

York & North Yorkshire Climate Change Leadership seminars

Interim report on Workshop 1: area based emissions (NI186)

This note records ideas which emerged during the first in a series of four seminars on Climate Change Leadership which took place on 27th November 2009, 0930-1230. The series is supported and funded by the sub regional partners of the Regional Improvement and Efficiency Partnership. Eight of the nine local authorities were represented at the seminar¹ with 24 members and officers representing their respective authorities, together with participants from the North York Moors National Park Authority, the Yorkshire Dales National Park Authority and the Government Office for Yorkshire and The Humber

The focus of the workshop was Local Authorities' (LAs') role in reducing area-based greenhouse gas emissions, with National Indicator 186 as the proxy LA performance measure. NI 186 is titled Per capita reduction in CO₂ emissions in the LA area. According to the Local Priorities website²:

“Action by local authorities is likely to be critical to the achievement of Government’s climate change objectives. Local authorities are uniquely placed to provide vision and leadership to local communities by raising awareness and to influence behaviours. In addition, through their powers and responsibilities (housing, planning, local transport and powers to promote well-being) and by working with their Local Strategic Partnership they can have significant influence over emissions in their local areas. In the Climate Change Programme 2006, the Government stated its commitment to ensure the local Government framework will include an appropriate focus on action on climate change, sufficient to incentivise more authorities to reach the levels of the best. The Government also committed to give greater flexibility to deliver on national priorities in the most cost effective way for that locality. The proposed indicator will rely on centrally produced statistics to measure end user CO₂ emissions in the Local Area from: • Business and Public Sector, • Domestic housing, and • Road transport”

The stimulus inputs were

Professor Johan Kuylenstierna of Stockholm Environment Institute at York outlined the background science behind climate change through a discussion of ‘Climate Change: Our Greatest Global Challenge?’ During this presentation, Johan provided updated CO₂ emission figures and advised that

- there was enough CO₂ currently in the atmosphere to cause a 2.5°C rise in temperature
- rise in CO₂ is now at a much greater rate than ever before
- since 2001 predictions, the current CO₂ levels are nearest to worst case scenario projections

Mark Watts, Director of the International Sustainable Cities Programme at Arup and architect of the London Climate Change Action Plan provided examples of where cities are tackling the challenge of reducing emissions in innovative ways.

- in 2030 97% of increase in demand for oil demand will be for transport
- projects in Brighton showed car usage cut by 10% and Darlington Sustainable Travel Town cut traffic by 9% through behavioural change and better information

¹ NYCC, York CC, Harrogate BC, Scarborough BC, Craven DC, Hambleton DC, Ryedale DC, Selby DC

² <http://www.localpriorities.communities.gov.uk/NIRResults.aspx?NIRRef=NI%20186>

- buildings demand for energy needs to be tackled through retro-fitting projects as half of existing buildings will still be in use in 2050
- Kirklees street by street insulation has so far insulated 32,000 homes. For every £1 invested returns £4 to the local economy

Lance Saxby from the Energy Savings Trust outlined EST's support to Local Authorities in reducing area emissions.

- Energy Savings Trust Advice Centre offer domestic energy saving and transport choices advice, Carbon Trust offer workplace advice
- take people on a journey for a low carbon future, giving consideration to easy things first like low energy light bulbs and insulation and increase their awareness and understanding leading up to renewable energy generation
- various local authority tools are available such as "trace" to monitor NI186, one to one support and Nottingham declaration work

David Potruff from the Audit Commission explained the role of councils in reducing domestic CO₂ emissions through the research the Audit Commission had undertaken for the 'Lofty Ambitions' report³. He advised that

- reducing CO₂ emissions is less costly than adapting to climate change
- on average each individual's UK CO₂ emissions are currently at 9 tonnes per annum and by 2050 we need to reduce this to just over 2 tonnes per person
- 3.3 tonnes of CO₂ are emitted by driving a car 10,000 miles per annum
- approximately one third of CO₂ emissions in England comes from energy used to heat and power our homes and a large proportion of the savings could come from local authorities encouraging homeowners and landlords to reduce domestic emissions

