



## **Special Environment and Sustainable Communities Overview and Scrutiny Committee**

**Date**        **Tuesday 6 October 2015**  
**Time**        **9.30 am**  
**Venue**       **Committee Room 1A, County Hall, Durham**

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### **Business**

#### **Part A**

**Items during which the Press and Public are welcome to attend. Members of the Public can ask questions with the Chairman's agreement.**

1. Apologies
2. Substitute Members
3. Declarations of Interest, if any
4. Any items from Co-opted Members or interested parties
5. Low Carbon Energy - Overview (Pages 1 - 4)
  - a) Joint Report of Assistant Chief Executive and Corporate Director of Regeneration and Economic Development
  - b) Presentation by Professor Jon Gluyas, Dean of Knowledge Exchange, Dong/Ikon Chair of Geoenergy Carbon Capture and Storage, Department of Earth Sciences, Durham University
6. Renewable Energy - Policy Changes and Update on Recommendations in the 'Reducing the Council's Carbon Emissions' - Scrutiny Review Report: (Pages 5 - 18)
  - a) Joint Report of Assistant Chief Executive and Corporate Director of Regeneration and Economic Development.
  - b) Presentation by Leo Oliver, Policy Officer, Maggie Bosanquet, Sustainability and Climate Change Team Leader and Stephen Beresford, Senior Sustainability and Climate Change Officer, Regeneration and Economic Development.
7. Such other business as, in the opinion of the Chairman of the meeting, is of sufficient urgency to warrant consideration

**Colette Longbottom**  
Head of Legal and Democratic Services

County Hall  
Durham

28 September 2015

To: **The Members of the Environment and Sustainable Communities  
Overview and Scrutiny Committee:**

Councillor B Graham (Chairman)  
Councillor E Adam (Vice-Chair)

Councillors J Armstrong, D Bell, E Bell, J Clare, J Clark, D Freeman, J Gray,  
D Hall, G Holland, I Jewell, C Kay, P May, A Liversidge, O Milburn, S Morrison,  
J Shuttleworth, P Stradling, L Taylor and S Zair

**Co-opted Members:**

Mr T Bolton and Mrs P Spurrell

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**Contact: Paula Nicholson**

**Tel: 03000 269710**

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**Environment and Sustainable  
Communities  
Overview and Scrutiny Committee**



**6 October, 2015**

**Low carbon energy – Overview**

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**Joint report of Assistant Chief Executive and Corporate Director  
of Regeneration and Economic Development**

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**Purpose of the Report**

1. The purpose of this report is to provide members of the committee with background information prior to a presentation by Professor Jon Gluyas, Dean of Knowledge Exchange, Dong/Ikon Chair of Geoenergy Carbon Capture and Storage, Department of Earth Sciences, Durham University focusing on low carbon energy providing detail of: energy development in the Country and in the North East region; current position; issues and challenges and current and future opportunities.

**Introduction**

2. Professor Jon Gluyas attended the special meeting of the Environment and Sustainable Communities Overview and Scrutiny Committee in November 2014 and gave a presentation focusing on Underground Coal Gasification (UCG). At that meeting it was suggested by members that Professor Jon Gluyas be invited to a future meeting of the committee to do a presentation on low carbon energy and it was agreed by members as part of the work programme for 2015/16 that a special meeting be arranged to look at low carbon energy, changes in Government policy regarding renewable energy and work undertaken by Durham County Council (DCC) in relation to renewable energy and reducing DCC's Carbon emissions. Arrangements have therefore been made for Professor Jon Gluyas to attend the Environment and Sustainable Communities Overview and Scrutiny Committee on the 6 October to deliver a presentation focusing on:
  - Background in relation to the development of energy in the Country and the North East region.
  - Current position – Why we are where we are?
  - Issues and challenges.
  - Current and future opportunities.
3. Members are also aware that as part of the 2014/15 and 2015/16 committee work programmes regular reports have been received providing updates on the development of the European Structural and Investment Fund (ESIF) Programme 2014-2020. Members will recall that included within the ESIF programmes top priorities is the low carbon economy strand which is ring fenced as 15% of County Durham's total ERDF allocation (around £18m). The last update received by the committee at the April meeting highlighted that DCC and partners had developed a number of projects to put forward for funding under the low carbon economy strand of the programme. The next

ESIF programme update is scheduled to be considered at the meeting on the 12 October, 2015.

