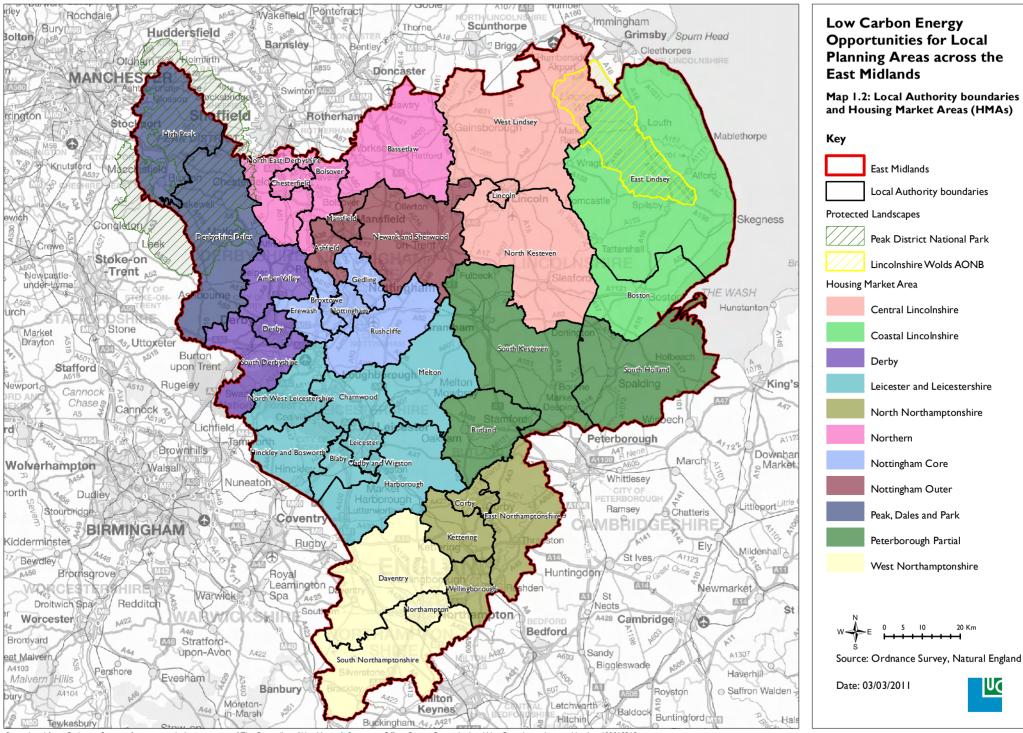


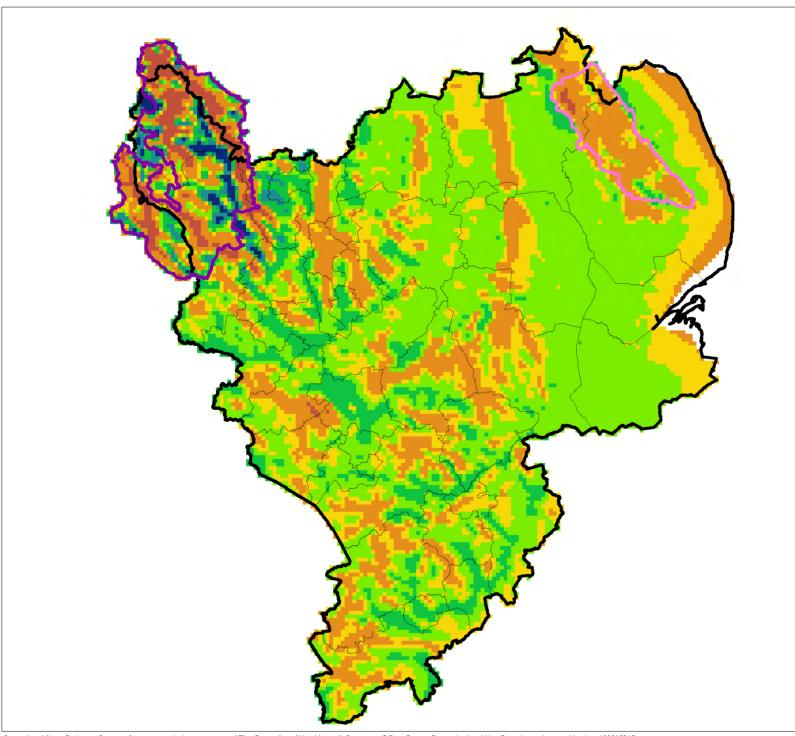
Low Carbon Energy Opportunities for Local Planning Areas across the Fast Midlands Map 1.1: Local Authority boundaries and protected landscapes Key East Midlands Local Authority boundaries County boundaries Derbyshire Leicestershire Lincolnshire Northamptonshire Nottinghamshire Rutland Protected Landscapes Peak District National Park Lincolnshire Wolds AONB

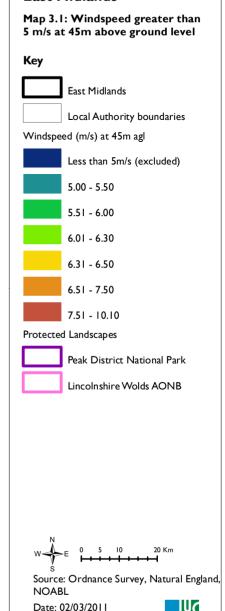


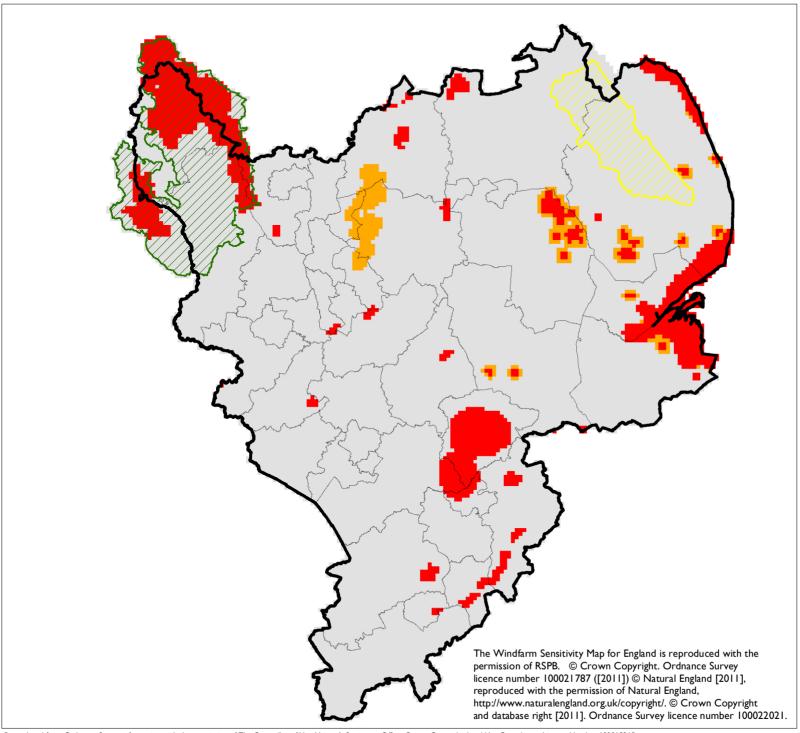
Source: Ordnance Survey, Natural England











Map 3.2: Map of sensitive bird areas in relation to onshore wind farms in England

Key

East Midlands

Local Authority boundaries

Sensitive bird areas

High sensitivity

Medium sensitivity

Unknown sensitivity

Protected Landscapes

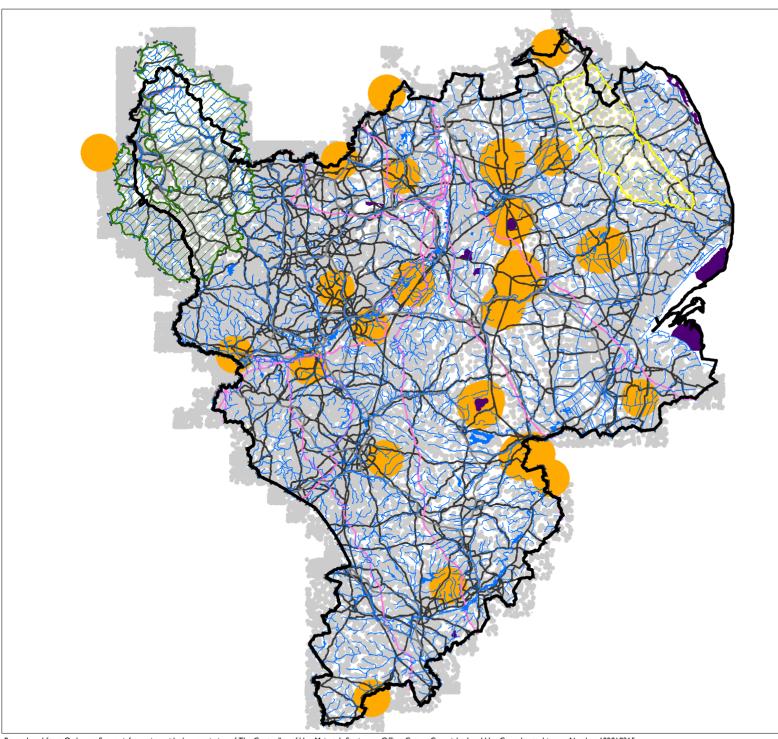
Peak District National Park

Lincolnshire Wolds AONB

W E 0 5 10 20 Km

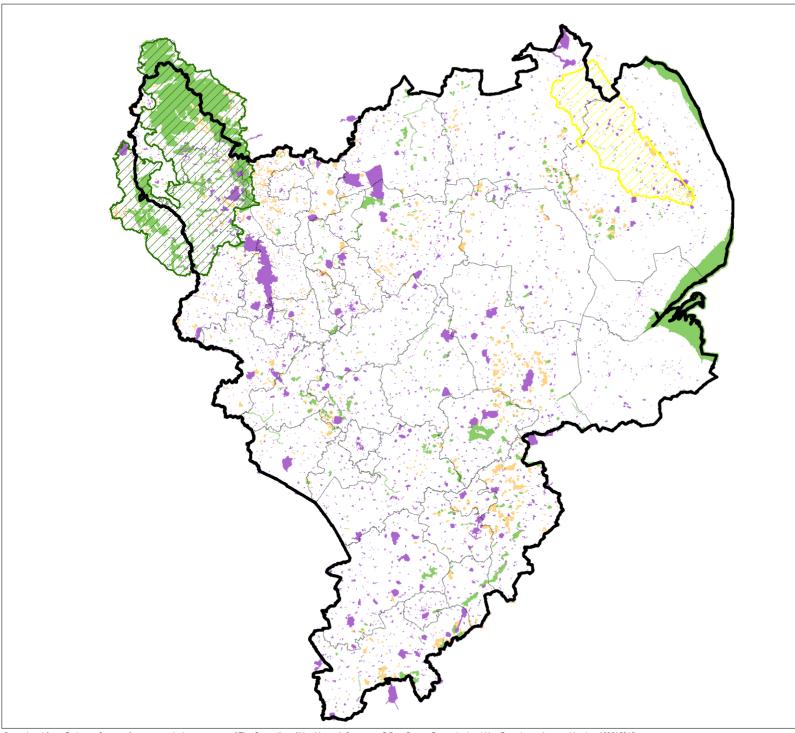
Source: Ordnance Survey, Natural England,





