The Environmental Economy of the East Midlands

2002
This report, for the first time, looks at the contribution made by the environment to the economy of the east midlands.
The Environmental Economy of the East Midlands

Foreward

1. What is the Environmental Economy?

2. Current Size of the East Midlands’ Environmental Economy

   2.1 The Environmental Industry

   2.2 Regenerating Land Based Industries

   2.3 Capitalising on a High Quality Environment

3. Moving Forward: Recommendations for Accelerating Growth in the Environmental Economy

   3.1 Supporting Growth in the Environmental Industry

   3.2 Regenerating Land Based Industries

   3.3 Capitalising on a High Quality Environment

   3.4 Actions for Developing the Environmental Economy as a Whole

Glossary
The Environmental Economy of the East Midlands

The environmental economy of the East Midlands is a vibrant and growing part of the region’s economy, which generates approximately 71,000 jobs and 3% of the region’s GDP. This makes it comparable in size to other important sectors such as construction and food and drink.

The environmental economy encompasses a wide range of growing activities, including:

- Businesses supplying environmental technologies and services.
- Environmental and resource productivity improvements in industry.
- Rural businesses relating to environmental improvements, such as agri-environment schemes and organic farming.
- Tourism and leisure businesses which are dependent on the quality of the region’s natural and historic built environment.

Strong market drivers provide significant opportunities for developing these activities in the future and creating new jobs in the East Midlands. This will help to diversify the region’s industrial base, invigorate rural economies and accelerate progress towards sustainable development in the East Midlands.

This summary presents the main findings of a study undertaken by regional partners, which for the first time has quantified the contribution of the environment to the East Midlands’ economy. It also identifies opportunities for increasing this contribution and recommends actions for regional partners to accelerate growth of the environmental economy.

The full report is available from emda at www.emda.org.co.uk
Our region's economic development strategy aims to make the East Midlands a top 20 region in Europe by 2010. This is a hugely challenging ambition, but very importantly, we must achieve genuinely sustainable progress - that is economic opportunity that extends to everyone, and that enhances our environment for future generations.

That is why our vision for the region states clearly that we want to be a region where people live and work because of our vibrant economy, healthy, safe, diverse and inclusive society and quality environment.

However we face some important environmental challenges, for example we must cut our carbon emissions and recycle our waste products if we want to provide just that quality of life that we are striving for.

I very much welcome this report, as it captures for the first time, the highly significant contribution that the environmental economy makes to the East Midlands and examines the opportunities to support the growth of this increasingly important sector. It is a basis on which we can work together to secure real and practical progress.

The East Midlands has the potential to become a world leader in environmental technologies. In partnership, we can make this a reality.

Martin Briggs
Chief Executive emda

Foreward

I very much welcome this report, as it captures for the first time, the highly significant contribution that the environmental economy makes to the East Midlands and examines the opportunities to support the growth of this increasingly important sector.
1. What is the Environmental Economy?
The ‘environmental economy’ covers a range of activities which are dependent on the region’s natural and historic built environment or which are involved in protecting or improving the environment. These activities have been grouped under three sub-headings:

i) ‘The Environmental Industry’

• Businesses and academic organisations supplying environmental technologies and services in areas such as waste management and recycling, air pollution control, wastewater treatment, contaminated land remediation, environmental consulting, energy management, renewable energy and cleaner technologies.
• Environmental improvements in industry which help businesses to generate cost savings and enhance competitiveness, by reducing waste, effluent emissions etc.
• Public sector environmental posts in organisations such as the Environment Agency and English Nature.
• Voluntary sector organisations involved in environmental improvement and physical regeneration activities, such as the Groundwork Trust and Wildlife Trusts.

ii) Regeneration of Land Based Industries

• Activities which bring environmental improvements in land based industries (e.g. agriculture and forestry), such as agri-environment schemes, organic farming and sustainable woodland management.
• Regional produce, which is frequently branded according to the quality of the environment and also helps to reduce the financial and environmental costs of transport.

iii) Capitalising on a High Quality Environment

• Tourism and leisure businesses which are dependent on the quality of the region’s natural and historic built environment.
• Inward Investment and Quality of Life – The role of the environment in helping to attract investment, regenerate communities and contribute to the overall quality of life in the East Midlands.

For the first time, the contribution of these activities to the regional economy has been quantified in a study commissioned by the East Midlands Development Agency (emda), the Environment Agency, English Nature and the Countryside Agency, working closely with regional partners such as the Regional Assembly, the Government Office for the East Midlands, the Heart of England Tourist Board, the CBI, the Environmental Pathfinder Group, the NFU, the Groundwork Trust, English Heritage, the East Midlands Action Group for the Environment (EMAGE) and East Midlands Environment Link (EMEL).

This summary presents:

• The current size of the environmental economy of the East Midlands.
• Growth potential of the environmental economy.
• Recommended actions for accelerating this growth and capitalising on future market opportunities.

