

Final Report of the Project Team  
as approved by the Review Committee

# Review of Implications of Global Warming Agenda on Rochford District Council and the Role the District Council and its Communities Might Play



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## 2 Glossary

Biomass	Refers to living and recently dead biological material that can be used as fuel or for industrial production
EEAC	European Environment and Sustainable Development Advisory Council; a collaboration within the European Union.
Energy Measures Report	The report produced by the Secretary to State in order to comply with a duty imposed under the Climate Change & Sustainable Energy Act 2006 to identify how Local Authorities can promote sustainable communities.
LDF	Local Development Framework
LAA 2	Local Area Agreement
LATS	Landfill Allowance Trading Scheme
Microgeneration	The generation of zero or low carbon heat and power by individuals, small businesses and communities to meet their own needs.
NI	National Indicator
Nottingham Declaration on Climate Change	A voluntary commitment to address the issues of climate change.
RDC	Rochford District Council
RHA	Rochford Housing Association.
SAP	Standard Assessment Procedure - the system recommended by Government for calculating the energy rating of a dwelling.
SMART	Objectives that are Specific, Measurable, Achievable, Realistic and Time constrained
Yellow Woods Challenge	A National scheme run in Rochford, involving the collection of old Yellow Pages directories by schools.

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### **3 Introduction**

- 3.1 Over the last few years the subject of Climate Change has come to the fore and received a lot of publicity and interest.
- 3.2 There is a growing body of scientific evidence that the world's climate is changing as a result of the increased level of greenhouse gases which can be linked to mans activities. This increase will impact directly on the Rochford District in that our weather patterns will change leading to warmer and wetter conditions.
- 3.3 During the Review the Committee were advised of the following details:-
- At 380 parts per million (ppm), today's atmospheric carbon dioxide level is higher than at any time in at least the past 420,000 years.
  - Only increased greenhouse gas emissions can explain the upward trend in temperature over the past 150 years.
  - In less than 200 years, human activity has increased the atmospheric concentration of greenhouse gases by some 50%.
  - It is already too late to stop any further atmospheric warming, due to the inertia of the climate system; even if greenhouse gas emissions were reduced to pre-industrial levels within the next 100 years, average temperatures would not stabilise for several centuries, sea levels would continue to rise due to thermal expansion and melting ice for several millennia.
  - The average proportion of the global population harmed by climate-related disasters each year has nearly doubled since 1975, reaching nearly 4% or 255 million people in 2001. The World Health Organisation estimate, based on current trends, that between 6%-8% of population will be directly affected by 2030.
- 3.4 The Government has signed up to the Kyoto Protocol, the international agreement on climate change. This commits the United Kingdom to reduce emissions of greenhouse gases by 12.5% from the 1990 level by 2012. In the longer term, the Government has accepted that far more significant cuts in greenhouse gas emissions will be required, and the need to cut emissions by at least 60% by the middle of this century is now required.
- 3.5 The Climate Change & Sustainable Energy Act 2006 places a duty on the Secretary of State to assist Local Authorities in promoting sustainable communities and to invite Local Authorities to make proposals in that regard.

- 3.6 A summary of the drivers for Local Authority action on climate change mitigation and fuel poverty alleviation were identified in the Energy Measures Report September 2007.
- 3.7 The Climate Change Bill proposes a limit on carbon emissions by putting into law the Government's long-term goal to reduce carbon dioxide emissions by 60% by 2050, against a 1995 baseline. It also seeks to establish an independent body, the Carbon Committee, to work with the Government on how efforts to reduce emissions should be spread over time and across the economy.
- 3.8 The Stern Report – The Economics of Climate Change, is the first major contribution to the global warming debate by an economist, rather than a scientist. The main conclusion of the Stern Report is that there is still time to avoid the worst impacts of climate change, as long as immediate strong action is taken.

## 4 Background

4.1 With the Climate Change agenda being promoted by Central Government and the realisation of the impact that man is having on the climate of the planet it was felt that this subject would prove worthwhile to review. Local Authorities are being assessed on more and more areas to do with the Climate Change agenda and it was hoped that recommendations could be made regarding appropriate areas for policy development, managing our own impact on the environment or National Agreement Partnerships that it may be appropriate for Rochford District Council to become party to.

