

Climate Change Local Authority Responsibilities

30th June 2010

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CLASP - Climate Change Local Area Support Programme

- NW wide programme for LAs and LSPs
- Technical and Leadership support
- Many activities: see www.clasp-nw.info
- Contact Ailsa Gibson ailsa@clasp-nw.info
- Managed by Liverpool City Council
- Main funder: NWIEP

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Tackling Climate Change

- Reducing emissions (mitigation)
 - Saving energy
 - Generating low-carbon energy
 - Creating carbon sinks in natural environment
- Dealing with the impacts (adaptation)
 - Emergency planning
 - Service maintenance
 - Long term planning
 - Creating community and business resilience

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National Legislation

- Climate Change Act 2008
 - 80% reduction in CO2 emissions by 2050
 - 34% reduction by 2020
- Climate Change and Sustainable Energy Act 2006
 - places duty on LAs to “lead their community and local partners on climate change”.
- Renewable Energy Target
 - 15% by 2020

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Public Sector Targets

- By 2010/11
 - 12.5% reduction from buildings vs 1999/200
 - 15% reduction from transport vs 2005/6
- By 2020
 - 30% reduction from buildings vs 1999/200
 - 30% reduction from transport vs 2005/6

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National Indicators

- NI 185 – reduction on CO2 emissions from own estate by 2011 (typically 15%)
- NI 186 – reduction in per capita CO2 emissions by 2011 (Typically 10-12%)
- NI 187 – Tackling Fuel Poverty
- NI 188 – Adapting to the impacts of climate change

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Why bother?

- Energy efficiency
 - NW spends £13bn on energy each year
- Energy security
 - Energy price stability
 - Reduced dependence on political hot-spots
- Reducing health problems
 - Obesity, chest ailments (air quality, damp housing), cold and heat related deaths
- Improving quality of places
 - Green space, smart buildings, reduced congestion

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Has it all changed now?

- Key points from the budget
 - Low carbon economy
 - Green Investment Bank
 - Green Deal for Householders
 - Commitment to 10% reduction in government emissions in one year
 - Taxation changes/reviews for company cars, heavy goods vehicles, aviation

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Managing your Authority's own carbon emissions

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Carbon Saving Reduces Costs

- Typical Council energy bills
 - County / Large Unitary - £15-20m
 - Medium Unitary - £7-12m
 - Small Unitary - £3-5m
 - District - £200k - £2m
- Carbon Trust CM Programme targets currently 35% - 50% over 5 years

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NI185

- Annual reporting on carbon emissions from:
 - Stationary sources: buildings, street lighting, traffic signals
 - Transport: fleet, business travel
 - Includes outsourced activities e.g. PFI contracts, waste service provision
 - Excludes renewable electricity if ROCs/FITs claimed
- Baseline year 2008/9
 - Reports must be provided by July
- District Authorities should provide information for County reporting

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Carbon Reduction Commitment

- Cap and trade system for carbon emissions
- Applies to any organisation with half-hourly metering
 - Those using over 6,000 MWh half-hourly metered electricity in 2008 must participate
 - Those using <6,000MWh must register
- Reporting data similar to NI185
- Annual costs cannot be quantified in advance
- Credits for Automatic Meter Readings and Carbon Trust Standard

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Carbon Management

- Installing energy saving technologies
- Monitoring, management and sharing information
- Enabling staff to change behaviour
- Thinking about energy in all sorts of decisions

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Energy Saving Technologies

- Lighting replacement and controls – Zetland car park, Middlesbrough 50% saving
- Voltage optimisation – Conyers School, Stockton 14% savings
- Pool covers & variable speed drives – Salt Ayre, Lancaster £30k investment paid back in 8 months
- Boiler controls – Middlesbrough Golf Club 23% savings
- Computer power-down software – Sunderland Council Offices, 120 MWh/year
- Water coolers – Cheshire & Wirral Partnership NHS – replacing all water coolers with mains or in-line chillers

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Metering & Monitoring Reporting

- Staff time to manage data and provide support essential
- Liverpool City Council – Automatic meter readings show areas to target e.g. buildings with 50% baseload
- Warrington Museum
 - 14% savings once staff shown weekly usage

