



OPPORTUNITIES FOR GREATER LINCOLNSHIRE SUPPLY CHAINS

SUMMARY REPORT

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Introduction

This reports sets out the findings of a study of the key sector supply chains in Greater Lincolnshire. The report has been produced by the University of Lincoln, ADAS and Rose Regeneration on behalf of the Greater Lincolnshire Local Enterprise Partnership (GLLEP).

Firm Ownership and International Trade in Greater Lincolnshire

- **Non-UK Firm Ownership:** Across Greater Lincolnshire, non-UK firms account for around 0.6% of the total business population, which is lower than the regional and national average. The economic contribution of non-UK firms is strongest in North East Lincolnshire, where they account for 33% of all sales turnover. This relates to the seafood and chemicals industries in the area, which are highly internationalised. By contrast, non-UK firms contribute less than 1% of turnover in Boston and East Lindsey, which demonstrates the relative importance of indigenous firms in these areas.
- **Key Export Sectors:** The most important export sectors in Greater Lincolnshire are agri food and manufacturing. This is in contrast to the regional and national picture, where machinery and transport account for the largest share of exports. This emphasises the association of Greater Lincolnshire with 'traditional industries'.

Supply Chain Mapping

- **Supply Chain Involvement:** Of all the sectors, agri food companies are most likely to demonstrate involvement in all areas of the supply chain. This reflects the consolidation of companies in this sector, which means that they are increasingly engaged in all areas of food production. This is indicative of a wider pattern within the sector, with the drive for efficiency meaning that smaller producers are increasingly absorbed within larger companies. The implication of this for new, smaller producers is that it can be difficult to compete with large suppliers and negotiate access to retailer supplier chains.
- **Influence of Customers:** Across all the identified sectors, the majority of companies feel that they have the flexibility to choose their own suppliers. However, companies in the agri food, care, and environmental technologies sectors are most likely to feel that their customers have an influence on their choice of suppliers. In the case of agri food, this is due to customers' preferred supplier lists. For health and care, and environmental activities, quality standards have a role to play in determining use of suppliers.
- **Use of Local Suppliers:** The majority of companies in the agri food, engineering, manufacturing, and logistics sectors say that they prioritise local suppliers. However, fewer obtain most of their products/services locally. The sectors with the 'least local' supply base are engineering and manufacturing, which is related to the specialist nature of products/services sought. Around half of agri food companies say that the majority of their suppliers are local, which emphasises the locally embedded nature of this sector.
- **Location of Customers:** The agri food, health, and environmental activities sectors have a predominantly local and national customer base. Engineering, manufacturing, and logistics have a national and international focus. These companies are, therefore, more distant from their customers which suggests that they are less tied to the local area.
- **Collaboration:** Not a lot of whole-supply chain collaboration takes place across the identified sectors. The exception to this is logistics, which provides the link between suppliers and customers. Same sector collaboration is strong in engineering/manufacturing, while cross-sector collaboration is greatest in environmental activities and

agri food. Reasons for a lack of collaboration include commercial sensitivity, not wishing to collaborate with competitors, and a lack of relevant firms locally.

Identified Sector Summaries

- **Agri food:** agri food is an important and locally distinctive sector, both in terms of its concentration of employment and its contribution to the area’s export profile. The sector in Greater Lincolnshire is diverse, incorporating growing/ processing of fresh produce, import and processing of seafood, as well as manufacture of ingredients and prepared meals.
- The two principal clusters in Grimsby and south Lincolnshire are distinct and focused on very different product areas. Compared with other sectors, there is relatively strong support from trade groups, and produce associations. The Grimsby cluster has a tight geographical and product focus, and is recognised by Government as a best practice case. The south Lincolnshire cluster, while larger in employment terms, incorporates a wider range of activities and perhaps lacks the strength of focus of the Grimsby cluster.
- The agri food sector in Lincolnshire has declined in employment terms, with greatest losses in the fish and vegetable processing sectors. The sector faces a number of key supply chain issues, which include increasing consolidation of farms, processors and manufacturers, increasing international ownership, availability of labour and technical skills, and growing internationalisation of the seafood industry.
- Opportunities for the LEP to support this sector include providing support for smaller producers in collective purchasing, building on and facilitating linkages between existing clusters, and promoting access to R&D via existing facilities at Grimsby and Holbeach. There is also a role in continuing to promote the distinctiveness of local produce, which is a key advantage for Lincolnshire. The sector in south Lincolnshire is felt to be disadvantaged by its peripheral location and poor roads, and there may be an opportunity for the LEP to lobby for infrastructure improvements in this area.