Map 3.3: Infrastructure-related non-accessible areas and exclusion areas





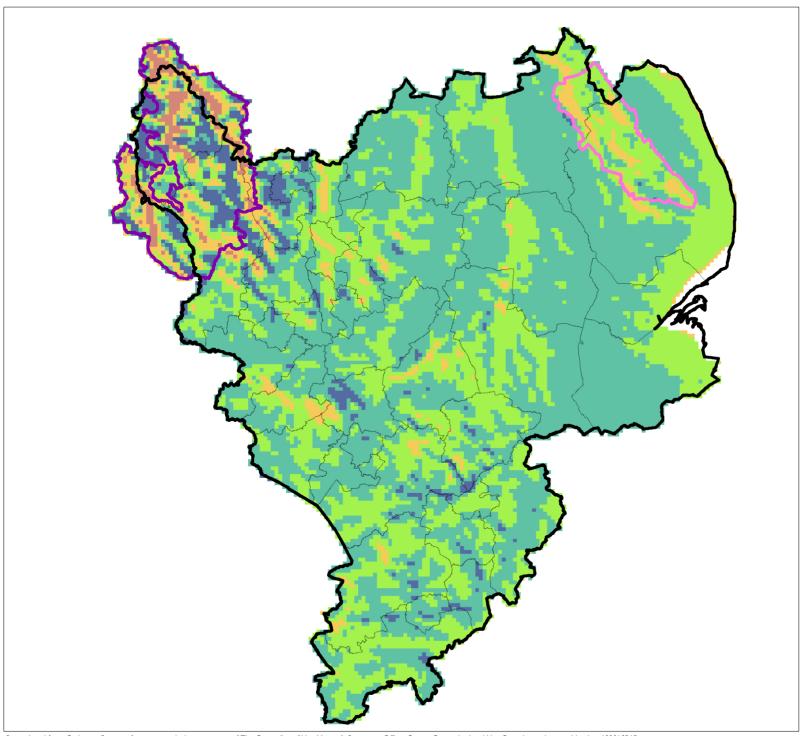
Map 3.4: Heritage and Nature Conservation constraints

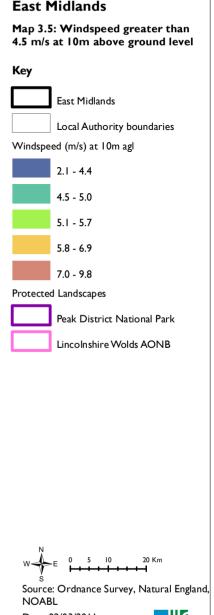




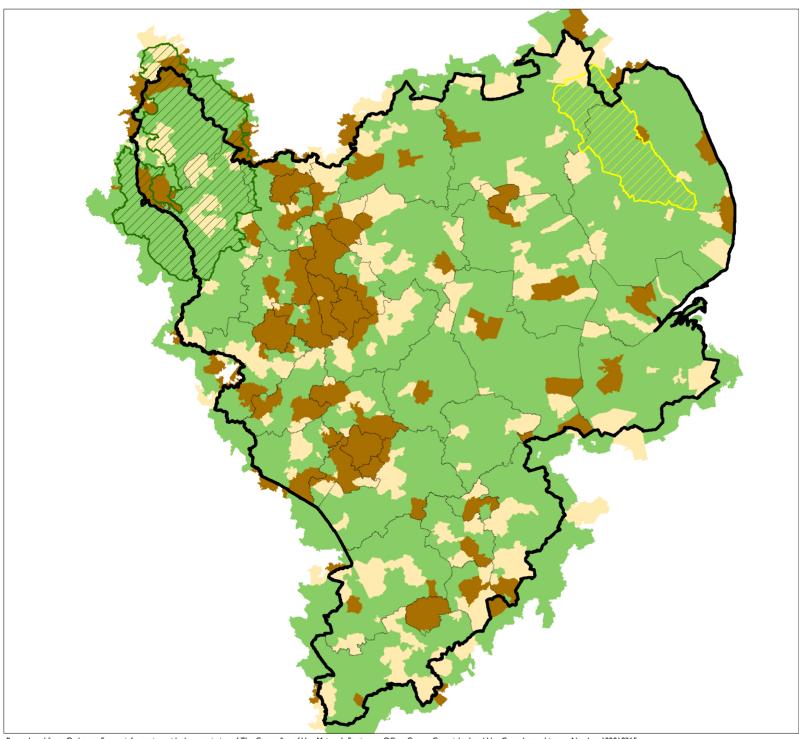
Source: Ordnance Survey, Natural England, English Heritage











Map 3.6: DEFRA Rural-Definition (Lower Super Output Area level)

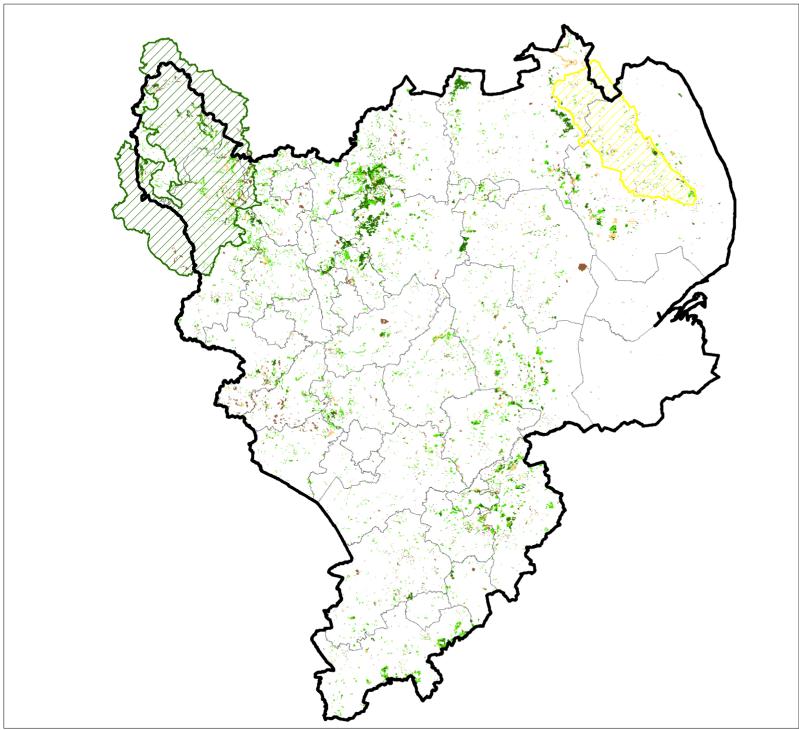




Source: Ordnance Survey, Natural England, DEFRA, ONS

DEFRA, ONS Date: 02/03/2011



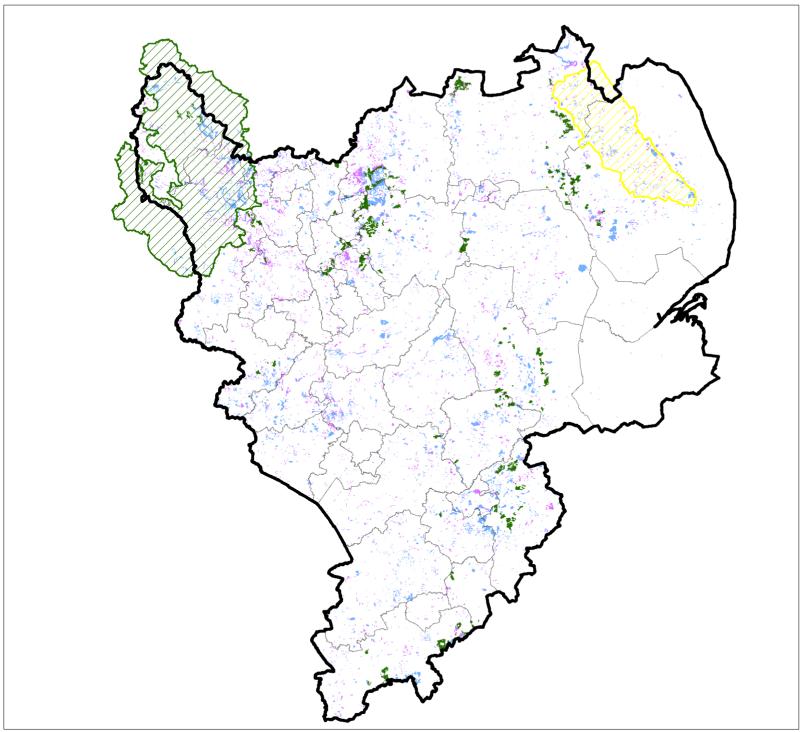


Map 3.7: Woodland by broad type





Source: Ordnance Survey, Forestry Commission, Natural England

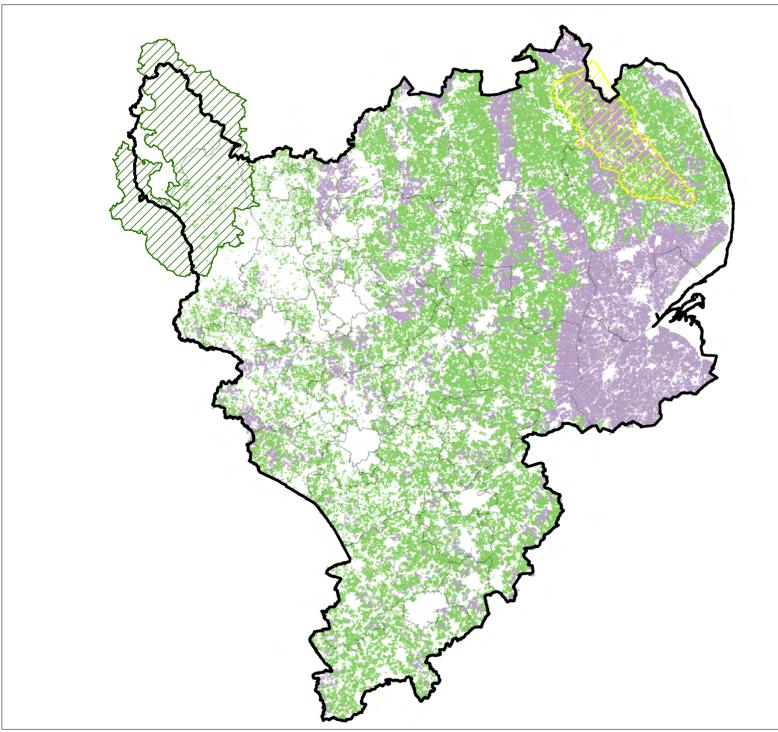


Map 3.8: Woodland by management





Source: Ordnance Survey, Forestry Commission, Natural England



Map 3.9: Energy crops - high scenario

Key

East Midlands

Local Authority boundaries

Potentially opportune areas for energy crops (high scenario)