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Enabling Carbon Saving

- Smart funding
 - Darlington's voltage optimisation savings used to pay for an energy management post
 - Northumberland's npower rebate used to pay for the "One Degree Man"
 - Lancaster's Invest to Save pot £20k/year for sports centre projects
- Overcoming barriers
 - Turning down heating
 - Involving IT to identify what can be turned off

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Supporting Staff

- Providing targeted information
 - Newcastle – training programme for caretakers
 - Hartlepool – two schools carbon reduction officers, technical and educational
 - Cheshire & Warrington Partnership's Eco-Reps Handbook

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Thinking about energy implications

- Halton – energy & water savings of £1800 through buying more expensive dishwashers
- Cheshire East & West PCTs – video-conferencing for regular meeting saved 16 hours staff time and 480 car miles per month
- IT equipment - multifunction & low standby power
- PFI contracts and outsourcing
 - Street lighting
 - New buildings: BSF schools using 50-100% more
 - Contract services energy in CRC & NI185

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Renewable Energy

- Renewable energy is usually capital-intensive
- Feed-In Tariffs and Renewable Heat Incentive may offer long term income stream
- Think big - one solar panel/small turbine will do little for your carbon footprint and may be counter-productive
- Be creative – Second hand turbines? Joint projects?
- Consider all aspects of performance & sustainability (especially biofuels)
- Offers price stability but not NI185/CRC credits

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Showing Leadership

- Setting out what's expected
- Supporting these expectations (technical and managerial)
- Requiring information and results
- Incorporating carbon in reporting
- Valuing action taken
- Talking it up

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Focus on what matters

- 30-40% of a unitary council's energy use is in schools
- 60% of the NHS carbon footprint is from procurement
- 50% of the Northumberland National Park Authority's carbon footprint is travel
- Good energy management staff pay for themselves
- Good energy saving projects pay for themselves

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Questions?

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NI185 – Discussion

- What's your role as Members?
- Examples from your area?
- What else can you do?

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Tackling Carbon Reduction in your Community (on a tight budget)

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NI 186: per capita CO2 emissions

- 10-12% reduction in CO2 per capita by 2011
- Area-wide so action by all partners is essential
- Numeric indicator (DECC produces the figures) but major issues with these numbers
- Progress evidenced by actions
- CLASP briefing papers to help

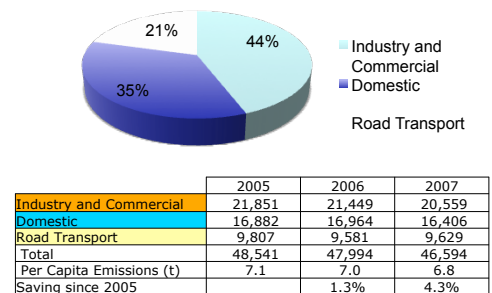
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NI 186: Steps to take

- Understand the target and how much is needed to hit it
- Understand existing actions and how much they will contribute
- Filling gaps – extending reach of existing actions or further actions
- Understand who can influence which emissions
- Agree which partners can deliver what

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NW NI186 CO2 Baseline



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Typical 10% reduction means

- Local residents have an extra **£8 million** available to spend in the local economy
- Local businesses reduce their operating costs by **£7 million**
- Households and businesses reduce their transport fuel costs by **£5 million**

(The total spend on energy used in Blackburn with Darwen is around **£200m** per year)

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100,000 tonne CO2 saving

- Install cavity wall insulation in 175,000 homes **or**
- Insulate solid walls in 50,000 homes **or**
- Top up loft insulation in 385,000 homes **or**
- Replace old gas boilers in 140,000 homes **or**
- Install 12 million low energy light bulbs

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Steps taken to tackle NI 186

- Housing insulation programmes
- Boiler replacement
- High standards for new build
- Retrofitting existing homes
- Public transport schemes
- Travel planning (business and personal)
- Support programmes for business energy efficiency and waste recycling

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Big Picture - Policy

- Procurement
- Planning
- Waste
- Energy
- Economic development
- Transport
- Housing

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Win-Win Examples

Justifying how projects lock out carbon
but achieve a lot of other things too

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Housing

- Blackpool, Fylde & Wyre Credit Union interest-free loan scheme for members to help pay for energy saving improvements to their home.

