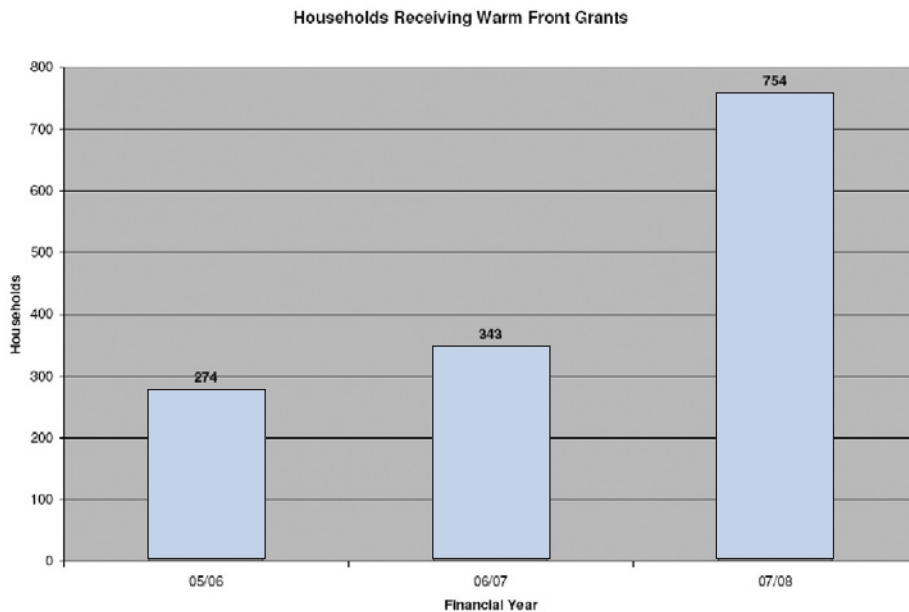


Figure 1: Changes in the number of households receiving warm front grants in Haringey Council between 2005 and 2008

A welfare system for sustainable social justice: a whole-systems approach

The welfare system in the UK tends to be blind to the two underlying operating systems on which it utterly depends. One is the carrying capacity of the planet: the natural economy that is essential to human survival. The other is the 'core' or social economy – the resources of individuals, families and social networks that sustain human society.

Health and social care, education, child care, benefits, housing and all local services depend not just on taxes and professional expertise but also, crucially, on the planet and the core economy. Society, environment and economy are entirely interdependent. Any attempt to improve the quality of life of the poorest or to narrow the gap between rich and poor will founder unless this crucial set of relationships is taken into account.

We must therefore redesign our welfare system so that it values and works with the two operating systems – natural and social – in ways that protect and enhance them both. And it will need a new perspective on the market economy: it will not rely on continuing growth to provide sufficient finance for public services, or on 'market rules' to ensure their efficiency – because markets are less reliable than ever and because unchecked growth puts the planet at risk.

nef (The new economics foundation) has begun to envisage a welfare system in which all three economies – natural, social and monetary – work together for sustainable social justice. The project is at an early stage but here are some opening points for discussion.

- The central aim will be sustainable well-being for all. This means creating the conditions that enable every individual to flourish, physically, socially and psychologically – not just now but in the medium and long term. ‘Flourishing’ is not a luxury for the better-off; it’s about being able to engage in society, to act and do, to fulfil one’s potential. For everyone to have the opportunity to flourish, it will be essential to tackle poverty, powerlessness and insecurity.
- A welfare system that aims for sustainable social justice will give priority to prevention. This includes preventing ill-being by addressing the upstream social and economic determinants of mental and physical health, enhancing people’s capacity to flourish. It includes preventing the waste of human potential by tackling entrenched patterns of unemployment, and preventing damage to the environment, most urgently climate change. Sometimes, the same measures can prevent both ill-being and environmental damage – for example, where health professionals encourage people to walk or cycle, promoting better health through physical exercise at the same time as cutting carbon emissions.
- The system we envisage will value and help to grow the ‘core’ economy – the abundant wealth of human and social resources that are largely neglected by today’s welfare state. These are embedded in the everyday lives of every individual (time, wisdom, experience, energy, knowledge, skills) and in the relationships between them (love, empathy, watchfulness, care, reciprocity, teaching and learning). If public services work in equal partnership with the people they are supposed to serve, they can dramatically increase their resource base, radically transform the way they operate, promote resilience and achieve better outcomes. Instead of ‘providers’ and ‘users’ of services, people will pool different kinds of knowledge and skills, to coproduce sustainable well-being. This approach recognises that every individual has assets that are beyond price, without which human needs cannot be met.
- The imperative of tackling climate change is not a marginal concern for this new welfare system, but a mainstream opportunity. Investment in ‘green collar’ jobs will help unemployed people get into paid work. Higher priority will be given to developing appropriate skills and opportunities so that people who would otherwise be jobless can earn a living, for example by insulating homes, building renewable energy sources, and growing the green technologies that will be essential for a sustainable future.
- There will be fresh thinking about integrating the redistribution of carbon and income. Care must be taken to ensure that carbon-reduction measures not only don’t penalise the poor, but also narrow inequalities. That means looking for ways to align systems for redistributing income (tax and benefits) with new systems for reducing carbon emissions (whether by rationing, budgeting, trading or taxing). For example, incentives to enter paid employment could be aligned with incentives to cut emissions, backed up by support to enable people to do so, and with opportunities to work in the ‘green economy’. And payments to pensioners might be adjusted to enable them to save energy, rather than simply pay for more fuel.
- Last but not least, public services will be sustainable. The vast resources of organisations that ‘provide’ public services – hospitals, schools, town halls, prisons and all the institutions of the state – will lead by example. They will embody the principles of sustainable development by engaging people locally in planning, designing and delivering services, focusing on preventing ill-being and helping people to flourish, promoting active travel and public transport, encouraging exercise and healthy eating, improving and encouraging the use of green spaces, promoting local food production and using renewable materials in building and repairs. By safeguarding the environment, by preventing needs arising and by saving resources through energy efficiency and other means, this approach is the only way to ensure the long-term viability of the services themselves.

Housing

Poor quality housing, poverty and climate change are interwoven problems. A future of uncontrolled climate change will mean heat waves, flooding and unpredictable weather – here as well as abroad – and the most likely to suffer in the UK will be low-income households. People in poverty are at risk as they live, typically, in worse housing; they have the least access to insurance and the fewest resources to cope with the effects of a changing climate. In addition, our homes are responsible for adding greatly to the problem of climate change; emissions from homes must be reduced if catastrophic climate change is to be avoided.

Social and environmental groups can and must find common ground on these issues. One good example of where the social agenda and the environmental agenda complement each other is in the case of reusing furniture.

The planning system will be vital to tackling the problems of climate change, poverty and housing. If the UK is to successfully reduce carbon emissions tomorrow, it is essential that all housing today is designed or retrofitted to zero-carbon standards. The right policies will act to reduce energy costs for tenants, supporting the vulnerable and reducing emissions at the same time. The main recommendations are:

- Invest nationally in retrofitting existing social housing with zero-carbon design.
- Build all new social housing to a high quality and with climate change effects carefully considered.
- Plan and implement climate-proofing developments, to include open spaces that provide cooling during hot weather or accommodate flood water; this can transform local communities by providing local facilities, creating space for walking and cycling, and creating green space in urban areas.

When social and environmental groups work together, positive, sustainable solutions can be found. Reusing furniture is just one good example of complementary social and environmental agendas.