Other arable and temporary grassland

Constrained arable and temporary grassland

Protected Landscapes

Peak Di

Peak District National Park



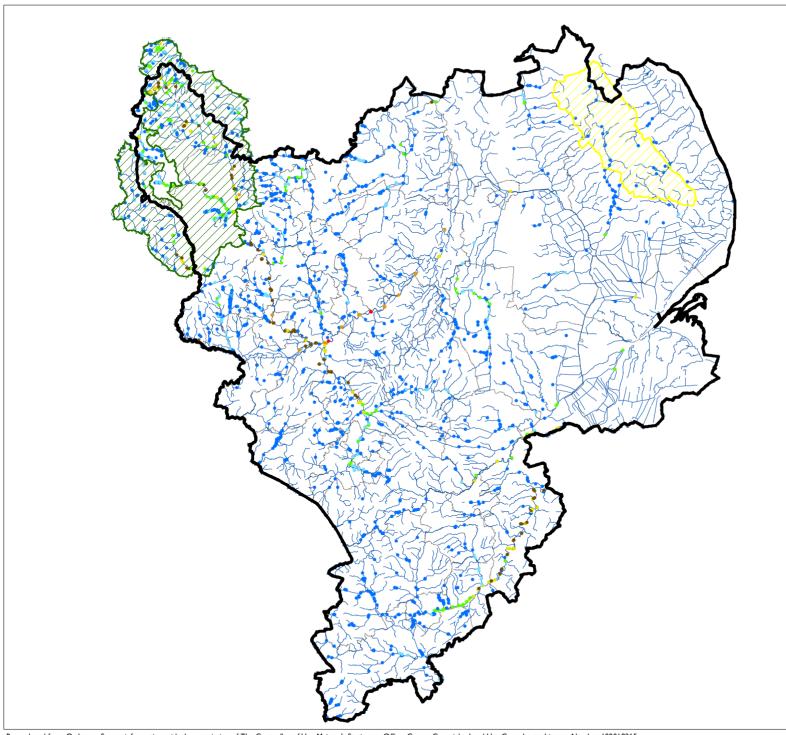
Lincolnshire Wolds AONB

Arable and temporary grassland is considered constrained if it is within: Agricultural Land Grades I or 2 UK BAP habitats
Nature conservation designations
Cultural heritage designations
Registered Common Land



Source: Ordnance Survey, Natural England, English Heritage, DEFRA, RPA





Map 3.10: Environment Agency study hydropower barriers: power

Key

East Midlands

Local Authority boundaries

Protected Landscapes

//// F

Peak District National Park



Lincolnshire Wolds AONB

Rivers

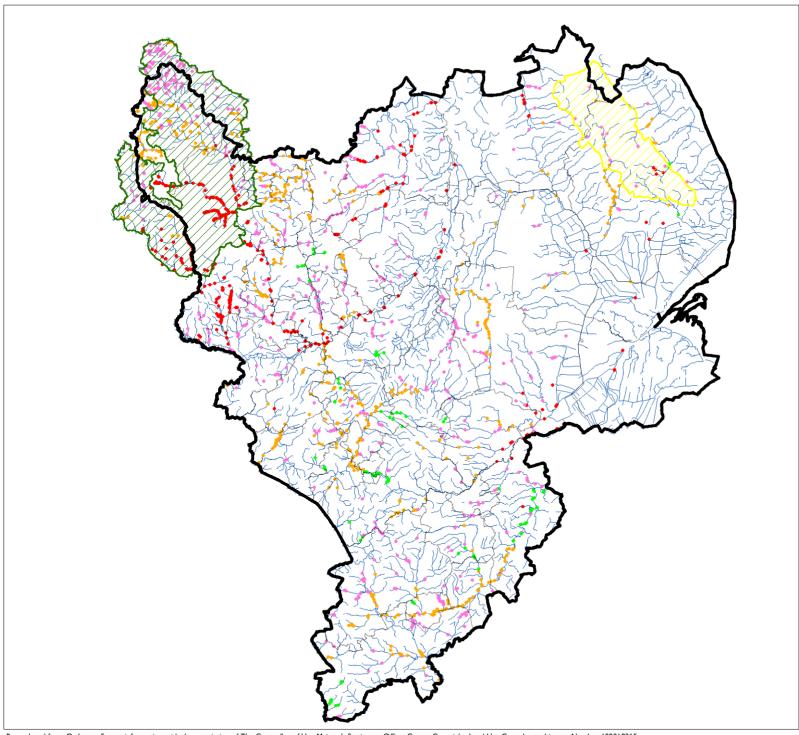
Power category

- 0 10 kW
- 10 20 kW
- 20 50 kW
- 50 100 kW
- 100 500 kW
- 500 1500 kW
- > 1500 kW



Source: Ordnance Survey, Natural England, Environment Agency





Map 3.11: Environment Agency study hydropower barriers: sensitivity

Key

East Midlands

Local Authority boundaries

Rivers

Sensitivity category

- High
- Medium
- Low
- Unknown

Protected Landscapes

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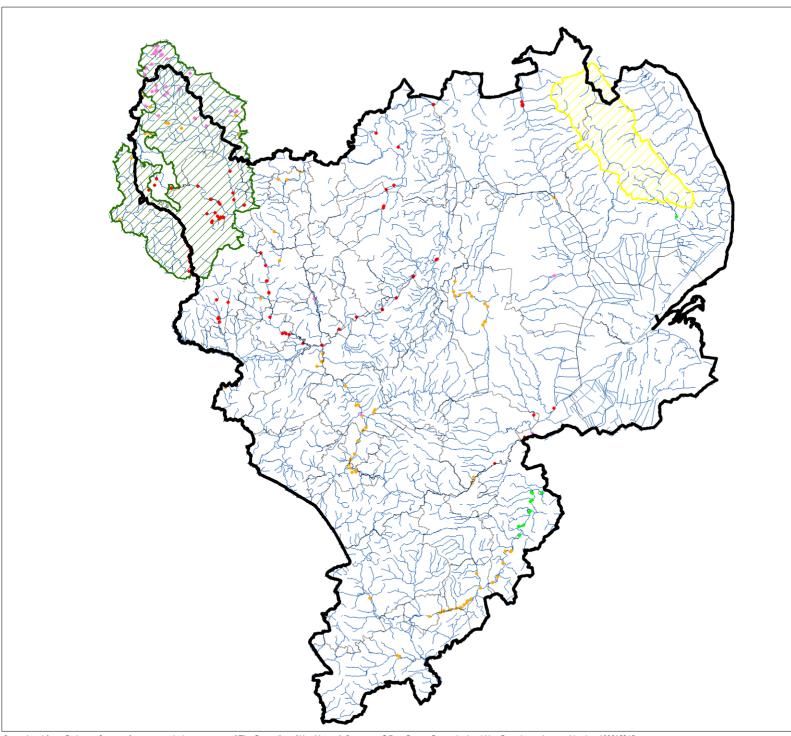
Peak District National Park

