

ANNEX A

# Reducing Carbon Emissions Scrutiny Sub-Committee

Reducing Carbon Emissions from York's Public and Private Sector Housing.



Agreed at The Reducing Carbon Emissions Scrutiny Sub-Committee 5<sup>th</sup> July 2006

Considered by Scrutiny Management Committee 24<sup>th</sup> July 2006

Agreed at Executive Date XXXXX

## **Chair's Foreword**

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## Summary of Recommendations

- 1. That the Scrutiny Management Committee progress an Ad-Hoc Scrutiny Review of Climate Change Strategies and Action Plans with a view to recommending best practice approaches for the creation and adoption of such a strategy and action plan at the City of York Council.
- 2. That the Sub Committee considering the final report of the former Planning and Transport Scrutiny Board regarding sustainable development be requested to include a recommendation that: The Local Development Framework of City of York Council includes a Calderdale/Merton Style Target requiring developers to ensure that at least 10% of all energy required is provided from renewable sources in all new and significantly refurbished developments up to 2010. Including domestic and with a rising target for onsite embedded renewables ( ≤ 15% by < 2015, 20% by 2021 etc) thereafter.
- 3. That an appraisal of the authorities capacity to respond to and enforce Parts L and F of the Building Regulations be conducted as a matter of urgency, highlighting any training and resourcing issues that need addressing.
- 4. That the Yorkshire and Humber Assembly be requested by the authority's Elected Member Energy Champion to facilitate region wide BREEAM assessor training for the region's Development Control (and other appropriate) Officers with the aim of reducing costs to individual Local Authorities.
- 5. That the City of York Council commit to adopt standards greater than or equal to Ecohomes Very Good Standards for all its funded housing from the present until April 2008 with a rising target thereafter.
- 6. That as a matter of urgency the Elected Member Energy Champion present a first version of the Regional Assemblies questionnaire to the Executive and thereafter the Regional Assembly, as a record of the authorities position across all sectors to date.
- 7. That the Elected Member Energy Champion present six monthly updates of the Regional Assemblies questionnaire to the Executive and thereafter the Regional Assembly, as a record of the authorities progress on energy across all sectors.
- 8. That the authority adopt a more integrated approach, to recording improvements to LA housing stock utilizing the developing Environmental Management System (EMAS) or similar. That Officers in Housing work with the Authority's Sustainability Officer who should be engaged to advise about targeted improvements in this area and the reporting of targeted outcomes under EMAS.

- 9. That the Housing Strategy & Enabling Group Housing Standards & Adaptations Officer and other officers in housing as appurtenant work with York EEAC officers consult upon, devise and adopt a fuel poverty strategy and action plan for the authority this year. And that the action plan use the Regional Action Plan (Annex C) NEA guidance (Annex F) and above quick step pointers as a steer.
- 10. That the Local Authority ensures that CYC Officer and Member Positions on the Energy Partnership Board are always filled.
- 11. That Annual and inter-year joint working be conducted between EEAC's Local Authority Support Programme Co-ordinator and CYC Housing Officers to ensure renewables are incorporated as part of the HRA Business plan. Consultation should cover improvements scheduled to buildings fabric and/or heating, water systems replacements etc

# **Summary of Implications of Recommendations** for City of York Council

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### FINAL REPORT

Other	

# Final Report: Reducing Carbon Emissions from York's Public and Private Sector Housing.

### Summary

1. Members of the Executive are presented with the final report of the Reducing Carbon Emissions Scrutiny Sub-Committee (formerly Housing Scrutiny Board) delivering their research and findings regarding approaches Local Authorities might take to reducing carbon dioxide (CO<sub>2</sub>) emissions from York's public and private sector housing.

### **Background**

- 2. Between 2005 and 2006 Scrutiny<sup>1</sup> at the City of York Council advanced the development more robust and holistic strategic approaches to delivering carbon reduction and energy sourcing. These approaches have covered all sectors of the Council's work bar transportation fuel, including;
  - a. Sustainable Planning Guidance
  - b. Reducing managing and monitoring energy consumption in council property
  - c. Ensuring increasingly sustainable supply and embedded micro-generation in council property
  - d. Street Lighting strategic management & procurement to reduce co2 emissions and waste
- 3. The housing topic<sup>2</sup>, 'Reducing Carbon Emissions from York's Public and Private Sector Property', was chosen by the Housing Scrutiny Board as complimentary to the aims of the other Scrutiny reviews and recommendations supporting the authority to monitor, manage and achieve carbon savings in line with:
  - 1. The Energy Hierarchy (see box below)
  - 2. Future development of a Climate Change Strategy
  - 3. Recent changes to the National Planning Policy framework promoting greater sustainability
  - 4. The Audit Commission's aims for increased sustainable assessment in the Comprehensive Performance Assessment (CPA); for more information regarding Comprehensive Performance Assessment see glossary
  - 5. Gershon efficiencies reporting; for more information regarding Gershon efficiencies see glossary
  - 6. Local Housing Authority obligations under the Home Energy Conservation Act 1995

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Through work of the Boards: Environment and Sustainability and, Planning and Transport

See Annex A for the topic registration form

### **Energy Hierarchy**

#### Sustainable

- Energy conservation (reducing total energy demand)
- Energy efficiency
- Exploitation of renewable, sustainable resources
- Exploitation of non-sustainable resources using low/no-carbon technologies (eg CHP)
- Exploitation of conventional resources as we do now

#### Unsustainable

#### WHY WORRY? OR THE VIEW FROM OUT THERE

- 4. Planet Earth, seems a vast, safe and robust mass from the ground, an endless expanse of ocean beneath limitless air, manned space exploration returned cosmonauts and astronauts whose story differed. They described Earth as a tiny blue gem or 'marble' beneath a thin, fragile atmosphere suspended in a silent and endless void.
- 5. Whilst our observatories, signalling and scoping technologies reach ever deeper into space, Earth remains the only planet we know of to harbour life and life is dependant on our fragile atmosphere. Our atmosphere is composed of distinct layers, we can be described as living in the troposphere where the weather i.e. rain, snow etc mostly occurs. Impacts such as the Hole in the Ozone layer<sup>3</sup> first recorded by a research group from the British Antarctic Survey (BAS) and Global Warming occur in the stratosphere above this.
- 6. Over the past century, Earth's surface temperature rose by about 1-2 degrees Fahrenheit with accelerated 'global warming' in the past two decades. Evidence indicates that warming over the last 50 years is attributable to human activities altering the chemical composition of the atmosphere and creating a build up of greenhouse gases<sup>4</sup>; including Carbon dioxide (CO<sub>2</sub>). CO<sub>2</sub> and other air pollution. In the atmosphere this acts like a thickening blanket, trapping the sun's heat and causing the planet to warm up.
- 7. Astronauts were trained in recent decades to detect major areas of environmental degradation visible from space. Astronaut Eileen Collins expressed concern about environmental damage on earth seen from on board the spaceship *Discovery*,

Stratospheric ozone depletion initially recorded over Antarctica is now seen over the Arctic with associated thinning globally see glossary for more information.