## **Background**

4. The North East region of England emits around 20 million tonnes of carbon dioxide per annum. Heating accounts for just over one third while power generation is a third and transport just under one third. The per capita emissions are higher than the UK average and reflect the abundance of industry in the region. Government commitments to cut the emissions by 80% for 2050 demand very affirmative actions to reduce the region's carbon footprint. In reality this will need to be achieved while delivering both growth and improving prosperity. Heating, transport and power generation all need to be addressed and energy demand must be reduced. Can low carbon and renewable energy technologies deliver to this challenge?

## **Current position**

5. County Durham has developed most of its high grade wind-prone average. However the remaining low carbon energy technologies have not been fully evaluated and certainly not applied.

## **Issues/Challenges**

6. The main issue to overcome is that absence of accounting for the cost (environmental and long term) of burning fossil fuels, that is to say that the associated emissions are simply ignored. This means that the high energy density in fossil fuels gives such fuels a big advantage. Large scale uptake of low carbon and renewable energy requires initial subsidy and/or significant infrastructure investment.

## **Opportunities**

7. The North East region has a number of advantages, some natural and others derivative which provide it with an opportunity.
8. The geology of the region offers us opportunities to develop geothermal energy, low carbon energy from coal and utilisation of industrial waste heat. It is also possible that the North East have materials that could find use in renewable and low carbon energy applications.

## **Recommendation**

9. That the members of the Environment and Sustainable Communities Overview and Scrutiny Committee note and comment upon the information provided during the presentation.

## **Background papers**

None

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**Contact: Tom Gorman, Corporate Scrutiny and Performance Manager Tel: 03000 268027**

**Contact: Maggie Bosanquet, Sustainability and Climate Change Team Leader, Tel: 03000 265549**

**Author: Diane Close, Overview and Scrutiny Officer, Tel: 03000 268141**

**Author: Professor Jon Gluyas, Dean of knowledge Exchange, Durham University**

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**Appendix 1: Implications**

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**Finance** –None

**Staffing** – None

**Risk** - None

**Equality and Diversity** – None

**Accommodation** - None

**Crime and Disorder** - None

**Human Rights** - None

**Consultation** – None

**Procurement** - None

**Disability Discrimination Act** – None

**Legal Implications** – None

**Environment and Sustainable  
Communities Overview and  
Scrutiny Committee**



**6 October 2015**

**Changes in Government policy  
on renewables and an update on  
'Reducing the Council's Carbon  
Emissions' Scrutiny Review  
Report**

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**Joint report of Lorraine O'Donnell, Assistant Chief Executive  
and Ian Thompson, Corporate Director, Regeneration and  
Economic Development**

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**Purpose of the Report**

- 1 The purpose of the report is to provide members of the committee with an update on the progress made in relation to the recommendations contained within the 'Reducing the Council's Carbon Emissions' scrutiny review report 2013 attached at Appendix 2. In addition, the report provides detail of areas to be covered by officers in a short presentation to the committee focusing on: changes to Government Planning Policy in relation to renewables (wind turbines) and the challenges this presents to local authorities; progress made by Durham County Council (DCC) in reducing carbon emissions; key projects; challenges and opportunities and future developments.

**Background**

- 2 Members of the Environment and Sustainable Communities Overview and Scrutiny Committee in 2012 considered that as a local authority, Durham County Council is well placed to drive and influence carbon emission reductions through the services it delivers and its regulatory and strategic functions and it has been part of the Local Authority Carbon Management Programme since 2009. It was therefore agreed that a Scrutiny Review would be undertaken by the committee focusing on reducing the Council's carbon emissions.
- 3 'Reducing the Council's Carbon Emissions' Scrutiny Review report was considered by Cabinet at the meeting on the 16<sup>th</sup> January, 2013. At that meeting Cabinet agreed the recommendations contained within the review report which included a recommendation for a six monthly update on progress against recommendations contained in the report. The last update was provided to the Committee at the meeting on the 2 October, 2014 and it is therefore considered timely for a further update to be given to members at the October meeting of the committee.