The full report is available from emda on Tel. 0115 988 8300 or www.emda.org.uk
Analysis shows that the environmental economy in the East Midlands currently generates 71,000 jobs (see Table 1). These jobs represent 4.1% of total employment in the East Midlands (1,732,259) and are clearly significant when compared to employment in other sectors (see Figure 1).

2. Current Size of the East Midlands’ Environmental Economy

Activities in the environmental economy generate approximately 2.5% of total regional GDP (£1,200 million, out of a regional total of £49,413 million).

<table>
<thead>
<tr>
<th>Employment (FTE)</th>
<th>Estimated Regional GDP (£ million)</th>
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<tbody>
<tr>
<td><strong>The Environmental Industry:</strong></td>
<td></td>
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<tr>
<td>Private Sector</td>
<td></td>
</tr>
<tr>
<td>Environmental Suppliers</td>
<td>20,100</td>
</tr>
<tr>
<td>Environmental Management jobs in Industry</td>
<td>808</td>
</tr>
<tr>
<td>Public sector environmental posts</td>
<td>4,035</td>
</tr>
<tr>
<td>Environmental jobs in academic institutions</td>
<td>585</td>
</tr>
<tr>
<td>Environmental jobs in the Voluntary Sector</td>
<td>495</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>26,003</strong></td>
</tr>
<tr>
<td><strong>£600</strong></td>
<td></td>
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<tr>
<td><strong>Regenerating Land Based Industries:</strong></td>
<td></td>
</tr>
<tr>
<td>Environmentally beneficial farming</td>
<td>1,271</td>
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<tr>
<td>Environmentally beneficial forestry</td>
<td>70</td>
</tr>
<tr>
<td>Organic farming</td>
<td>310</td>
</tr>
<tr>
<td>Regional Produce</td>
<td>2,600</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,251</strong></td>
</tr>
<tr>
<td><strong>£64</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Capitalising on a High Quality Environment:</strong></td>
<td></td>
</tr>
<tr>
<td>Tourism employment based on the quality of the environment</td>
<td>40,300</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>70,554</strong></td>
</tr>
<tr>
<td><strong>£1,185</strong></td>
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</tbody>
</table>

*FTE = Full Time Equivalent jobs*
2.1 The Environmental Industry

Businesses Supplying Environmental Goods and Services: The environmental industry is now recognised by governments throughout the world as an important and growing sector which generates many jobs and environmental improvements which underpin economic development.

The environmental industry in the East Midlands comprises over 900 companies which employ approximately 20,000 people in the manufacture and supply of a wide range of environmental technologies and services (see Table 2).

A number of firms have successfully diversified into the environmental industry from other sectors such as engineering and metal fabrication. This has helped these businesses to continue to grow when faced with slow-down in some of their 'traditional' markets such as coal mining or textiles. Examples of these diversifying companies include J McIntyre Machinery Ltd which manufactures metal recycling equipment and Jenkins Newell Dunford Ltd which manufactures a range of products including waste to energy plant.

### Table 2: Environmental Suppliers in the East Midlands

<table>
<thead>
<tr>
<th>Environmental Industry Sub-Sector</th>
<th>Number of companies:</th>
<th>Established Employment:</th>
<th>% of Employment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste management</td>
<td>418</td>
<td>7695</td>
<td>38%</td>
</tr>
<tr>
<td>Energy management</td>
<td>52</td>
<td>1820</td>
<td>9%</td>
</tr>
<tr>
<td>Water and wastewater treatment</td>
<td>59</td>
<td>4575</td>
<td>23%</td>
</tr>
<tr>
<td>Air pollution control</td>
<td>54</td>
<td>1775</td>
<td>9%</td>
</tr>
<tr>
<td>Environmental monitoring and instrumentation</td>
<td>49</td>
<td>1204</td>
<td>6%</td>
</tr>
<tr>
<td>Environmental consultancy</td>
<td>94</td>
<td>911</td>
<td>5%</td>
</tr>
<tr>
<td>Contaminated land remediation</td>
<td>46</td>
<td>804</td>
<td>4%</td>
</tr>
<tr>
<td>Landscape industries</td>
<td>70</td>
<td>560</td>
<td>3%</td>
</tr>
<tr>
<td>Renewable energy</td>
<td>27</td>
<td>444</td>
<td>2%</td>
</tr>
<tr>
<td>Noise &amp; vibration control</td>
<td>37</td>
<td>284</td>
<td>1%</td>
</tr>
<tr>
<td>Environmental law</td>
<td>5</td>
<td>28</td>
<td>1%</td>
</tr>
<tr>
<td>Total</td>
<td>911</td>
<td>20100</td>
<td>100%</td>
</tr>
</tbody>
</table>
A survey of environmental suppliers undertaken during the study has demonstrated that environmental businesses in the East Midlands have experienced significant recent growth (see Figures 2 and 3). Importantly, this growth has been achieved amongst manufacturers of environmental technologies, as well as service providers, and highlights how environmental markets provide opportunities to diversify the region’s manufacturing base towards growing markets.