See Glossary for a definition of Green House Gasses

- ".. you can see how there is erosion, and .. deforestation. It's very widespread in some parts of the world. . . . We would like to see, .. people take good care of the Earth and replace the resources that have been used."
- 8. Nearly half century of evidence shows increasing Amazonian and Congo deforestation each decade, extending silt plumes from major rivers into our oceans and the expansion of the great Sahelian Desert further south into sub-Saharan Africa. Moved by our destruction, astronauts remind us how fragile we are in the vastness of time and space and that this our only home must be cared for now.

#### **Global Warning Signs The Last Decade**

- Droughts create severe dust storms and famine across areas of Africa and Asia
- America and Australasia endure their worst wildfire seasons ever.
- Severe floods, including those across our region.
- Heat waves in 2003 cause over 20,000 European in and 1,500 India deaths.
- Tropical forests are dying back. Without them less atmospheric CO<sub>2</sub> is locked up.
- The area of the Arctic's perennial polar ice cap is decreasing by 9% per decade.
- Warmer winters are raising sea levels by melting glaciers and causing early snowmelt
- The temperature distribution of our Oceans is altering. Tropical storms are picking up more energy category 3 storms are being turned into the more dangerous category 4+ storms. The destructive potential of hurricanes has greatly increased along with ocean temperature changes over the past 35 years.
- Shifts in UK weather patterns are increasing with greater propensity to flooding.
   As the gulf stream conveyor decreases and may potentially even stop<sup>5</sup> our winter temperatures will plummet.

The overall effects of Global Warming and Ozone Depletion are described as Climate Change.

#### **OUR PLANET**

- 9. The first global agreement to restrict CFCs was the signing of the Montreal Protocol<sup>6</sup>. The European Community is stricter agreeing to halt production of the main CFCs from 1995. Tighter deadlines for use of the other ozone-depleting compounds are also being adopted.
- 10. The Kyoto Protocol ammends the United Nations Framework Convention on Climate Change (UNFCCC). Countries ratifying agreeing and signing up to the protocol have committed to reduce their emissions of carbon dioxide and five other green houses gasses, and/or engage in emissions trading (see glossary) if they maintain or increase emissions of these gases.

see also glossary

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Recent observations show a decrease of 20% since 1950 in the flow of water in the channel between Greenland and Scotland a source of cold dense water that drives the Gulf Stream. Climate models predict continued greenhouse gas emissions will further weaken the stream, potentially making it unstable and likely to shut down completely in the future.

- 11. In working on the progression of this topic the Sub-Committee acknowledged the commitment made by the City of York Council to actions mitigating climate change in signing the Nottingham Declaration<sup>7</sup>; See glossary for more about the declaration. The Sub-Committee believe that the research, findings and recommendations in this report should support the City of York Council to fulfil its declaration commitments.
- 12. In the course of their investigations the Scrutiny Sub-Committee recognised that other authorities around the region have progressed the aims of the Nottingham declaration through the creation and approval of a Climate Change Strategy and Action Plan.
- 13. In view of several Scrutiny Boards work on energy management and CO<sub>2</sub> reduction across most areas of the authorities operations, the Sub-Committee believe it is now an appropriate time to review best practice Local Authority (LA) Climate Change Strategies and actions plans, with a view to the adoption of such a strategy and plan for the City of York Council (CYC). This would provide the authority with a framework for target setting and recording progress against the objective aims of the declaration.

#### **Possible Recommendations**

1. That the Scrutiny Management Committee progress an Ad-Hoc Scrutiny Review of Climate Change Strategies and Action Plans with a view to recommending best practice approaches for the creation and adoption of such a strategy and action plan at the City of York Council.

#### **OUR NATION**

- 14. The largest controllable source of CO<sub>2</sub> emissions is energy generation, 28% of total UK energy consumption and carbon dioxide emissions today are domestic<sup>8</sup>. 80% of energy consumed in households is for space heating and hot water; see Department for Environment, Food and Rural Affairs' (DEFRA) report<sup>9</sup>.
- 15. Between 1990 and 2002, UK household energy consumption rose by 18% contra to a domestic carbon savings target of 4.2 million tonnes by 2010 per annum. DEFRA's report concludes necessary domestic decrease requires approaches to energy efficiency combining insulation and buildings envelope improvement with more innovation in, and take up of, energy-saving products for homes<sup>10</sup>.
- 16. The Energy Efficiency Commitment (EEC) requires energy suppliers to achieve domestic energy efficiency promotion targets which can be met by carrying out

For more about the Nottingham declaration please see glossary

See Department of Trade and Industry Sustainable Consumption and Production Indicators - Revised Basket of Decoupling Indicators June 2005

<sup>&</sup>lt;sup>9</sup> 'New Sustainable Consumption and Production Indicators' DEFRA 11<sup>th</sup> April 2005 report outlining progress the UK must make towards economic growth with reduced damage to the environment

See also House of Commons - Environment, Food and Rural Affairs Committee Ninth Report of Session 2004–2005 Volume I 'Climate Change: looking forward' Pg. 32-36 regarding household emissions.

- a combination of approved measures, from installing insulation to providing low energy light bulbs.
- 17. The Home Energy Conservation Act 1995 (HECA) obliges local housing authorities to act and report annually as "energy conservation authorities". Reports must identify measures improving energy efficiency in all residential accommodation – public and private 11. After extension of HECA's scope in 1996<sup>12</sup>, the aim was to deliver improved energy efficiency of 30%. DEFRA are clear that HECA contributes to meeting the UK's Climate Change commitments.
- 18. DEFRA and Commons report findings regarding the need to reduce CO<sub>2</sub> from Domestic property are echoed in the Audit Commissions revised CPA and voluntary indicator frameworks<sup>13</sup>; The latter formalizing and covering the delivery of public/private partnership objectives originally agreed at a local level through LA21. The Audit Commissions 'CPA 2005 Key Lines of Enquiry for Corporate Assessment'14 and 'Technical Guide to the Service Assessment Framework (CPA 2005)' is more rigorous in its expectations regarding sustainability and energy, in accordance with Audit's stated aim:
  - .."to cover a more substantial area of the council's environmental service function and .....take a broader view of the council's environmental performance"
- Revisions to both frameworks can be seen as promoting devolved delivery of the National Government Sustainable Development Strategy 'Securing the Future 15. Each monitoring framework emphasises the role of Local Authorities as a catalyst and exemplar for better citizens awareness regarding reduced energy use and sustainable energy sourcing. An outline to the key messages of the CPA and Voluntary Indicator frameworks can be found in the glossary.