- 4 In addition, when considering Underground Coal Gasification in November 2014 a presentation was provided by Professor Jon Gluyas, Dean of Knowledge Exchange, Dong/Ikon Chair of Geoenergy Carbon Capture and Storage, Department of Earth Sciences, Durham University. Following the presentation members requested that as part of the future work programme we invite Professor Jon Gluyas to a future meeting of the committee to provide a presentation and discuss with members the development of low carbon energy.
  
- 5 To complement the presentation from Professor Gluyas arrangements have been made for Leo Oliver, Policy Officer, Maggie Bosanquet, Sustainability and Climate Change Team Leader and Stephen Beresford, Senior Sustainability and Climate Change Officer, Regeneration and Economic Development to attend the meeting on the 6 October to deliver a presentation focusing on:
  - An overview of recent planning changes in relation to renewables including:
    - Changes in Government’s Planning Policy and guidance for wind turbines.
    - Challenges presented to Local Planning Authorities.
  
  - Update on how the Council is reducing its carbon emissions highlighting:
    - Progress to date.
    - Key projects.
    - Challenges and opportunities.
    - Future developments.

### **Changes in Government Planning Policy – Renewables (wind turbines)**

- 6 On 18 June, the Secretary of State for Communities and Local Government (Greg Clark) published a Written Statement representing new planning policy considerations for proposed wind turbine developments. This aims to give communities the final say on wind turbine development.
  
- 7 *The statement sets out that ‘when determining planning applications for wind energy development involving one or more wind turbines, local planning authorities should only grant planning permission if:*
  - *the development site is in an area identified as suitable for wind energy development in a local or neighbourhood plan; and*
  - *following consultation, it can be demonstrated that the planning impacts identified by affected local communities have been fully addressed and therefore the proposal has their backing’.*
  
- 8 National Planning Practice Guidance has also been changed to reflect the new policy. The changes present a shift in approach, as it is clear that maps showing a potential wind resource and potential capacity for turbines would not comply with the policy approach, Local Planning Authorities would have to be more prescriptive and consider allocating areas for wind turbines.

### **Terms of Reference of the ‘Reducing the Council’s Carbon Emissions Review’**



9 The Environment and Sustainable Communities Overview and Scrutiny Committee at its meeting on 9<sup>th</sup> July, 2012 agreed to undertake a review of the Council's Carbon Management Programme to assess whether the Council is on course to:

- Reduce CO<sub>2</sub> emissions by a minimum of 40% from the Council's 2008/09 baseline of 105,816 tonnes by 2015.
- Deliver savings in energy costs of at least 20% against business as usual predictions by 2015.
- Quantify the direct carbon emissions from the Council's activities and allocate ownership of those emissions to Service Groupings and services by 2012 to allow emissions reduction targets and carbon budgets to be included in Service Plans and monitored by 2013.
- Create a 'low carbon culture' within the Council by raising awareness, providing formalised training and gaining support from staff and senior management.

### **Recommendations of the Reducing the Council's Carbon Emissions Review**

10 The Scrutiny review report made recommendations in respect of:-

- The importance of a corporate and co-ordinated approach in relation to reducing carbon emissions and the need for service groupings to continue to proactively engage with the Council's Carbon Management Programme Board.
- That the Council/Cabinet continues to explore opportunities for 'invest to save' that will result in significant reductions in energy consumption and carbon emissions and ultimately lead to savings and efficiencies.
- That Elected Members be provided with detailed information on any trials/schemes in relation to street lighting in their area prior to residents.
- That more Eco Champions be recruited to promote simple energy saving changes. As part of the corporate induction programme Elected Members be provided with information on the Council's Carbon Management Programme and that volunteers are sought from elected members to act as Eco Champions.
- That the use of innovative technology be looked at to reduce business travel.