The industry generates significant revenues from outside the region and includes many exporters – 49% of surveyed companies have been active in overseas markets in the last 3 years. This indicates the international competitiveness of many of these businesses. Figure 4 shows the range of overseas markets that East Midlands environmental suppliers export to.

Fast Track Business Growth in Environmental Markets: The Derbyshire company Extec Industries, with its head office in Swadlincote, manufactures mobile screening and crushing machinery for a range of industrial applications, including waste processing and recycling. Extec’s equipment is supplied throughout the UK and internationally for uses such as landfill reprocessing, recycling of construction and demolition waste and tyre recycling. 80% of the firm’s machines are exported to markets as far away as Australia and Hawaii. Established in 1987, Extec was recently identified as the 26th fastest growing UK company in The Times ‘Fast Track 100’ index, with profit growth of 60% per year from £2m in 1998 to £8.1m in 2001, when it had 313 staff.
As well as businesses, the environmental industry in the East Midlands includes academic organisations involved in environmental R&D, often working with businesses to develop new environmental technologies and delivering environmental services. Examples of this expertise in the East Midlands include The British Geological Survey, De Montfort University, Loughborough University, Nottingham Trent University, University College Northampton and the University of Nottingham.

**Strong Drivers for Future Growth:**
Environmental businesses in the East Midlands already employ over 20,000 people and have experienced strong recent growth. Significant scope exists for further growth over the next decade in the face of strong market drivers in the UK and overseas.

In the UK, for example, the market for environmental goods and services is forecast to grow from £14.8 billion in 2001 to £21 billion by 2010. Highest rates of growth are expected in sub-sectors such as waste management, contaminated land remediation, renewable energy and cleaner technologies.

Business opportunities will stem from market drivers such as:

- EU environmental regulations such as the Landfill Directive, the End-of-Life Vehicles Directive (ELV) and the Waste Electrical and Electronic Equipment Directive (WEEE).
- UK policies such as the UK Waste Strategy 2000 and its targets for increasing waste recycling, the UK Landfill Levy, brownfield land reclamation targets (60% of new housing to be on reclaimed land); the Climate Change Levy and UK renewable energy targets.
- Growing commitment amongst industry to improve environmental performance.

A number of opportunities relate to land based sectors – e.g. the development of biomass crops for renewable energy.

As well as opportunities at home, East Midlands companies should also benefit from growing international markets – forecast to grow from US$515 billion today to US$680 billion by 2010 (see Figure 6).
Cost Effective Environmental Improvements in Industry:

Environmental management in industry helps companies to meet environmental regulations and reduce costs – thereby enhancing industrial competitiveness. It is estimated that there are over 800 environmental management posts in industry in the East Midlands.

Experience clearly demonstrates that companies can make significant cost savings by adopting environmental good practice and making better use of resources. Activities such as waste minimisation, environmental management systems, control of air emissions and solvent use, effluent management, recycling and effective use of packaging have led to significant financial benefits for companies. Environmental good practice can also avoid the need for costly environmental remediation work.

![Figure 6: Forecast Global Environmental Markets to 2010](source: JEMU 2002)

Pentos Office Furniture plc. employs 400 people in Ripley, Derbyshire, in the design and manufacture of office furniture. Following a review of packaging processes which aimed to improve resource efficiency and environmental performance, the company installed an automated spiral wrap system for flat-pack furniture. This generated cost savings of over £258,000 per year in packaging and £338,000 per year from a reduction in damaged goods.

The investment had a payback period of six weeks and reduced waste going to landfill by 62 tonnes per year.

Welbeck Fabric Dyes employs 170 people at its Derbyshire factory and produces 350,000 metres of fabric per week. Like other dye-houses, considerable amounts of water are needed in the dyeing and fabric finishing processes. Faced with rising costs for water supply and effluent disposal, the company improved process control to reduce water consumption. It achieved cost savings of over £32,000 in the first year and a reduction in water consumption of over 37,000 m³ per year.
Potential for Wider Uptake:
At present, whilst a proportion of firms in the East Midlands have introduced these cost effective environmental improvements, substantial scope exists for wider uptake amongst the region's industrial companies.

The Government's Envirowise programme has demonstrated that waste can cost an average manufacturing company 4% of its turnover per year and that environmental best practice can reduce these costs by as much as 50%.

With total manufacturing turnover in the East Midlands of £36.9 billion, this indicates that industry could, in theory, reduce costs by £700 million through the adoption of environmental best practice – thereby significantly enhancing industrial competitiveness in the region.
Environmental Enhancement and Conservation:
Activities to enhance and protect the environment in the East Midlands generate economic, social as well as environmental benefits. An estimated 350 people are directly employed in environmental conservation activities in the region and a further 5,800 volunteers work on conservation projects in the East Midlands. Examples include the work of the Groundwork Trust, the Wildlife Trusts, the RSPB and the British Trust for Conservation Volunteers. Opportunities exist for expanding these activities and generating further economic benefits as well as environmental improvements.