Lincolnshire Wolds AONB



Source: Ordnance Survey, Natural England, Environment Agency





Map 3.11: Environment Agency study hydropower barriers: win-wins

Key

East Midlands

Local Authority boundaries

Rivers

Sensitivity category

- High
- Medium
- Low
- Unknown

Protected Landscapes

////

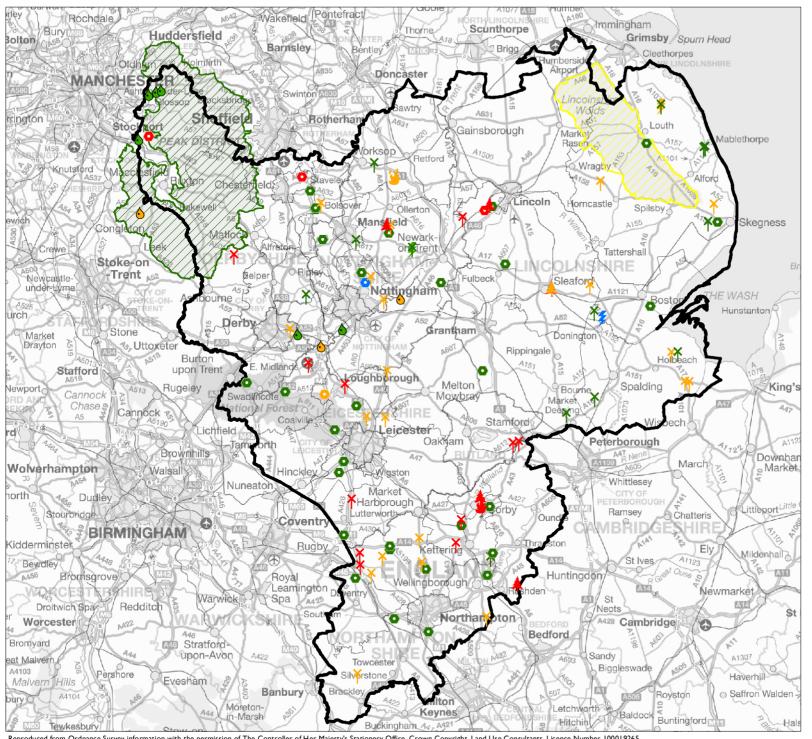
Peak District National Park

Lincolnshire Wolds AONB

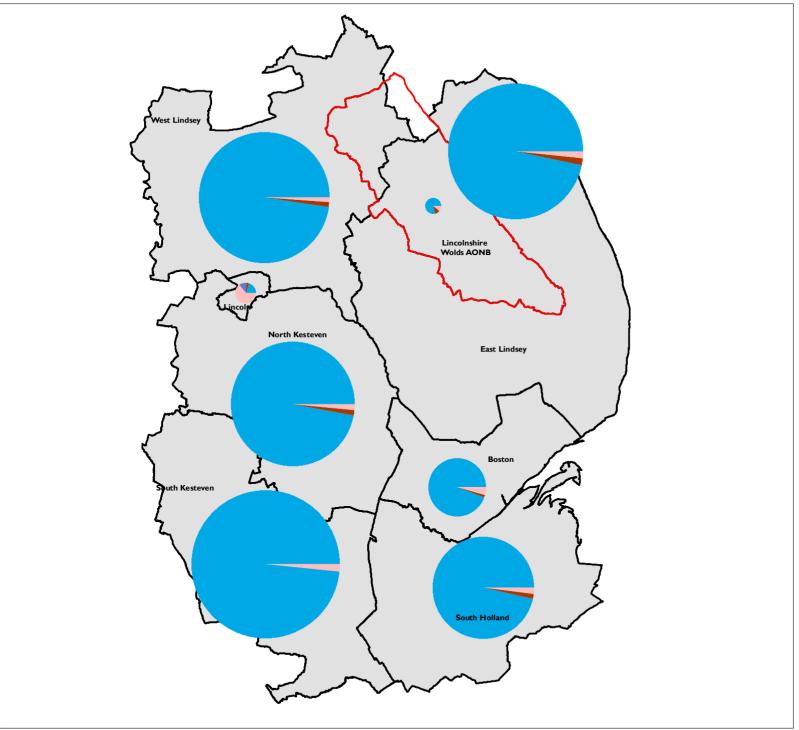


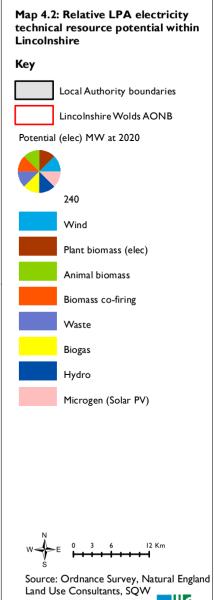
Source: Ordnance Survey, Natural England, Environment Agency

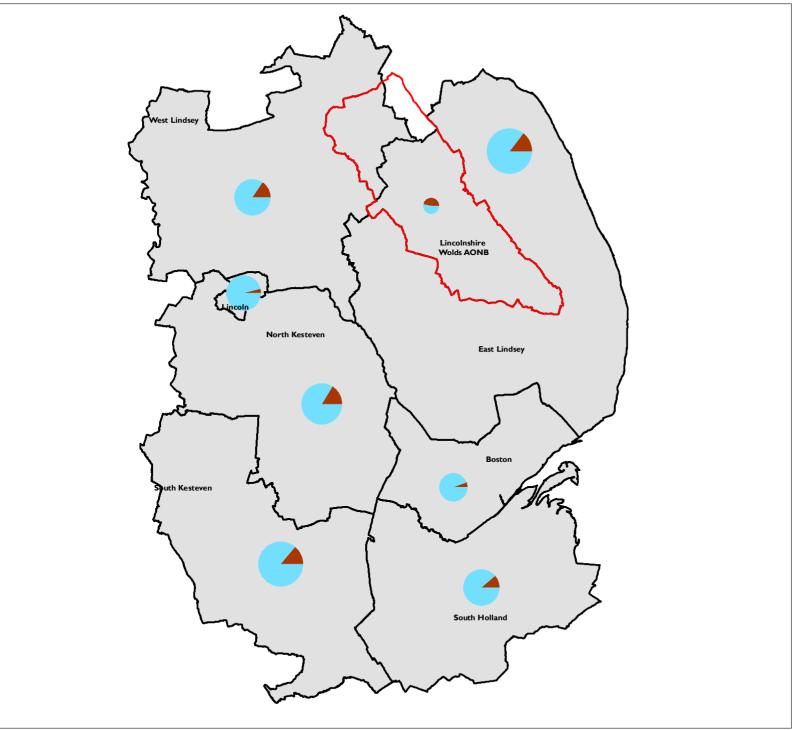




Fast Midlands Map 4.1: Rapid review of existing and planned renewable schemes Key Fast Midlands Local Authority boundaries Protected Landscapes Peak District National Park Lincolnshire Wolds AONB Technology Biomass - Dedicated Hydro Landfill Gas Municipal and Industrial Waste **Photovoltaics** Wind Onshore Status Operational Under Construction **Awaiting Construction** Additional schemes (in planning process) N/A - Application Submitted Source: Ordnance Survey, Natural England, DECC (Restats Planning Database) Date: 02/03/2011







Map 4.3: Relative LPA heat technical resource potential within Lincolnshire

Key



Lincolnshire Wolds AONB

Potential (heat) MW at 2020



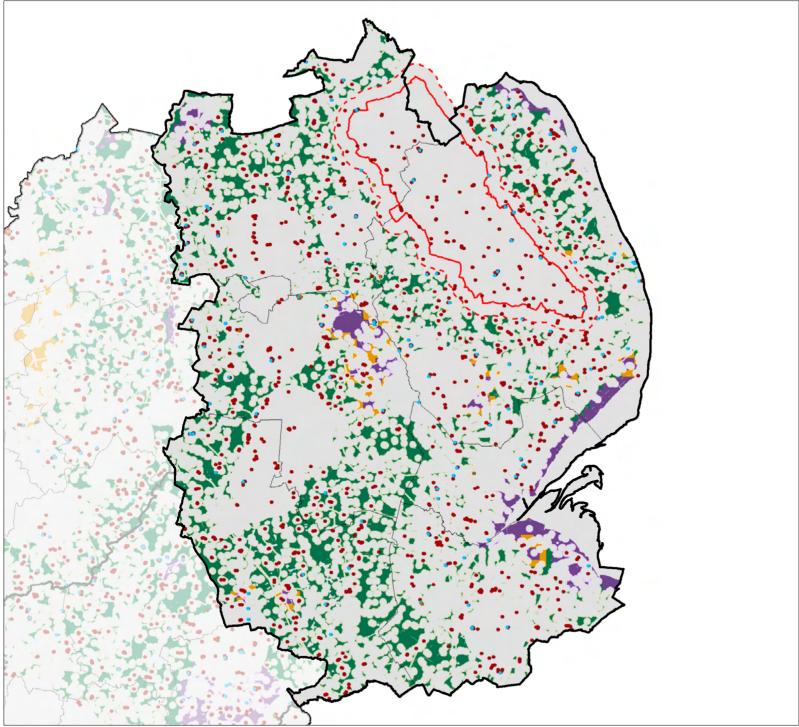
320



Heat pumps and solar thermal



Source: Ordnance Survey, Natural England Land Use Consultants, SQW

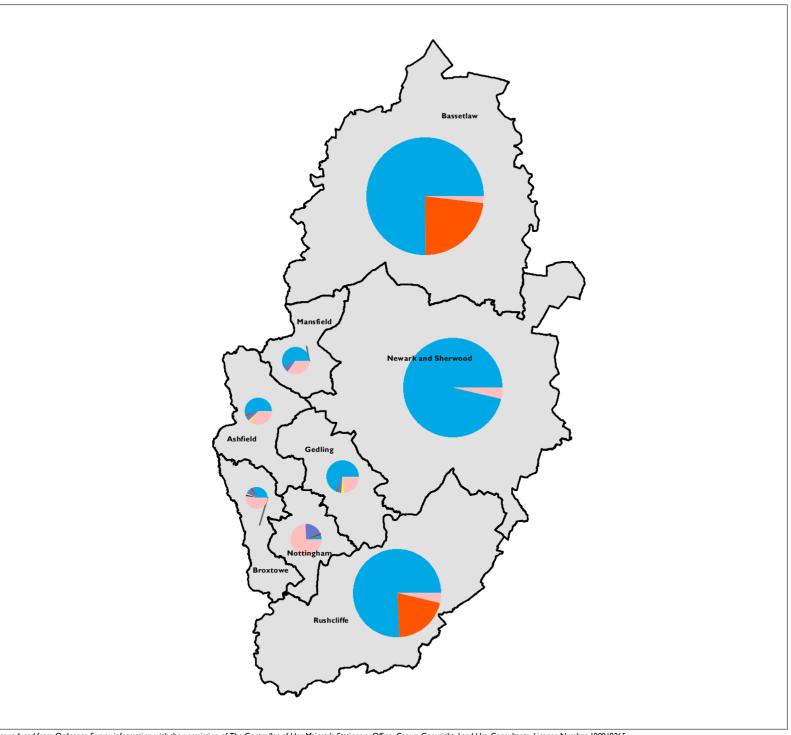


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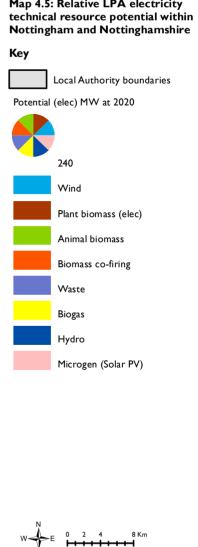
Low Carbon Energy Opportunities for Local Planning Areas across the East Midlands

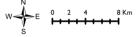
Map 4.4: Lincolnshire onshore wind energy opportunity plan



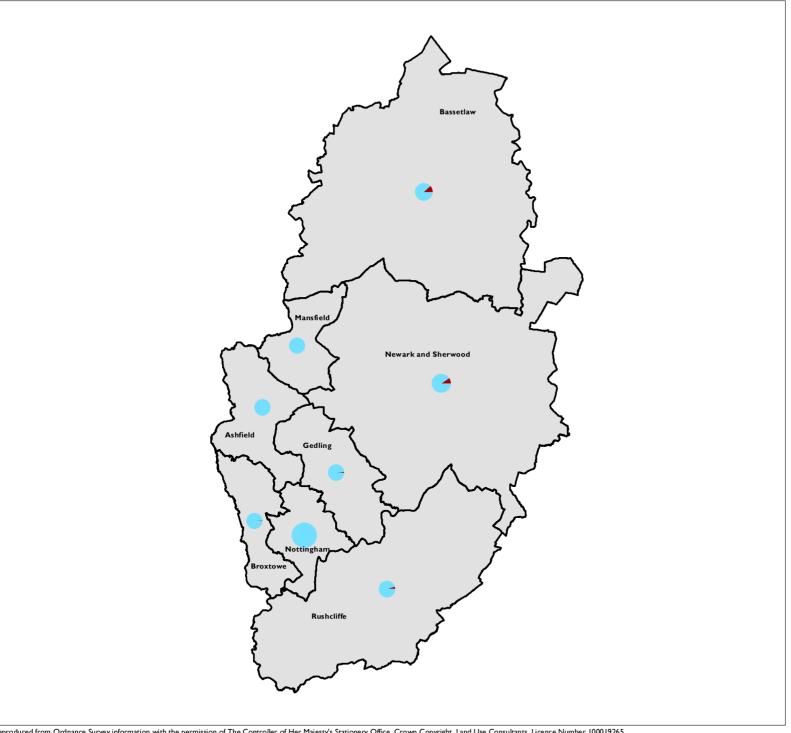


Map 4.5: Relative LPA electricity





Source: Ordnance Survey, Land Use Consultants, SQW



Map 4.6: Relative LPA heat technical resource potential within Nottingham and Nottinghamshire