#### Fuel Poverty, Thermal Comfort and CO<sub>2</sub> Reduction.

- 20. Households needing to spend above 10% of their income on fuel for all uses, to achieve 'thermal comfort' are 'Fuel Poor', those exceeding 20% of their income are classed as severely fuel poor. The Governments Fuel Poverty Strategy of November 2001 aimed to end fuel poverty in vulnerable homes by 2010 and all homes by 2016; policy aims reaffirmed in the Energy White Paper of Feb. 2003, which set targets to improve energy efficiency by 20% by 2010.
- 21. Climate change will lower UK winter temperatures as the gulf stream conveyor decreases and may stop completely<sup>17</sup>. We are no longer self sufficient in gas,

Local Authorities were asked to submit their Ninth Progress Reports to the Secretary of State by 30 September 2005.

to include the identification of measures to improve the energy efficiency of houses in multiple occupation and certain house-boats.

Local guality of Life Indicators supporting Local Communities to Become Sustainable Audit commision August

September 2005 and October 2005

HM Government 2005

Thermal comfort: a satisfactory level of warmth i.e. no less than 21°C in the living room and 18°C in other rooms the level may be higher for the vulnerable or elderly. People with income brackets allowing < 10% spend on fuel for all uses are described as living in 'thermal comfort'.

Observations show a decrease of 20% since 1950 in water flow between Greenland and Scotland a source of cold dense water that drives the Gulf Stream. Climate models predict continued greenhouse gas increases

- oil or coal and international oil reserves are anticipated to run dry in 30-40 years. Insecure fuel supply, rising fuel prices and altered climatic factors are leaving increasing numbers of citizens in health threatening fuel poverty.
- 22. The health impacts of fuel poverty, including excess winter deaths, rising NHS costs (through treating conditions worsened by living in cold and damp), mental health effects (due to not being able to pay fuel bills, debt, isolation and living with poor health conditions) will increase. For more detail regarding the Health impacts of fuel poverty see the recent HACKW report at Annex).
- 23. Progress delivering fuel poverty programmes was eclipsed between 2003 and 2006 by 35% rises in domestic fuel prices doubling vulnerable households in fuel poverty to 2 million. According to the Government's Fuel Poverty Advisory Group (FPAG)<sup>18</sup> increased resources of more than 25%-30% over four years (amounting to about £1bn extra in total) to Warm Front<sup>19</sup> are required to eliminate fuel poverty amongst vulnerable households by 2010. FPAG calls for the Government's to re-affirm its fuel poverty targets in the Energy Review and support policies and funding resources to meet them.
- 24. The Energy Efficiency Partnership 'Homes Fuel Poverty Strategy Group'<sup>20</sup> have highlighted the strategic need to support embedded renewable microgeneration as integral to tackling fuel poverty. National Energy Action (NEA) and the National Right to Fuel Campaign (NRFC) believe the impact of fuel prices on fuel poverty will result in more than 1 million households still being fuel poor in 2009, with almost 90% of these being classed as vulnerable. These bodies regard microgeneration as a key remedy in such higher fuel price scenarios.
- 25. Tackling fuel poverty and CO<sub>2</sub> reduction are clearly wedded issues. The responses of Fuel poverty reduction bodies to the relationship between Fuel Poverty and micro generation (previously seen as primarily a CO<sub>2</sub> reduction measure) are summarised in the table below.
  - A. Typical energy efficiency schemes insulation, mains gas central heating installation etc do not benefit many UK properties as construction methods (e.g. solid walls, flat roofs) create 'Hard to Treat Properties' (HTT's). Efficiency measures alone will not alleviate fuel poverty in such homes and alternatives must be sought.
  - B. Proximity to gas networks impacts on fuel poverty; homes that cannot be connected usually rely on more expensive heating methods, such as electricity.
  - C. Microgeneration can alleviate fuel poverty in this context. 'Whole-house' approaches to effective long-term improvements in energy performance and fuel poverty reduction should include strategies promoting microgeneration technologies.

will further weaken the stream, making it unstable and likely to shut down completely. This would mean that less heat is brought to north-west Europe and therefore harsher winters. See also article of the Ocean and Climate Change Institute. <a href="http://www.whoi.edu/institutes/occi/currenttopics/climatechange-wef.html">http://www.whoi.edu/institutes/occi/currenttopics/climatechange-wef.html</a>

Compiled by R. Sherratt

See FPAG 4<sup>th</sup> Annual Report (March 2006) expressing concern about the effects of high energy prices on fuel poverty

<sup>(</sup>the Government's main fuel poverty programme) announced by the Chancellor in the pre-Budget Report Fuel Poverty Strategy Group response to the responses to a Department of Trade and Industry consultation exercise re the Microgeneration Strategy and Low Carbon Buildings Programme September 2005.