Treswell Wood in Nottinghamshire, is a 118 acre ancient woodland which has remained largely unchanged since the time of the Domesday Book. By bringing the woodland back under a traditional coppicing management regime, the Nottinghamshire Wildlife Trust has enhanced the reserve’s biodiversity at the same time as generating income for the local economy, creating jobs and enhancing the recreational value of the reserve.

The Groundwork Trust works with partnerships of local people, local authorities and businesses to make physical improvements to the natural environment which also promote economic and social regeneration. Through its network of five Groundwork Trusts in the East Midlands (Lincolnshire, Greater Nottingham, Ashfield and Mansfield, Treswell and Erewash Valley) Groundwork employs 105 people in the region and has a turnover of over £10m.
2.2 Regenerating Land Based Industries

Increasing attention is focusing on environmental improvement activities in land based industries, such as agriculture and forestry, as a means of helping to regenerate and diversify the rural economy.

Environmentally sensitive farming and forestry practices such as agri-environment schemes, organic production and sustainable woodland management, generate or relate to approximately 4,300 land based jobs in the East Midlands. Whilst this total is relatively small compared to total regional employment, the figure is significant when viewed in the context of the 47,000 people employed in agriculture and forestry in the region. Taken together, these activities play an important role in sustaining and diversifying rural enterprises and communities in the East Midlands.

Agri-environment schemes in the East Midlands such as the Countryside Stewardship Scheme, the Environmentally Sensitive Areas Scheme, the Organic Farming Scheme and the Woodland Grant Scheme, currently create or sustain approximately 1,271 jobs in the East Midlands, as well as enhancing and protecting important wildlife habitats and historic landscapes.

Organic and Regional Produce: Organic food and drink production in the East Midlands is growing rapidly in the face of growing consumer demand. Organic production tends to have a lower environmental impact compared with conventional production and also provides farmers with a higher margin.

At present, only 30% of UK demand for organic produce is met by UK suppliers – there is therefore significant potential for future development.

Likewise, demand is growing for regionally branded food and drink products such as Derbyshire and Leicestershire cheeses, Melton Mowbray pork pies and sausages, Lincoln red beef, Alderton ham, Dovedale beef, local ales and Lincolnshire plum bread.

Activity Employment

<table>
<thead>
<tr>
<th>Activity</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agri-Environment Schemes</td>
<td>1,271</td>
</tr>
<tr>
<td>Organic farming</td>
<td>310</td>
</tr>
<tr>
<td>Regional produce</td>
<td>2,600</td>
</tr>
<tr>
<td>Environmentally beneficial forestry</td>
<td>70</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,251</strong></td>
</tr>
</tbody>
</table>
Opportunities in Organics:
The market for organic produce in the UK grew by 35% to £980 million in 2001 and is forecast to reach £1.2 billion in 2002 and £1.8 billion by 2005, making Britain Europe’s largest market for organic produce. The UK organic baby foods market is now valued at £55 million – representing 40% of all baby food sales compared with 23% in 2000.

Environmentally sensitive woodland management, as promoted in the East Midlands by initiatives such as the Greenwood Community Forest and the National Forest, highlight the potential of woodlands in generating economic, social, recreational and environmental benefits.

Organic Farming in the East Midlands:
The Robert Thomas Farm between Mansfield and Nottingham is a 9000 hectare (ha) farm which specialises in vegetable production and began converting part of the farm to organic production three years ago. Currently, 11ha are fully organic and 188ha are under conversion. The farm owner, Richard Thomas sees organic conversion as a sound commercial decision which adds value to the produce and increases farm revenue. The fact that most organic produce sold in the region is imported and downward pressures on costs in conventional farming also contributed to the decision.

The National Forest covers 500 square miles of Leicestershire, Derbyshire and Staffordshire and aims to:

- improve the landscape and environment
- regenerate the region’s coalfields
- stimulate economic enterprise and employment opportunities
- create a major new tourism resource
- provide a new supply of timber for industry, and
- assist diversification of farmland and rural businesses.

“The National Forest is rapidly helping to regenerate the landscape, but is also doing much more than just planting trees... the creation of the Forest is helping to improve the local economy and opening up new opportunities for community benefit”

(Pat Richards, NFC Board).

Since 1995, when work began on the ground, population growth in the forest area is well ahead of the national average, with a buoyant housing market, more than 330,000 new visitors each year generating £128 million in income for local businesses and more than 500 new jobs.
Greenwood Community Forest:

The British Coal pit closure programme led to the closure of 9 of the 15 collieries in Nottinghamshire in 1992 and the loss of over 36,000 jobs. Nottinghamshire County Council and the Forestry Commission are now restoring seven coal pits, converting 760 ha of colliery spoil into woodland as part of the Greenwood Community Forest project. The Forest, situated on the urban fringe of Nottingham, will greatly enhance the area's environment and will help to attract inward investment to generate new employment. Sustainable woodland management practices are being used to provide valuable wildlife habitats, opportunities for a wide range of recreational activities and materials for the local timber industry.

Opportunities for Growth in Land Based Industries:

Significant opportunities exist to develop land based activities relating to the environment in the East Midlands.