Key

Local Auth

Local Authority boundaries

Potential (heat) MW at 2020



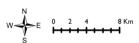
1,600



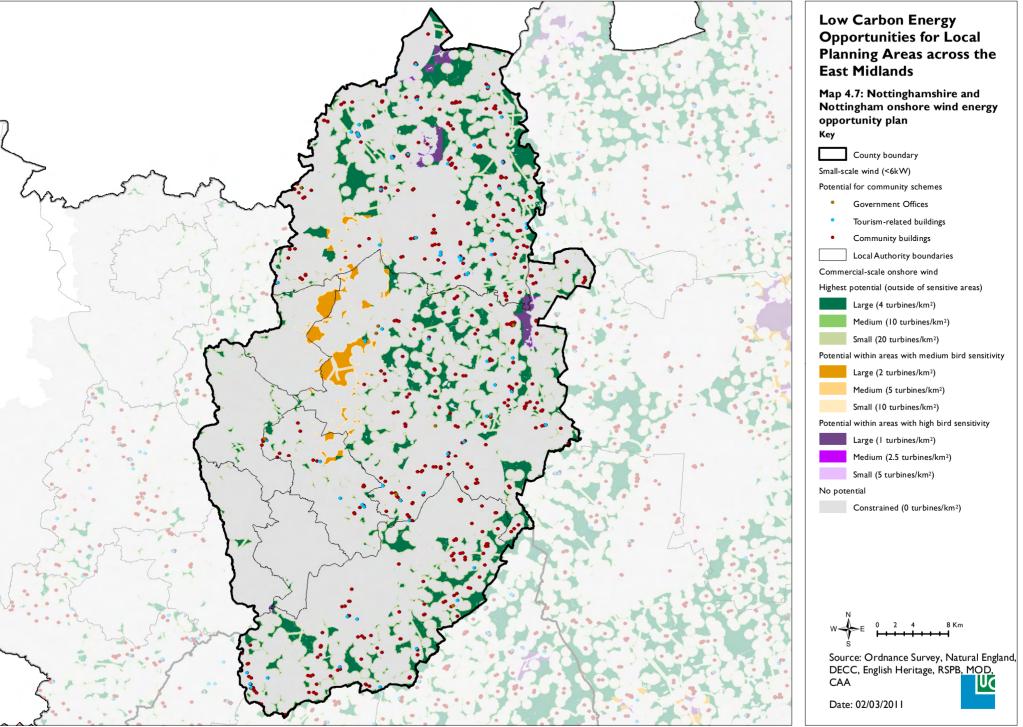
Plant biomass (heat)

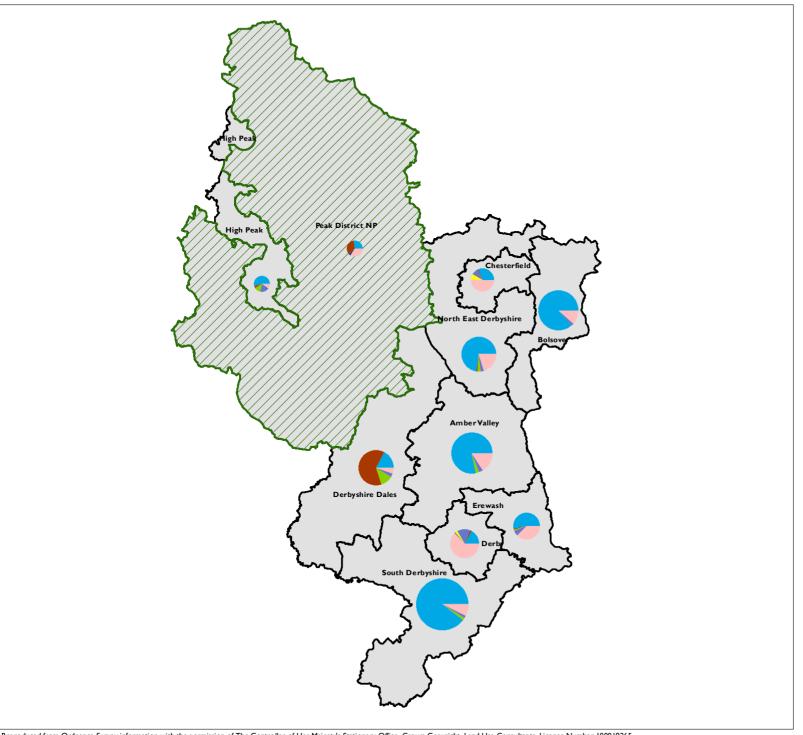


Heat pumps and solar thermal

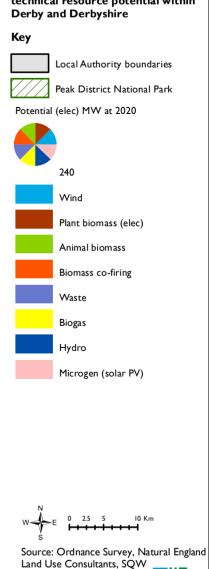


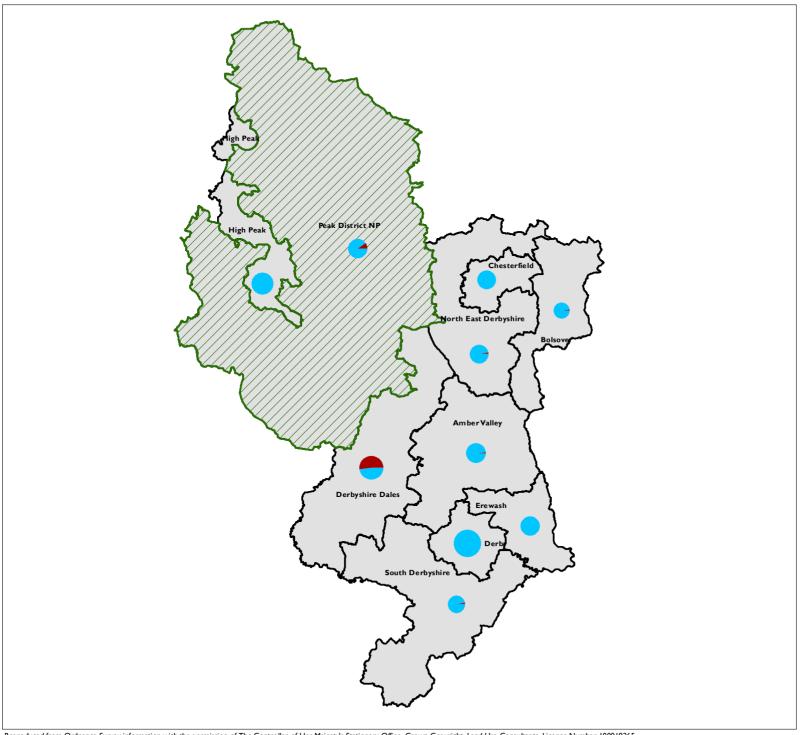
Source: Ordnance Survey, Land Use Consultants, SQW





Map 4.8: Relative LPA electricity technical resource potential within





Map 4.9: Relative LPA heat technical resource potential within Derby and Derbyshire

Key

Local Auth

Local Authority boundaries



Peak District National Park

Potential (heat) MW at 2020



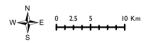
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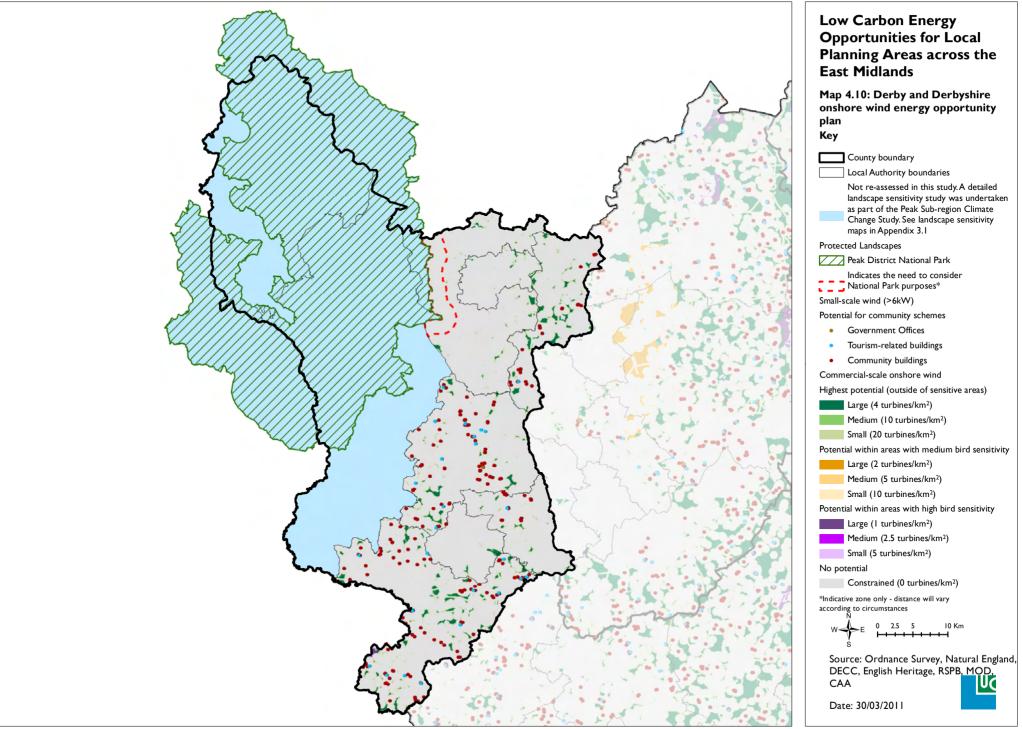
Plant biomass (heat)