4.2 The Government has recently published proposed new National Indicators (NI) for Local Authorities that relate to climate change. These include:-

- NI 185 CO2 reduction from Local Authority operations.
- NI 186 Per capita reduction in CO2 emissions in the LA area.
- NI 187 Tackling fuel poverty - people receiving income based benefits living in homes with a low energy efficiency rating.
- NI 188 Adapting to climate change - Each Local Authority will be assessed as to which of the following levels it has reached:-

Level 0: The Authority has not assessed and managed climate risks and opportunities, or incorporated appropriate action into local authority strategic planning.

Level 1: The Authority has undertaken a comprehensive, local risk-based assessment of current vulnerabilities to weather and climate, both now and in the future. It has developed possible adaptation responses explicitly related to other relevant council strategies, plans, partnerships and operations (such as planning, flood management, economic development, social care, services for children, transport, etc).

Level 2. The Authority has identified the most effective adaptation responses to address the risks and opportunities, explicitly related to other council strategies, plans and operations. This will yield a set of locally specific, preferred options.

Level 3. The Authority has developed an adaptation action plan to deliver necessary steps to achieve the existing objectives set out in council strategies, plans, investment decisions and partnership arrangements in light of projected climate change.

Level 4. The Authority has implemented an adaptation action plan, and a process for monitoring and review to ensure progress with each measure.

- 4.3 The Landfill Directive requires that an increasing proportion of biodegradable municipal waste be diverted from landfill over the next 15 years.
- 4.4 The UK has been set the following targets by the EU:-
- By 2010 to reduce the biodegradable municipal waste disposed to landfill to 75% of that produced in 1995;
  - By 2013 to reduce the biodegradable municipal waste disposed to landfill to 50% of that produced in 1995;
  - By 2020 to reduce the biodegradable municipal waste disposed to landfill to 35% of that produced in 1995.
- 4.5 Failure to comply with local targets will result in financial penalties from 2010 onwards.

## 5 Terms of Reference

- 5.1 To establish the implications for Rochford of Government guidance and best practice within the local authority sector in respect of Global Warming and assess how the Community can be encouraged to take an active role. To inform and develop Council policy where appropriate.
- 5.2 Out of scope - The specific environmental implications of global warming such as:-
- Increased risks of flooding caused by the melting of the Polar ice caps and rising sea levels.
  - Changing weather patterns with changes in rainfall and temperature patterns which are likely to affect infrastructure and property.
  - Changes to growing seasons affecting agriculture and the range and types of crops that can be grown as well as of the landscape and animal husbandry. There is also potential for increased erosion.
  - Threats to wildlife and their habitats. Alterations to biodiversity are likely to have complex effects upon food chains and the interactions between species.
  - Adverse effects on human health such as the increased incidence of skin cancers and the range of diseases spread by pest species.
  - Statutory environmental enforcement.
  - Future changes caused by external pressures i.e. Thames Gateway policies.
  - Statutory duties in respect of Air Quality. However, there may be some synergies/ conflicts between some related issues in scope.

## 6 Methodology

- 6.1 The Review was structured around the main themes of the Energy Measures Report, namely:-
- Improve energy efficiency
  - Increase the level of microgeneration or low carbon technologies
  - Reduce greenhouse gas emissions and
  - Reduce the number of people living in fuel poverty.
- 6.2 The report advocates a strategic approach to climate change mitigation and fuel poverty alleviation and focuses on our respective roles as an Estate Manager, Service Provider and Community Leader. Officers utilised a self-assessment template developed from the local and regional carbon management matrix by the Centre for Sustainable Energy. This assisted in the identification of the Council's strengths and weaknesses in each of the above roles.
- 6.3 The Review looked at some of the activities that have already been introduced by Rochford District Council together with that identified in Essex County Council's Environmental Strategy. Other Authorities were contacted and other published Reviews by other Authorities were examined for evidence of Best Practice that could possibly be introduced by RDC. This included those developed by Woking Borough Council, which was awarded Beacon status under the 'Tackling Climate Change' theme in Round 9 of the National Beacon award scheme. Other sources of advice included the Energy Saving Trust, the Carbon Trust, The Nottingham Declaration Action Pack, the Local Government Climate Change Commission, the Improvement and Development Agency and Warm Front.
- 6.4 Contact was made with the various other agencies sponsored by the Government to request their input/assistance with the Review. External site visits were arranged as appropriate.
- 6.5 Recommendations would be made regarding appropriate areas for policy development, managing our own impact on the environment or National Agreement Partnerships that it may be appropriate for Rochford District Council to become party to.