These are being driven by:

- Expansion of UK and EU funding for agri-environment schemes.
- Growing consumer awareness of agri-environment issues and rapidly growing markets for organic and regional produce in the UK.
- Further scope exists for development of woodlands/forestry to regenerate urban and rural areas, attract investment and provide a valuable environmental and recreational resource.
- Scope exists for the development of non-food crops to be used as an environmentally friendly raw material in products such as fibre for car and aircraft upholstery, oil for bio-solvents, bio-lubricants and bio-fuels.
- Growing demand for sustainable forestry products, for example, under the Forestry Stewardship Certification Scheme (FSC).

National Space Centre, Leicester
- built on a regenerated site
2.3 Capitalising on a High Quality Environment

Tourism Dependent on a High Quality Environment

The quality of the region’s natural and historic built environment underpins a large proportion of tourism activity in the East Midlands. As demonstrated during the Foot and Mouth epidemic, this activity is of great importance to regional and especially rural economies. Over 70,000 people are employed in the region’s tourism and leisure industry, and of this total, an estimated 20,000 jobs stem from visits to the region’s environment and countryside. Leading attractions include:

- The Peak District National Park
- The Derwent Valley
- The National Forest
- Sherwood Forest
- The Lincolnshire coast
- The Lincolnshire Wolds Area of Outstanding Natural Beauty
- Gibraltar Point and The Wash
- Rutland Water
- Waterways and rivers such as the Nene and Trent
- Country Parks such as Rufford Country Park, Daventry, Irchester and Brixworth, and
- Historic buildings such as Lincoln Cathedral, Nottingham Castle, Pevenyi Castle, Kirby Hall, Gainsborough Old Hall, Bolsover Castle and Ashby de la Zouch Castle.
The Peak District:
In 1998, the Peak District National Park attracted 475,000 overnight tourist trips and 17,963,000 leisure day visits. Total visitor spend in the National Park amounted to over £185 million, equivalent to £10.03 per head. These visits to the Peak District National Park support 2,120 jobs.

Farm Based Holidays:
“We’re a business and our biggest business asset is our location. We live in a fabulous place, somewhere where people want to come and stay, so this is a really good way of using that asset...tourism supplies up to 70% of the farm’s income”

- Peak District Farmer.

The Historic Built Environment:
The work of organisations such as English Heritage and the National Trust, in the restoration and protection of the historic built environment is very important to regional tourism, as well as helping to attract businesses and enhancing overall quality of life. For example,

between 1994 and 1999, English Heritage investment in the East Midlands through the Conservation Area Partnership (CAP) scheme (now replaced by the Heritage Economic Regeneration scheme) amounted to over £3.6 million. This has included high profile regeneration projects such as Creswell Crags and Bolsover Castle and District:

The CAP scheme has brought new life to the historic Market Place of Bolsover in Derbyshire, by enabling refurbishment of traditional stone buildings. Bolsover Castle, attracting over 45,000 visitors per year is also undergoing restoration work as part of a £11 million regeneration scheme for the town.
Business Investment and Regeneration:
A high quality environment contributes to the ‘right climate’ for attracting inward investment. Whilst it is difficult to isolate the effect of the environment from other factors which determine locational decisions by businesses – such as quality of workforce, premises or transport links – the environment and the quality of life it engenders is important.

Improvements to the environment are also important in regenerating local economies, particularly in disadvantaged areas which may have suffered from industrial decline.

The regeneration of derelict land in urban and rural areas has contributed to economic development and community strengthening in many parts of the East Midlands. This is being clearly demonstrated by high profile regeneration projects such as the Avenue Coking Works at Wingerworth near Chesterfield and the Sherwood Energy Village, on the site of the former colliery at Ollerton, Nottinghamshire.

Sherwood Energy Village

The Sherwood Energy Village is a major initiative for the East Midlands transforming a 91 acre former colliery at Ollerton, Nottinghamshire into an enterprise park for industry, housing, recreation and leisure use. The development is being constructed to high environmental and sustainability standards, including plans to generate heat and power from an on-site biomass power plant, solar panels, photovoltaics and wind generation. These environmental improvements are helping to attract companies and new investment to the area.
Opportunities or Growth:

Tourism Based on a High Quality Environment:
Opportunities for increasing tourism in the East Midlands which is based on the high quality environment relate to:

- Development of rural tourism, including farm based attractions and facilities in the East Midlands.
- Promoting the region’s environmental attractions through regional food and drink – tourism businesses could increase local sourcing of food and drink. The sustainable development of tourism along Lincolnshire’s Coastline.
- Development of the Region’s forestry and woodlands as recreational and tourism resources, as exemplified by Sherwood Forest and the National Forest.

Business Investment and Regeneration:

There are clear opportunities to contribute to inward investment and economic and social regeneration through further improvements in the region’s physical environment.

Opportunities include continuing the regeneration of the former coalfield areas and derelict industrial sites, physical regeneration in market towns and in disadvantaged urban areas.

Potential also exists for new developments to incorporate sustainable construction practices and to be designed in a way which to promotes environmental improvement and biodiversity.