Decent homes for everyone

The existing housing stock needs to be upgraded to achieve efficiency gains and adapt to future climate change; this will be crucial as 70 per cent of homes already built will still be in use by 2050. The Government must provide incentives to homeowners and landlords to improve efficiency for the UK to be able to achieve an 80 per cent reduction in emissions from 1990 levels by 2050.

One place where the Government can make a real impact is with social housing, which represents 13 per cent of the housing stock in the UK. Existing social housing should be retrofitted as rapidly as possible. There are several existing technologies, which need to be measured in terms of cost-effectiveness that can help to reduce carbon emissions.

- Improving insulation.
- Fitting energy-efficient lighting and appliances.
- Stopping draughts.
- Installing an efficient heating system.

Cavity wall insulation currently represents the largest potential carbon saving opportunity. Of the 23 million homes in the UK, it is estimated that 9 million have cavity walls without insulation.¹⁷ Across the whole stock, insulation would give a payback period of about three years.¹⁸ This is a relatively inexpensive measure that makes homes more comfortable, particularly for the elderly, ill or housebound.

Investment into retrofitting the existing housing stock to a high, energy-efficiency standard would be a win-win strategy contributing towards emission reductions, lifting many out of fuel poverty and with the potential to generate jobs and training opportunities. New social housing must be built to the best energy-saving standards to protect vulnerable, at-risk groups; social-housing providers must be held to account in this regard.

Climate-proof developments

New developments should be based around walking, cycling and public transport to prepare the way for a low-carbon future. Moreover, if the UK is to help people in poverty to adapt to the effects of climate change that will be felt in the future, it will have to act now to incorporate adaption measures into planning policy for new urban developments. Sustainable urban drainage systems and green space to counteract heat extremes will be important to help vulnerable groups cope with the future effects of a changing climate.

At times there has been tension between the regeneration and climate change agendas, with local planners disregarding flood advice from the Environment Agency. Despite warnings from the Environment Agency about the dangers of a changing climate, 89 per cent of the Government's proposed housing schemes are to be built in flood-prone areas.¹⁹ This is especially worrying as extreme rainfall events are notoriously difficult to predict and are generally underestimated in current climate models. The unpredictability of what the future holds is far more of an issue for low-income households, as they are more vulnerable with less access to insurance and have fewer resources to fall back on in an emergency. Planning policies at both national and local level must set out the necessary requirements and make sure these standards are met.

Go Carbon Neutral – CIVA

Social housing communities cut carbon and reap the benefits

Social housing makes up around 13 per cent of England's housing stock and consequently has the potential to make a huge contribution to the climate change agenda. Social landlords themselves have an environmental and social responsibility to let energy-efficient properties, but residents also need to be persuaded to change their lifestyles and sustain these changes over time. In addition to cutting emissions, a low-carbon lifestyle can also benefit the community in lots of other ways, from providing health benefits to the opportunity to learn valuable new skills.

The Go Carbon Neutral project finds ways to effectively engage deprived communities in taking up the challenge of reducing emissions. It has been developed by the Centre for Innovation in Voluntary Action (CIVA) with funding from the Wates Foundation and UnLtd.

Knowle West is an estate of 4500 households in the south of Bristol which scores high on indicators of deprivation, ranking in the worst 10 per cent of the country for housing, health, educational attainment and employment. The ecological footprint of the ward is ranked highest in the city. Cranberry Lane in Newham, East London, also ranks highly on indices of deprivation, with 34 per cent claiming a key benefit compared with 15 per cent in England as a whole. Nearly 50 per cent of adults of Cranberry Lane Housing Estate have low qualifications or none at all. Information about the current levels of environmental sustainability on the estate is not available.

For the Go Carbon Neutral project about 100 households from each of these estates have been engaged in a sustained campaign to reduce carbon emissions over an 18-month period ending in February 2009. Ten initiatives are underway which aim to reduce carbon consumption and have been designed and led by residents. The community projects aim to raise awareness and engage local residents to reduce emissions. Many of the initiatives have also had additional health and economic benefits and have helped the residents to develop new skills. The community projects aimed at awareness raising and engaging local residents to reduce emissions. Many also had additional health and economic benefits and helped the residents to develop new skills.

For example, Inns Court, in Knowle West, despite having been redeveloped in the 1990s to improve the quality of life of local people, lacked a greengrocer. Many residents were struggling to source their 'five-a-day' and some of the children never ate fresh fruit or vegetables. Go Carbon Neutral's 'Project Agricola' aims to change this, establishing a shop to bring fresh, locally grown, affordable produce to the area.

The project is starting with a trial market stall at the local community centre.

In Cranberry Lane, a bicycle project enables young people on the estate to practice their cycling skills – whether that be repairing or riding. Cycle mechanics are in high demand, and it's envisaged that after the six-week course some may find employment using their new skills. These projects are showing that reducing carbon can provide added benefits to low-income communities.

Coupling social and environmental benefits

Furniture reuse during the 2007 floods

Linking the social imperative of furniture reuse with the environmental benefits of saving on waste production and the consumption of scarce resources has been a popular conception for many years. The London Community Recycling Network recently proposed a simple calculation that putting a tonne of furniture and appliances to reuse could save 8.7 tonnes of carbon emissions.

In July 2007, Gloucestershire was hit by a flood disaster affecting 4500 homes; nearly 2000 people had to be placed in temporary accommodation. One community-based initiative stepped up to the challenge to try to prevent more goods being thrown away than was absolutely necessary. The Furniture Reuse Project (FRP), working in partnership with the local authorities, was on hand to offer free furniture to people whose homes and possessions were ruined by the floods of 20 July.

Operating out of an old supermarket warehouse on the outskirts of Tewkesbury, the organisation supplied a wide range of furniture, equipment and household goods to help get families back on their feet. Replacing furniture lost in the floods was effectively dealt with by householders phoning in with their requests for items ranging from fridges and sofas to lamps and tables. Two vans and crews made essential deliveries.

The project also salvaged partially damaged furniture which could be dried and used again rather than scrapped and replaced. Residents were grateful for the opportunity to move their goods to a dry place for storage and this helped to reduce the carbon footprint of the flood replacements. The FRP team also played a key role in the distribution of 1000 litres of drinking water.

Trinity Homeless Projects

Matching reuse with poverty/enabling people to make a home

A fair society shares its resources with those most in need. At the moment, 1.9 million tonnes of furniture and household effects are estimated to be thrown into landfill each year, much of which could still be used. Added to the loss of good furniture to the waste stream and the impact on global warming this is also a lost opportunity to assist those in poverty – individuals and families in our communities who cannot afford to furnish their homes.

Trinity Homeless Projects, based in Uxbridge, runs a furniture reuse service that works to ensure that good furniture from across the borough is not thrown away. These rescued items are then offered for sale to raise funds for the hostel work and of course to assist hostel residents with their move to independent living.

Reused furniture is the best choice for the environment and organisations like Trinity are also able to offer training and volunteering opportunities to its hostel residents as a worthwhile and meaningful occupation during the day. There are a variety of interesting jobs on the furniture project and skills learnt are transferable to the labour market. Supported Employment gives full-time jobs at a living wage and provides much-needed work references.

Essa Ali, a resident at Trinity says:

'I have been working for Trinity as a trainee administrator. My job consists of providing admin support to the administration department. I'm also working towards NVQ level 2 in Business and Administration. During my short time here I have learned a vast amount of work skills: what's involved in my job description, but also other essential skills in prioritising my work-load, interacting with colleagues, clients, suppliers and organisations.'