## **7 Findings**

- 7.0.1 The Review Committee received presentations from Mr Donnachadh McCarthy, a well know environmentalist, together with the Head of Environmental Strategy at Essex County Council. These meetings were held in open session and the Minutes from these meetings are a matter of public record and have not therefore been repeated in the report.
- 7.0.2 Following discussion with the Committee, officers commissioned a report by the Carbon Trust to look at energy savings that could be achieved within the main Council offices. A detailed action plan was presented that estimated that energy savings of 44% could be achieved, equivalent to £16,568 annual savings.
- 7.0.3 The new Planning Policy Statement (PPS) on climate change sets out how planning, in providing for the new homes, jobs and infrastructure needed by communities, should help shape places with lower carbon emissions and resilience to the effects of climate change now accepted as inevitable.
- 7.0.4 The planning system can be used to help minimise the carbon footprint of new developments. The design and location of new developments, including accessibility to public transport to permit sustainable transport options, are also important elements of low carbon developments.
- 7.0.5 Local authorities can substantially influence carbon emissions through their spatial planning role by producing development plan documents which make a full contribution to delivering the Government's climate change and energy policies and, in doing so, contribute to global sustainability. A key role can also be played by local authorities in helping shape regional spatial strategies, which are ambitious in addressing climate change.

### **7.1 Public Consultation**

- 7.1.1 During December two events were held, one in Rayleigh and the other in Rochford to assess the public's opinion on global warming and to see what areas that the public felt were important for the Council to address.
- 7.1.2 The events were timed to coincide with market day in each area and took place in the morning to try to ensure that a representative cross section of the community could be canvassed. A team spoke to 156 people during the two mornings and the results from the exercise can be seen in tables 1 and 2 below.
- 7.1.3 Whilst only 54% thought that Climate Change was manmade, 90% thought it was an important issue.

7.1.4 The main area that the public felt that the Council should promote was recycling, although 35% of those interviewed suggested that public transport would be a good area to promote /subsidise to reduce the effects of Climate Change. This can also be seen from the 46% of people interviewed who said that they had changed to public transport as a way to reduce their own carbon emissions.

7.1.5 The public identified the following priorities for the Council to promote or subsidise, in order of priority:-

Recycling	(62%)
Loft Insulation	(35%)
Public Transport	(35%)
Energy Efficient Light Bulbs	(28%)
Composting	(22%)
Sustainable Energy / Fuel	(19%)
Double Glazing	(19%)
Solar Panels	(19%)
Cavity Wall Insulation	(16%)
Water butts	(15%)
Cycling	(13%)

**Table 1**

7.1.6 They identified the actions that they had taken as follows:-

• Recycling	(84%)
• Loft Insulation	(72%)
• Double Glazing	(70%)
• Energy Efficient Light Bulbs	(67%)
• Changed to Public Transport	(46%)
• Composting	(39%)
• Water butts	(31%)
• Cavity Wall Insulation	(24%)
• Cycling	(12%)
• Sustainable Energy/Fuel	(10%)

**Table 2**

7.1.7 Whilst there were large numbers of people who had loft insulation, double glazing and were using energy efficient light bulbs, the same was not true of cavity wall insulation, which accounted for only 24% of the people surveyed. It was noted that there are currently grants available to assist with the cost of cavity wall insulation and this could be an area worth promoting as it could reduce wasted energy in houses that have been built using the cavity wall system.

