



Tracking our progress

The Council will continue to monitor a number of data sources from which carbon dioxide emissions are calculated and bring these together into one corporate inventory. There are lots of assumptions and gaps in our knowledge and it is impossible to be precise, but monitoring and knowledge is slowly improving. The Council is also working with other partners in the Nottingham Declaration Development Group to develop improved monitoring tools.

Resource Implications

The Strategy will initially be implemented by existing members of staff (with the addition of one new post in 2006/7) within existing budgets, although this will be reviewed in the light of experience. Project funding is expected to come from a range of sources, particularly the Energy Conservation Fund, if criteria are met (10 year payback period) leading to longer term revenue savings from reduced utility bills. External sources of funding are also being sought.

A number of renewable energy technologies are still relatively expensive and a number of possibilities are being explored to generate more resources for such applications. One of these is an internal carbon offset fee which could be levied on activities that generate emissions, such as flights and other business travel. The resulting funds would be reinvested in things which reduce or capture carbon, such as renewable energy, or tree planting.

PRIORITY 1: MITIGATING THE COUNCIL'S OWN CO2 EMISSIONS

The Council has made good progress over the last five years by reducing its CO2 emissions by over 30,000 tonnes through becoming one of the largest 25 users of renewable energy in the EU. The Council joined the Carbon Trust's local authority programme in 2005 and will complete and implement a detailed Carbon Management Strategy and Action Plan as a result, to reduce CO2 emissions from a range of areas, including energy use in buildings, transport, waste and procurement.

This will be delivered by the integration of environmental targets into the Council's annual departmental planning process and through a recently agreed commitment to EMAS, the European Eco-Management and Audit Scheme, to ensure a systematic and corporate approach. This will be supported by a number of officers specialising in energy management, environmental management and travel planning.

PRIORITY 2: ADAPTATION

Adaptation involves analysis of the likely impacts of climate change on Nottingham and putting in place measures that reduce risk, improve resilience and maximise benefit. Some work has been done on this agenda locally, but it is much less well developed than the mitigation side. In some ways this is more urgent because the climate is already changing and will continue to do so for the foreseeable future, regardless of how well Nottingham mitigates its own emissions.

The main impacts will be milder and wetter winters, warmer and drier summers and an increased number of extreme weather events. These will have implications for services including: emergency planning, waste collection and disposal, planning, estates management, provision of leisure facilities and social services.



Angela Smith MP, DCLG Minister launches the Nottingham Declaration Action Pack in Westminster, July 2006

The Council will bring together a similar range of services, together with other agencies where appropriate, to plan appropriate responses to the key risks, using UK Climate Impacts Programme guidance.

Health Impacts

According to research by the Department of Health, cold-related winter deaths will decline substantially by 2050, but heat-related summer deaths will increase. This example has already been seen in the heat wave that struck Europe in summer 2003 and to a lesser extent in 2006. Cases of food poisoning are likely to increase substantially as will the risk of major disasters like severe gales.

The Council will work with the new Greater Nottingham Health and Environment Partnership to tackle the local health impacts (e.g. on the dangers posed by heat waves) and the strong links with mitigation (e.g. the promotion of walking and cycling, the need for thermal comfort)

PRIORITY 3: REDUCING DEMAND AND INCREASING SUPPLY

The Council will aim to work with 20 of Nottingham's largest businesses and employers on a common approach to environmental management, travel planning and procurement, to reduce demand for fossil fuel energy. In addition to the direct impact, the aim will be to extend this far more widely through supply chain pressure on a large group of smaller local companies.

A complimentary strand of work will involve working with the UK Business Council on Sustainable Development to develop a market based approach to developing and supplying increasing amounts of locally generated renewable energy and low and zero carbon technologies, using the skills and resources of local businesses and universities wherever possible.

PRIORITY 4: RAISING THE PROFILE OF CLIMATE CHANGE IN THE WIDER COMMUNITY

The Council will:

- Seek to maintain the momentum generated by the Second National Councils' Climate Conference and the subsequent Target 200 campaign within UK local government, in conjunction with the Nottingham Declaration Development Group, with the possibility of extending this approach to universities and the NHS.
- Support the East Midlands in its new aim to become the first English region to get 100% public commitment to climate protection from all 46 local authorities and help develop training on the Nottingham Declaration Action Pack
- Launch and promote a local 'Respect for the Climate' pledging scheme, linked to the Nottinghamshire and Derbyshire Local Authority Energy Partnership's DEFRA supported 'Climate Heroes' project.