Trinity is one of 400 reuse organisations across the UK. Collectively two million items are collected for reuse each year by the network; 700,000 low-income households get the benefit of affordable furniture to improve their quality of life and the sector supports 10,000 volunteers who are there to gain work experience and enhance their prospects of paid employment.

One of the added strengths of Trinity's Supported Housing is that the facility provides support for residents in between leaving the hostels and moving into independent accommodation. Providing furniture as part of a package of support is a key element in finding a long-term solution to homelessness. People come to Trinity wanting a place to live and they leave able to make a home.

Poverty, women and climate change in the UK

All the vulnerabilities with regard to poverty apply more to women than to men. That means that if climate change is a disproportionate threat to people in poverty, it is also a greater threat to women. In the UK – as elsewhere – women are less well paid than men, are more likely to be single parents and are more likely to be in poverty in old age. In the UK, statistics show that one million more women live in poverty than men²⁰ and 19.2 per cent of single pensioner households and 16.8 per cent of lone parent households are facing energy poverty – the majority of these households are women.²¹

This relative disadvantage means that women in general have lower carbon footprints than men but they also have fewer options for reducing their emissions. Women are also more vulnerable to the adverse impacts of climate change, such as extreme weather events. For example, in the heat wave in Europe in 2003, the excess mortality for women was 75 per cent higher than that for men at all ages.²² Similarly, the excess mortality (caused by heat and associated pollution) in the 1995 heat wave in Greater London was also more pronounced for women and in ways that cannot be entirely accounted for by age.²³

Other impacts arise from women's family responsibilities. In the UK today, according to the Office of National Statistics women do double the amount of housework that men do.²⁴ In response to climate change and other environmental problems, households are expected to do more waste recycling, or more environmentally sensitive purchasing, for example. This added burden is likely to fall more on women than men, to add to the existing double or triple burden (paid work, care of dependents, housework) already felt, particularly by women in low-income households.

After an extreme weather event, these added responsibilities are compounded. For example, it tends to be women who deal with the impacts of flooding: caring for children when schools are closed; caring for vulnerable relatives; and putting homes and families back together again once the waters have receded. All these tasks are made even more difficult where there is a lack of economic resources.

As the Stern Review pointed out, it is crucial to involve women in developing gender-aware mitigation and adaptation strategies.²⁵ Unfortunately, this issue is not sufficiently discussed. Women are significantly under-represented in environmental decision-making in government, industry and the scientific community and their role as educators and 'change agents' still goes unacknowledged.

Livelihoods

A just transition

Reducing the risk of serious climate change will alter the shape of the UK economy. But as policy to tackle climate change develops, the question needs asking: what impact will it have on social justice, jobs and livelihoods? And how can we ensure that the costs of change are fairly distributed, and not heaped upon ordinary workers and the poorest members of society?

Virtually all sectors of the economy will be affected in some way by the transition to a low-carbon economy, with implications for the nature, location and security of jobs. Previous periods of economic restructuring have often happened in a chaotic fashion leaving ordinary workers, their families and communities, bearing the brunt. Indeed, many individuals and communities in the UK are still paying the price for the rapid shift away from industrial production over the last 30 years.

Re-structuring needs to be done in a way that is sensitive to all workers but particularly low-income workers, who are the most vulnerable to food or fuel price shocks. Green taxes must be carefully designed to ensure that they are progressive. Climate change policies must be equitable and prevent the burden of climate change falling unfairly on low-income workers and their families.

The trade union movement and others have argued for a just transition to a low-carbon economy. The concept of just transition recognises that support for environmental policies are conditional on a fair distribution of the costs and benefits of those policies across the economy, and on the creation of opportunities for active involvement by those affected in determining the future well-being of themselves and their families. Just transition recognises that the impacts of climate change are disproportionately borne by the poorest in society – those who have done the least to contribute to climate change. It provides a framework for addressing this injustice, but also for ensuring fairness for all workers who face churn in the jobs market, and taking advantage of the many opportunities presented by greening our economy.

The TUC's publication, *A green and fair future – for a just transition to a low carbon economy*, argues that we must start planning now so that social justice is built into climate change policy and the inevitable transformation that will flow from it.²⁶ This approach centres on consultation, training, innovation and financial support for green enterprise and growth, planned and co-ordinated at the national level and supported by local level engagement. Just transition means minimising job loss and ensuring that change is not at the expense of decent work with decent terms and conditions. There must be education and training to aid sustainable employment, and flexible transition packages for workers whose jobs may be lost or changed.

Substantial evidence demonstrates that environmental transition happens most effectively when workers are involved. The TUC's Green Workplaces project shows the success that can come from employers and employees working together to set and meet environmental goals. Support for communities is also essential, particularly given the geographical concentration of many energy intensive industries. Regional Development Agencies, local authorities, employers, trade unions and the Department for Communities and Local Government will all have a part to play in planning a co-ordinated response. Only through this approach can we ensure a genuinely just transition to a low-carbon economy.

Green collar jobs and the Green New Deal

In the decades to come, global markets will be transformed by carbon trading and environmental regulation. The economy will have to shift from being narrowly focused on financial services and consumer services to being an engine of transformation. Energy-intensive industries face particular challenges in adapting to low-carbon production. But the shift to a low-carbon economy provides opportunities for hundreds of thousands of 'green collar' jobs – both for skilled and unskilled workers.

As the recent major International Trade Union Confederation, United Nations Environment Programme, International Labour Organisation and the International Organisation of Employers report on green jobs clearly sets out, central to the definition of green jobs is the fact that they must be decent jobs; 'which offer adequate wages, safe working conditions, job security, reasonable career prospects, and worker rights'.²⁷ A job that condemns workers to poverty or is exploitative or dangerous is not a genuine green job.

To bring about a low-carbon future, there will be a need for a training, education, research and development programme for the 'carbon army' of new workers needed. The UK has so far not capitalised on green collar jobs as much as it could and it needs to learn from the example of Germany, where 250,000 people are already employed in renewables alone.

However, the good news is that thousands of new and existing businesses and services will benefit from this transition and a large increase in tax revenue will be generated for the Government from this new economic activity. A wide range of expertise will be needed offering opportunities for all. This could help provide the stimulus that the economy needs following the financial crisis of recent months and the looming recession and enable a new economy to be modelled around the transition to a low-carbon future. Some have dubbed this vision, the 'Green New Deal', referring to Franklin D. Roosevelt's programme launched in the wake of the Great Crash of 1929.²⁸ In July 2008, the Green New Deal Group published their modernised version, a 'Green New Deal' designed to power a renewables revolution, create thousands of green-collar jobs and rein in the distorting power of the finance sector while making more low-cost capital available for pressing priorities.

Green collar – green skills

Matching employment needs with training

The TEN and Just Cities programmes have been operating since 2006, aiming to provide opportunities training and work placements within the environment sector. Both projects are part of the Green Collar – Green Skills programme being developed by Capacity Global.

The Just Cities programme has been raising awareness amongst young people aged between 14 and 18 from London, Amsterdam, Paris and Berlin about environmental issues and the career opportunities. As a result, some of the young people have themselves set up a pan-European social enterprise to provide young people with opportunities to take part in environmental consultations. The enterprise will also provide much-needed jobs and work experience to young people from low-income households across Europe.



Above: Just Cities Berlin-Campaign workshop 2007
Below: Just Cities fieldwork in Clichy-Sous-Bois, Paris. Samir and Amir
Photograph: Capacity Global's environmental justice projects.