- D. National government should develop 'approved' training courses for each of the microgeneration technologies. Building partnerships, training and advice will drive mass-market transformation and fuel poverty elimination development facilitated by relevant sector skills councils and trade bodies. The Energy Efficiency Best Practice for Homes programme has developed a qualification regarding energy efficient central heating boilers and control systems (now offered as standard training for gas installers). Such approaches must be used to develop skills and regulate training for the microgeneration sector. With a view to inclusion of renewables in the future Warm Front and similar schemes.
- E. Devolved (Regional/Local Government) Administrations should target refurbishment of hard to treat homes with renewables and other innovative low carbon technologies, reducing fuel bills as an objective.
- 26. In brief the Energy Efficiency Partnership 'Homes Fuel Poverty Strategy Group' the NEA and NRFC recommend that national, regional and local microgeneration strategies must address fuel poverty issues, targeting the refurbishment of hard to treat (HTT) homes with renewables and other innovative low carbon technologies. Refurbishment HTT programmes should demonstrate reduced fuel bills promoting the wider application of renewables in future Warm Front activities in recognition of the contribution that microgeneration can now make to delivering 'thermal comfort' or affordable heating for all.
- 27. The National Planning Policy frameworks and buildings regulations were recently amended, again reflecting increased awareness of the need to address climate change, insecurity of fuel supply and fuel poverty. Regional Spatial Strategies (RSS) and Local Development frameworks will be required to incorporate 'Planning Policy Statement 22: Renewable Energy' (PPS22) emphasising the importance of Regional and Local Planning Authorities developing positively expressed policies on integrated renewables.
- 28. National Government recently announced its expectation<sup>21</sup> that all planning authorities" put in place policies on a par with Merton and Croydon. National clarification of PPS22 wording regarding the wider take-up of Merton-type pro-renewables planning policies emphasised that "It is essential that all planning authorities follow this example and all Chief Planning Officers will be written to urging them to do so".
- 29. Adoption of a Calderdale/Merton Style Target will require developers to ensure that at least 10% of all energy required is provided from renewable sources in developments including domestic up to 2010 with a rising target for onsite embedded renewables (15% by 2015, 20% by 2021 etc) thereafter. This requirement and the associated targets should be explicit in the developing City of York Council Local Development Framework.

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<sup>&</sup>lt;sup>21</sup> The Minister for Housing and Planning (Yvette Cooper) Written Ministerial Statements *Thursday 8 June 2006* Communities And Local Government PPS22

#### **Possible Recommendations**

- 2. That Sub Committee considering the final report of the former Planning and Transport Scrutiny Board regarding sustainable development be requested to include a recommendation that: The Local Development Framework of City of York Council includes a Calderdale/Merton Style Target requiring developers to ensure that at least 10% of all energy required is provided from renewable sources in all new and significantly refurbished developments up to 2010. Including domestic and with a rising target for onsite embedded renewables ( ≤ 15% by ≤ 2015, 20% by 2021 etc) thereafter.
- 30. In addition to which, recently expedited changes to Parts L and F of the Building Regulations in line with the findings of the Sustainable buildings task group and EU directive developments highlight the importance of establishing practice maximising energy efficiency opportunities prior to integrating or embedding renewable energy within proposals for significant refurbishment and new development. Local authorities will be expected to take a stronger line to enforce standards.
- 31. The Office of the Deputy Prime Minister (ODPM) published their proposals for Code for Sustainable Homes in December 2005 (formerly Code for Sustainable Buildings). From April 2006 the Code applies to all new homes receiving Government funding. It establishes a five star rating system, based on six essential elements, including energy efficiency and use of materials. Minimum standards will need to be achieved for each element, with additional, optional, elements for those developments wishing to achieve higher ratings. The Code builds on the existing EcoHomes standard.
- 32. Housing funded by the Housing Corporation and English Partnerships will be required to achieve a three-star rating equating to EcoHomes Very Good. The Housing Corporation have already committed to the requirement of Ecohomes Very Good on all its funded housing from April 2006 until 2008.

#### **Possible Recommendations**

- 3. That an appraisal of the authorities capacity to respond to and enforce Parts L and F of the Building Regulations be conducted as a matter of urgency, highlighting any training and resourcing issues that need addressing.
- 4. That the Yorkshire and Humber Assembly be requested by the authority's Elected Member Energy Champion to facilitate region wide BREEAM and EcoHomes assessor and standards training for the regions Development Control (and other appropriate) Officers with the aim of reducing costs to individual Local Authorities.
- 5. That the City of York Council commit to adopt greater than or equal to Ecohomes Very Good Standards for all its funded housing from the present until April 2008 with a rising target thereafter.

#### **OUR REGION**

- 33. With 14.9% of households 'fuel poor', the Yorkshire and Humber Region is the second worst nationally according to the 2001 English House Condition Survey (EHCS). The relationship between regional fuel poverty and HTT homes is highlighted in the Regional Housing Strategy (RHS) of 2005-2021 as housing structures which are difficult to insulate due to solid (single shell) walls and/or location off the gas mains are cited as contributory factors.
- 34. The 2001 EHCS found the average SAP (standard assessment procedure) rating across all stock in the region to be 49.9. The regional aim is to increase the rating across all homes to a SAP 65 by 2016. The Regional Housing Strategy proposes the development of policies, practices, and coordinated investment activity targeted initially at properties with a SAP of less than 30, which are otherwise sustainable. With the aim of reducing the percentage of housing with a SAP of 30 or under in 10 years to less than 1% or 2% in social and private housing respectively.
- 35. Responding to drivers from Government Office, the Region has developed a Regional Fuel Poverty Action Plan (see Annex) as a way to try and solve fuel poverty. Its development marries well with the fact that most authorities in the region (unlike York which will be addressed later in the report) have already developed and adopted a Fuel Poverty Strategy.
- 36. The Draft Regional Spatial Strategy (RSS) or 'Yorkshire and Humber Plan' devolves for incorporation within LA Local Development Frameworks responsibilities for energy<sup>22</sup>. This states that;

The Region will improve energy efficiency and increase installed renewable energy capacity to at least 708 MW by 2010 and to 1862 MW by 2021. All development strategies, plans and decisions will:

- **<u>A</u>** Improve energy efficiency and maximise the efficient use of power sources by:
  - Requiring orientation and layout of development to maximise passive solar heating
  - Maximising use of combined heat and power systems, especially by development with considerable energy demands
  - Locating development to utilise community heating scheme opportunities near major sources of power generation, especially those at Immingham and near Selby
  - Providing for new efficient energy generation and transmission infrastructure in keeping with local amenity and areas of demand
  - Supporting the use of clean coal technologies and abatement measures
- **B** Maximise renewable energy capacity by:
  - Delivering at least the sub-regional targets for installed renewable energy capacity to 2010 (Humber 124 MW; North Yorkshire 209 MW; South Yorkshire

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See The Yorkshire and Humber Plan, Draft for Consultation December 2005: Section15 Environment Pages 214-217

- 47 MW; West Yorkshire 88 MW; other 240 MW) and to 2021 (Humber 350 MW; North Yorkshire 350 MW; South Yorkshire 160MW; West Yorkshire 270 MW; other 690 MW)
- Helping to develop and deliver local authority targets for installed renewable energy capacity to 2010 in line with those provided in table 15.12
- Requiring at least 10% of the energy to be used in sizeable new development to come from on-site RE sources.
- 37. Scrutiny at the City of York Council was instrumental in supporting the Yorkshire and Humber Assembly's production an Elected Member Energy Champions Questionnaire. The Regional Energy Champions initiative aims to engender a better understanding and application of best energy practice and sources of practical and financial help for continuous improvement in this area region wide.
- 38. The City of York Council appointed Cllr. Christian Vassie as its Elected Member Energy Champion at Full Council on 25<sup>th</sup> May 2006. As a result of this the Scrutiny Sub Committee hope that the initial responses to the Housing Section of the questionnaire (see Annex D) will be completed shortly and presented to the City of York Council Executive and Regional Assembly Energy. In addition to which updated versions of the full questionnaire will be presented to the City of York Council Executive and Regional Assembly Energy on a six monthly basis to support monitoring of improvements.