Avenue Coking Works

The Avenue Coking Works at Wingerworth near Chesterfield is a 240 acre former industrial site. It was transferred from British Coal ownership in 1996 and is now one of emda’s portfolio of business sites. Extensive reclamation, environmental improvement and regeneration is underway in preparation for subsequent use, including as an investment site to help bring new jobs to the area.
As shown above, the environmental economy of the East Midlands makes a significant contribution to the region’s economy and progress towards sustainable development. There is considerable scope for increasing this economic contribution, through:

- Growth of businesses supplying environmental goods and services.
- Increasing the uptake of cost-effective environmental improvements in industry in the East Midlands.
- Further conservation and enhancement of the natural and historic built environment in parts of the region.
- Expanding environmental improvement activities in land based sectors such as agriculture and forestry.
- Increasing the contribution of the region’s environment to economic activities such as tourism and inward investment.

The following section provides a summary of recommended actions for capitalising on these opportunities. These actions have been identified through consultation with regional organisations and businesses. Further detail is provided in the main report.

It is important to emphasise that actions in these different areas are inter-related and should not be seen as separate ‘silos’. For example, actions to support the development of environmental businesses could be closely linked to actions to develop renewable energy or waste composting projects in the land based industries.
3.1 Supporting Growth in the Environmental Industry

Suppliers of Environmental Goods and Services:
The environmental industry in the East Midlands is a strong and growing sector with good prospects for future growth.

Support needs identified by surveyed companies are summarised in Figure 7. High priorities include:

- advice on accessing available sources of business funding and support – many companies reported that they were not aware of what support is available or where to obtain it;
- support with marketing activities in the UK and overseas;
- support with innovation and development of new environmental technologies and services; and
- support in identifying market opportunities in the UK and overseas.
Recommended Actions:
The following recommendations are made for supporting growth of the region's environmental industry. These should build on initiatives already introduced by emda and regional partners, such as the establishment of the Environmental Industries Forum for the East Midlands (EIF) and development of a skills action plan for environmental businesses.

Potential actions within the Strategy and Action Plan include:

1. General business support – including the provision of flexible business development grants for environmental companies and advice on accessing financial support.

2. Export support – such as trade missions to overseas markets and hosting of stands for companies at key environmental industry trade shows.

3. Innovation support – such as supporting links between environmental companies and university R&D in the East Midlands and innovation in emerging areas such as ‘end-of-life’ vehicles.

4. Skills development support for companies.

5. Support for environmental business start-ups and spinoffs from larger companies and universities.

6. Support for companies in other sectors (such as engineering and metal fabrication) to diversify towards environmental markets.

7. Strategic inward investment projects to attract international environmental suppliers into the East Midlands in high growth areas such as the manufacture of waste recycling and renewable energy technologies.

8. Development of an eco-industry business park which would provide regional flagship facilities for business networking, business incubation and for showcasing regional environmental suppliers.

9. Business clustering and networking events amongst environmental suppliers.

10. Actions to stimulate regional ‘demand’ for environmental goods and services, including: public sector procurement policies and regional action plans to achieve UK renewable energy and waste recycling targets.

Key players in delivering future support include: emda, the Small Business Service, Business Links, Trade Partners UK, Sub-Regional Strategic Partnerships, the East Midlands EIF, the Environment Agency, the Government Office, the Regional Assembly and the RTAB.

Regional actions to support this sector will also benefit from strong links to the ongoing national activities of JEMU and programmes such as Envirowise.

Support actions could be delivered via the Regional Economic Strategy (RES) Delivery Plan, Sub-Regional Strategic Partnership (SSP) action plans; cluster development programmes; the regional skills action plan; and innovation programmes.

It is recommended that regional partners should establish a co-ordinated Regional Strategy and Action Plan for developing the environmental industry and examine whether the environmental industries should be included in emda’s priority sectors for development.
Increasing the Take-Up of Cost Effective Environmental Improvements in Industry:

Significant scope exists for many more companies in the East Midlands to adopt cost effective improvements in environmental management – generating environmental benefits, reducing costs and thereby enhancing industrial competitiveness. A number of regional actions are recommended:

- The revised Regional Economic Strategy and all SSP action plans should incorporate objectives to enhance resource productivity in the region’s industry and economy.
- Regional and sub-regional partners should develop a clear regional Strategy and Action Plan for helping industry to achieve cost effective environmental improvements and for enhancing resource productivity.

Potential actions include:

- establishing ‘Envirowise’ networks for companies throughout the region to promote cost-effective environmental best practice in industry; and developing high profile environmental improvement projects on industrial estates in the East Midlands (along the lines of the Premier Business Park model in Walsall).
- Regional partners should support the development of supply chain projects to help companies address emerging regulatory issues such as the EU End-of-Life Vehicles Directive or the WEEE Directive(2).