The TEN programme has provided work placements and training for graduates and non-graduates from diverse backgrounds within the environmental sector to ensure that the green transition economy provides job and economic opportunities for everyone.



Health

Unequal access to resources, reflected in the income gap between the rich and poor, presents a major problem for the health of billions globally. Climate change is likewise an evolving problem for our health. The two are interrelated – with income gaps further widened by climate change. This vicious circle constitutes the greatest threat to human health over the next century.

Our health is determined by a number of factors. The way society is structured frames the choices and lifestyles available to people and the environment in which genes are nurtured and so shapes human health. The Government thus plays an influential role in creating health-promoting societies. The social, environmental and economic building blocks needed to construct healthy societies are well known, as is the way in which they must be arranged.

Basic requirements of clean air, water, and adequate food and shelter are assembled to enable access to education, security, health care, rewarding and rewarded work, and a sense of participatory and long-lasting control of life-shaping events, including fertility. The healthiest societies are those in which building blocks are assembled so that access to resources is more rather than less equal – the gap between individuals with access to the most resources and those with access to the least is narrow – and in which these resources are delivered within environmental limits. Policy to build health-promoting societies both now and in the future must therefore create and assemble the necessary resources within defined environmental limits, and ensure that the gap between the haves and the have-nots is narrow.

Health, climate change and poverty

The Department of Health identifies a number of negative health effects that are likely to worsen with climate change. Those in poverty are most vulnerable to all these effects, which include:

- Heat-related deaths will increase and possibly by around 2800 cases per year.
- Cases of food poisoning are likely to increase significantly, by approximately 10,000 cases per year in the UK.
- Insect-related problems, such as diarrhoeal diseases spread by flies, will increase.
- Skin cancer cases are likely to increase by perhaps 5000 per year and cataracts cases by 2000 per year in the UK by 2050.
- Injuries, infectious diseases, anxiety and depression are all linked to serious flooding and these are likely to increase.
- Respiratory allergies will increase due to increased mould growth in housing caused by more humid winters.

The negative impacts of climate change on human health are of particular significance to those living in poverty. The lowest income bands already experience a higher burden of illness due to a number of factors including: low wages, occupational stress, unemployment, inadequate housing, poor nutrition, poor education, limited access to health care, transport and shops, lack of recreation facilities, and exposure to air pollution. This leaves the poorest in society more exposed to the negative effects of climate change on health.

Simply living in a deprived area can lead to an increased risk of poor health. For example, one study in Scotland found that mortality rates for those under 75 years of age in the 10 per cent most-deprived areas are three times as high as those in the 10 per cent least-deprived areas, even when individual characteristics were taken into consideration.²⁹ Furthermore, the study found that 30 per cent of the population in the 10 per cent most-deprived areas suffer from long-term limiting illness compared to 12 per cent in the 10 per cent least-deprived areas. The further down the social ladder someone goes, the higher stress levels are and the less control they have.³⁰ This means they are more likely to be susceptible to the additional stress and anxiety caused by profound environmental changes.

Public buildings Royal College of Nursing

Nurses lead the way to a low-carbon NHS

The NHS is the largest public-sector contributor to climate change in England. It is Europe's largest employer and has a portfolio of buildings that includes both large general hospitals and smaller local health centres. There is huge potential for the NHS to move towards a sustainable buildings programme through new building projects as well as the modernisation and refurbishment of existing centres. Adopting a long-term sustainable approach to its building programme would enable the NHS to not only reduce its emissions and save money but also to create positive health-enhancing environments that have a major impact on the care environment of patients and service users. Good design is synonymous with sustainable design, addressing social equity and inclusion.

The NHS not only has a duty to provide care for patients, but also to promote health and health-enhancing activity. A commitment to healthy sustainable buildings and creating natural spaces would provide access to open space and opportunities for exercise for patients and staff alike. This can encourage responsibility for personal health and go some way to reducing the rising incidence of life style diseases, such as obesity and heart disease.

Nurses have the potential to be influential in the decision-making process relating to their working environment as well as to take action to reduce their organisation's carbon footprint by taking the lead in small improvements and encouraging others to change their behaviour. Switching off lights and computer terminals can reduce energy costs by thousands of pounds; displaying information about why energy consumption is important and disposing of waste correctly are just a few examples of effective action.

In one NHS Trust in Liverpool, a nurse has taken on the role of environment champion in her team. She has provided input on all environmental issues at the Trust and liaises regularly with the Environment Agency and the Carbon Trust. A new hospital is being built in the centre of a neighbouring park while the old site is being demolished and regenerated into parkland. One of her tasks has been to influence the future design of the hospital and to ensure that it is an environmentally friendly building. Attending sustainable development meetings has enabled her to ensure that the new hospital has a low impact on the environment which, it is hoped will help to encourage patients and visitors to adopt healthier lifestyles. The new building will incorporate flexible layouts that meet the needs of staff and patients/service users and good design that optimises efficiency, comfort and therapeutic care.

The Teddy Bear Project

Learning between the generations

Between 2004 and 2007, the pan-European Teddy Bear Project brought hundreds of older people, who had lived through the Second World War, together with children to share reminiscences and practical knowledge about how to live in a world of limited material resources. Different generations were able to share invaluable knowledge about how to cope in a low-carbon future. This project had important social implications, too. It empowered older people who had been living in sheltered accommodation or supported residential settings and had suffered from isolation.

Teddy Bear worked with cohorts of school children in England, Finland and Italy. They gathered knowledge on the kinds of skills and information that will be needed to survive in a post-carbon world. In England the work was led by the Educational Centres Association in partnership with Herefordshire WRVS, local authorities, schools and other locally based organisations. Local pastoral support agencies, and extended schools partnerships were also involved in the programme.

Older people shared experiences of day-to-day life during the war and the subsequent period of rationing; in particular, the practical implications of life in a war economy such as the need for self-sufficiency, recycling and reuse and local food growing. It built upon the requirements of the National Curriculum and utilised reminiscences from which to develop practical joint projects involving the children and older people, such as gardening, cooking and other skills.

The project also recorded a number of added social benefits which included:

- Improving social cohesion between generations.
- Improving the social links for older people who had previously experienced isolation within their communities.
- Addressing issues of lack of personal direction, ill health and poor self esteem amongst the older participants and reducing their reliance on social services.
- Empowering older people to take a more active role in local affairs.

The programme supported the teachers, care workers and adult learning professionals through group meetings and helped them to use the experiences to support their own work, for instance by enabling care workers to see their clients as 'whole people' with an active past and useful, relevant life experiences. The pan-European nature of the project enabled learning from personal histories between countries and revealed the diversity of experiences, culture and response to these issues across Europe.

Intergenerational education

The effects of unchecked climate change will be as devastating as those of war, with refugees, disease, political instability and deaths on a vast, almost unimaginable scale. In April 2007, Foreign Secretary Margaret Beckett gave a lecture invoking one of the most iconic and resonant political phrases of the last century. Referring to World War II, she said:

*'Climate change is the gathering storm of our generation. And the implications— should we fail to act —could be no less dire: and perhaps even more so.'*³¹

Action is imperative; the UK must rapidly transition to a low-carbon economy to avoid catastrophic effects. To achieve this, it will be wise to learn lessons from those who have lived through periods of constraint. The most obvious group to look to is the older generations and those who lived through the Second World War. There are many lessons to be learnt: for example, the dig for victory campaign or focus on low consumption leisure during the wartime period.

Sharing knowledge between generations serves an important function for community building. Valuing the input of older people is important not only to help us deal with climate change, but also to improve intergenerational respect and cohesion.