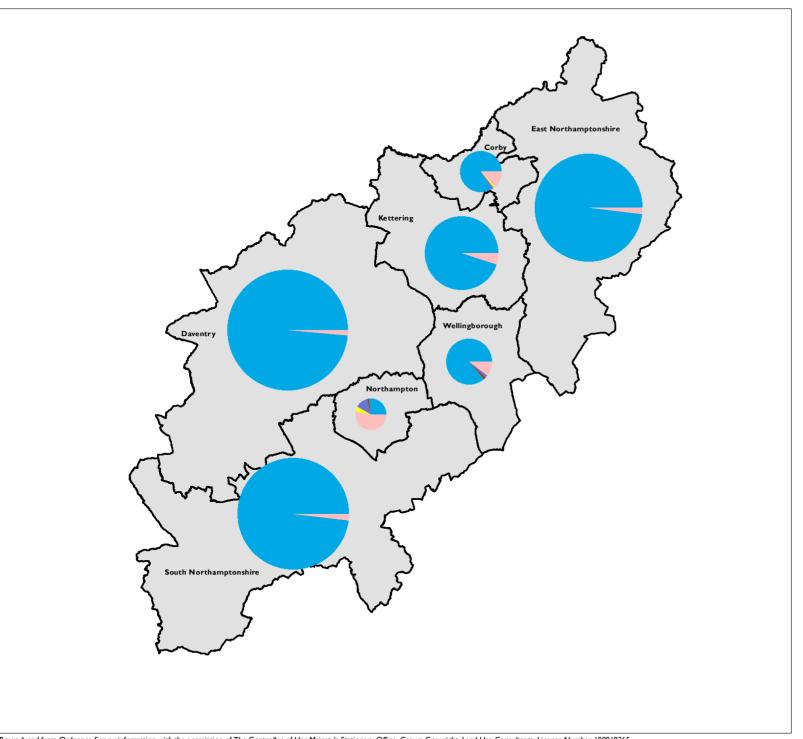


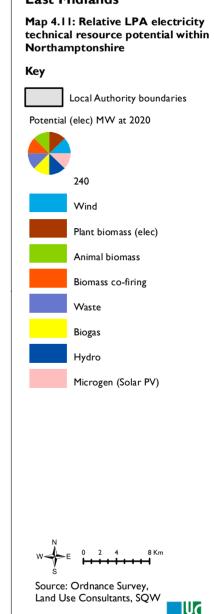
Heat pumps and solar thermal

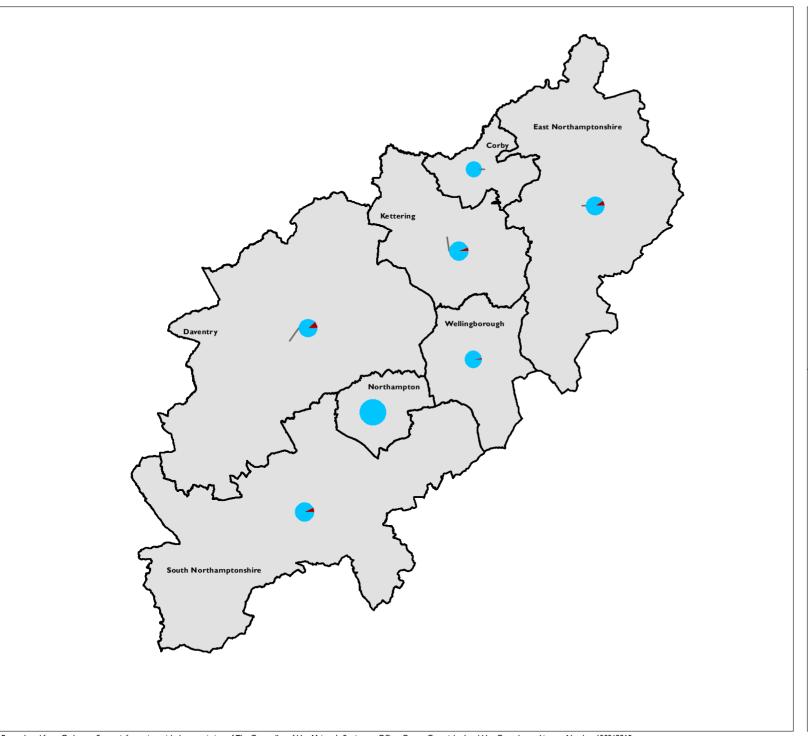


Source: Ordnance Survey, Natural England Land Use Consultants, SQW









Map 4.12: Relative LPA heat technical resource potential within Northamptonshire

Key

Local Authority boundaries

Potential (heat) MW at 2020



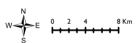
1,100



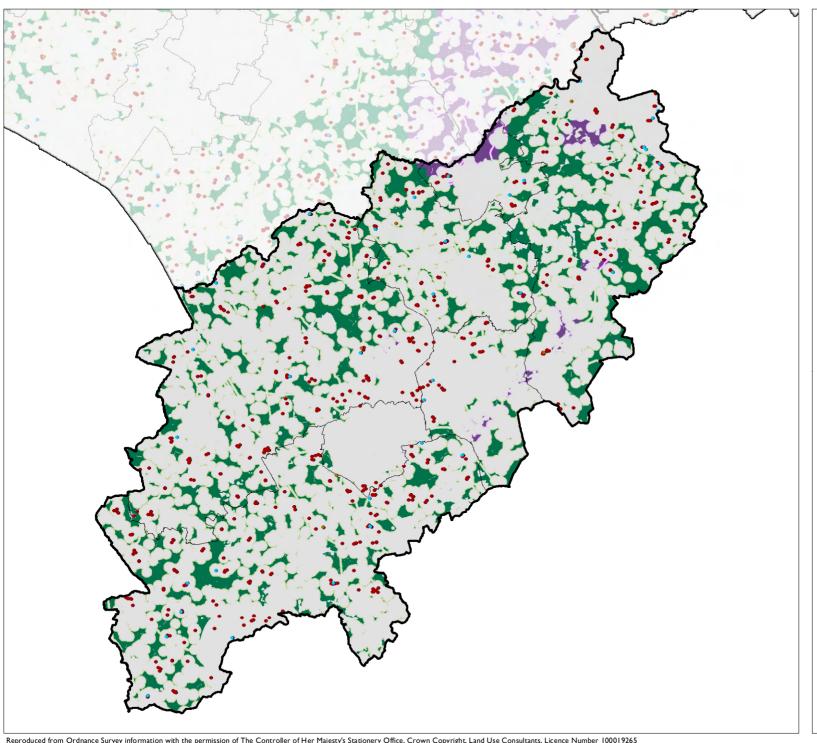
Plant biomass (heat)



Heat pumps and solar thermal

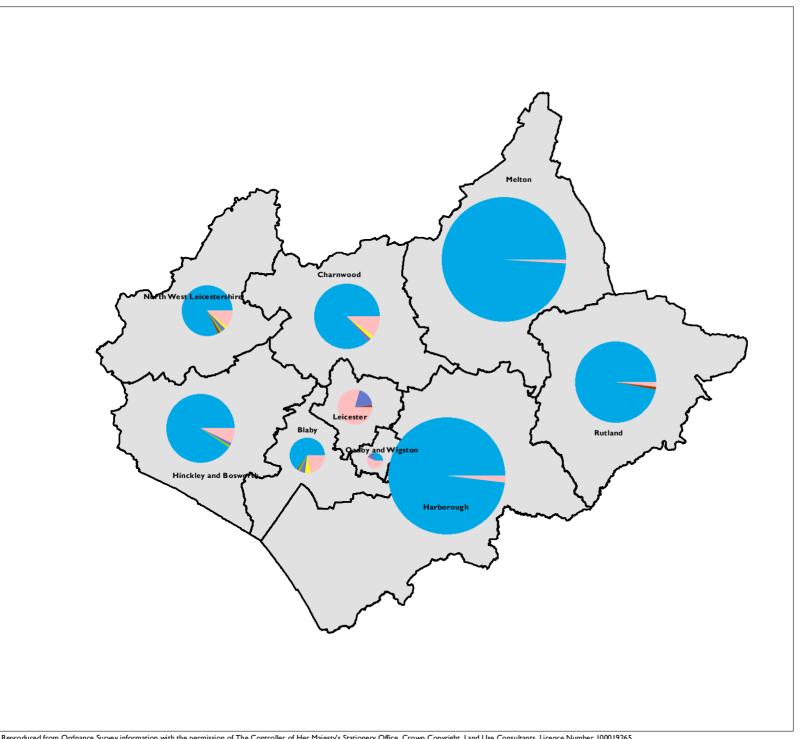


Source: Ordnance Survey, Land Use Consultants, SQW

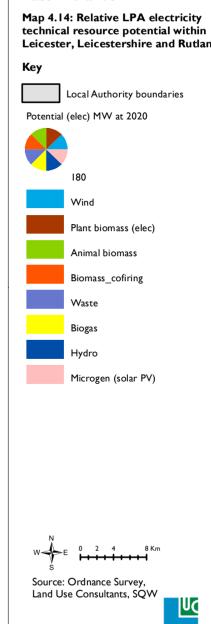


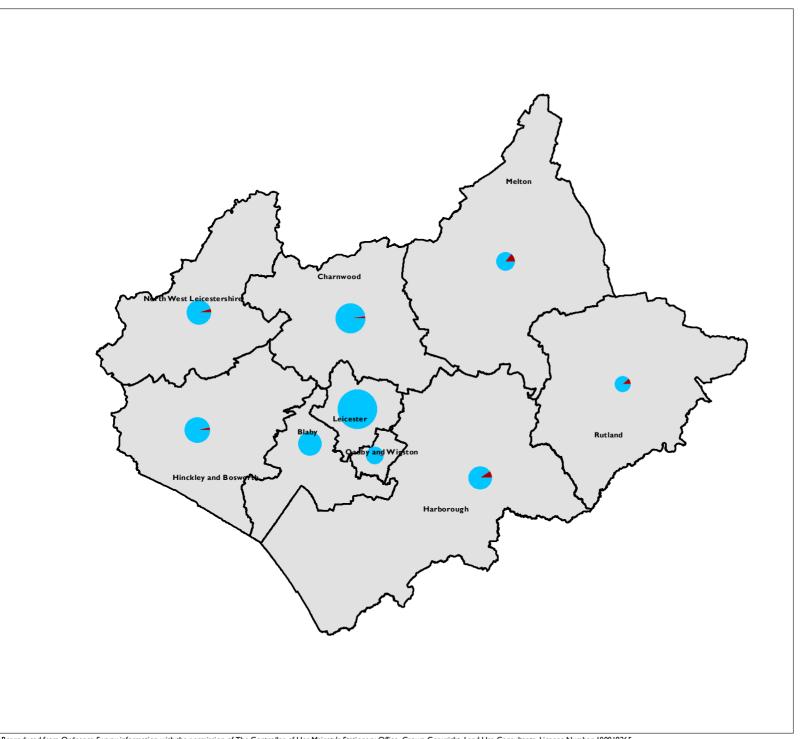
Map 4.13: Northamptonshire onshore wind energy opportunity plan