#### **Possible Recommendations**

- 6. That as a matter of urgency the Elected Member Energy Champion present a first version of the Regional Assemblies questionnaire to the Executive and thereafter the Regional Assembly, as a record of the authorities position across all sectors to date.
- 7. That the Elected Member Energy Champion present six monthly updates of the Regional Assemblies questionnaire to the Executive and thereafter the Regional Assembly, as a record of the authorities progress on energy across all sectors.

#### **OUR CITY**

- 39. The Performance Improvement Team highlighted the timeliness and particular importance of the City of York Council addressing issues raised in this topic in feasibility return to the former Housing Scrutiny Board. Their response reminding the Board of the corporate CPA assessment / inspection expected in 2007/2008 which will seek to form a view on the following service and policy areas:
  - Condition of LA housing stock (cross tenure fuel poverty, energy and resource efficiency are relevant)
  - Evidence that the council with partners are delivering on a 'clean and green liveability' agenda.

- The topic was also noted as fitting with Corporate Aim 1: '<u>Take Pride in</u> the City', by improving quality and sustainability, creating a clean and safe environment.
- 40. In respect of our city wide performance against monitoring (such as the CPA), legislative (HECA etc) and planning (i.e. PPS 22 etc) frameworks with a bearing on this mater, many weaknesses in the authority's strategic approaches and partnership working became clear during the course of this scrutiny.
- 41. In respect of the Local Authorities own housing stock York's performance can be seen as good with a SAP rating of 66pts; above the national average but not as good as all other councils in the region. In considering the information returned through feasibility analysis the Board recognised the value of work undertaken by the authority to ensure its own housing stock meets required standards of thermal comfort.
- 42. Our private sector performance is however falling below this with a SAP of 44pts and mars our record on HECA reports. Improvements to Thermal Comfort within the Local Authorities own housing stock have been subsequent to achieving decent homes standard rather than strategic interventions with the joint aims of achieving thermal comfort and CO<sub>2</sub> reduction.
- 43. It would be beneficial to the authority to adopt a more integrated approach, to recording improvements which utilized the developing Environmental Management System (EMAS) or similar. The Sustainability Officer for the Authority should be engaged to advise about targeted improvements in this area and the reporting of targeted outcomes under EMAS.

#### **Possible Recommendations**

- 8. That the authority to adopt a more integrated approach, to recording improvements to LA housing stock utilizing the developing Environmental Management System (EMAS) or similar. That Officers in Housing work with the Authority's Sustainability Officer who should be engaged to advise about targeted improvements in this area and the reporting of targeted outcomes under EMAS.
- 44. The Authority has neither a Thermal Comfort /Fuel Poverty Strategy or Action Plan in conjunction with rising energy prices may mean in real terms that the authorities position is now no better than it was some three to four years ago; a snap shot of mapped thermal efficiency giving detail regarding this can be found at Annex E.
- 45. A holistic approach to improving thermal comfort and sustainability in relation to domestic energy procurement, in all (including non-LA) housing stock needs to be adopted by the authority in partnership. Relevant partners i.e. the Energy Efficiency Advice Centre, Primary Care Trust, Health Authority, Private Landlords including Universities and National Energy Action need to be consulted (see Annex F NEA process outline) to create a holistic response to

- fuel poverty reduction and improved public health and the associated need for CO<sub>2</sub> reduction in response to climate change.
- 46. The authorities Equalities Officer also advised the Board that the absence of a fuel poverty or thermal comfort strategy may prohibit the authorities capacity to meet the equality concerns raised by the community and hence to achieve the Equality Standard.
- 47. Inequalities in housing both mirror very closely, and exacerbate, other inequalities in society. Disabled people, elderly people, black and minority ethnic people, young people, single parents etc are more likely to live in poor standard accommodation with poorer energy efficiency. The Officers considerations being based upon consultation undertaken by the authority with community groups (as part of its work to implement the Equality Standard) which has highlighted many equality issues around housing and poverty related to the topic. The Equalities Officer hoped that recommendations would incorporate strategies making advice and support regarding improved thermal comfort accessible and inclusive to all sections of the community.
- 48. The former Housing Scrutiny Board felt one of the biggest issues facing the citizens in respect of carbon reduction was understanding what a low emmisive home was comprised of. A notional model was created (in collaboration with Officers from York's EEAC) emphasising measures which could be taken to move existing homes towards the ideal; i.e. without major reconstruction of the buildings fabric. See 'SKETCHING the ENERGY EFFICIENT HOME How to make a Normal Home a Greener Cleaner Home'. Annex G of this report.
- 49. In order to help assess the effects of more concerted education/marketing regarding advice to citizens the Board felt the following actions might be helpful:
  - a. Do a scaled down version of the paper (4 x A4) for delivery as leaflets direct to householders in one or two of York's most thermally poor Wards as a pilot with a view to explicitly monitoring any improvements in grant take up returns through EEAC. (to be done)
  - b. ensure that the fuller version of the report is annually refreshed with the support of EEAC and kept as a data source on the council's website. (to be done)
  - C. Contact Elected Members to request a short notice in their Ward Newsletters encouraging people to take up the advice and grants available through EEAC. Newsletters including this at the Boards request; Fishergate Jan 2006, Heslington and Fulford Jan 2006, Holgate February 2006, Strensall, Towthorpe, Earswick & Stockton on the Forest February 2006, Dringhouses & Woodthorpe February 2006.
  - d. Request that the Deputy Chief Executive send an all staff Email out advising of the same information, this was done first week of December 2005.
  - e. Ensure that Streets Ahead (the Council Housing Magazine) incorporates an article on Energy Efficiency Advice

50. As a result of completing limited actions c, d and e Colin Eastwood, Project Manager Energy Efficiency Advice Centre (EEAC), <sup>23</sup> reported a vast increase in the level of customer contact, and resulting grant take up, with and through the local (EEAC). Further consultation by the Board with the Project Manager EEAC, National Energy Action and the Regional Assembly's Energy Policy Manager quickly led to a series of quick step actions that the authority might use as the basis of a fuel poverty action plan. These are tabulated below;