Climate change is also a matter of equity and the consideration of future generations. Intergenerational fairness is a primary consideration in trying to prevent environmental damage and climate change. It is wrong to impoverish future generations and destroy the Earth's bounty through disregard, greed and short-sightedness. We need to learn the lessons of the older generations to enable us to achieve intergenerational equity and pass on a world of value to future generations.

Brent climate change strategy

Community education works

Brent Council commissioned AEA, an environmental consultancy, to develop a climate change strategy for the borough to address the borough's potential to reduce emissions as well as adapt to the impacts of climate change.

Brent is a vibrant borough with a wide variety of ethnic, religious and linguistic communities. As well as nationally significant areas of commercial development, which include Europe's largest industrial estate and the world-famous Wembley stadium, Brent also has pockets of intense deprivation and a population that is highly vulnerable to climate change. Part of this vulnerability stems from the social isolation of many individuals and communities.

AEA has taken an innovative approach to the design of the strategy –instead of focusing exclusively on the Council as the only agent in Brent, the strategy is designed to engage all key stakeholders, including the private sector, public services, community groups and residents in the delivery of mitigation and especially adaptation measures.

The strategy has been designed after consultation with a wide range of stakeholders in the borough. The public has been consulted at a number of outdoor events held over the summer and via an online consultation questionnaire. Public service, private sector and council stakeholders have been involved via online consultation, various presentations and a stakeholders' workshop.

One of the most distinctive features in the draft strategy is the Community Champions initiative. AEA has proposed that information and practical advice on adaptation is communicated via existing community groups, such as residents' associations, faith groups, and volunteer groups. Under the proposal, key individuals from within each community would be provided with basic training in climate impacts and adaptation, for example on the impacts of heat stress in urban heat islands and risk-mitigation measures. This training would include the provision of easy-to-use communication materials in the language of the community in question. These 'community champions' would then act as trusted messengers to promote more sustainable practices within their own communities –helping to reduce the vulnerability of the most vulnerable groups in Brent.

In other ways, the strategy aims to put the people of Brent at the centre and to use existing networks and resources to decrease the contribution that Brent makes to causing climate change and especially to increase the capacity of its people and communities to adapt to present and future climate impacts. The strategy is in its final stages of consultation before being handed over to the Leadership of Brent to be implemented.

Growing older, getting greener

Two enormous – but utterly predictable – changes will be rolling across the global landscape in the coming decades: the ageing of our populations and the effects of climate change. Whatever other political and social policy choices command our attention, these two issues will be in constant attendance, and will demand to be addressed by strategies which are mutually compatible. That is the simple case for a widely spread and collaborative approach to policy formulation.

Solving the climate change crisis at the same time as tackling the problem of a rising number of pensioners, many of whom are living in poverty, necessitates integrated thinking. We need policies which are ‘age-proof’ and ‘energy-proof’ across wide swathes of our social and environmental infrastructure. We will need them:

- **In housing** – not just new-build, but throughout the existing housing stock. Half the growth in housing demand identified by the Barker Review³² is attributable to the growth of our older population, and if older people are to live the successful and independent lives to which we all aspire, their houses must be warm and well-designed, use energy efficiently and sparingly and include features which enable an older and possibly disabled person to function adequately. This calls for a massive, comprehensive and methodical capital upgrade of our entire housing stock.
- **In the environment** – to create places which are safe and attractive and encourage people to get out and about. This has implications for policing, open spaces, street-lighting and, if we are to enthruse older people to walk around, pavement maintenance, public seating and public toilets. Many parents of young children might cheer these changes, too. Public transport and traffic management must also be looked at through this new lens.
- **In neighbourhoods** – so that we create sustainable and locally accessible services which support local communities. The classic example of what not to do is the current post office rationalisation, where in the name of efficiency, we apply a purely business-case analysis to one element of our community fabric and ignore the consequences of people travelling further, the effect on local convenience stores, the issue of accessing money and the value of a local social network. Both public and private services provision need to work together as part of smarter neighbourhood planning.

The growth of our older population is occurring on two fronts: not only is the large baby-boomer generation entering retirement, but the very old are living longer, too. Cleverer ways of getting messages about energy consumption and health issues to retired people who may be more isolated and harder to reach are needed.

Most older people want to pass on something useful and positive to their children and grandchildren. With a bit of help they can pass on a planet which is fit to live on. That goal will take a lot of cross-disciplinary work but is worth trying to reach.

Food

The world food system is one of extremes and contradictions. Today over a billion people worldwide are obese, while at the same time nearly another billion go hungry. Our food and farming system is fostering ill health, damaging the planet and creating low-wage and often hazardous jobs.

Poor people in poor countries are likely to suffer under-nutrition and not have enough of the right kind of nutritious food. Poor people in rich countries are at risk of a different type of malnutrition; too much of the wrong kind of calorie-dense but nutrient-poor food. Both types of unhealthy diets lead to a range of crippling and often deadly diseases. In the UK these will include heart disease and stroke, some cancers and diabetes.

Agriculture and food production also makes a massive contribution to climate change and, worldwide, are responsible for between 20 and 30 per cent of global greenhouse gas emissions. At the same time some food and farming industries – including the seafood industry – are polluting and/or over-exploiting the natural resources we will need to produce food in the future; air, water, soil and biodiversity. Finally, jobs in the food and farming industry are often low status, low paid and sometimes even dangerous.

In 2007, and the first half of 2008, global food prices rose sharply. These food-price rises have been especially difficult for low-income groups in the UK who often cannot afford to buy sufficient healthy food – let alone food produced to high environmental standards – to feed themselves and their families.

Although, at the time of writing, food prices are falling again in the UK, the long-term trend will probably be up. This is likely to be the case for three reasons. First, oil is fundamental to our food and farming system. Fossil fuels, which are running out, are needed at every stage – from the farm machinery, through processing, storage, and transport right up to cooking it in our homes. Using those fossil fuels is also creating the climate change that is causing more severe droughts and floods which, alongside the human tragedies they cause, also affect our food supplies. The problems of peak oil and climate change spell disaster for the current food system.

Second, the world's population is growing and more people are starting to eat a 'Western' diet, which is high in meat and dairy products. This means that we need more food for more people and we also need more feed for the rising numbers of animals. To make matters worse, the ruminant animals – mainly cows and sheep – produce methane, adding to climate-changing emissions.

Third, one of the mechanisms for keeping food prices low at the point of sale has been supermarkets. However, supermarkets are contributing to environmental problems; there are too many goods (some of which are wasted), in too much packaging, travelling too far to get to shelves and the people who buy the food are driving too far to get to out-of-town locations. Supermarkets have also played a part in the decline of British farming – offering low prices and making fickle demands – and in the dwindling of the local high street and local economies.

So what can be done? Food and farming systems already exist that use less energy, produce nutritious food, enhance the environment and generate good jobs. They include organic systems, fair-trade products, and myriad local food-growing and distribution schemes. Food from these systems can sometimes be more expensive than unsustainable products, but that doesn't necessarily make them out of the question for families on low incomes.

Some of the best places to provide food that is good for the planet and people, are in schools, hospitals, care homes and other places where the taxpayer buys the food. Children, older people, those who are ill or in need of care deserve the best quality food. Often, the food served in places such as hospitals or schools, however, is

unappealing, lacking in nutrition, and made from ingredients from sources that have low environmental and labour standards.

The case study from St Andrew's Healthcare Northampton shows how popular local, organic and fairly traded meals can be with both patients and staff. Inspired by examples like these, the Netherlands Government has set a target for all its public procurement – including food – to be 100 per cent sustainable by 2010. The UK Government should match that ambition and turn its current voluntary approach into a mandatory one.