Key regional players in delivering these actions include emda, the Small Business Service, Business Links, the East Midlands Business Forum, trade associations in the region, the East Midlands Action Group for the Environment (EMAGE), East Midlands Environment Link (EMEL), the Government Office for the East Midlands, the Environment Agency, the Regional Assembly, Groundwork and Sub-Regional Strategic Partnerships.

(1) Regional Technical and Advisory Body – responsible for developing the Regional Waste Management Strategy.
(2) WEEE = Waste Electronics and Electrical Equipment Directive
Regenerating and Enhancing the Environment:
Environmental protection and enhancement projects can bring significant economic, social, as well as environmental benefits to the East Midlands – either as ‘discrete’ environmental projects, or as parts of larger physical regeneration projects. Recommended actions for developing these activities include:

- Major flagship environmental improvement projects such as improvements to the Lincolnshire coast, which will help to attract visitors and tourist income to the area.
- Continuation of environmental improvements in the Coalfields in order to help attract investment and create employment opportunities.
- Integration of environmental improvement / conservation work into major regeneration projects in the region, e.g. the Nottingham riverside, Derbyshire canals and Fenland waterways projects.
- Expansion of community-led environmental improvement projects in the East Midlands to bring economic, social and environmental benefits.
- Region-wide application of sustainable construction practices as demonstrated in projects such as the Sherwood ‘Energy Village’ and the ‘Leicester Ecohouse’.
- Highlight flagship land management projects in the East Midlands and assist funding and development of future projects.
- The revised RES and sub-regional strategies and action plans should seek to support the development of regional conservation activities which generate clear economic and social benefits.

Key organisations to be involved in these actions include:

The Sub-Regional Strategic Partnerships (SSPs)
Local Authorities

dma

English Nature

English Heritage

NGOs (such as the RSPB, The Wildlife Trusts, The National Trust, The BTCV, Groundwork etc)

The Environment Agency

The Countryside Agency

The Government Office

... and key businesses.
3.2 Regenerating Land Based Industries

As recognised in the Rural White Paper and the Rural Action Plan for the East Midlands, the rural economy, in common with other regions, faces significant changes and challenges relating to declining farm incomes, the possible expansion of the European Union and changes in the financial support for agriculture.

It is important that businesses in the land based sector are encouraged and supported to diversify into a broader range of activities which benefit the environment as well as bringing economic and social benefits. There is every indication that this is already beginning to happen, but there is scope for accelerating and deepening this process.

Actions to Promote Environmentally Beneficial Farming, in line with the Rural Development Programme (RDP), include:

- Increase awareness amongst the region's farmers of the benefits of agri-environment schemes and support available under the RDP. Specific actions should include development and show-casing of successful agri-environment projects in the region.
- Provide farmers with clear contacts points and 'signposting' for accessing agri-environment support schemes.
- including the provision of advice through the Farm Business Advisory Service (FBAS).
- Streamline and simplify the co-ordination and administration of existing agri-environment schemes at the next national review in 2002/2003.
- Build on the achievements of FWAG in working with farmers on environmental training linked to agri-environment schemes.
- Explore the potential for and, if appropriate develop farm based composting of organic waste within the region. Also examine the case for expanding rural biomass or biofuel projects across the region.
Actions to Support the Development of Regional and Organic Produce:
The following recommendations will help to realise the growth potential in regional / organic produce in the East Midlands:

• Support for the development of links / clusters between farms, local food processing businesses and retailers in the East Midlands in order to develop regional produce and increase the value added of farm products in the region.

• Incorporate actions to support regional and organic produce into the revised RES and SSP action plans – in line with regional food and drink strategies.

• Actions to strengthen the links between tourist destinations and local food and drink in the East Midlands – including the work of SSPs and the HETB.

• Examine the scope for a regional brand or ‘logo’ which links regional produce to tourism in the region.

• Support producers in developing new, high value regional produce based on the quality of the local environment – e.g. regional shellfish products.

Key partners in delivering these actions include emda, the food and drinks industry, trade associations such as the Shell Fisheries Association, the Countryside Agency, DEFRA, the HETB, local authorities and the SSPs.

Actions to Promote Environmentally Beneficial Forestry:
Much has already been achieved in the East Midlands in generating economic and social benefits from environmentally beneficial forestry activities. The following actions are recommended in order to help build on these achievements:

• Examine, and if appropriate, support the development of regional biomass projects which make use of wood waste and capitalise on opportunities for bio-crops. Initiatives need to build on existing work in the region by organisations such as the Forestry Commission, EMRETT and Nottinghamshire County Council.

• Build on the successes of flagship projects such as the Leicester Ecohouse project which have demonstrated the economic and environmental benefits of sustainable construction using woodland materials.

• Public and private sector site developers should be encouraged to incorporate sustainable woodland design into business site developments and infrastructure development in the region.

• Regional partners should examine the scope for increasing the use of woodlands in the regeneration of selected derelict / brownfield sites.
3.3 Capitalising on a High Quality Environment

Actions to Develop Tourism Based on a High Quality Environment:

The natural and historic built environment of the East Midlands provides significant assets for tourism activities. Scope exists for increasing the contribution of these activities to the region’s economy.