ACTION	WHO	WHEN
Annual refreshing of 'Sketching the Energy Efficient Home' for posting on the council's website with links to Sustainability content and Housing content of the site and reciprocal links to EEAC.	Housing Officers + EEAC personnel	April or as near to date of established annual grants funding changes
Possible short leaflet version of 'Sketching the Energy Efficient Home' for delivery direct to householders in Wards and/or for placement in Doctors Surgeries and other appropriate community locations etc.	Housing Officers +Marketing and Communications EEAC personnel, Health Authority, PCT	Devise Summer roll out Autumn
Short 'Winter Warmer' notice in Ward Newsletters and or Your City, encouraging people to take up the advice and grants available through EEAC.	All Elected Members, Neighbourhood Pride Team, Marketing and Comms, EEAC personnel,	August/September for phased roll out in letters October through February
Pre-Ward Meeting Information sessions or Energy Bingo Games including give aways – low energy light bulbs, hot water tank jackets sponsored by Power providers	All Elected Members, Neighbourhood Pride Team, Energy Providers, EEAC personnel,	At Ward Members choice in consultation
Single Paragraph Advice	Payments	October and March

Co-Opted Member of the Housing Scrutiny Board, Project Manager York, North Yorkshire and East Riding Energy Efficiency Advice Centre (EEAC)

\_

link to EEAC in the advertising/information boxes on Council Payslips	Manager, Resources, EEAC personnel,	
All staff Winter Warmer reminder Email encouraging staff to get the messages to friends and neighbors	Director Of City Strategy. EEAC personnel,	Late November
Benefits Section to facilitate York Energy Efficiency Advice Centre information being enclosed in benefits mail outs. To include a tick box on benefits forms giving claimants the option of been contacted by the Advice Centre if and when applicable grant funding or relevant information became available.	Payments Manager, Resources, EEAC personnel,	To be determined in consultation

51. In respect of the National and regional drivers and their findings and testing of improvement methods the former Housing Scrutiny Board believe that it is now imperative that the authority consult upon devise and adopt a fuel poverty strategy and action plan and ensure that the authorities relations with EEAC are built upon and consolidated.

#### **Possible Recommendations**

- 9. That the Housing Strategy & Enabling Group Housing Standards & Adaptations Officer and other officers in housing as appurtenant work with York EEAC officers consult upon, devise and adopt a fuel poverty strategy and action plan for the authority this year. And that the action plan use the Regional Action Plan (Annex C) NEA quidance (Annex F) and above quick step pointers as a steer.
- 10. That the Local Authority ensures that CYC Officer and Member Positions on the Energy Partnership Board are always filled.
- 52. To date The authority has not done any work in respect of improving sustainable sourcing in relation to domestic energy procurement; i.e. microgeneration from embedded renewable sources in its own housing stock. Nor has it taken a strategic stance on the education and support to achieve annually increasing levels of embedded renewable microgeneration in private

- sector stock. In respect of this the authority area has fallen behind its regional peers<sup>24</sup>.
- 53. Authorities such as Kirklees, Harrogate, Bradford and Leeds have achieved significant microgeneration retrofit and new builds within their housing stock. In no small part by capitalising on established positive relations with their Energy Efficiency Advice Centres (EEAC) developed through delivery of Fuel Poverty Strategies. These have then been extended to ensure EEAC's are consulted annually in respect of proposals for upgrading of heating systems, thermal efficiency measures and other buildings fabric improvements prior to recording within Housing Revenue Account Business Plans.
- 54. This form of consultation has allowed EEAC's and Local Authorities to target grant funding streams and retrofit renewable microgeneration sources into domestic stock. This in turn has facilitated authorities such as Kirklees which is seen Nationally as exemplary in this field to aim for targeted levels of installation recorded under the Environmental management system EMAS.
- 55. To date the City of York Council has not adopted such a strategy. As a result of the Board's scrutiny however, some preliminary exploratory meetings have taken place between the Head of Housing Services and the EEAC Project Manager.
- 56. The Head of Housing Services agreed to look into possibilities for replacing (at end of life) standard boilers with heat pumps where this may be cost effective to the Authority and tenant. Although this situation used to be rare where properties have mains gas connections, it will need to be increasingly considered in reflection of rising fuel prices and will almost certainly prove the best cost benefit fit where off gas network properties are under consideration.
- 57. EEAC have committed to keeping The Head of Housing Services fully up to date as to Energy Efficient Commitment funding and other funding streams including regional available for heat pumps and other possible microgenerative alternatives as schemes change in 2006. In this way the authority should be better able to capitalise on funding streams available to it.

#### **Possible Recommendations**

11. That Annual and inter-year joint working be conducted between EEAC's Local Authority Support Programme Co-ordinator and CYC Housing Officers to ensure renewables are incorporated as part of the HRA Business plan. Consultation should cover improvements scheduled to buildings fabric and/or heating, water systems replacements etc

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See 'Mapping Renewable Exemplars – York's And Humber', (provided at by the Environment and Sustainability Scrutiny Board, in respect of the known domestic microgeneration showing increasing levels of LA domestic stock retrofit and new build installation at other authorities within the region.

#### **Final Comments from the Board**

The Housing Scrutiny Board/Reducing Carbon Emissions Sub-Committee would like to acknowledge the invaluable assistance of a number of people for their technical support and advice to the Board throughout various points of the Scrutiny. The Board extends its thanks to each of those listed below.