- That the Committee continues to monitor the progress being made to achieve the Council's carbon reduction targets through the current quarterly performance monitoring reports and receives regular updates by members of the Council's Sustainability, Carbon and Climate Change Team and Carbon Management Programme Board.
- That all staff and Elected Members be made aware of the Council's carbon reduction targets, the financial impact and energy use and the savings that can be made by using energy more effectively

### **Current position**

- 11 The attached Action Plan (Appendix 2) provides information on the progress made in relation to the recommendations contained in the scrutiny review report. In addition, the presentation provided at the meeting on the 6 October will highlight changes in planning policy (wind turbines), progress made by DCC to date in reducing its carbon emissions, key DCC projects, challenges and opportunities and future developments.

### **Next steps**

- 12 DCC will continue to explore what we can do going forward to reduce our carbon emissions and generate more renewable and low carbon energy across County Durham.

### **Recommendations**

- 13 Members of the Environment and Sustainable Communities Overview and Scrutiny Committee are asked to consider and comment upon the presentation provided at the meeting and the progress made in relation to the recommendations contained in the scrutiny review report 'Reducing the Council's Carbon Emissions'.

### **Background Paper(s)**

Reducing the Council's Carbon Emissions Scrutiny Review report – January, 2013.

Environment and Sustainable Communities Overview and Scrutiny Committee – Update: Reducing the Council's Carbon Emissions Scrutiny Review report – 2 October, 2014.

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## **Appendix 1: Implications**

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**Finance** – None

**Staffing** – None

**Risk** - None

**Equality and Diversity** – An Equality Impact Assessment was undertaken in respect of the Scrutiny Review recommendations.

**Accommodation** - None

**Crime and Disorder** - None

**Human Rights** - None

**Consultation** – None

**Procurement** - None

**Disability Discrimination Act** – None

**Legal Implications** –None

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OVERVIEW AND SCRUTINY WORKING GROUP REPORT – REDUCING THE COUNCIL’S CARBON EMISSIONS  
 REVIEW OF RECOMMENDATIONS CONSIDERED BY CABINET ON: 16<sup>TH</sup> JANUARY, 2013

Information from last update in October 2014 is in lighter shading and the most up to date information is in bold.

Review Recommendation	Progress Report of Action taken to implement recommendation	Resib'ty	Timescale
<p>1) That Cabinet notes the importance of a corporate and co-ordinated approach in relation to reducing carbon emissions. This approach is facilitated through the Council’s Carbon Management Programme Board and in order to continue to fulfil this function, Service groupings should proactively engage with the Board to ensure a joined up and planned approach.</p>	<p>The corporate Carbon Management Programme Board Continues to lead the Council’s work on carbon reduction and energy savings. All service groupings are represented and quarterly reports are received by the Board on all relevant capital and revenue projects.</p> <p><b>The Board has continued to meet and receive reports on projects. Further details on progress and actions are included in this report and in the presentation.</b></p>	<p>Carbon Management Programme Board</p>	<p>Ongoing</p>