Leicester, Leicestershire and Rutland





Map 4.15: Relative LPA heat technical resource potential within Leicester, Leicestershire and Rutland

Key

Local Authority boundaries

Potential (heat) MW at 2020



660



Plant biomass (heat)

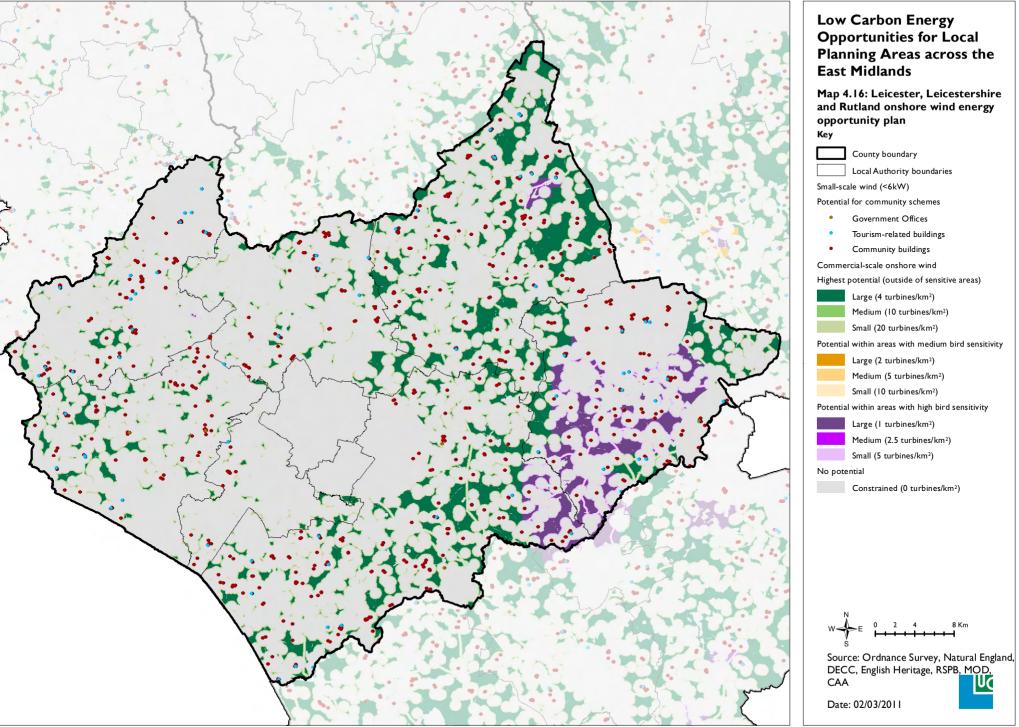


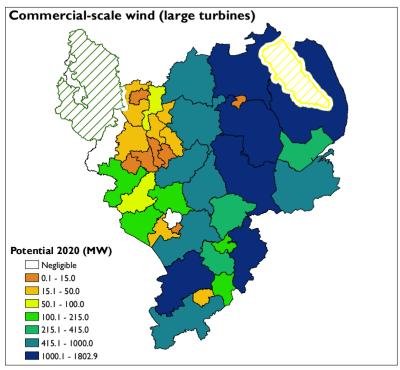
Heat pumps and solar thermal

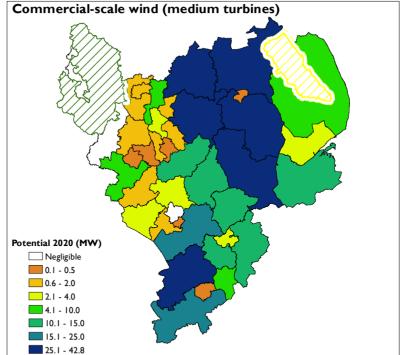


Source: Ordnance Survey, Land Use Consultants, SQW









Map 4.17: Summary of potential for on-shore commercial-scale and small-scale wind (<6kW)

Key

Protected Landscapes

Peak District National Park



Indicates need to consider National Park purposes*



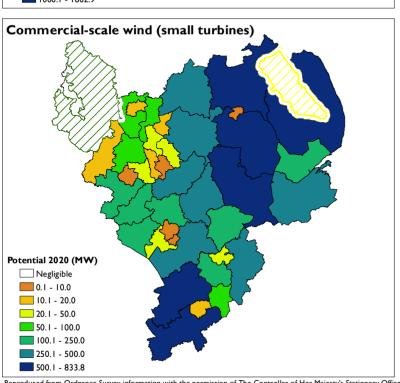
Lincolnshire Wolds AONB

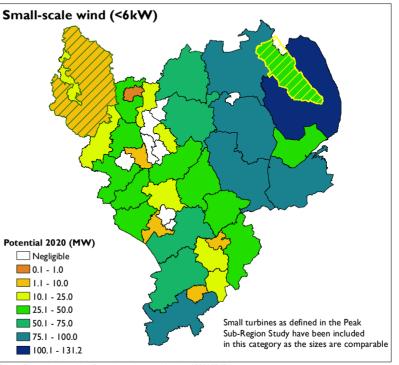


Indicates need to consider AONB

purposes*

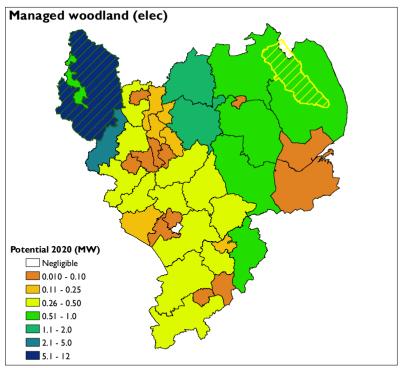
*Indicative zone only - distance will vary according to circumstances

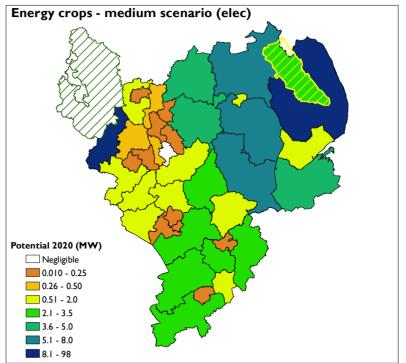


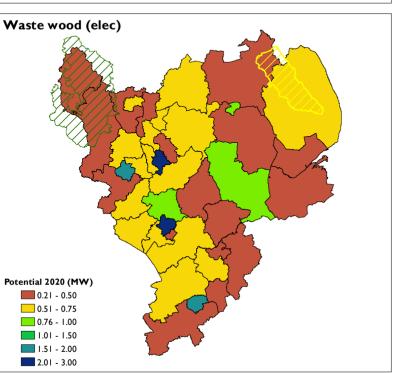


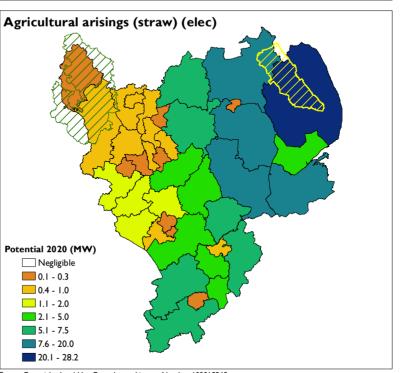












Map 4.18: Summary of potential for plant biomass (elec)

Key

Protected Landscapes

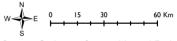
/// Pe

Peak District National Park



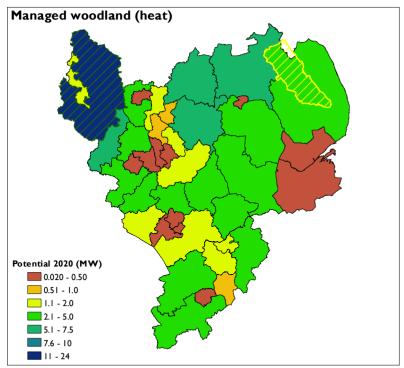
Lincolnshire Wolds AONB

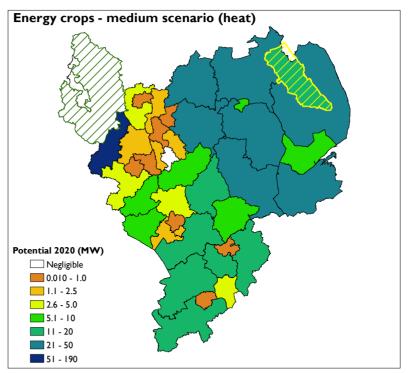
Please note: For some sources of renewable energy generation looked at in this study there is no specific technical potential set out specifically for the Peak District National Park and the Lincolnshire Wolds AONB. For details of the data that is available specifically for these two designated areas please see Table 4.7.

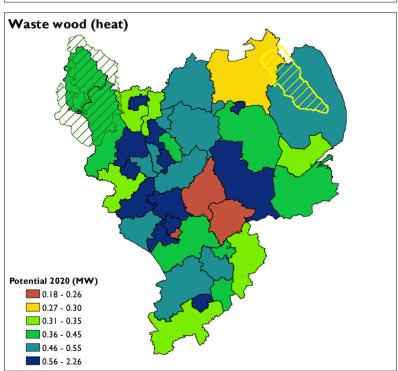


Source: Ordnance Survey, Natural England









Map 4.19: Summary of potential for plant biomass (heat)

Key

Protected Landscapes

//// ۱

Peak District National Park



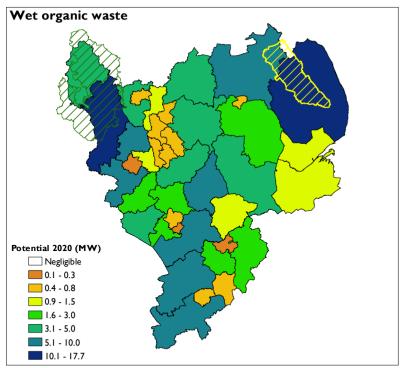
Lincolnshire Wolds AONB

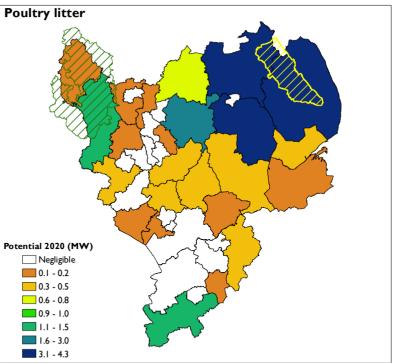
Please note: For some sources of renewable energy generation looked at in this study there is no specific technical potential set out specifically for the Peak District National Park and the Lincolnshire Wolds AONB. For details of the data that is available specifically for these two designated areas please see Table 4.7.