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Travel Planning

- Partnership of East Lancs PCT, Lancashire County Council, Cycling Projects (local cycling charity), The college, Sustrans, Funded by the Big Lottery's Well being programme, aimed at promoting healthy active travel to tackle depression and obesity – across young people, BME groups.
- Big impact in getting people walking (8,000 through walking schemes last year) and cycling.

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Community: Brent Green Zones

- Brainchild of Lorraine Skinner, local resident, mother of seven, who devised a questionnaire for her neighbours about how green they are, then provided advice on what to do about reducing energy use, growing your own veg. It was recognised and supported by Brent Council, a runner up in the Future Friendly awards, there are now more Green Zones supported by the council and who receive a 10% discount at the local garden centre and free water butts. It's also been selected to receive funding for Defra's Zero Waste Places scheme.

"..some of us have even installed insulation in our lofts. Now that we have made small changes to our homes, we are considering larger improvements that can be made, one of my neighbours is even seeking to install solar panels".

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Talk it Up! Incredible Edible Todmorden

- Incredible Edible Todmorden started a couple of years ago – aiming for local food – very simple, got growing in lots of places, by the roadside, in gardens, by the canal, in all the schools, in the new Health Centre, planting fruit trees on police and fire & rescue land, providing growing packs for social housing tenants, new Every Egg Matters campaign for locally produced eggs. A big lottery bid is in for a growing project and hydroponic fish farm at the secondary school... Calderdale Council has seized the idea and is aiming for
- Incredible Edible Calderdale, working with community groups who can identify potential growing land and bring it into council ownership to set up allotments.

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Finding fertile ground

- It's about thinking in a network way
- Finding links to other people's priorities
- Thinking about different ways to do things
- Or finding the best places to sow the seeds of a project idea
- Talking it up

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Questions?

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Discussion

- What have you already done to help reduce carbon emissions in your communities?
- What opportunities do you have in your area?
- How much can you do with existing resources?
- How can you justify resourcing “external” work on climate change?

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Adapting to the Impacts of a Changing Climate

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Weather Impacts

“Climate’s what you expect
– weather’s what you get”

Likely changes in the NW

- Warmer drier summers
- Increased rainfall and flooding
- High winds and storms
- More variability

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Impacts

- Wetter winters and sudden heavy rain
 - Surface water flooding – drainage capacity – critical infrastructure issues
 - River and reservoir flooding – severe issues in some catchment areas e.g. Bury, Salford
- Heatwave
 - Increased outdoor activity correlates with increased crime and rowdiness
 - Increased incidence of moorland fires
 - Soil contraction: issue for building foundations especially on clay soils
 - Urban heat island effect can increase local temperatures by 5-10C
 - Vulnerable groups health issues: Local Heat Plans

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Social Impacts

“Deprivation increases vulnerability to climate change and climate change increase deprivation.”

Differential Social impacts of Climate Change in the UK, Jan 2009 - report by CAG for Scottish and Northern Ireland Forum for Environmental Research

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Highest Risk Communities

- Places at risk
 - Susceptible to heat, flooding, storms
- Disempowered
 - Unable to understand or respond to advice
- Socially Deprived
 - More likely to live in places at risk
 - More susceptible due to poor health & housing
 - Less able to retreat
 - Less able to buy their way out of risk
 - Less able to recover quickly
 - More affected by disruption to basic goods and services, health, education, employment

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Long Term Impacts

Hull floods 2007

- People not back in homes
- Money worries
- Job losses
- Schools disruption – loss of only stable environment
- Psychological impacts & mental health
- Loss of trust in public services
- Strain on council services – 700 staff involved in response

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What can we do about it?