Another way to encourage fair access to good food is to grow your own. Bankside Open Spaces Trust and Cultivating the Future case studies demonstrate that not only can food be grown in surprising urban spaces – helping to green the city – it can also help to grow community spirit, and improve health. The Food Standards Agency for example, has shown that households that grow their own food consume more fruit and vegetables than average.

And supermarkets aren't the only place to buy good value food. The Fruit Barra case study illustrates that local fresh produce delivery schemes can meet local needs at affordable prices. Food skills and job opportunities can also be offered by imaginative community groups, such as the Manor Gardens Centre, as well as creating vibrant local food cultures.

St Andrew's Healthcare, Northampton

Sustainable food for all

St Andrews is the UK's largest mental health charity. Its main Northampton site has several national specialist services for in-patients, set in a glorious 120-acre heritage estate. There are 600 patients and 2500 staff.

A couple of years ago catering was at a very low ebb, a cook-chill system having been introduced a few years earlier. Patients were seeing monotonous menus with little attention being paid to wholesome food or sustainable development. Every effort to improve the food had failed. Chief Executive Dr Philip Sugarman and Head of Hotel Services Graham Walker were inspired by Prince Charles's challenge to hospitals to improve the quality of hospital food. With support from Sustain and the Soil Association, the charity has been able to rise to the challenge.

Consultation and a launch event involved everyone from patients to Board members. Live cookery demos and product sampling were a huge success in generating support for an exciting programme of change. Everyone has worked to use local produce and to prepare food on the wards, involving nurses and patients. Kitchens have been refurbished and local chefs appointed to each service.

By Christmas 2008, St Andrew's is determined to meet its stretching targets:

- Seventy-five per cent of food produced within a 75-mile radius.
- Fifty per cent from Northamptonshire or a 50-mile radius.
- Twenty per cent will be organic and/or ethically traded.

Staff and patients have already noticed the difference. Menus are more varied, tastier and healthier with, for example, monthly themed menus selected by patients. Patients also visit the kitchens, and talk with the chefs and catering staff.

St Andrew's aims to be the national leader in local and organic food in mental health, with food prepared as close to the patients as possible.

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Bankside Open Spaces Trust

Sustainable and self-sufficient

With climate change and resource depletion leading to higher food prices it's arguably small-scale, neighbourhood organisations which will be best placed to promote sustainability and self-sufficiency. Seeding a new belief in the power of communal action is therefore a critical development.

Bankside Open Spaces Trust (BOST) in London is based in an underprivileged area of high-density, relatively run-down social housing near Waterloo Station. BOST has worked with the community to create the Diversity Garden, which provides safe plots for communal vegetable growing, in a setting which also incorporates ponds for wildlife, a seaside-style gravel garden, and specially planted cherry, maple and alder trees. BOST runs gardening groups for families, local schools, minority groups and anyone with an interest in growing plants and produce.

Over the past eight years, BOST has worked with dozens of different resident groups, and numerous local schools, to develop a green vision for Southwark and Lambeth. It provides the knowledge, the expertise, the support, the advice and the training which empowers individuals and communities to develop skills and productive growing spaces, from shared areas to vegetable growing on tower block balconies.

BOST, and the communities with which it works, is also feeding the future. Rhianna, a nine-year-old from a local primary school, worked with classmates in a BOST-promoted after-school gardening club to grow vegetables from seed to harvest in the Diversity Garden said:

'Our home-grown potatoes were the best, and tasting the chillies that we have grown is like tasting the sun.'

BOST is one of a variety of organisations which is re-connecting people with the realities of food production and consumption in their own backyards. There is a growing band of individuals, organisations and community groups turning to innovative self-help, and finding mutually supportive ways which, once the produce is harvested, can lead to trading, bartering and – in some cases – the creation of local garden currencies.

Fruit Barra

An alternative to supermarkets

One reason for the link between poverty and poor diet is the fact that people on lower incomes find it harder to buy affordable food. Transport to and from the supermarket often depends on access to cars; the poor, who have the lowest levels of car ownership, are excluded. This leaves those with the least dependent on smaller and pricier corner shops for everyday supplies.

Brian Power at the Craigend Resource Centre in Inverdale recognised that dependence on small shops presented a further barrier to achieving a healthy diet. It is struggle enough inculcating '5-a-day thinking' and as Power says,

Power's response was to set up a local fruit-and-vegetable delivery service called Fruit

'If there are only three of the five on offer, and they're mouldy and overpriced, it's impossible.'

Barra. Craigend already had a café dedicated to providing cheap healthy food for its users and local people and the café simply increased its wholesale order, and started selling produce through the centre. They additionally offered £1 selections of fruit and vegetables for delivery around the area and developed a service reaching out to local nurseries, schools, day centres and charities.

The project was highly successful. Demand grew faster than the Resource Centre could keep pace with, and even faster than funding could be found. Fruit Barra is still running and it reaches about 150 customers a week. This might seem negligible in the grand scheme of things. However, for those individuals it serves, it is vital; as a signpost to a different kind of future for food culture in an era of quickening climate change, it merits careful consideration.

Manor Gardens Centre

Food that's affordable, healthy and good for the planet

For people in poverty, the fight to survive is all-consuming, anxiety-provoking and exhausting. The own-brand freezer cabinet is the destination of choice for many who seek to feed a family quickly, cheaply and easily. However, pre-packaged meals are often very environmentally unfriendly. This kind of food has a negative impact on the environment, on people's personal health and also on the nation's general well-being.

The shift towards local, pesticide-free, organic fruit and vegetables and humanely farmed meat has begun, but for those on lower incomes the costs are often perceived to be prohibitive.

The Manor Gardens Centre in Islington has enjoyed considerable success in reversing this received wisdom. Its Community Kitchen project works with community groups to promote healthy eating and a healthy lifestyle, and offers training and employment opportunities. Much of its work originates through sustained partnerships, funding or agreements with Primary Care Trusts and social services and the local authority – its remit has been about much more than just food.

The work empowers people with the knowledge and practical skills required to realise a shift towards healthier living and eating. It fosters the understanding that economic disadvantage is no bar to a good diet. The centre's Gardens Café uses local suppliers, fair-trade goods and organic products to create affordable meals which exemplify the project's healthy eating agenda. It also serves as the teaching kitchen, and offers work placements.

By empowering low-income earners to diminish their dependency on cheap, off-the-shelf solutions to everyday eating, and to opt instead for inexpensive, seasonal, home-made menus, Manor Gardens' work feeds into and supports a quickening cultural shift that will be vital to enable a post-carbon economy to emerge.

Women's Environmental Network

Cultivating the future

Women living on low incomes in the UK do not have many ways to cut their carbon footprints. Food is one area where there might be some options, but buying genuinely sustainable food is very difficult. Stretching a low weekly income to organic food is near impossible, particularly if you've got extra mouths to feed as many women do. In the UK more than 90 per cent of lone parents with dependent children are women.

Women's Environmental Network's (WEN's) local food project offers a solution; it has been supporting women's groups to grow their own healthy, fresh and pesticide-free food. It started in the Borough of Tower Hamlets in London's ethnically diverse East End, when WEN was approached by Jagonari Women's Centre for support to secure inner city space to grow traditional Bangladeshi vegetables. WEN found that there was very little help available for these groups, and developed the Cultivating the future project in response.