However, activities need to be carefully managed in order to avoid damaging the very environment on which this tourism is based.

Recommended actions include:

- The HETB and regional partners should implement proposals for developing environment-related tourism as contained in ‘Visitor Focus: Growing Prosperity in the Heart of England through Tourism, 1999-2003’.
- Implement English Heritage’s recommendations to repair neglected buildings in the region and put conservation of the historic built environment at the heart of renewal and regeneration projects.
- Undertake specific projects such as supporting the revitalisation of Lincoln as a heritage and tourism location and invest in environmental and tourism infrastructure along Lincolnshire’s coastline.
- Support the implementation of the HETB Action Plan ‘Food and Drink in Tourism’ to strengthen the Region’s distinctiveness as a tourist destination.
- Implement proposals in the Regional Economic Strategy to promote tourism and sports-tourism based on the environment.
- Provide support for stronger marketing of the region based on the quality of the region’s natural and historic built environment.
- Promote environmental good practice (e.g. Green Globe) in the region’s tourist industry.

Key partners in delivering these actions include the Heart of England Tourist Board (HETB), Sub-Regional Strategic Partnerships and Local Authorities, emda, English Heritage, British Waterways, the Regional Assembly, the National Trust and the Countryside Agency.

Enhancing the Contribution of the Region’s High Quality Environment to Inward Investment and Quality of Life.

Recommended actions include:

- Regional and sub-regional partners to allocate resources to build on major regeneration projects such as the regeneration of the former Shirebrook colliery – generating significant economic, social and environmental benefits.
- Regional and sub-regional economic development partners should recognise the role of the environment in attracting inward investment and tailor regional marketing plans accordingly.
- Support community-led regeneration activities to improve the Region’s physical environment, as well as helping to attract investment and strengthen communities.
3.4 Actions for Developing the Environmental Economy as a Whole

As well as the recommended actions for specific parts of the environmental economy of the East Midlands, it is also recommended that:

- *emda* and regional partners should incorporate actions to support the growth of the environmental economy into the revised Regional Economic Strategy and future revisions of the Regional Delivery Plan.
- Sub-Regional Strategic Partnerships should incorporate actions to promote the environmental economy in their sub-regional development strategies and action plans.
- Local Strategic Partnerships and Local Authorities should recognise the importance of the environmental economy in their local development plans and reflect this in their activities such as regeneration, planning processes, enforcement of environmental regulations and delivery of support and grants for businesses.
- New projects should be developed using the East Midlands Regional Sustainability checklist, available on the Regional Assembly website: www.eastmidlandsassembly.org.uk.
- The Regional Assembly and the commissioning partners of this study should examine how they can monitor future development and expansion of the region’s environmental economy, in order to accelerate progress towards sustainable development in the East Midlands and achievement of the Regional Vision contained in the Integrated Regional Strategy.
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>BTCV</td>
<td>British Trust for Conservation Volunteers</td>
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<td>CAP</td>
<td>Conservation Area Partnership</td>
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<td>CBI</td>
<td>Confederation of British Industry</td>
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<td>EIF</td>
<td>East Midlands Environmental Industries Forum</td>
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<td>ELV</td>
<td>End of Life Vehicle</td>
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<td>EMAGE</td>
<td>East Midlands Action Group for the Environment</td>
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<td>emda</td>
<td>East Midlands Development Agency</td>
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<td>EMEL</td>
<td>East Midlands Environment Link</td>
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<tr>
<td>EMRETT</td>
<td>East Midlands Renewable Energy Technology Transfer</td>
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<tr>
<td>FBAS</td>
<td>Farms Business Advisory Service</td>
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<td>FTE</td>
<td>Full Time Equivalent (employment)</td>
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<td>FWAG</td>
<td>Farming and Wildlife Advisory Group</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GOEM</td>
<td>Government Office for the East Midlands</td>
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<td>HETB</td>
<td>Heart of England Tourist Board</td>
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<td>JEMU</td>
<td>Joint Environmental Markets Unit</td>
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<td>NFU</td>
<td>National Farmers Union</td>
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<td>NGO</td>
<td>Non-Governmental Organisation</td>
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<td>R&amp;D</td>
<td>Research and Development</td>
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<td>RDP</td>
<td>Rural Development Programme</td>
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<td>RES</td>
<td>Regional Economic Strategy</td>
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<td>RSPB</td>
<td>Royal Society for the Protection of Birds</td>
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<td>RTAB</td>
<td>Regional Technical Advisory Board</td>
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<td>SSP</td>
<td>Sub-Regional Strategic Partnership</td>
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<tr>
<td>WEEE</td>
<td>Waste Electrical and Electronic Equipment</td>
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</table>
Other partners involved included:
The Regional Assembly, the Government Office for the East Midlands, English Heritage, the Heart of England Tourist Board, the CBI, the Environmental Pathfinder Group, the NFU, Royal Society for the Protection of Birds (RSPB), the East Midlands Action Group for the Environment (EMAGE) and the East Midlands Environment Link (EMEL).