- Understanding and assessing risks
- Emergency planning
- Maintaining services
- Community & Business Resilience
 - Preventing a drama becoming a crisis
 - Using usual risk management processes

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Twin Approach

- Building Adaptive Capacity
 - Policies, strategies, embedding
 - Training, education, awareness
 - Creating resilience
 - Resources and management
- Delivering Actions
 - Building flood defences
 - Installing natural cooling
 - Storm-proofing buildings
 - Replacing road surfaces

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NI 188 – Adapting to Climate Change

- Level 0 – Preparing the baseline
- Level 1 – Initial risk assessment and public commitment
- Level 2 – Comprehensive risk assessment, action on priorities
- Level 3 – Action plan in place and embedded
- Level 4 – Implementation, monitoring and review

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Local Climate Impacts Profile Blackpool

	JANUARY 2008
3	Snow and weather warning for Blackpool's roads
8-10	Gusts over 60mph, trees felled, lightning strikes affecting Blackpool & Fylde
21	Hundreds of thousands of pounds of damage caused by floods due to heavy rainfall on Sunday 20 January Thousands of people without fresh water. People trapped in own homes Ten schools closed for one day, eight for two days
24	Businesses in Poulton count loss to business due to water shortage
30	Winds of 70-80mph recorded Power cuts – residents between Wrea Green & Peel Corner without power. Roads blocked by fallen trees Dramatic airlift from stricken Riverdance Ferry – 23 people rescued Barrier blown down at Carleton Crossing
31	Promenade blocked off after fears nightclub signs could close down (3pm)

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Impact of weather on Lancashire CC

Dates	Service area	Costs	No. of incidents	Typical impacts
Since Oct 2005	Highways – customer service centre (highways helpline)	Costs = number of calls x duration x staff costs.	Highways calls since October 2005 = 139,930 (% of calls as a result of weather impacts may be as much as 70%)	High volumes swamp calls to other services.
			Week commencing 21 Jan 2008 2500 calls logged (8,000 unanswered)	Many calls unanswered – public dissatisfied.
			Number of incidents since July 2003 174,729	Blocked gullies/drainage problems % of calls relating to these issues has steadily increased. 2nd most common call type Roads flooded
2003-2006	Spending on storm damage highways	£735,785		• Trees blown down • Street furniture damage
	Winter maintenance	£14,101,812		• Delays to planned work

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Impacts of hotter drier summers – Sefton

Department	Specific Event	Impact
Tech Services Engineering Design	Increase in extremely warm days	Concreting is not possible on very hot days, which might lead to delays in works delivery and therefore to increased costs.
LSP Community safety department	Increased summer temperatures	Potential for increase in acquisitive crime and anti-social behaviour/ violence associated with alcohol
Finance & IS Department	Continuous days of hot weather - a heat wave	Offices overheated Staff uncomfortable and less productive.
EPD Environment Team	Increase in noise, odour and dust complaints	Demand increased for service from reactive team.
Health & Social Care	Heat stroke	Public Health and resources to cope

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Emergency Planning

- Response
 - Standard activity for emergency services
- Prevention
 - Flood Risk Assessment
 - Heatwave Plan
 - Cold Weather Plan
- Critical infrastructure
 - Transport capacity
 - Energy supply

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Business Continuity

- Schools closures
- Hospital appointments disrupted
- Access to key services
- Damage to public sector buildings
- Staff unable to get to work
- Staff pulled out of normal duties
- Increased demand on social services
- Availability of critical goods – food, cash, fuel

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Embedding in Plans and Actions

- Planning: minimising risk through LDF
 - Development areas, green infrastructure, drainage systems
- Operating policies
 - Working temperatures, dress codes, alternatives to school closures, planting regimes
- Incorporating climate change impacts in decisions: remembering to ask the question
- Reviewing risks and updating information

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Community Resilience

- Strong and active communities cope with crises
 - Aware of own resources and concerned about community members
 - Work together and use local networks
- Plans, networks and structures are vital
 - Relevant and timely information
 - Community-level plans: who does what
 - Specific support
- Support for businesses

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Discussion

- How well do you understand the risks, critical infrastructure and impacts?
- Do adaptation responses conflict with other policies?
- How do you deal with this?

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