Review Recommendation	Progress Report of Action taken to implement recommendation	Resib'ty	Timescale
<p>Pa 12</p> <p>2) That in view of the recent increases in energy prices, the Council/Cabinet continues to explore opportunities to 'invest to save' that will result in significant reductions in energy consumption and carbon emissions and ultimately lead to savings and efficiencies. Consideration also needs to be given to whether schemes should be undertaken that provide the opportunity for large scale carbon reduction, but do not meet the usual financial pay back criteria.</p>	<p>Further projects have been initiated. These include boiler optimisation, new lighting in five leisure and office buildings and surveys have been carried out on three main depots with recommendations for new invest to save projects. These will be approached using an innovative "whole buildings" methodology which, if successful, will be rolled out across the full site of retained non-school buildings once the building review is complete. Further projects are also being looked at and are in feasibility stages.</p> <p><b>A new Carbon Management Plan is currently being produced. This will outline our actions for the next five years towards our target of a 40% reduction by 2020. It will initially concentrate on ensuring that our Office Accommodation Programme embeds carbon savings in its work and the good practice learnt from the first five years is carried forward.</b></p> <p>Since the last report the Energy team has had three members of staff leave their posts for new jobs. This has impacted on current work planning. An internal restructure of the Sustainability, Energy and Climate Change team is being prepared and staff are currently covering essential roles but this has inevitably meant slower progress on projects than anticipated.</p> <p>The Government is currently making significant changes to the support network for renewables (Feed in Tariff and Renewable Heat Incentive). This is creating a very unstable environment for medium and long term planning in this field, and a number of projects have been scaled back or are at risk because of the proposals.</p>	Carbon Management Programme Board	Ongoing

Review Recommendation	Progress Report of Action taken to implement recommendation	Resib'ty	Timescale
<p>3) That the Council's Elected members be provided with detailed information on any trials/schemes in relation to street lighting in their area, prior to residents being notified.</p>	<p>We have retrofitted over 14,000 street lights to date countywide with new energy efficient LED street lights as part of the Street Lighting Energy Reduction Project. We estimate that this has impacted over 70,000 households and has generally been very well received.</p> <p>The new LED street lighting meets and exceeds current British Standards whilst much of the old street lighting it replaces does not meet current or past British Standards.</p> <p>It is important to note that street lighting is only supposed to light the road and footway and the new LED street lights achieve this objective very well due to the enhanced control provided by LED technology.</p> <p>The Street Lighting Energy Reduction Project involves a £21million capital investment in highways that will produce gross revenue savings of £2million per annum which will help meet the unprecedented reductions in central government funding. The Project will also reduce the Council's carbon emissions by over 7,500 tonnes per annum. In summary, the new LED street lighting is better quality and achieves significant savings in electricity consumption, carbon emissions and maintenance.</p> <p><b>The street light retrofits installed to date have been generally well received by the public. The elimination of light has taken some residents a bit of time to get used to, however when the benefits are explained to them they are more comfortable</b></p>	<p>Street Lighting Energy Reduction Project Board.</p>	<p>Ongoing</p>

with the new lights. As reported previously, there has been extensive compliance testing across a wide range of sites demonstrating conclusively that the new lights comply comfortably with required standards.

With over 26,000 street lights already retrofitted affecting in excess of 100,000 homes, customer complaints received so far have been relatively modest and we've also received a small number of compliments as well as a welcome range of positive anecdotal feedback.

In addition, part of the programme involved removing redundant street lights and de-illuminating traffic signs. This started in April 2014 due to the need to undertake a thorough road safety risk assessment and consultation exercise prior to any street lights being removed.

In Year 2 308 street lights have been removed and 329 traffic signs have been de-illuminated. We're targeting 1,000 removals during Year 3 and 250 sign de-illuminations.

LED retrofit numbers to date are:

Year 1 to 31st March 2014 - total 8,138 units converted

Year 2 to 31st March 2015 – in year total 12,004 conversions so that's a grand total of 20,142 to end of Year 2

Year 3 target to 31st March 2016 is a further 12,000 conversions and we're currently on programme.

By the end of the current financial year (ie Year 3) we'll have completed 32,000 conversions out of the planned 41,000 and will be well ahead of the original programme.



