Invitation to tender to produce low carbon energy opportunities and heat mapping for local planning authority areas across the East Midlands

1. **Objective**

1.1 East Midlands Council (EMC) is the consultative forum for all local authorities in the East Midlands. It provides support for councils to improve their services and is a strong voice for the East Midlands.

1.2 EMC wishes to appoint a contractor to produce a series of GIS based maps giving a spatial representation of opportunities for low carbon energy generation and the local supply and consumption of heat for each local planning authority and Joint Planning Unit (JPU) area in the East Midlands. The outcome will be made available to local planning authorities and JPUs to inform the evidence base for their local development frameworks. To assist this process, generic guidance should be offered showing how the analysis could lead to the formation of specific policies, including highlighting potential locations for CHP and district heating schemes.

1.3 This work should commence by the end of September 2010 and conclude with the submission of a Final Report by 31 January 2011.

2. **Background**

2.1 Resources have been made available through the Department of Energy & Climate Change (DECC) to support the deployment of low carbon and renewable technologies at a local level in the East Midlands. In line with the Government’s localism agenda, the focus should be on enabling local planning authorities to take forward local policies informed by a sound evidence base, rather than seeking to impose centrally determined targets or proposals.

2.2 Whilst a number of authorities in the East Midlands have made progress on developing an evidence base for renewable energy, Combined Heat and Power (CHP) and district heating, coverage appears to be patchy and inconsistent. As a result, EMC and partners have decided to focus resources on ensuring that all local planning authorities have access to a basic evidence base consistent with DECC’s Renewable and Low-carbon Energy Capacity Methodology (published January 2010), which can then be used and developed further to suit locally determined priorities.

3. **Detailed Requirements**

3.1 **Low carbon and renewable energy resources and opportunities** should be mapped using the DECC methodology to ensure consistency
and use accepted datasets. National and regional datasets should be used where possible. Where additional local data sets are required, these will be collected by the Project Steering Group via designated liaison officers for each county area.

3.2 Based on the DECC methodology the following energy sources should be assessed:

- Wind
- Hydro
- Biomass
- Wastes (including biomass and energy from waste)
- Waste heat
- Existing heat distribution infrastructure
- Anchor loads to trigger district heating networks
- CHP/district heating opportunities

3.2 Analysis should be undertaken for all 41 local planning authority areas, (including the Peak District National Park Authority) and 3 JPUs\(^1\) in the East Midlands using the following stages of the DECC methodology:

Stage 1: naturally available resource  
Stage 2: technically available resource  
Stage 3: physical constraints  
Stage 4: planning and regulatory constraints

3.4 Generic guidance should also be provided on the formation of policy using the maps to inform LDFs, with examples given of how specific policies could be developed.

3.5 In addition there are a number of authorities interested in taking the analysis further and considering stages 5 to 7 of the DECC methodology. Details are listed in Appendix 1 of this brief. Bidders are invited to submit an outline tender for this additional work, but any further contract will be awarded by the relevant local authorities via a separate process.

3.6 In relation to the **heat mapping**, the aim is to produce large scale maps for all local planning authority areas making use of existing energy consumption datasets, and then to produce more detailed maps for areas identified as having significant potential for making use of waste heat. This should be achieved by an assessment of heat use by fuel type, sector, and size of loads and making use of datasets which provide information on building type and location.

\(^1\) **Central Lincolnshire JPU**: Lincoln City, North Kesteven, West Lindsey  
**North Northamptonshire JPU**: Corby, Kettering, Wellingborough, East Northamptonshire  
**West Northamptonshire JPU**: Daventry, Northampton, South Northamptonshire

Brief for renewable energy opportunities and heat mapping for the East Midlands FINAL
3.7 These detailed maps should highlight specific locations where there is the potential for district heating and the use of waste heat which can be used to inform LDFs. Areas should be categorised according to heat density and size of the heat load, and the potential energy and CO₂ reductions should be calculated using transparent assumptions.

3.8 The mapping should be accompanied by a summary report setting out the methodology, analysis and recommended priority locations.

3.9 Where work on low carbon and renewable energy has already been by local planning authorities, this analysis should be used to inform the project. Any inconsistencies between local studies and the maps produced for this project should be clearly stated. Use should also be made of previous studies undertaken at the regional level.

4. Meetings/liaison

4.1 Effective communication and liaison with the Project Manager and Steering Group is crucial to the process. You will, therefore, be asked to:

- Establish a project management process that ensures communication with the Steering Group is maintained on at least a two weekly basis.
- Attend a meeting with the Steering Group at the inception stage of the work.
- Attend up to a further 3 meetings with the Steering Group.

4.2 The project inception meeting and subsequent meetings between the contractor and the Project Manager, together with the Steering Group, will normally be held at the offices of East Midlands Councils in Melton Mowbray. The contractor should allocate approximately two hours for each of these meetings.