FURTHER INFORMATION AND FEEDBACK

More information can be found at:
www.nottinghamcity.gov.uk/respecttheclimate

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Carbon Trust
Nottingham Declaration Development Group
Steve Waller, IDeA

ZERO2100

From two million tonnes of carbon dioxide emissions/year to zero
A carbon neutral city by 2100
A carbon neutral council within 10 years



THE STRATEGY IN BRIEF

Introduction

Scientists around the world increasingly concur that human induced climate change from the burning of fossil fuels and the resulting accumulation of greenhouse gases (particularly carbon dioxide or CO₂) in the atmosphere poses one of the most serious threats to our long term survival. As a global phenomenon, coordinated international action is required to solve it, yet many of the causes and consequences are at the local level where local government has a key role to play (as acknowledged in the new UK Climate Change Programme 2006). Whilst some progress is being made internationally, many countries are not doing enough and not doing it quickly enough to meet their targets and atmospheric concentrations of CO₂ are continuing to rise to levels not seen for 600,000 years (380 parts per million in 2006). This further underlines the need for local leadership and action.

Outline

This Outline describes (in summary form) Nottingham City Council's strategy for tackling the causes (1) and impacts (2) of climate change here in Nottingham.

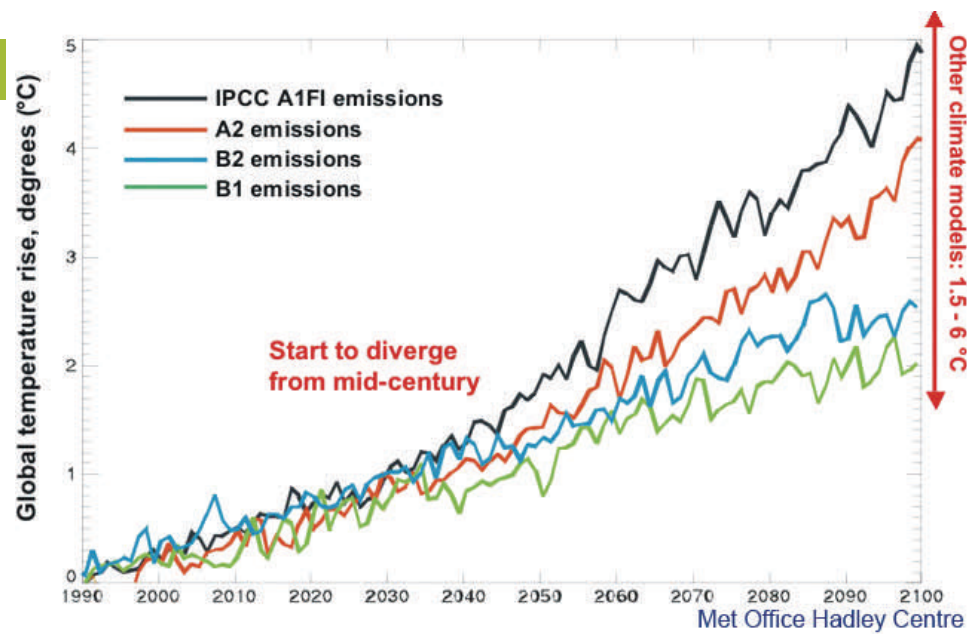
1. CAUSES:

Nottingham contributes 2 million tonnes of CO₂ per year to the global climate. The best available estimate of carbon dioxide emissions from regions and local authority areas is from an experimental dataset produced by Netcen for the National Atmospheric Emissions Inventory in 2005, using 2003 data. This calculated that 2,021,000 tonnes of CO₂ was emitted from the Nottingham City area, with an approximate 7.4 tonnes per person, as shown in the pie chart.

2. IMPACTS:

Nottingham will be increasingly affected by climate change over future years and decades, with the possibility of:

- More frequent episodes of severe weather
- Flooding in the River Trent and its tributaries
- Heat waves
- Heat island effect in the city centre and a range of other indirect effects. The frequency and severity of future climate impacts in Nottingham and elsewhere will depend upon the future trends in global CO₂ emissions. A range of scenarios have been developed by the Intergovernmental Panel on Climate Change (IPCC), which suggest that average global temperatures will continue to rise between now and



2050, regardless of what we do now and will then diverge, with a +2°C overall rise by 2100 from the low emissions scenario and a +5°C rise resulting from a high emissions scenario.

More details of potential impacts can be found in the East Midlands Climate Impact Study 2000 and the Nottinghamshire Climate Impacts Study 2004.

Overall Aims of the Strategy

1. To put the city on to a path towards a low carbon future where the needs of the economy and local people are much less dependent on fossil fuels and resulting carbon emissions
2. To ensure that the city is adapted to the inevitable impacts of climate change and is well placed to maximise any benefits

Targets

1. The long term target, reflecting national policy, is to reduce carbon dioxide emissions from Nottingham by 60% (from 1990 levels) by 2050 with the eventual aim of being carbon neutral by 2100.
2. A medium term target is to achieve a 30% reduction by 2020. These are highly ambitious targets, as a number of leading councils have set, but we believe are achievable with the right mixture of leadership, commitment and technological development.
3. Nottingham City Council is only directly responsible for a small proportion of these emissions, but will lead by example by seeking to become carbon neutral within ten years and by encouraging all other sectors, organisations and individuals to make an appropriate contribution. National and regional policy will have a key role to play in those areas where local government has little or no influence.

