

EAST HERTS COUNCIL

LOCAL DEVELOPMENT FRAMEWORK EXECUTIVE PANEL –
23 SEPTEMBER 2010

REPORT BY EXECUTIVE MEMBER FOR PLANNING POLICY AND
TRANSPORT

HERTFORDSHIRE RENEWABLE AND LOW CARBON ENERGY
TECHNICAL STUDY (JULY 2010)

WARD(S) AFFECTED: ALL

Purpose/Summary of Report

- To inform Members of the completion of the Hertfordshire Renewable and Low Carbon Energy Technical Study;
- This report summarises the findings of the study, which provides technical evidence base in respect of CO₂ emissions and energy provision which will assist in the formulation of Climate Change policies in the East Herts Local Development Framework Core Strategy.

RECOMMENDATION FOR EXECUTIVE:

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(A)	That the Hertfordshire Renewable and Low Carbon Energy Technical Study (July 2010) be agreed and published as a technical study, forming part of the evidence base, to inform and support the East Herts Local Development Framework.

1.0 Background

1.1 In August 2009 Aecom was appointed by a consortium of ten Hertfordshire Local Planning Authorities including the County Council and East Herts Council.

1.2 The commission was split into two stages. Stage 1 was completed in September 2009. It consists of a Scoping Report providing a “*short, speedy assessment of the state of the planning regime in*”

Hertfordshire in relation to CO₂/climate change matters". Stage 1 outputs include a shortlist of recommended actions to take forward into Stage 2. The findings of the Stage 1 study were reported to Members at the LDF Executive Panel on 11th November 2009.

- 1.3 The Stage 1 study recommended 2 areas in particular for further improvement, as follows:
 - **Policy Development:** the focus of efforts should be placed on supporting the development of policy regarding energy and sustainable buildings.
 - **Technical Evidence Base:** insufficient work has been carried out by all the Local Planning Authorities to date in developing an appropriate evidence base and that the requirements of national policy are not being met. This will not only have a detrimental impact on the progress for developing climate change policies but will consequently result in delays to meeting the LDF programme. If policies and targets are not fully robust and defensible they will be vulnerable to regular scrutiny and challenge.
- 1.4 The Hertfordshire Renewable and Low Carbon Energy Technical Study (RLC study) addresses both these concerns and forms the main output from Stage 2, although further recommendations emerging from the Stage 1 study are also being considered through meetings of the Hertfordshire Technical Chief Officers Association (HCTOA) Development Control and Development Plans sub-committees.
- 1.5 The East of England Plan included two policies of particular importance for renewable and low-carbon energy. However, the revocation of the Regional Spatial Strategies including the East of England Plan in June 2010 has left a policy vacuum in the Development Plan in respect of energy and climate change. The current study therefore assumes particular importance as a basis for emerging replacement local policy through the LDF.
- 2.0 Report
- 2.1 **Essential Reference Paper 'B'** includes a Non Technical Summary of the RLC Study.
- 2.2 Chapter 1 identifies that the role of planning is to identify energy and climatic opportunities and risks spatially, and to use this

understanding to set out planning policies designed to support action and delivery, while also acting as a wider resource for use by the local authority and local strategic partnerships. Planning policies will be essential in order to achieve the higher levels of the Code for Sustainable Homes.

2. 3 Chapter 2 looks at existing energy demand in Hertfordshire. It suggests local policy will need to play a major role in gearing the house building industry and supply chain up to meeting the zero carbon homes policy.
2. 4 Chapter 3 looks at opportunities for energy efficiency in existing buildings. Monitoring of CO₂ savings should take account of the 'rebound effect' (whereby CO₂ savings are partially offset by improvements in comfort).
- 2.5 Chapter 4 examines opportunities and costs for District Heating and Combined Heat and Power (CHP), which are much more efficient ways of generating heat than conventional power stations. The study identifies that there are viable opportunities in the main towns, including Bishop's Stortford and Hertford, although more detailed work on feasibility would be required at each of these locations.
- 2.6 Chapter 5 examines opportunities for Renewable and Low Carbon Technologies. To give an idea of the scale of potential resources, if all the resources identified were used, the study claims that the following figures could theoretically be achieved across Hertfordshire:

Item	No of Mega-Watt hours (MWh) generating capacity per annum	CO ₂ savings (tonnes)	Equivalent CO ₂ emissions in no. of detached homes
37 large wind turbines (80m hub height)	150,000	85,000	26,000
100 small wind turbines (15m to 45m hub height)	1,314	-	350
Energy crops	1,330,000	225,000	88,000
Arboricultural arisings (dried wood)	50,000	-	5,500
Parks and highways waste	6,600	1,100	-
Cattle and pig manure	21,270	3,600	1,000
Poultry litter	2,700	1,500	1,000
Packaging waste and construction wood waste	135,000	23,000	-
Municipal sold waste	85,000	47,300	11,600

(compiled from RLC Study Section 5.15 page 51 and Appendix C)

2.7 Chapter 6 explains the background to the energy opportunities plan. The plan is presented in Essential Reference Paper 'C'. The plan shows:

- Areas of heat demand with district heating potential
- Parks and woodlands (possible biomass resource)
- Agricultural land grades 3 &4 (possible biomass resource)
- Green Belts and airfields (possible constraints)
- Areas feasible for large-scale wind (i.e. sufficient wind speed)
- Energy from waste and biomass plants

2.8 However, it is acknowledged that there are various constraints and other considerations (food production, visual amenity etc) and that these factors would need to be considered as part of any strategy.

2.9 Chapter 7 provides advice on how the Code for Sustainable Homes can be used to achieve local objectives, and also provides advice on the costs of compliance.

2.10 Chapter 8 describes how policy options for Hertfordshire have been tested for feasibility and viability. It should be noted that if adopted,

these local policies would be superseded by Building Regulations in 2016.

- 2.11 Chapter 9 provides policy recommendations, including suggested policy wording. The recommendations are based on a summary of the results of modelling of 20 case studies, including urban and rural, small and large, residential and commercial development examples.
- 2.12 Chapter 10 explores how RLC energy might be delivered in Hertfordshire. It emphasizes the need for leadership from the County, districts, and partners. They should consider what would be required to set up an Energy Services Company (ESCo) in order to deliver District Heating and possible funding opportunities. A clear framework which gives certainty to developers should be established.
- 3.0 Implications/Consultations
- 3.1 Information on any corporate issues and consultation associated with this report can be found within **Essential Reference Paper 'A'**.

Background Papers

Hertfordshire Renewable and Low Carbon Energy Technical Study (July 2010), Aecom. The document is available online at

www.eastherts.gov.uk/planningandclimate

Hard copies can be made available for Members on request from the Planning Policy Team. Public inspection copies are available at reception at the Council's offices in Hertford and in Bishop's Stortford.

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ESSENTIAL REFERENCE PAPER 'A'

Contribution to the Council's Corporate Priorities/ Objectives (delete as appropriate):	<p>Caring about what's built and where <i>Care for and improve our natural and built environment.</i></p> <p>Shaping now, shaping the future <i>Safeguard and enhance our unique mix of rural and urban communities, ensuring sustainable, economic and social opportunities including the continuation of effective development control and other measures.</i></p> <p>Leading the way, working together <i>Deliver responsible community leadership that engages with our partners and the public.</i></p>
Consultation:	None
Legal:	None
Financial:	In August 2009 the LDF Panel agreed to East Herts participating in Stages 1 and 2 of the study. Funding for both stages was made from the 2009/10 LDF Studies/Consultancy Budget.
Human Resource:	None
Risk Management:	Failure to take account of the issues raised in the report would result in the Core Strategy being found unsound.