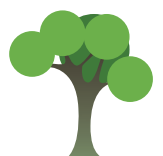


Economic Development and Climate Change:

Bringing these agendas together to stimulate a 'green new deal'?

This fourth Great Brief focuses on the apparent contradiction between economic development and the growing issue of climate change and explores how these two policy agendas can be progressed together, rather than in parallel. In particular, it details an overview of the challenge of climate change; debates surrounding the relationship between economic development and the climate change agenda; and finally, will outline what local authorities can do to respond to this agenda. Suggestions made in this section include:

- Recognising the link between economic growth and climate change;
- Committing to tackling climate change;
- Leading the way in terms of reducing emissions;
- Realise the potential of procurement; and
- Work with partners to explore project options.



The challenges of climate change: global and local

Climate change refers to any long-term significant change in global patterns of average weather over a period of time. Since 1900, the average temperature on the planet has increased by 0.74 degrees Celsius and the UK's sea level has risen by approximately 10 centimetres. Further global rises are expected, as well as more extreme weather events like flooding and drought.

The causes of climate change have been widely debated, with some arguing that the change in climate has been brought about by natural causes, such as the way the ocean and the atmosphere interact; changes in the earth's orbit; and changes in energy received from the sun. However, it has been forcefully argued that human activity and, in particular global economic growth, has at the very least aggravated this environmental trend. Emissions of harmful gases, such as carbon dioxide, are believed to have caused the 'greenhouse effect' with the result of artificially 'warming-up' the environment. The main causes of the increase in greenhouse houses are believed to be: deforestation, as trees absorb carbon dioxide; the burning of fossil fuels, such as coal, gas and oil; and a growing global population that has resulting in an increased demand for energy, livestock and food. In the UK the largest contributor to climate change is believed to be from fuel to generate energy followed by transport emissions.

Global

A global change in climate is predicted to have a number of harmful effects internationally. A global rise in temperature is expected, with predictions that global temperatures could rise between 1.1 and 6.4 degrees above 1980-1999 levels by the end of the 21st century. This change in temperature is likely to have a detrimental impact on agriculture, crop-yields, and consequently the provision of food, whilst eco-systems are also likely to be damaged and therefore threatening the existence of many plants and animal species.

Local

Climate change is also predicted to have a number of negative impacts at the national, regional and local level here in the UK. For example, it is anticipated that the UK will see a marked increase in flooding, risking both the safety of communities and also incurring significant financial costs to home owners and businesses. Looking more closely at the regional level the Yorkshire and The Humber Adaptation Study¹ was released in 2009. The following key changes for the region were identified:

¹See: http://www.ukcip.org.uk/index.php?option=com_content&task=view&id=196&Itemid=318



- Annual average daily temperatures rising, by almost 2°C;
- Extreme hot temperatures will increase, with summer temperatures more regularly reaching 34°C;
- A reduction in annual rainfall of up to 6%, although by less in upland areas;
- Greater seasonality of rainfall, with increases in winter combined with significant reductions in summer;
- In northern and upland areas an increase in the number of extreme rainfall events;
- Dry spells (over ten consecutive days without rain) are expected to increase in number;
- Significant reductions in the number of days of frost and snow;
- Marginal increases in winter average wind speeds, although summer and autumn speeds reduce slightly; and
- Sea levels will rise by around 0.35 metres.

Policy responses to climate change

As noted above, changes to climates will have a number of detrimental impacts both globally and locally. Calls from the environmental lobby have long urged us to look after our environment and live sustainably, reducing resource exploitation and pollution. In the 20th century this was concentrated particularly within the academic world, see for example the work of James Lovelock. However, it was not until the publication of the Brundtland Report in 1987 by the United Nations that the issue really started to gather any large scale popular support or register in government policy, and even then this was still only a small section of international society that was really aware of many of the issues. That said, the environmental argument has slowly gathered mainstream support over the last two decades and the emergence of strong evidence for climate change has increased the sense of urgency with which responses to this challenge have come. Over time, the voices of academics and environmental campaigners have been joined by government policy-makers, local policy-makers, businesses and citizens. A wealth of environment-focused policy developments have occurred at national and supra-national levels, impacting the way that industries, services and households are run. Policy responses from the UK government include:



- **Nottingham Declaration, 2000:** a public commitment by Council Leaders and Chief Executives to tackle the causes and effects of climate change.
- **Stern Review, 2006:** described as the first substantial appraisal of the potential effects of climate change and global warming on the global economy.
- **Climate Change Bill, 2007:** published as a government blueprint for tackling climate change and modifying the UK into a low carbon economy.
- **Energy White Paper, 2007:** proposed a path forward for implementing the measures of the Energy Review Report of 2006 and the Budget for 2007.