## **7.2 Visit to a major employer - Tilbury Power Station**

- 7.2.1 The Review Committee was keen to learn how major corporations had responded to climate change issues and whether there were any significant regional issues that they needed to be aware of. Accordingly, a visit was made to one of the Council's partner organisations within the South Essex Environmental Protection Advisory Group, the Tilbury Power Station.
- 7.2.2 The power station is a coal-fired station that has been earmarked for closure by the end of 2015 due to European legislation. The station is operated by RWE npower and utilises low sulphur fuels whenever practicable. They are currently going through the initial planning stages of building a new 'cleaner coal' power station on an adjacent site.
- 7.2.3 It was explained that the country faced a potential 'energy gap' if the Government did not conclude the current Energy Review promptly, as such developments take many years to come to fruition.
- 7.2.4 Members of the Review Committee were treated to a tour of the existing process and the reasons for the new station were explained, along with details of how npower have responded to the need to supply energy from renewable sources.

## **7.3 School visits**

- 7.3.1 Following a meeting of the Review Committee in October 2007 it was agreed that officers would contact various schools to attempt to arrange visits by Members of the team to establish the views of the young people in the District. A visit was arranged and a Member of the Review Committee visited Holt Farm Primary School to talk to the pupils. This visit provided evidence of the success of the Council's Schools Recycling Scheme and from discussions with the pupils and teachers, they have identified recycling as a way that they can all get involved in tackling climate change. The school are active participants in the 'Yellow Woods Challenge'.
- 7.3.2 The wider issues of Climate Change do not currently form part of this school's Curriculum.

## **7.4 Engagement with Local Business Community**

- 7.4.1 At the meeting between, local business representatives and Rochford District Council on 15 October 2007 attention was drawn to the fact that this review was in progress. Subsequently a letter was sent to all Chambers of Trade inviting comments on how important the issue was to them and what actions should be taken by the Council. The response to this request was disappointing.
- 7.4.2 Members were advised that a Green Business Pilot scheme had previously been run to encourage recycling, but that this had only had

limited success. The pilot established that local small businesses had difficulty accessing recycling schemes.

- 7.4.3 It was noted that the Council currently sponsors the Environmental Award of the Southend Evening Echo Business Awards and that this provides a valued contribution.

## 8 Conclusions

- 8.1 There is the need for the Council to act as an exemplar in respect of energy conservation and sustainability issues and for us to use our role as community leader to influence others.
- 8.2 It is considered that this could be achieved by setting ourselves challenging targets in respect of our own activities and ensuring that these are in place before any statutory requirements, giving the Council the opportunity to develop detailed action plans.
- 8.3 The Council commissioned an energy efficiency audit from the Carbon Trust and has been presented with a detailed action plan to secure a 44% reduction in energy consumption.
- 8.4 It was considered important that every opportunity was taken to ensure that the Council's Local Development Framework, which will guide future development of the District up to 2021, is planned and carried out in a sustainable fashion.
- 8.5 The Council has responded in many of the priority areas, including those identified in the public consultation exercise.
- It has invested in a new recycling scheme.
  - There are soft targets for vehicle emissions and fuel use included in the new recycling and grounds maintenance contracts.
  - RHA has plans in place to continue the work previously undertaken to raise the mean SAP rating significantly, aiming for a standard higher than decent homes.
  - In respect of private sector homes, it was noted that in view of the targeted work previously undertaken to tackle energy efficiency, the mean SAP rating was above the national average. It was noted the Council worked in conjunction with local EEAC schemes together with a partnership with British Gas, involving a Council Tax rebate for participants.
  - The LDF encourages high-energy efficiency standards (beyond Building Regulations) in new housing and other buildings and sets a target that 10% of energy used is from on-site renewables. Some restriction on development away from transport nodes. Proactive advice provided on design solutions and on-site advice aims to exceed minimum standards.
  - Decision-making for planning is based on the transport hierarchy, with priority given to measures that reduce the need to travel followed by walking, cycling, public transport. Travel by private car and by air transport are recognised as the least sustainable and not offered encouragement.