Chris Dessent, Founding director of Creative Concern provided a range of ways in which local authorities can engage effectively with their communities in order to achieve changes in environmental (and other) behaviours. Effective communication is about

- knowing your audience
- getting inside their heads, so you don't swim against the tide
- giving information, removing barriers and provide viable and desirable alternatives
- giving simple messages which lead to a change in behaviour
- helping people feel good about themselves by making choices and joining the flock

Summary

The workshop demonstrated that there are actions that could be led by the sub region's local authorities to reduce area based carbon emissions, particularly in domestic buildings and transport. However, any such actions need to

- work across boundaries
- recognise the distinctive issues of the North Yorkshire sub region (such as the built heritage or a rural commuter /tourism economy)

³ <http://www.audit-commission.gov.uk/nationalstudies/localgov/loftyambitions/Pages/Default.aspx>

- work with the grain of community interests and engage people effectively.

1.1 What are the priorities to tackle in reducing area based emissions?

Area based emissions, as measured in NI186, have three major components.

- **Domestic energy consumption.** The workshop acknowledged that measures to improve the energy efficiency of the existing housing stock are a priority for the sub-region. But there are number of issues that need to be addressed before this can be fully implemented. There can be problems with cost effectively retrofitting listed properties or properties in Conservation Areas which require a tailored approach in every case.
- **Transport.** Workshop participants recognised that this is a big issue for the sub region, particularly given the rural nature of the county and the historic nature of many towns. There are often physical restrictions to many transport infrastructure interventions.
- **Business.** Industry and commercial emissions, including public sector, but not those included in the EU Emissions trading scheme. The workshops discussed the public sector in particular, though this component is dealt with further in Workshop 3.

The workshop also touched on two (related) major sources of emissions which are not covered by NI186.

- Agricultural land use and land management of carbon source/sinks such as upland peat bogs. The sub region has significant opportunity to maximise the benefits that these resources have for reducing emissions. Different types of agriculture absorb different volumes of CO₂, therefore there may be an opportunity to increase the amount of carbon locked up in the soil etc. There is also the potential for biomass fuel source e.g. Danby Forest.
- Food consumption and waste.

1.2 What barriers must be tackled?

1.2.1 Communicating why action is needed must be relevant.

The bottom line needs to be the issue that has to be tackled, with less emphasis being placed on debating agreed science.

The specific language used in discussing climate change can cause problems. Examples include carbon footprinting, names for different kinds of boilers, and what does a tonne of CO₂ mean? Communication must be kept simple and relate climate change issues to people's everyday lives through understandable mechanisms such as transport or domestic energy. With time, there may be a need to separate cost savings from CO₂ emissions reduction once relatively easily achievable efficiency reductions have plateaued.

1.2.2 Funding needs to be available, and used

There is a low take up of existing grants and funds, suggesting a possible problem with perception. People in the sub region might see it as claiming 'benefits' and interpret this as being demeaning. However, examples like the Kirklees' Insulation scheme that is open to all avoid this perception by treating everybody equally. There are some technical issues to overcome as well e.g. installing enough insulation in single skinned dwellings and houses with very narrow gap within cavity walls.

1.2.3 The links between the sub region's economy and emissions need to be understood

Many emissions come from passing travel and tourism (e.g. Ryedale). The question then is how to keep economic activity going while still reducing emissions. The sub region is generally seen as affluent which means accessing funding can be difficult. Many residents' "wealth" is tied up in assets (housing) which may not be accessible to make emissions reductions.

1.2.4 Transport

Whilst transport related emissions offer large scope for carbon dioxide reductions, significant barriers remain which may block this. In spatial and development planning, often only token references to climate change issues are incorporated. At an individual level, personal transport patterns could be altered through behaviour change policies, but this process requires ongoing support and commitment from both national and regional government.

Reducing transport emissions can only be done through joint working across LA boundaries and integrating planning, transport delivery, economic development and health and education." Climate change and carbon dioxide emissions are often seen as a 'bolt on' addition to planning and are not integral in the process. Development of overarching climate change focused transport policy would provide a framework for collaboration amongst differing departments and agencies with the same policy driver.