Bringing together economic development and climate change?

The publication of the Stern Review in 2006 marked a significant shift in the conceptualisation of climate change. The Stern Review served to 'shake off' the perception that concerns about climate change were the preserve of environmentalists and 'left-wingers', by evidencing the detrimental effect that a changing climate will have on the global economy. According to the report², not taking action on climate change could cost from five to twenty per cent of global GDP every year, now and in the future. In comparison, reducing emissions to avoid the worst impacts of climate change could cost around one per cent of global GDP each year.

Since the report's publication, therefore, we have witnessed greater recognition at central government level of the interconnectedness between the economic development agenda (particularly with respect to the recession) and the climate change agenda. As Gibbs (2003) notes, "The adoption of sustainable development as a guiding principle for global, national and local economies from the 1990s onwards appears to offer the opportunity to consider economy, environment and society together in a balanced manner" (p.3). Indeed, in a context of global financial crisis, the Prime Minister has latched onto the concept of 'green jobs' as a way of recovering from the recession in the UK. Speaking in March 2009, Gordon Brown stated that moving to a low-carbon economy will create 400,000 new jobs over the next eight years, in industries such as renewable energy.

Green new deal: rhetoric rather than reality?

However, despite the rhetoric of a 'green new deal', debates have raged as to whether it is possible to have economic growth, in its current model, whilst also responding to climate change and mitigating against future environmental damage. As Gibbs (2003) comments, "While sustainable development has been enthusiastically embraced by a

²Stern Review on the Economics of Climate Change (2006), accessed at: http://www.hm-treasury.gov.uk/sternreview_index.htm



wide range of actors concerned with environmental issues – business, governments, non-governmental organisations – in many cases this is simply at the level of rhetoric” (p.3). For instance, critics have observed that the bulk of public spending announced in global economic stimulus packages has largely been channeled towards banks and car companies, as opposed to industries such as renewable energy. Indeed, of Britain’s £25billion reflationary package, only £1.5billion has been committed to sustainability.

It would appear, therefore, that despite the promising rhetoric, the government’s response to the dual challenge of economic crisis and climate change is lacking. Moreover, at the local level, it has been argued that the prevailing orthodoxy of local economic strategies is one that promotes international competitiveness, inward investment and the development of ‘knowledge economies’; yet overlooks the impact of this on the environment. For example, as Gibbs and Jonas (2005) note,

“place-specific pressures are faced by areas seeking to improve their competitive advantage through environmentally contentious projects (new roads, airport expansion, greenfield development)” (p.7).

Continue to grow, and be green?

It seems convincing that, within both central and local government, there is a prevailing assumption that as a society we can continue to have economic growth whilst simultaneously tackling climate change through ‘smarter growth’, such as ‘cleaner’ forms of growth such as investment in renewable energy or bio fuels. A key component of this approach is that technology and science have an important role to play in helping society to adapt to changes in our climate and coming up with technological solutions to ameliorate the affects of climate change on our society and way of life. The implication of this policy approach is of a ‘balance’ between the requirements of society to continue to grow its economy and the recognition that there needs to be some response to the threat to climate change.

The government’s stance seems to some extent, therefore, to resonate with what Gibbs (2003) terms “ecological modernisation” (p.4); the notion that “the central institutions of modern society can be transformed to avoid ecological crisis” (ibid). This approach to reconciling environmental challenges and the economic growth involves “the restructuring of production and consumption towards ecological goals” (ibid), through, for example, “the development and diffusion of clean production technologies” (ibid). Moreover, it advocates “integrating environmental policy goals into other policy areas” (ibid). For example, Gordon Brown’s attempts to marry together a recovery from the recession with the development of ‘green’ industries.