Steve Waddington Head of Housing Services

Mark Grandfield Asset Manager (Housing Services)

Ruth Abbott Housing Strategy & Enabling Group – Housing Standards &

Adaptations

Kristina Peat Sustainability Officer, CYC

Colin Eastwood Project Manager York EEAC

Ashley Herbert Kirklees Energy Services

**Ruth Collins** Local Authority Support Programme Assistant, City Strategy,

**Energy Efficiency Centre** 

**Lance Saxby** Local Authority Support Programme Co-ordinator, City Strategy,

**Energy Efficiency Centre** 

Julian Horsler Equalities Officer, CYC

Lorraine Donaldson National Energy Action

Andrew Cooper Yorkshire and Humber Assembly

Policy Manager Energy

**Graeme** EAGA Partnership

Stephenson

#### **Contact details:**

Authors:

The Housing Scrutiny Board/ Reducing Carbon Emissions Scrutiny Sub-Committee

#### **Supporting Scrutiny Officer to the Board/Sub-Committee:**

Ruth Sherratt Tel: 01904 552066

E-mail: <u>r.sherratt@york.gov.uk</u>

For further information please contact the supporting scrutiny officer in the first instance

# Members of the Housing Scrutiny Board/ Reducing Carbon Emissions Sub-Committee Scrutiny Sub-Committee July 2005- 2006

Chair Cllr. Ceredig Jamieson Ball

Vice Chair Cllr. Bill Fairclough

Cllr. P. Blanchard Cllr. Janet Greenwood Cllr. David Horton Cllr. Mark.Hill

Cllr. Madeleine Kirk Cllr. David Livesley

Co-Opted Member Colin Eastwood

Co-Opted Member Alderman Jack Archer

**Co-Opted Member** Mildred Grundy Pat Holmes

#### **Background Papers & Publications**

#### Title and Author(s)

CPA 2005 Key Lines of Enquiry for Corporate Assessment (KLOE).

DIRECTIVE 2002/96/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on waste electrical and electronic equipment (WEEE)

Draft Environmental Policy And Update On Preliminary Review For The Environmental Management System (Ems).

Environment and Sustainability Scrutiny Board - Energy Use In Council Buildings

Environment and Sustainability Scrutiny Board - Generating the Future

Feedback on the Consultation Exercise for the Best Value Performance Indicators for 2005/2006

Home Energy Conservation Act 1995

Local Quality of Life Indicators – Supporting Local Communities to Become Sustainable

Planning for Renewable Energy A Companion Guide to PPS22

Planning Policy Statement 22: Renewable Energy

Regional Housing Strategy

Releasing resources to the front line Independent Review of Public Sector Efficiency Sir Peter Gershon, CBE

#### **Publisher and Date**

Audit Commission Sept 2005

Official Journal of the European Union 13<sup>th</sup> Febraury 2003

CYC Environment & Sustainability EMAP 20<sup>th</sup> April 2004

CYC Executive 2<sup>nd</sup> Feb 2005

2003

January 2006

ODPM May 2005

Crown Copyright

ODPM, LGA, DEFRA, AC

August 2005

**ODPM 2004** 

**ODPM 2004** 

Yorkshire and Humber

Assembly

Crown Copyright July 2004

#### Title and Author(s)

Review of Sustainable Energy - Beacons sustainable energy theme

Publisher and Date
June 2005
I&DeA Learning Pages

#### Glossary

# **Broad Leaved Native Trees**

Broad Leaved native Trees would generally be agreed to be species of Deciduous (trees which loose their leaves in winter) trees which have grown in England since the last Ice Age. The below list is not comprehensive but provides a guide;

Alder (Alnus glutinosa), Ash (Fraxinus excelsior), Aspen (Populus tremula), Bay Willow (Salix pentandra) Beech \*\* (Fagus sylvatica), Bird Cherry (Prunus padus), Black Poplar (Populus nigra var betulifolia), Broad-leaved Lime \*\* (Tilia platyphyllos), Crab Apple  $\cong$  (Malus sylvesteris), Crack Willow (Salix fragilis), Downy Birch (Betula pupescans),

English Oak (Quercus robur), Field Maple (Acer campestre), Goat Willow (Salix caprea),

Hawthorn ≅\*\*(Crataegus monogyna) and Midland Hawthorn≅ (Crataegus oxyacantha),

Hazel≅ \*\* (Corylus avellana), Hornbeam (Carpinus betulus), Rowan ≅(Sorbus aucuparia), Sessile Oak (Quercus petraea), Silver Birch≅ (Betula pendula),

Small-leaved Lime (Tilia cordata), Service Trees (Sorbus domestica and Sorbus torminalis), White Willow (Salix alba), Whitebeam (Sorbus aria),

Wild Cherry (Prunus avium), Wych Elm (Ulmus glabra)

#### Suitable for smaller gardens

#### \*\* Suitable for Hedging or pleatching

CARBON MONXIDE: Poisoning and Prevention

Carbon monoxide (CO) is a poisonous gas, which may be given off by heating - both fixed and portable appliances - or cooking appliances that use gas, coal, wood or oil, if they're not working properly, if the flue is blocked in any way, or if the room is not properly ventilated.

More than 50 Deaths from accidental domestic carbon Monoxide poisoning occur in the UK each year. Carbon Monoxide gas has no smell, no colour or taste and this makes it particularly dangerous.

To avoid accidental death through Carbon Monoxide poisoning people should do the following things as a minimal precaution;

Households with a gas boiler or heating system should be serviced every year

Chimneys should be swept, even if the fire is not in regular use, every year

Fit Carbon Monoxide detectors, these should comply with British Standard BS 7860 – a Carbon Monoxide detector is a warning device not a substitute for regular servicing.

#### In rented accommodation

The Gas Safety (Installation and Use) Regulations 1998 place a duty on landlords to make sure that appliances and flues are kept in good order and checked for safety at least once every 12 months. Landlords must also keep a record of previous safety checks and issue the current record to the tenant.

Tenants moving into new accommodation should:

Demand to see a copy of the current record of safety checks carried out.

Ensure that safety checks were carried by a CORGI-registered engineer.

Not use any gas appliances which they think may be unsafe.

Not attempt do-it-yourself work on appliances.

For more information about Carbon Monoxide in Homes please see the Department of Trade and Industry web site www.dti.gov.uk/homesafetynetwork/cm\_intro.htm

ChloroFluroCarbons (CFC's)

A common industrial product, used in refrigeration systems, air conditioners, aerosols, solvents and in the production of some types of packaging. Although chemically inert in the lower atmosphere (troposphere), they are taken to very high altitudes where they are broken down into their components by the stronger sunlight (UV) at these altitudes. It is the chlorine formed in this process that causes the damage to ozone. The manufacture and use of CFCs in industry has been severely curtailed following the Montrol Protocol and subsequent amendments.

Local Authorities must show performance or delivery of priorities agreed by the ODPM's Central and Local Government Partnership. The priorities are expressed as 5 sub-themed themes in the Key Lines of Enquiry. Themes have criteria for judgement at Level's 2 and 3 (where 3 shows the greater commitment). Sub-theme 5.1.2 has particular reference to housing and the criteria for judgement at Level's 2 and 3 of 5.1.3 widen encompass an Authorities own policy and monitoring framework, the Planning Authority role and the role of authority as exemplar. Sub Themes 5.1.2 and 5.1.3 with the associated criteria for judgement are copied below.