- 8.6 Local authorities have a far-reaching role in the environment and can take significant steps towards mitigating climate change and alleviating fuel poverty through their functions in this area. They have the opportunity to encourage behavioural change through policies and enforcement action, and by taking a community leadership role that clearly promotes actions that reduce carbon dioxide emissions.
- 8.7 By ensuring policies and enforcement action support the climate change agenda, local authorities can also achieve significant benefits for themselves and their communities. These include financial savings, improved air quality, reduced traffic congestion and enhanced community liveability.
- 8.8 Leading a local area to reduce carbon emissions and remove fuel poverty can deliver many local benefits beyond the obvious ones of avoiding potential climate change impacts and improving quality of life for households taken out of fuel poverty. It has the potential to impact on areas such as health and community cohesion. It also demonstrates that the local authority is willing to act on issues that many are concerned about, and can create the potential for increased pride in the local area. Lower fuel costs that result from increased efficiency can provide increased disposable income, some of which may well be spent in the local economy. Developing a market for low carbon goods and services can offer opportunities for local businesses to develop in areas that will have national and international markets.

## 9 Recommendations

Taking a strategic approach to climate change mitigation and fuel poverty alleviation can help ensure that all appropriate actions are considered, that progress can be reported and that potential partners can see the value of proposed actions.

The Council should be seen to be acting as an exemplar in respect of energy conservation and sustainability issues and use its role as community leader to influence others. This could be achieved by developing a Sustainable Energy Strategy that would encompass issues such as energy and water conservation, sustainable procurement and investigating the potential use of biomass.

The resources needed by the Council to develop and deliver the action plans cannot be precisely quantified at this time, but are likely to be substantial. Unless other activities are to cease as a result of reprioritisation, it is likely that additional resources will be required to deliver real improvements. To ensure that these initiatives are implemented effectively, staff champions will be required in all divisions and appropriate training should be provided.

The ideal depth and breadth of any strategy and action plan will to some extent depend on the resources available to an authority, but the key steps of the process can be of use to all.

### 9.1 Recommendation No 1

It is recommended to the Executive Board that the Council develops a Sustainable Energy (Climate Change) Strategy by September 2008, in order that resource implications can be considered by the Council as part of the 2009/10 budget process.

### 9.2 Recommendation No 2

It is recommended to the Executive Board that detailed action plans are developed to ensure that the Sustainable Energy strategy is delivered. If practicable, this should also be developed by September 2008, in order that resource implications can be considered by the Council as part of the 2009/10 budget process.

### 9.3 Recommendation No 3

It is recommended to the Executive Board that the Council becomes a signatory to the Nottingham Declaration on Climate Change, at the earliest opportunity (see Appendix B).

### 9.4 Recommendation No 4

The planning system helps define local authorities' place shaping role and is centred on sustainable development. As such, it offers one of the largest opportunities for local authorities to influence energy use and hence carbon dioxide emissions arising from new developments. National planning policy in England and Wales has an increasing focus on climate change mitigation and adaptation and this has a direct influence on expectations for local planning policy and practice.

Officers took the opportunity to include specific sustainability targets, developed as a result of this review, in the 'Vision to Reality' report that was considered by Council 19 February 2008. The Council will be formally reviewing its Corporate Plan in June and needs to address issues such as:-

- The new legislation shortly to be introduced that will impose carbon reduction targets on local authorities;
- The emerging LAA 2 identifies climate change as a regional priority;
- The new statutory targets for recycling from 2010 onwards.

It is recommended to the Executive Board that the following specific targets are established in the Corporate Plan:-

'Over the next five years, we will .....

Work on reducing the Council's own carbon dioxide emissions by 30% (based upon 2005 baseline).

Achieve a recycling target of 50% within the 5-year period.

Through the Council's Local Development Framework, ensure that the future development of the District up to 2021 is planned and carried out in a sustainable fashion.

By 2017 .....

Implement an Adapting to Climate Change Action Plan for action, monitoring and review.

Work on reducing the Council's own carbon dioxide emissions by 60%

Secure a recycling rate of 60% per year'

## **9.5 Recommendation No 5**

Effective action will include the development of appropriate partnerships. These can increase the resources available for initiatives, provide expertise and offer routes to reach and persuade the right people to take action.

A large proportion of the public considers climate change to be an important issue and they are likely to respond well to further engagement. There may be opportunities to develop a community wide policy as part of the LAA.