As the project developed and new groups started, the women involved have realised other benefits: making friends, learning skills, or putting existing ones to good use, and getting some gentle exercise and fresh air into the bargain. The projects are a chance for people to reconnect with nature – quite difficult if you live on a sprawling concrete estate – and literally get back to their roots, growing traditional vegetables from their homelands. Growing non-native foods is one way to make environmentalism more inclusive.

As one participant at the Jagonari Centre put it:

'It's an education centre for women who are usually quite isolated. They can learn keep fit. There is a tradition to grow food; it's a form of liberation.'



Tree Planting

And there are wider benefits for the community: people actually talking to their neighbours and feeling a sense of pride in the place where they live, children discovering that potatoes come from the ground, not as oven chips, and that you can't grow pasta from pasta shapes, as one child tried when asked to bring seeds to a gardening session.

Since then, the project has set up the Taste of a Better Future national network of community food-growing projects, holding popular Culture Kitchen events that allow women from different groups to come together and share their ideas and experiences whilst enjoying the shared fruits of their plots. Recently, Getting to the Roots, a new programme to train volunteers to support new and existing groups has been praised for empowering its participants with skills, knowledge and confidence.

Transport

Transport Injustice

Combating climate change will make it necessary to revolutionise transport in the UK. A post-carbon society will have to rely vastly more on public transport, walking and biking and the car will no longer dominate our towns and villages. Solving the problem presents an opportunity for joined-up thinking between social justice and environmental organisations as public transport infrastructure, cycle paths and walkways can advance equality within society and benefit those in poverty. Investing in public transport presents an opportunity for kick-starting virtuous circles, positively effecting health, communities and the environment.

If the right policies are not introduced, not only will emissions from transport continue to rise, but transport injustice and social exclusion will also rise steeply.

Transport injustices are experienced by millions of people in the UK today. Some are those who cannot afford or struggle to run a car, or those who live in areas blighted by motorway noise. The types of injustices include having unequal access to work and work opportunities; a struggle for money; reduced chance to be active and fit; and a proportionately greater exposure to pollution, road danger and noise. One stark example of transport injustice is the fact that – despite owning the fewest cars – the poorest households in the UK today are the most exposed to death or injury by cars, and this is especially true of children.³³

We have created a ‘must-have-car’ society, which is contributing significantly to the problem of climate change and is adding to the social exclusion of those in poverty. Amongst the poorest fifth of households, those who do own cars spend nearly a quarter of their income on the cost of motoring. This amounts to transport poverty although currently there is no accepted definition of this.³⁴

Disadvantaged households are also more subject to what the Government’s Foresight programme terms an ‘obesogenic environment’. The highest rates of adult obesity are amongst men and women in households in the lowest-fifth according to income. Lack of safe and attractive walking and cycling routes, lack of space to store a bicycle at home or work are a problem, as is the lack of knowledge about how to repair a bicycle or how to cycle safely. Programmes to encourage confidence and incentivise people to walk or cycle are important to reverse the vicious circle of obesogenic environments.

Transport injustice is a multifaceted problem and there are many other determinants of transport poverty than income alone. For example, children are no longer allowed to walk or cycle independently as previous generations did; older people become housebound or dependent on others for lifts once they can no longer drive; and disabled people find much of our streetscape and even much of our public transport is inaccessible.

In a world of climate change, urban planning should not to force anyone into car owning. We need to start planning for a post-carbon society now, and stop locating essential services on the outskirts of towns. Birmingham is an example of a city that has benefitted from good transport links, such as cycle routes. This type of development should be encouraged and there is a need for further and faster development of quality bus services, tram links and integrated public transport systems.

Hackney Community Transport

Low impact community transport

Much of the carbon-emissions-orientated debate over congestion charges, fuel duty, 4x4s, road tolls, hybrids and biofuels is irrelevant to people on low incomes. By necessity, mobility for many of the economically disadvantaged is green because travel by public transport is cheaper. Almost 60 per cent of those in the lowest-fifth according to income have no access to a car, with high proportions of households without access to a car found amongst single pensioners (69 per cent), students (44 per cent) and lone parents (43 per cent).³⁵

The challenge, if carbon is to be reduced, will be to get more and more people out of their cars and using public transport. Moreover, if equality across income groups is to be promoted, public transport needs to be quicker, better and more convenient.

Hackney Community Transport (HCT) has demonstrated that modern, responsive, flexible, neighbourhood public transport, tailored to people's needs, can be delivered, at a price people can afford. What HCT is doing provides a model for lowering carbon emissions around the country.

HCT was founded in 1982 by 13 voluntary groups in Hackney, who wanted to purchase and share a minibus. Twenty-six years later, HCT has 400 staff, 6 depots, 214 vehicles (based in West Yorkshire and East London), and it generates a turnover of over £17 million pa, primarily from public sector contracts (for example, school buses and day centre transport), and a red bus service in London. It sounds like an exceptionally successful, large-scale transport business. It is. But it is also a social enterprise, so commercial profits get ploughed back into projects providing community benefit.

The projects include:

- **Group Transport** – a low-cost accessible minibus service for community and voluntary groups.
- **Scootability** – an award-winning electric scooter home-delivery scheme for those with mobility problems.
- **Door 2 Door** – an individual transport facility for Hackney residents provided by volunteers.
- **PlusBus** – a fixed-route service with the flexibility to drop and pick-up passengers at locations very close to their homes.

Critically, costs are low; average fares are 25 per cent of commercial equivalents. HCT can also offer opportunities for permanent work for local residents. Eric Boake, in his late-20s, with years of joblessness behind him and little apparent hope of a way out, joined HCT as an Intermediate Labour Market (ILM) trainee. The project provided him with temporary paid work, training, and personal development. A few months later, he was offered a full-time position as a minibus driver, and two years on, he received a full Passenger Carrying Vehicle Licence.

This aspect of HCT's work feeds into an agenda which is very much about personal, social and environmental sustainability. 2012 is the London Olympics, underpinned with a promise that these will be the 'green games'. It's fitting testament to HCT's green credentials and principles that it has secured a number of major transport contracts for the event. Many of the measures we need to take to combat climate change are costly, and so policy-makers need to find ways to make them affordable to those on low incomes. In the case of transport, higher-income earners have a lot to learn from the economically disadvantaged and from a community-based social enterprise like HCT.

21st Century Village Project

Rural transport

During 2007, the Rural Community Action Network (RCAN) undertook a project to explore life in the twenty-first century village and in particular how rural communities are responding to the challenges arising from climate change and peak oil. These issues are likely to affect rural communities more than others, and may compound existing issues such as rural poverty, poor transport and access to services.

RCAN is the primary support network for rural community action, helping local people to design their future through parish plans and then to support them to deliver the agreed actions and achieve the priorities which require action by others. The 21st Century Village initiative builds on this approach to address new challenges, harnessing the tradition of community action to deliver sustainable futures for rural communities. Communities will need to plan and act together and make the most of the land assets that surround them and the willingness of rural people to become involved in controlling their own future.

All 38 RCAN members had some involvement in the project ranging from conferences and events to highlight and discuss the issues to the initiation of practical local projects to provide solutions.