1.2.5 Land use: Exclusions from 186

Whilst land use is not directly within the remit of NI 186, North Yorkshire has extensive areas which will offer potential sources for carbon sinks and for reducing the region's net carbon emissions. For example, peat bogs can be managed to increase in volume and density through the filling in of drainage grips and selective planting of beneficial species. Changes in agricultural techniques can also develop carbon sinks in the region's soils. Such methods may become more productive than traditional agriculture in a changing climate and economic environment.

1.3 What are the criteria for successfully reducing area based emissions?

The question was raised as to how to measure what savings are being made. To measure savings, the sub region needs an understanding of what the current area baseline is, both through the formal NI 186 process, and also quantifying non- NI186 factors such as land use. This could be completed from top down models based on what economic outputs are produced, or through bottom up accounting of what is present on the ground⁴.

The second aspect considered was that of the need for immediate feedback to individuals when carbon savings are achieved. Individuals (and organisations) are more likely to reduce energy use if they are able to immediately see consumption values and most importantly, have ability to impact on the rate of change of consumption with a corresponding real time effect.

1.4 What ideas for action and collaboration emerged?

1.4.1 Develop a branded, unified, local message that enables action

The case studies of the Texas anti-littering campaign raised by Creative Concern and adverts used to reduce waste in Devon waste caught the attention of some participants. During discussions it was felt that the strong Yorkshire identity could provide a focus for this type of

⁴ www.ghgprotocol.org

⁵ Guidance on how to measure and report your greenhouse gas emissions, DEFRA, 2009

campaign, making people proud of their county and proud to save money by reducing costs and energy use.

1.4.2 Tell people how well they're doing (or not) in terms they can make sense of

Relating to section 2.3, providing individuals with measurements of their energy use in a manner that's easy to use and understand can help improve their confidence that they are making measurable achievements. Shifting the 'climate change message' from a guilt approach (save the polar bears etc.) to positive re-enforcement (cost savings, amount that has already been achieved etc.) will help, especially when combined with a breakdown in tasks and advice to easily achievable behavioural changes.

1.4.3 Link policy areas together, don't perpetuate silos (We don't have the resources!)

Many different specialist departments all have their own priorities and agendas. Climate change is relevant across many policy areas, with departments such as transport, housing and waste all playing a role in reducing emissions. Could every policy area be tasked to look at how it contributes to a changing climate and how it might reduce emissions, at the same time as achieving its other policy goals?

1.4.4 Develop a distinctive approach to reducing housing emissions that reflects the sub region's distinctive housing stock

North Yorkshire has distinctive in its housing stock, notable the prevalence of houses heated by solid fuel, and complex walled and constructed houses. While local authorities in other areas might be able to take a 'street by street' approach, the complexity of local stock suggests a village by village approach will not follow the same process. Issues include the age of buildings resulting in technology problems with some retro-fit measures, and challenges such as conservation areas and/or listed buildings requiring visual and structural continuity.

Despite these challenges, retrofitting residential properties, especially those in the private sector, remains a priority. Discussion suggested important processes are to educate and communicate with residents about the benefits that can occur, and to signpost them to (ideally) free resources.

1.4.5 Tackle transport emissions through means other than transport planning

Changing driver behaviour was seen as one mechanism for reducing transport emissions in the sub region. In York and North Yorkshire, car changeover occurs relatively frequently and it would be possible to *upgrade the regional fleet* to more low carbon transport if incentives are put in place. However, the subregion's rural nature means that it has to be recognised that some vehicles are needed for practicality and day to day use.

Other potential catalysts for driver behavioural change come from other services and infrastructure. Significant behavioural change has occurred in information campaigns such as the Darlington Sustainable Travel Town where traffic was cut by 9%. Providing facilities for broadband access, car sharing, home working etc. can all result in some behavioural change although policy and action needs careful design to avoid unintended consequences.

1.4.6 Look at the infrastructure the sub region needs in order to reduce emissions associated with energy generation and distribution

Technology has to be suitable for the region, not just in its low carbon or renewable nature, but in providing outputs that meet subregional requirements. Technology must also fit national infrastructure requirements, such as national grid configuration.