It is recommended to the Executive Board that the Council engages with LAA partners to reduce the carbon footprint of domestic properties, business and public sector activities.

## **9.6 Recommendation No 6**

Engagement with the business sector was less successful, but needs to be addressed. For example, the new EU and Government targets on waste now focus on municipal as opposed to just household waste.

It is recommended to the Executive Board that further action be taken to encourage recycling in respect of the business sector.

## **9.7 Recommendation No 7**

The Carbon Trust have undertaken a survey of the main Council offices and identified significant savings that could be made subject to certain actions being implemented at a small cost to the Authority.

It is recommended to the Executive Board that officers explore the implementation of the action plan produced by the Carbon Trust.

## Appendix A

Feedback from Public Consultation.

### 1. Do you think Climate Change is man made?

Yes 54% No 15% Maybe 23% Do not know 3% No answer 4%

### 2. In your opinion how important is Climate Change?

Very important 60% Important 30% Not important 4% Not sure 4% No answer 1%

### 3. What should the Local Authority promote/ subsidise to reduce the effects of Climate Change?

Energy Efficiency Light Bulbs	28%	Sustainable Energy / Fuel	19%	Recycling	62%
Loft Insulation	35%	Double Glazing	19%	Composting	22%
Solar Panels	19%	Public Transport	35%	Water Butts	15%
Cavity Wall Insulation	16%	Cycling	13%	Other	24%

### 4. Are you a home owner?

Yes 75% No 3% Tenant 13% Other 3% No answer 6%

### 5. Do you think you are responsible for taking action to reduce the effects of Climate Change?

Yes 59% No 13%  
No answer 8% Partially responsible 20%

### 6. What actions have you taken to reduce your carbon emissions?

Energy Efficiency Light Bulbs	67%	Sustainable Energy / Fuel	10%	Recycling	84%
Loft Insulation	72%	Double Glazing	70%	Composting	39%
Solar Panels	3%	Changed to Public Transport	46%	Water Butts	31%
Cavity Wall Insulation	24%	Cycling	12%	Other	12%

## 7. Your gender

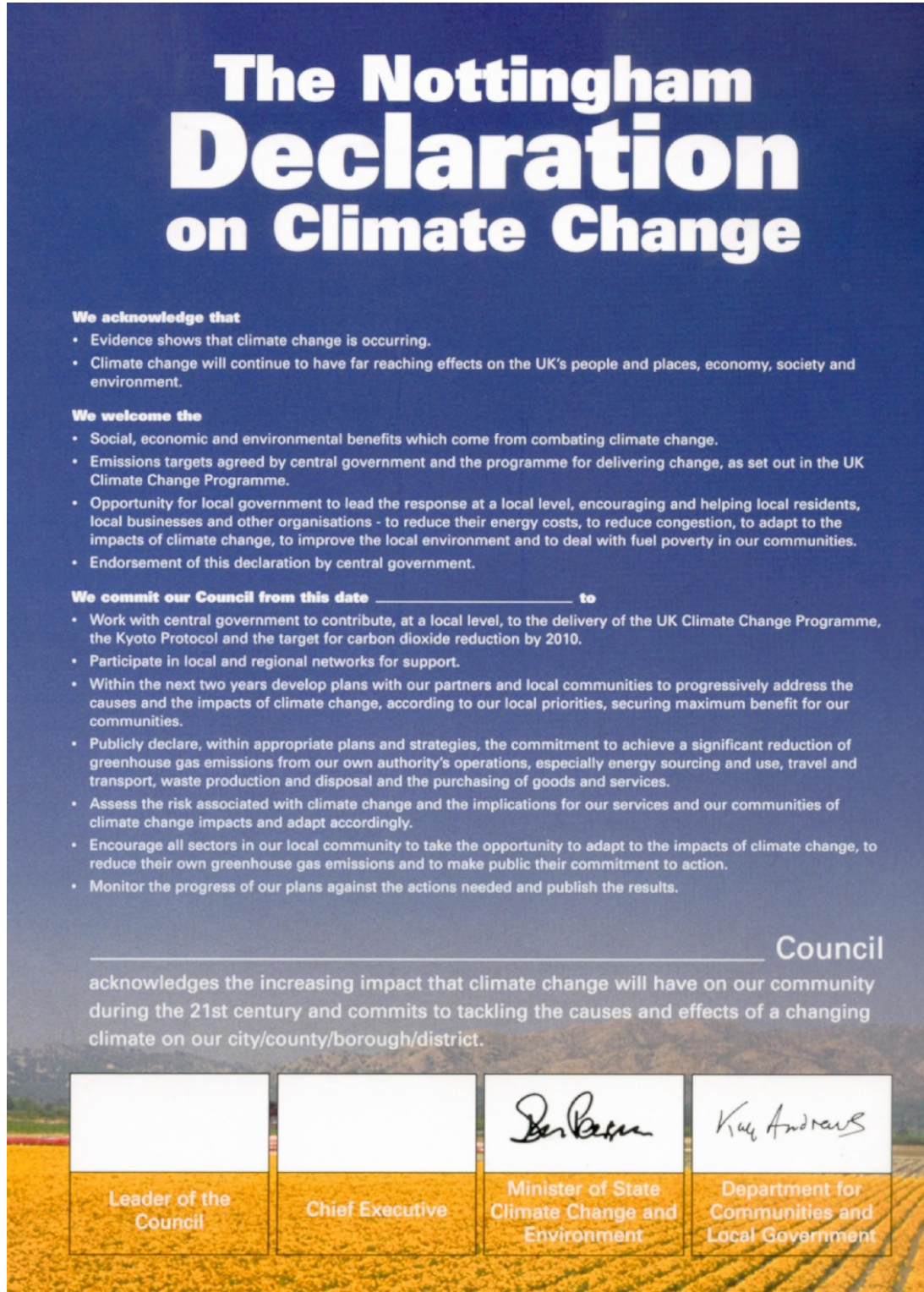
Male	49%	Female	48%
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## 8. Your age