- Voluntary Action Cumbria held a conference for over 80 people ranging from academics, elected representatives, officers of authorities and agencies and community activists to explore the issues. The inflationary effects of peak oil were also discussed and how they are likely to impact on social and economic life much more quickly than climate change, driving profound changes with a range of possible scenarios including re-ruralisation as a means of accessing reliable food supplies to ghettoisation with only the rich able to sustain a rural lifestyle dependent upon travel. Working groups at the conference agreed on actions needed to manage the effects of climate change and peak oil, including establishing viable, locally managed arrangements for transport services, and developing new arrangements for the delivery of specialist services, such as health.
- Suffolk ACRE with the local County Council and Chamber of Commerce have developed a county-wide car-share scheme to help overcome problems of limited public transport which leaves residents reliant on car use as an expensive and polluting means of accessing work, shops and services. They estimate that an individual, agreeing to share a lift at least twice a week, could save up to £1000 a year on running a car.

Conclusion

Policies that effectively combat climate change also tackle poverty. Home insulation cuts fuel bills, keeps homes warm, and reduces CO₂ emissions; investment in public transport makes travel affordable for all and cuts air pollution; the move to a low-carbon economy could be a stimulus for new skilled jobs in home insulation and energy efficiency. This report has presented just a few of the many examples of 'virtuous circles' – projects or policies that both reduce poverty and carbon emissions. As this report has shown many projects and policies designed to reduce poverty, also reduce emissions and strengthen community resilience.

If measures like these were adopted more broadly, they could form the basis of a radical and far-reaching government strategy to reduce UK poverty and tackle climate change. It is increasingly clear that tackling climate change and poverty is not a choice: the two must be tackled together. In fact, as many of the innovative projects set out in this report have shown, addressing poverty is the most effective way of ensuring that communities have the resources they need to adapt to climate change. And, unless climate change and poverty are considered together, policies like taxation on fossil fuels could increase inequality and undermine efforts to adapt to climate change.

There is a growing consensus that we have less than a decade to dramatically reduce carbon emissions before we cause potentially irreversible changes to the climate. If we fail, we may no longer be able to maintain a climate that can support stable societies – with potentially disastrous consequences for us all. At a time of rising unemployment and increasing food, financial and energy insecurity, when many are arguing that society cannot afford the "luxury" of protecting the environment, this report shows that now, more than ever, government can – and must – simultaneously create jobs, promote a fair society, and tackle climate change.

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- 1 www.oxfam.org.uk/resources/UKpoverty
- 2 National Statistics, HBAI 1994/5-2006/07, 10 June 2008
- 3 Capacity Global and the Environment Agency (2001) Mapping Common Ground Report. <http://www.capacity.org.uk/resourcecentre/reports.html> [15 December 2008].
- 4 Friends of the Earth (2001) Pollution and poverty: breaking the link (London: Friends of the Earth Policy Research Unit).
- 5 Institute for Public Policy Research (2002) Streets ahead: safe and liveable streets for children (London: IPPR).
- 6 The Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters
- 7 Schwarte S, Adebawale M (2007) Environmental justice and race equality in the European Union (London: Capacity Global).
- 8 Vilatarsana G (2004) The environmental noise exposure of schools around Heathrow (MSc Dissertation).
- 9 BERR (2007), UK Fuel Poverty Strategy Fifth Annual Report; 2007
- 10 National Statistics, HBAI 1994/5-2006/07, 10 June 2008.
- 11 Fuel Poverty Advisory Group <http://www.berr.gov.uk/files/file45365.pdf>
- 12 Fuel Poverty Advisory Group <http://www.berr.gov.uk/files/file45365.pdf>
- 13 In the Office of the Deputy Prime Minister's (ODPM) Indices of Deprivation 2004 (ID 2004), as measured by the Average of Super Output Area (SOA) Ranks and Extent measures (London: ODPM).
- 14 Indices of Deprivation 2004 (2004) (London: ODPM).
- 15 2001 Census, Dataset Code UV60.
- 16 CSE Website Fuel Poverty Indicator
- 17 Energy Saving Trust www.energysavingtrust.org.uk
- 18 Department for Communities and Local Government (2006) Review of sustainability of existing buildings: the energy efficiency of dwellings, initial analysis (London: DCLG). <http://www.communities.gov.uk/publications/planningandbuilding/reviewsustainability>
- 19 Pitt M (2008) The Pitt review: lessons learned from the 2007 floods (London: Cabinet Office). <http://archive.cabinetoffice.gov.uk/pittreview/thepittreview.html>
- 20 DWP (2006) Households below average income, Department for Work and Pensions, 2005/06 TPP, quoted in WEN and WI (2005) Women's manifesto on climate change (London: WEN/WI).
- 21 UN Economic and Social Council (2006) Engendering the energy and climate change debate TP18PT BBC, quoted in WEN and WI (2005) Women's manifesto on climate change (London: WEN/WI).
- 22 Fouillet A, Rey G, Jouglu E, Frayssinet P, Bessemoulin P and Hémon D (2007) 'A predictive model relating daily fluctuations in summer temperatures and mortality rates' BMC Public Health 2007 7: doi:10.1186/1471-2458-7-114
- 23 Rooney C, McMichael A, Kovats R and Coleman M (1998) 'Excess mortality in England and Wales, and in Greater London, during the 1995 heatwave' Journal of Epidemiology and Community Health 52: 482-486.
- 24 ONS (2006) 2005 Time Use Survey (London: Office for National Statistics).
- 25 Stern N (2008) The Stern review on the economics of climate change (Cambridge: Cambridge University Press).
- 26 Trade Union Congress (2008) A green and fair future – for a just transition to a low carbon economy (London: TUC) <http://www.tuc.org.uk/publications/viewPub.cfm?frmPubID=549>
- 27 International Trade Union Confederation, United Nations Environment Programme, International Labour Organisation and the International Organisation of Employers (date) Green Jobs: towards decent work in a sustainable, low-carbon world (Nairobi: UNON). http://www.unep.org/labour_environment/PDFs/Greenjobs/UNEP-%20Green-JobsE-Book%20pi-xx-Preliminary-%20pages.pdf
- 28 Simms A, Pettifor A, Lucas C, Secrett C, Hines C, Leggett J, Elliott L, Murphy R, Juniper T (2008) A green new deal: joined-up policies to solve the triple crunch of the credit crisis, climate change, and high oil prices (London: nef – on behalf of the Green New Deal group).
- 29 Hart C, Ecob R and Smith G (1997) 'People, places and coronary heart disease risk factors: A multilevel analysis of the Scottish Heart Health Service archive' Social Science and Medicine 45(10): 893-902.
- 30 Marmot M (2006) 'Health in an unequal world', The Lancet, 368(9552): 2081-2094.
- 31 Beckett M (2007), Annual Winston Churchill Memorial Lecture, 16 April 2007, Climate change- the gathering storm (New York: British American Business Inc.).
- 32 Barker K (2004) Delivering stability: securing our future housing needs (London: HM Treasury). http://www.hm-treasury.gov.uk/press_barker_04.htm
- 33 Taylor I, Sloman L (2008) Towards transport justice: transport and social justice in an oil scarce future (Bristol: Sustrans).
- 34 Social Exclusion Unit (2003) Making the connections: final report on transport and social exclusion (London: SEU; p. 3)
- 35 Office of National Statistics (2004) Focus on social inequalities, London: The Stationary Office.



Supporting Organisations

(The Roundtable on Climate Change and Poverty in the UK)



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The Roundtable would also like to thank the following organisations for their contributions to this report: Sustrans, TUC, UNISON, The Community Development Foundation, Help the Aged and the NHS Confederation.

This report presents the concerns and observations of a wide range of organisations about the impact of climate change on the most vulnerable members of society. The broad platform is one of shared concern. Specific policy recommendations, though, remain those of the individual organisations operating in their particular field of competence.

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Registered charity number 1055254

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ISBN: 978 - 1-904882 - 51 -0