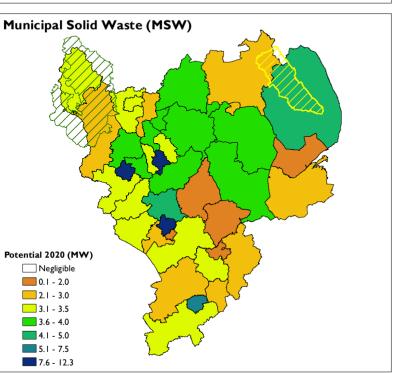


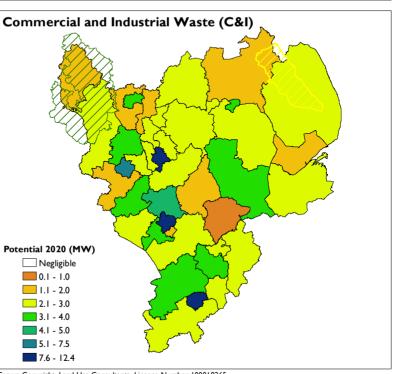
Source: Ordnance Survey, Natural England











Map 4.20: Summary of potential for animal biomass and waste

Kev

Protected Landscapes

Peak District National Park



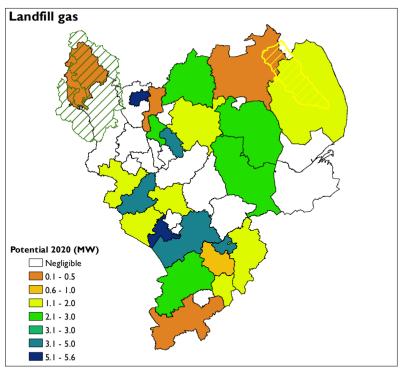
Lincolnshire Wolds AONB

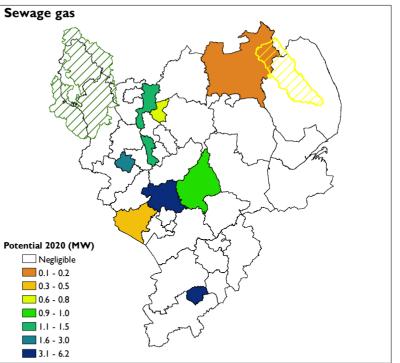
Please note: For some sources of renewable energy generation looked at in this study there is no specific technical potential set out specifically for the Peak District National Park and the Lincolnshire Wolds AONB. For details of the data that is available specifically for these two designated areas please see Table 4.7.

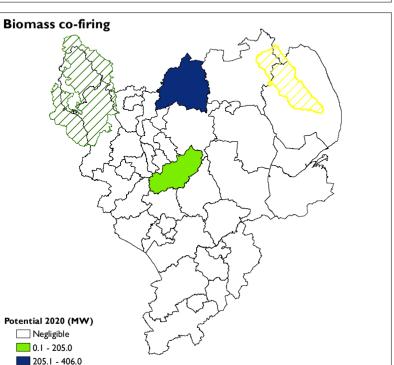


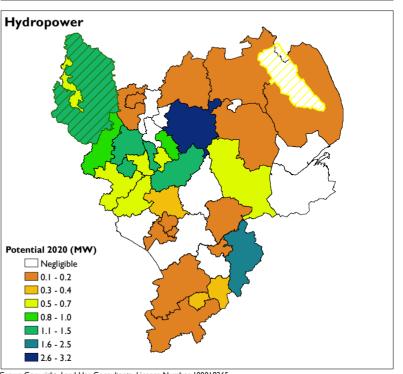
Source: Ordnance Survey, Natural England











Map 4.21: Summary of potential for biogas, biomass co-firing and hydropower

Key

Protected Landscapes

Peak District National Park



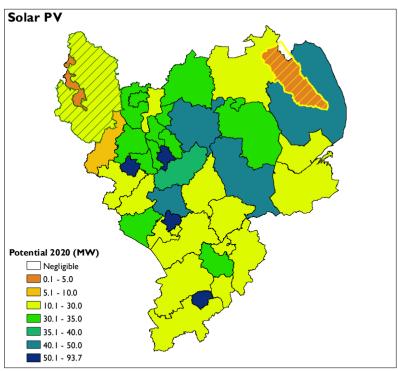
Lincolnshire Wolds AONB

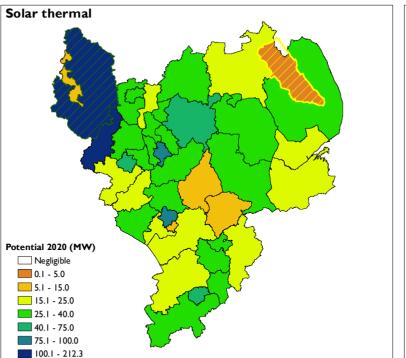
Please note: For some sources of renewable energy generation looked at in this study there is no specific technical potential set out specifically for the Peak District National Park and the Lincolnshire Wolds AONB. For details of the data that is available specifically for these two designated areas please see Table 4.7.

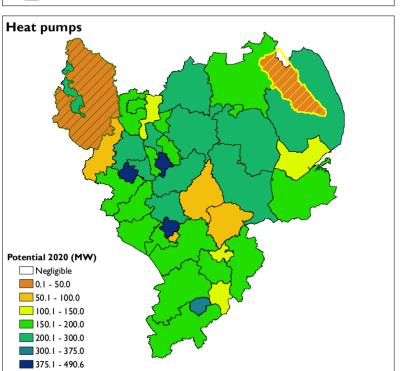


Source: Ordnance Survey, Natural England,











Map 4.22: Summary of potential for microgeneration

Key

Protected Landscapes

/// Pea

Peak District National Park

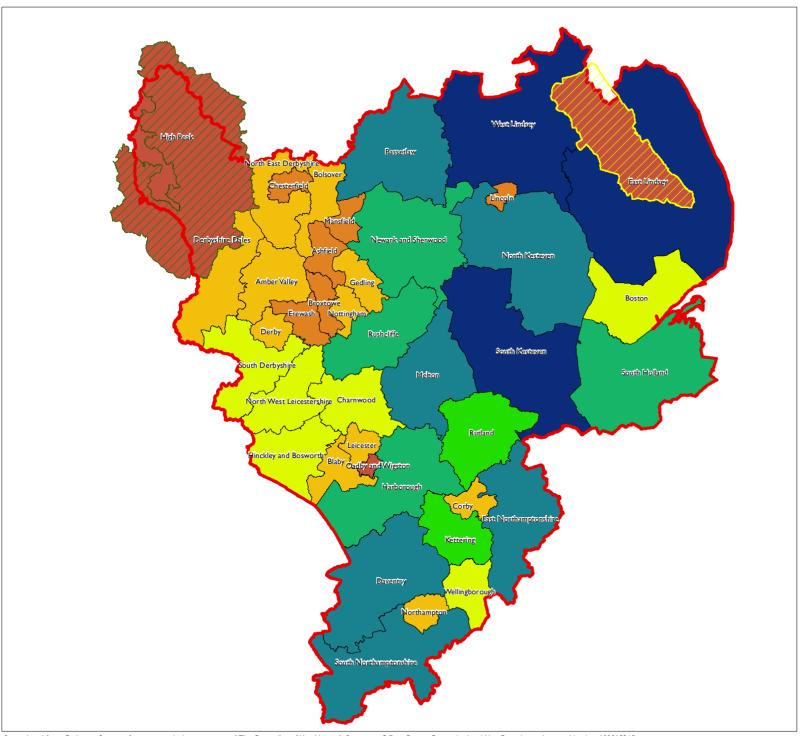


Lincolnshire Wolds AONB

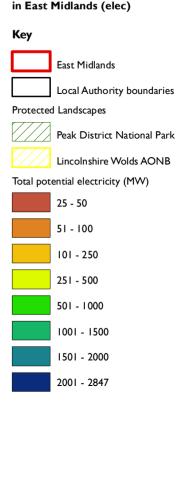


Source: Ordnance Survey, Natural England,





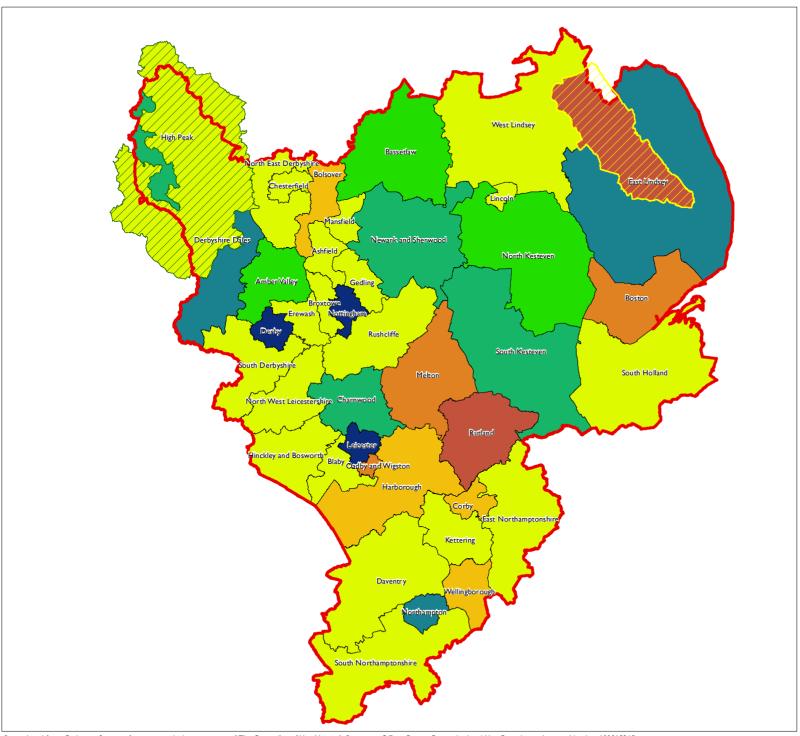
Map 4.23: Summary of potential in East Midlands (elec)

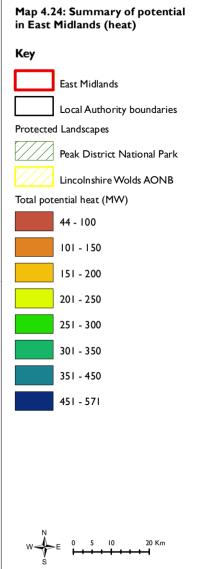




Source: Ordnance Survey, Natural England







Source: Ordnance Survey, Natural England