15 and under	1%	30-44	12%	65-74	30%
16-29	6%	45-64	32%	75+	19%

# Appendix B

## Climate Change Declaration



**The Nottingham Declaration on Climate Change**

**We acknowledge that**

- Evidence shows that climate change is occurring.
- Climate change will continue to have far reaching effects on the UK's people and places, economy, society and environment.

**We welcome the**



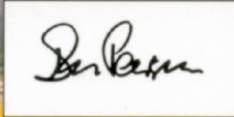
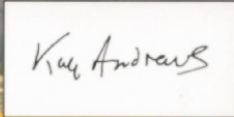
- Social, economic and environmental benefits which come from combating climate change.
- Emissions targets agreed by central government and the programme for delivering change, as set out in the UK Climate Change Programme.
- Opportunity for local government to lead the response at a local level, encouraging and helping local residents, local businesses and other organisations - to reduce their energy costs, to reduce congestion, to adapt to the impacts of climate change, to improve the local environment and to deal with fuel poverty in our communities.
- Endorsement of this declaration by central government.

**We commit our Council from this date \_\_\_\_\_ to**

- Work with central government to contribute, at a local level, to the delivery of the UK Climate Change Programme, the Kyoto Protocol and the target for carbon dioxide reduction by 2010.
- Participate in local and regional networks for support.
- Within the next two years develop plans with our partners and local communities to progressively address the causes and the impacts of climate change, according to our local priorities, securing maximum benefit for our communities.
- Publicly declare, within appropriate plans and strategies, the commitment to achieve a significant reduction of greenhouse gas emissions from our own authority's operations, especially energy sourcing and use, travel and transport, waste production and disposal and the purchasing of goods and services.
- Assess the risk associated with climate change and the implications for our services and our communities of climate change impacts and adapt accordingly.
- Encourage all sectors in our local community to take the opportunity to adapt to the impacts of climate change, to reduce their own greenhouse gas emissions and to make public their commitment to action.
- Monitor the progress of our plans against the actions needed and publish the results.

\_\_\_\_\_ Council

acknowledges the increasing impact that climate change will have on our community during the 21st century and commits to tackling the causes and effects of a changing climate on our city/county/borough/district.

			
Leader of the Council	Chief Executive	Minister of State Climate Change and Environment	Department for Communities and Local Government