Ecocalisation?

However, for many, this approach is not nearly radical enough to respond to the significant challenges of a changing climate. For some, ecological modernisation may merely result in “greater dominance of global resources by transnational industry and national governments” (ibid). For theorists from a Marxist tradition, there is doubt as to whether “capitalism can somehow be reformed on ecological lines” (ibid, p.5), as the ecological modernisation approach suggests. This has led some academics to argue that we need a paradigm shift in the way that we ‘do’ economic growth if we are to protect the UK from the negative impacts of climate change, both at national and local level. Some academics have called for the implementation of alternative models of economic growth, such as that of ‘ecocalisation’. Described by North (2009),

“Advocates of ecocalisation argue that urban economic policy needs to pay more attention to the need to avoid dangerous climate change, adapt to unavoidable climate change, and respond to looming resource crises by moving from a global division of labour, whereby things are produced where they can be most ‘efficiently’, with labour and environmental standards ignored, cheap oil, and carbon emissions from transport unquantified, to one where everything is produced as locally as it can be” (p.28).

North highlights how the Green movement has criticised the prevailing logic of growth-based urbanism, “arguing that it leads to unsustainable levels of greenhouse gas emissions and is dependent on resources that are being unsustainably depleted” (ibid, p.29). Challenging the prevailing ideology of capitalist global free trade, ecocalisation argues for “a reorientation of economic development policy away from insertion into the global economy in favour of systematically developing local production capacity, and focussing explicitly on meeting local needs as locally as possible” (ibid, p.30).

This resonates with work carried out by the ‘Green New Deal Group’, a group with expertise relating to the current financial, energy and environmental crisis. The group’s recently published report, ‘A Green New Deal’³ (2008), argues that we are facing a ‘triple crunch’ of financial meltdown, accelerating climate change and soaring energy prices. To respond to these challenges, the report: firstly, “outlines a structural transformation of the regulation of national and international financial systems, and major changes to taxation systems” (p.2) and secondly, “calls for a sustained programme to invest in and deploy energy conservation and renewable energies, coupled with effective demand management” (ibid). Underpinning the strategy is the belief that we can “lay the foundations for the emergence of a set of resilient low-carbon economies, rich in jobs and based on independent sources of energy supply” (p.3).

³New Economics Foundation (2008) A Green New Deal (nef: London)
http://www.neweconomics.org/gen/z_sys_publicationdetail.aspx?pid=258



How can local authorities in Yorkshire and Humber respond to this agenda?

As this briefing paper has illustrated, how best to progress economic development within a changing climate is hotly contested within academia. Moreover, the challenges posed by climate change for local authorities are likely to be of unprecedented scale. This briefing will now move on to consider briefly the implications of this agenda at the micro level, namely for local authorities and their partners.

As outlined in the first section of this briefing, a changing climate is predicted to have significant ramifications at the local level. As guidance from the IDeA notes, “climate change is a global phenomenon but its impacts are felt locally and are affected by physical, social and economic factors specific to a locality”. The consequences of a changing climate, such as flash flooding and so on, are likely to have a number of implications for local authorities’ service delivery, and as the IDeA⁴ highlight, especially with regard to:

- Emergency planning;
- Waste management;
- Planning;
- Estates management; and
- Social Services.

1. Recognise the link between economic growth and climate change

As noted above, the orthodoxy underpinning local economic strategies has tended to fail to address climate change, privileging economic growth at the expense of local environments. In response to this, local authorities may wish to initiate debate internally as to the link between economic growth and climate change. In turn, they may consider revisiting their local economic strategies with a critical eye and debate whether the strategy takes into account climate change, and if not, how this can be remedied. Going beyond this, a local authority may consider developing a dedicated climate change strategy, as illustrated in the case study below (p.8).