Our Approach

This new strategy seeks to address both the mitigation and adaptation aspects of the climate change agenda within the distinct roles of the Council as a community leader, service provider and large organisation through the framework of the Council's Corporate Plan.

Implementation

The strategy will then be implemented systematically through the milestones of the Nottingham Declaration Action Pack, that has been developed specifically for UK local government by the council and its partners. Many of the required actions will be delivered through other Council plans and strategies with an overall approach coordinated and monitored and by a Greener Nottingham project team. They will also review and refresh the Strategy annually. The supporting evidence and other information will also be periodically updated.

Our Priorities

Whilst continuing with all the statutory work that has brought about significant emission reductions over the last five years, the key priorities over the next two years will be:

1. Stepping up mitigation work on the Council's own emissions through the Greener Nottingham programme
2. Starting a programme of work on the adaptation agenda to ensure that the Council and its services, together with the city and its residents, are better prepared for inevitable climate impacts
3. Seeking the commitment of partners to environmental management to drive down energy demand on the one hand and to develop Zero and Low Carbon Technology on the other
4. Raising the profile of climate change within the wider community

DRIVE DOWN DEMAND

For energy from fossil fuels

- Environmental Management (driven by the largest 20 organisations in Nottingham and pushed down the supply chain)
- Travel Planning
- Accessibility Planning
- Sustainable Procurement
- Better Energy Efficiency in new build, retrofitting and targeted demolition of the poorest property
- Generate increased public awareness and support, e.g. 'Respect for the Climate' Campaign

I. OVERALL APPROACH TO REDUCING EMISSIONS

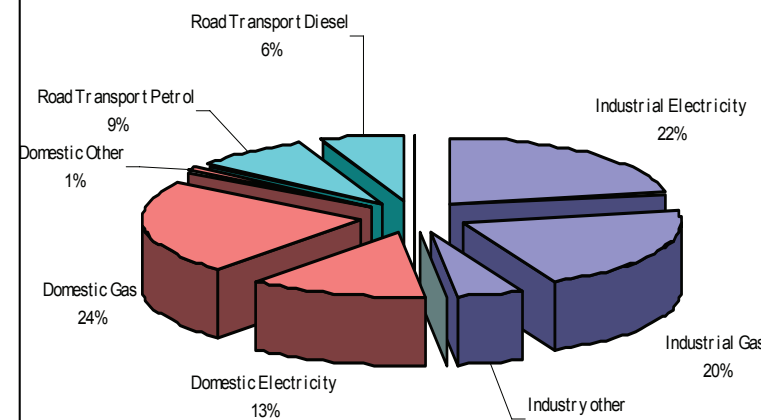
INCREASE SUPPLY

of renewable energy and low and zero carbon technologies (LZC)

- New planning policy specifying minimum levels of renewable energy on site in new developments
- Increase use of bio-fuels in fleets, biomass for heating, green tariff electricity,
- Develop market conditions for a network of locally generated renewable energy sources (wind, solar, geothermal, heat pumps, biomass)
- Work with universities, private sector, etc. to increase supply



2. THE KEY SOURCES OF EMISSIONS IN NOTTINGHAM



3. WHAT'S HAPPENING WITHIN DIFFERENT SECTORS - SOME KEY ISSUES

DOMESTIC SECTOR—37% overall

Great strides have been made in improving the energy (particularly thermal) efficiency of homes in the public sector, through large scale investment in cavity wall, loft insulation and other measures. Many homes in the private (and particularly rented) sector remain inefficient however and correspondingly difficult and expensive to heat.

Demographic and lifestyle trends have led to a rise in single person households and increased use of electrical appliances, which means that energy consumption (and with it emissions) is tending to increase overall.

TRANSPORT—15% overall

Nottingham's excellent track record on transport policy means that unlike most UK cities, transport growth (and subsequent emissions) has been stabilised over the last five years, thanks to improvements in public transport, the development of the tram and other measures like the promotion of travel planning and the Big Wheel marketing campaign.

However, continuing economic growth is expected to increase road traffic and resulting emissions over the next five years by some 8% across the Greater Nottingham area.

INDUSTRY—47% overall

This includes the public and voluntary sector alongside businesses, together with emissions from waste management. The reduction in manufacturing industry means fewer energy intensive processes, but a growth in the use of energy through IT, air conditioning, etc. is commonplace.

Whilst many large employers have made strides in environmental management, the vast majority of local businesses are SMEs, which tend not to have the skills, capacity or resources to invest in such schemes. An overall energy trend is unclear until further data is made available through the DTI.