Review Recommendation	Progress Report of Action taken to implement recommendation	Resib'ty	Timescale
<p>4) That the drive to recruit more Eco Champions to promote simple energy saving changes continues, and that consideration be given to the possibility of providing Elected Members with information on the Council's carbon management programme, as part of the corporate induction programme and seeking volunteers from Elected Members to act as Eco Champions.</p>	<p>Surveys have shown that Durham County Council is ahead of most other councils in respect of the number of Eco Champions to staff. The programme continues to be reviewed to assess how we can increase this further and provide a support network for all the Eco Champions. Carbon Management is now part of the induction programme and is also included in staff reviews.</p> <p>To date we have not recruited elected members as Eco Champions, but we will continue to assess this option.</p> <p><b>Updates on key initiatives and projects have been circulated to Eco champions. This year there have been 8 articles in Buzz, including pieces on fuel efficient driving, the Big Switch Off, cycle to work and schools carbon emissions.</b></p> <p><b>Building energy use data is available to Eco-champions (and Members / staff) via: <a href="http://intranet/Pages/BuildingSpecificEnergyUse.aspx">http://intranet/Pages/BuildingSpecificEnergyUse.aspx</a></b></p>	Carbon Revenue Project Board	Ongoing

Review Recommendation	Progress Report of Action taken to implement recommendation	Resib'ty	Timescale
<p>16) That in relation to the need to reduce business travel, consideration be given to making more use of innovative technology such as skype, telephone conferencing, video conferencing and promoting the availability of 'hot desks' at council offices throughout the county.</p>	<p>General awareness of the alternatives available instead of travelling has been raised through Eco Champions and the Fleet Review. This has included conference calls which have been trialled in several services for regular meetings. A new report from Myview has also been created. This is sent monthly to managers showing business mileage for all their team and a comparison to the previous year.</p> <p><b>New methods of working such as hot desking and tele/video conferencing are being incorporated into the Office Accommodation Programme. ICT Services can provide laptops/tablets with Juniper software to enable employees to work remotely.</b></p> <p><b>Regular updates on topics such as pool cars are included in Eco-champion literature and staff magazines.</b></p> <p><b>In spring, 72 staff took up an offer to take a free course on Safe and Fuel Efficient Driving led by the Local Motion project and the Road Safety Team :</b></p> <p><a href="http://www.dothelocalmotion.co.uk/ways-to-travel/drive/safed-training/">http://www.dothelocalmotion.co.uk/ways-to-travel/drive/safed-training/</a></p> <p><b>Participants improved their fuel efficiency by an average of 16%.</b></p>	Carbon Management Board	Ongoing

Review Recommendation	Progress Report of Action taken to implement recommendation	Resib'ty	Timescale
<p>6) That the committee continues to monitor the progress being made to achieve the Council's carbon reduction targets through the current quarterly performance monitoring reports and receive regular updates by members of the Council's Sustainability, Carbon and Climate Change Team and Carbon Management Programme Board.</p>	<p>Updates to this report will be provided and ongoing monitoring of electric, gas and water consumption and of the performance of capital and revenue projects to date can be provided on request.</p> <p>Durham County Council achieved 9.5% reduction in 2013/14 compared to 12/13. In total a 16.5% reduction from baseline 2008.</p> <p><b>The Council has continued to make carbon savings. In 2014/15 we reduced our emissions by a further 9,200 tonnes.</b></p> <p><b>In total the Council has reduced emissions by 25% since 2008 saving 26,330 tonnes of carbon per year. This represents financial savings of around £3 million per year against business as usual projections.</b></p>	<p>Maggie Bosanquet</p>	<p>Ongoing</p>

Review Recommendation	Progress Report of Action taken to implement recommendation	Resib'ty	Timescale
<p>7) That all staff and Elected Members be made aware of the Council's carbon reduction targets, the financial impact of energy use and the savings that can be made by using energy more effectively. This could be achieved through training sessions and the Council's performance appraisal scheme – focusing on staff actions/achievements that protect the County's environment and mitigate the effects of climate change.</p>	<p>Regular articles in Buzz and Member Updates have kept staff and members up to date with projects. The Big Switch Off has continued to make impressive savings in buildings where it has taken place, demonstrating to staff the importance of making a few minor changes to their behaviour.</p> <p><b>There has been continued engagement with staff with a Big Switch Off event being ran in the Green Lane offices at Spennymoor. This is the biggest site so far and they achieved 5% savings in their electricity consumption and have improved on that figure since.</b></p> <p><b>In October the campaign will be at the Greencroft offices.</b></p>	Maggie Bosanquet	Ongoing