# 5.1.2 Asks what the council, with its partners, has achieved in its ambitions and priorities for the local housing market: Level 2:

The council's various policies on fuel poverty, energy efficiency, health inequalities and community safety are achieving improvements but would benefit from being more consistently applied across tenures. There is work going on for outcomes in these areas to be more sustainable, with more efficiency savings and improved procurement practices.

#### Level 3:

The council is able to demonstrate that there are sustainable policies and practice where relevant across all tenures to address issues such as fuel poverty, energy and resource efficiency, health inequalities, and community safety. Outcomes in these areas will not only be reflected in sustained improvements to people's quality of life but can also be quantified in terms of efficiency savings and improved procurement practices.

New housing is more sustainable in terms of construction, location, maintenance, and running costs. It is appropriate in size, scale, density, design and layout. It is also accessible, affordable and sufficient green space is provided.

5.1.3 Asks what the council, with its partners, achieved in its ambitions for the local environment, can the council evidence that working in partnership with others, it has established and is delivering on its clean and green liveability agenda the

**CPA** 

council, working in partnership with others, has contributed to ensuring environmentally sustainable communities and lifestyles.

#### **Criteria for Judgement:**

#### Level 2:

The council is addressing the quality of design in buildings and public spaces and is addressing these matters in its local development plans. There has been some increase in the proportion of new developments (for example, public buildings, housing, fixed infrastructure) which mitigate the effects of, or adapt to the impact of, climate change during planning, design and construction.

The council is setting a positive example to others through its environmental management practices

#### Level 3:

The council has reduced its own resource consumption significantly and is able to quantify the cost of these and the environmental impact these policies have had.

The council is effectively addressing significant local and global environmental issues and actively communicating environmental issues to the wider community

Buildings and open spaces are designed to a high quality and this is addressed in the local development plans. There has been a sizeable increase in the proportion of new developments (for example, public buildings, housing, fixed infrastructure) which mitigate the effects of, or adapt to the impact of, climate change during planning, design and construction.

#### **Emissions trading**

Emissions trading is an attempt to reduce the environmental cost of pollution control by providing economic incentives for measurable reductions in emissions.

A central authority, such as an air pollution control district or a government agency, sets limits or "caps" for each type of pollutant, recognizing that clean air is a joint resource. Groups that intend to exceed the limits may buy *emissions credits* from those who will stay below their designated limits; this transfer is normally referred to as a trade.

#### **Green House Gases**

The six key gases, identified as accelerating global warming due to human production, use and emission into the environment; carbon dioxide(CO<sub>2</sub>),

methane.

dinitrogen (nitrous) oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF<sub>6</sub>)

Carbon dioxide (CO<sub>2</sub>) accounts for the greatest proportion of greenhouse gas emissions in the UK.

#### **Halocarbons**

A class of halide (i.e. containing Chlorine, Bromine or Iodine) compounds, including CFC's. These can break down to form various ozone-depleting radicals.

#### **Kyoto Protocol**

An international agreement setting targets for industrialised countries such as the UK to cut their greenhouse gas emissions. The protocol

was agreed in 1997, based on principles set out in a framework convention signed in 1992.

The Kyoto Protocol became a legally binding treaty on 16 February 2005 having been ratified by 55 nations.

#### **Montreal Protocol**

A convention signed in 1987 by many countries to greatly reduce the production and use of CFCs responsible for damage to the ozone layer with the aim to reduce them by half by the year 2000. Since 1987, further amendments to the protocol have imposed greater restrictions on the production and use of potentially damaging compounds. The main CFCs will not be produced by any of the signatories after the end of 1995, except for a limited amount for essential uses, such as for medical sprays.. Two revisions of this agreement have been made in the light of advances in scientific understanding, the latest being in 1992. Agreement has been reached on the control of industrial production of many halocarbons until the year 2030.

## Nottingham Declaration

In 2000 Nottingham City Council hosted a conference on climate change to launch a declaration which has been signed by over 80 local authorities in the United Kingdom (number as at November 2004). The full wording of the declaration is copied below.

# Ozone (O<sub>3</sub>: 3 oxygen atoms)

Ozone occurs naturally in the atmosphere and forms a layer in the stratosphere, thinnest in the tropics (around the equator) and denser towards the poles. It is created when ultraviolet radiation (sunlight) strikes the stratosphere, dissociating (or "splitting") oxygen molecules (O<sub>2</sub>) to atomic oxygen (O). The atomic oxygen quickly combines with further oxygen molecules to form ozone. **Ozone depletion** is mainly due to the release of manmade chemicals containing chlorine such as CFC's (ChloroFluoroCarbons), bromine containing compounds, related halogens and Nitrogen oxides;. Ozone depletion has a major effects upon us and our planet, even a small amount of loss to the ozone layer, means more ultraviolet light (UV-B) from the sun reaches the Earth. For each1% of the ozone layer depleted, 2% more UV-B reaches the surface of the planet. UV-B increase is one of the most harmful consequences of ozone

depletion because it can cause skin cancer. The US Environmental Protection Agency estimates that 60 million people born by the year 2075 in America alone will get skin cancer due to ozone depletion and that one million of these people will die, in addition it estimates 17 million more cases of cataracts can also be expected in the US alone

#### Voluntary Indicator Framework

The March 2005 UK Government Sustainable Development Strategy 'Securing the Future' incorporates the August 2005 <sup>25</sup> guidance to monitoring, and complimentary indicators for Local Authorities and Local Strategic Partnerships, entitled 'Local Quality of Life Indicators – Supporting Local Communities to Become Sustainable'.

Drafted with reference to National Local Authority monitoring indicators drawn up under the LA21 process the indicators are recommended for adoption to extend or widen the ethos of the CPA framework to cover an authorities partners and partnership working.

Whilst the indicators are at present voluntary – i.e. non-statutory – in fleshing out the statutory indicators they "..help (LA's/LSP's) monitor the effectiveness of their Sustainable Community Strategies.." $^{26}$ . There is a strong suggestion that they may become obligatory in the near future. Indicators 24, 25 and 26 relating to energy and emissions are copied below.

- Levels of key air pollutants.
- Carbon dioxide emissions by sector and per capita emissions.
- Average annual domestic consumption of gas and electricity (kwh)

<sup>&</sup>lt;sup>25</sup> Audit Commission, DEFRA, ODPM and Local Government Association

See Page 16 'Local Quality of Life Indicators – Supporting Local Communities to Become Sustainable'.