⁴See <http://www.idea.gov.uk/idk/core/page.do?pagelId=9377463>



Case Study: Woking Borough Council

Woking Borough Council is believed to be the first UK authority to have adopted a comprehensive Climate Change Strategy on a scale that is likely to meet The Royal Commission on Environmental Pollution targets of 60% reductions of CO₂ equivalent emissions by 2050 and 80% by 2100. Some of the measures that will be implemented as a result of the strategy will include:

- Use of sustainable combined heat and power sources of energy in the borough - discouraging the production of CO₂ type gases.
- Adopting a target of purchasing 100% of the Council's electrical and thermal energy requirements from sustainable sources and 20% from renewable sources by 2010/11.
- Exploring means of creating environmentally friendly energy from waste and encouraging the avoidance of landfill.
- Introducing a local award scheme to recognise any developments that incorporate features which contribute to the long-term aim of sustainable development, including reducing CO₂ equivalent emissions and mitigating against climate change.

For further information, see:

<http://www.woking.gov.uk/environment/climatechangestrategy>

2. Commit to tackling climate change

Local authorities may also wish to make a public commitment to tackling climate change, for example by signing the Nottingham Declaration on Climate Change, a voluntary pledge to tackle climate change. At a pragmatic level, identifying and monitoring potential environmental risks in the region may also be necessary. To achieve this, it may be necessary to develop partnerships with relevant organisations such as Future Energy Yorkshire, South Yorkshire Energy Centre and Sustainable Futures Leeds. Moreover, forging effective relationships with partners, such as Fire and Rescue Services and regional bodies will be necessary in order to ensure collaborative working.

3. Lead the way

According to guidance from the Local Government Association⁵; "Local Government, working with partners and with other councils across economic sub-regions, has a number of levers to help ensure a low-carbon economy begins to develop and thrive in its area" (p.18). Local authorities therefore have the potential to play an important role in 'leading the way', for example through "exercising a powerful leadership and



demonstration effect by developing and re-shaping its own services” (ibid). This may be through, for example, reducing the local authorities’ carbon emissions, or ensuring the energy efficiency of local authority owned buildings. Social marketing campaigns may also be developed to raise awareness of climate change in the community.

4. Realise the potential of procurement

Recognising the impact of procurement activity is another way in which local authorities can help to adapt to the challenges of a changing climate, whilst also helping to develop the local economy. According to the Local Government Association, “By buying into low-carbon solutions, councils acting individually or in consortia can promote the deployment of low-carbon solutions and take up of higher product standards” (ibid). Moreover, encouraging and developing local supply chains through local authorities’ procurement activity may also be a way in which they can promote environmental sustainability by reducing transport emissions, whilst also supporting the local economy. Furthermore, introducing environmental benefit clauses into procurement contracts may also be effective.

5. Work with partners to explore project options

Finally, local authorities have a role to play in terms of working with partners to develop project options to adapt to climate change. For example, “working with employers and employment and skills providers to ensure that skills gaps are identified and new training opportunities provided including public sector apprenticeships” (ibid). This may mean, for instance, encouraging colleges to introduce construction students to skills necessary for climate change.



Conclusions

This Great Brief has illustrated how the global change in climate is likely to have significant negative impacts at the local level, posing unprecedented challenges for local authorities and their partners. The threat of climate change also needs to be understood within the context of the global economic crisis, with many local areas reeling from the effects of the recession; such as unemployment, redundancies, and falling house prices. Clearly, any response to climate change will require consideration of the economy crisis, and vice versa. Whilst much has been said at government level about the importance of 'green jobs' in the UK's emergence from recession, as this briefing has shown there is significant scepticism about whether this will go beyond mere rhetoric. As illustrated above, academics have argued that the economy and the environment cannot be reconciled until we re-think the way in which we 'do' economic development at both the national and local level. The current orthodoxy, promoting inward investment and measuring development in terms of gross domestic product, has in fact contributed to climate change through emissions of carbon dioxide into the atmosphere. It therefore seems convincing that we need to radically reconceptualise how we 'do' economic development within the constraints of a changing climate.

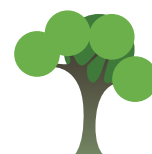
Further Reading

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Gibbs, D. & Jonas, A. (2005), Final Report to ESRC: Governance and Regulations in Local Environmental Policy Making, accessed at:

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