5. Timetable and Critical dates

- Proposed start date and inception meeting: w/c 27 Sept 2010
- Interim Report submitted to Steering Group: w/c 13 Dec 2010
- Draft final Report submitted to Steering Group: w/c 17 Jan 2011
- Final Report submitted to Project Manager: by 31 Jan 2011

6. Outputs

6.1 The Final Report should be split into two sections and be costed separately in the tender:
6.2 Low Carbon and Renewable Energy Opportunities Mapping
- GIS based maps for the resources set out under para 3.2 for each local planning authority area in the East Midlands, using stages 1-4 of the DECC methodology.
- A summary of the methodology, analysis and the data sets used.
- Generic advice on using the evidence to develop spatial planning policies at the local level.

6.3 Heat Mapping
- GIS based heat maps for each local planning authority area in the East Midlands with additional information relating to key loads and sources of waste heat.
- Detailed GIS based maps for smaller areas identified as having significant potential.
- A summary of the methodology, analysis and the data sets used, along with recommendations for locations that have the most potential for CHP and district heating schemes.

6.4 The Final Report and data files should be made available to the Steering Group in electronic form only.

7. Tendering Arrangements

7.1 Tendering will be via a competitive process. Prospective tenderers will be required to provide the following information:

Pricing
- The total fixed cost for the contract exclusive of VAT.
- A breakdown of all staff and other costs for the contract.

Approach / Methodology
- A detailed description of how the brief will be delivered.
- Proposed programme – prospective tenderers should provide a detailed programme for the work.

Personnel
- The qualifications and experience of proposed personnel. Tenderers are expected to provide CVs for all proposed personnel and the amount of time each member of the team will spend on the work.
- The relevant experience of the contractor's project team, relating to contracts of a similar nature where applicable.

7.2 Tenderers should provide sufficient information with their tender to assist with the tender evaluation based on the above criteria. Tenderers will need to demonstrate that the proposed project team has within it knowledge of energy and spatial planning issues at regional and local level and experience in data presentation and analysis.
Project Team members should be suitably qualified and experienced to carry out the work required.

7.3 All information supplied in connection with this invitation to tender shall be treated as strictly confidential. Three copies and an electronic version of the tender should be sent to:

Peter Williams
Policy Adviser
East Midlands Councils
Phoenix House
Nottingham Road
Melton Mowbray
Leicestershire
LE13 0UL
email: tender@emcouncils.gov.uk

7.4 The deadline for receipt of tenders is:
12.00 noon on Friday 17th September 2010.

7.5 Interviews will be held w/c 20 September 2010.

8. Project Management and Steering Group Arrangements

**Project Manager:** EMC Director of Strategy or such other person as he shall nominate

**Steering Group:**
EMC (Chair)
additional local authority reps (tbd)
DECC (Represented by GOEM)
emda
Environment Agency
Natural England

8.1 A project plan and work programme will need to be agreed between the chosen contractor and the Steering Group.

8.2 The contractor will liaise closely with the Project Manager. Primary responsibility for the day to day management of the contract will rest with the Project Manager in consultation with the Steering Group. The Project Manager will be responsible for keeping the Steering Group fully informed of the development of the project. Regular meetings will be required between the contractor and the Project Manager (through the Steering Group) to ensure that the project progresses on schedule.
8.3 The Steering Group, acting as a quality review panel, will review the interim Report and Draft Final Report and comments made will be used by the contractor to submit the Final Report by the 31 January 2011.

9. Confidentiality

9.1 All data and records are to be kept confidential and the contractor shall not disclose any of the data to any other person, other than directed by the Project Manager.

9.2 All data and GIS files produced by this project will be owned by East Midlands Councils on behalf of all local authorities in the East Midlands.

9.3 All data and records collected under this contract shall be transferred at the end of the project as directed by the Project Manager. Any remaining electronic copies should be erased unless permission to retain any such data is given by the Project Manager.

10. Payment and contractual arrangements

10.1 Payment for the contract will be staged – a third of the agreed fees will be paid at the project inception stage, a third at the Interim Report stage and a third on the satisfactory delivery of the Final Report. Payment will not be made until the Project Manager and Steering Group are satisfied with the reports provided.

10.2 In the event of a dispute between the contractor and the employing organisation, a nominated and jointly-agreed arbitrator will be employed.

11. Copyright

11.1 The copyright will rest with the East Midlands Councils including intellectual copyright.

12. Contacts

- Andrew Pritchard, East Midlands Councils, 01664 502641
- Peter Williams, East Midlands Councils, 01664 502634
Appendix 1 (Not Part of the Region-wide Tender)

The following local authorities have requested a quote to extend the assessment to include levels 5-7 of the DECC Methodology:

- Central Lincolnshire JPU (Lincoln City, North Kesteven and West Lindsey)
- Nottinghamshire (excluding Bassetlaw and Nottingham City) – also considering coal-mine methane and landfill gas and large scale photovoltaic arrays