Agri Food SWOT Analysis

<p>Strengths</p> <ul style="list-style-type: none"> ▪ Seafood processing. 70% of UK seafood is supplied from the region. ▪ Lincolnshire has some of the best soils in the UK, providing an advantage to growers. ▪ Significant number of food processors / manufacturers operating in the region ▪ A strong association of Lincolnshire with food 	<p>Weaknesses</p> <ul style="list-style-type: none"> ▪ Availability of labour and skilled staff in particular ▪ Lincolnshire roads perceived as poor and in need of urgent review. ▪ Broadband is a huge issue in rural areas of south Lincolnshire ▪ Limited support for local firms with the loss of organisations such as Business Link
<p>Opportunities</p> <ul style="list-style-type: none"> ▪ Government incentives to aid businesses, e.g. rates, training grants ▪ Initiatives for agri businesses to negotiate utilities with other businesses in the county ▪ There is currently little export of fresh produce but huge potential for this. ▪ Provenance plays a part and has been an important consumer driver in recent years ▪ Promoting “Lincolnshireness” of products – such as Grimsby Smoked Fish which has a PGI –and Lincolnshire Sausages ▪ Promoting access to training and R&D via Grimsby Institute and the National Centre for Food Manufacturing at Holbeach 	<p>Threats</p> <ul style="list-style-type: none"> ▪ Reforms to CAP/ Single Farm Payment ▪ Water supply for irrigation processing is seen as becoming a major problem for the county. ▪ Loss of food manufacturing jobs due to mechanisation, automation and consolidation ▪ Risk of loss of fish processing to hubs in France and Germany that are receiving strong investment ▪ Increasing squeeze on margins forcing operations out of business, linked to retailer purchasing power ▪ Securing cover for bad debt insurance is becoming increasingly difficult for packers and processors ▪ Proximity to raw materials is no longer a big draw. Local foods is not a significant factor for major manufacturers remaining in the region

- **Engineering/Manufacturing:** the engineering and electronic sector is relatively small in employment terms, but with a number of locally distinctive activities such as manufacture of turbines, agricultural machinery, bearings, and electronic components. The sector has a strong national and international focus, and our research suggests that sales are strong, driven by demand for more efficient sources of energy and growth in Asian markets.
- Engineering activity is diffuse across Greater Lincolnshire, with local concentrations in Lincoln, Grantham, North Lincolnshire and East Lindsey. Although there are existing networking activities to support the sector (e.g. Lincoln Engineering Breakfast), it is not thought to work together as a cluster, nor is there evidence of area-wide collaboration.
- The engineering sector has declined locally, although employment levels remain fairly static compared with the national average. Key supply chain issues for the sector include a limited/declining local supply base, limited awareness of/networking with local suppliers, a national and local shortage of engineering skills, and increasing international ownership. Opportunities for the LEP to support this sector include support for networking and collaboration in the absence of RDA funding, broadening access to R&D and training facilities at Lincoln Engineering School, and facilitating links between the engineering and renewables sectors.
- Other manufacturing activities are an important source of employment, with a number of distinctive local activities in North and North East Lincolnshire including basic metals, coke and petroleum, and pulp and paper products. As in the rest of the country, employment in manufacturing activities has declined, driven by a combination of increased mechanisation and international competition.
- Key supply chain issues within other manufacturing activities include, as with engineering, a lack of a local supply base and distance from customers, with many firms in this sector focused on export. Skills appear to be less of an issue for this sector compared with the engineering sector.

Engineering/Manufacturing SWOT Analysis

<p>Strengths</p> <ul style="list-style-type: none"> ▪ A high technology sector, with specialist products and services ▪ Currently strong overseas sales ▪ Diverse customer base, with a growing international focus ▪ Employment levels relatively resilient compared with other manufacturing sectors ▪ Legacy of RAF skills ▪ International ownership of larger firms 	<p>Weaknesses</p> <ul style="list-style-type: none"> ▪ Shortage of graduate and intermediate engineering skills in labour market ▪ Low/declining capabilities for machining and assembly ▪ Limited interaction between engineering companies ▪ Low profile of Lincoln as an engineering centre ▪ International ownership of larger firms
<p>Opportunities</p> <ul style="list-style-type: none"> ▪ Low carbon and energy efficiency agenda ▪ Lincoln Engineering School – training, R&D ▪ Proposed University Technical College ▪ Engineering Breakfast Forum ▪ Promotion of Lincoln, as a place to live and invest 	<p>Threats</p> <ul style="list-style-type: none"> ▪ Internationalisation of suppliers ▪ Increasing international competition ▪ Varying exchange rates ▪ Supplying to politically unstable countries

- **Renewables/Environmental Technologies:** as a relatively new sector, renewables/ environmental technologies incorporates a diverse range of businesses, which are grouped together on the basis that their activities result in low carbon energy or sustainable product development. The difficulty of quantifying the sector lies in the fact that much of it is ‘hidden’ within other sectors such as agri food, engineering, construction, and manufacturing. Nevertheless, existing studies suggest that Greater Lincolnshire is a leading region for renewable energy in particular, with much untapped potential.
- The nature of the sector varies geographically, with offshore wind activities focused in the Humber, anaerobic digestion from agricultural waste in south Lincolnshire, and energy from waste and landfill gas in North and North East Lincolnshire. There is also potential for further development of biomass and biofuels. Perhaps because of the disparate nature of the sector, collaboration is patchy. There is strong local collaboration around offshore wind, with the Grimsby Renewables Partnership, but less so in other sub-sectors.
- This is a fast growing sector, with great potential for growth of new environmental technologies businesses, as well diversification of established businesses. There are opportunities, in particular, for local engineering and agri food businesses. Key supply chain issues include uncertainty around government legislation and incentives, lack of a skills legacy for new industries, a lack of collaboration, and a predominance of international suppliers in the wind and solar energy sectors. Areas where LEP could support the sector including promoting the low carbon economy to foster growth of new businesses, facilitating local firm collaboration, and arranging a ‘sand pit’ event to bring together engineering and renewables companies.

Environmental Technologies SWOT Analysis

<p>Strengths</p> <ul style="list-style-type: none"> ▪ Location, especially for wind energy, biomass, and biofuel ▪ A number of renewables activities already established in Lincolnshire ▪ Linkages to the Industrial Power and Energy Group at Lincoln Engineering School 	<p>Weaknesses</p> <ul style="list-style-type: none"> ▪ Lack of specialist skills within local labour market ▪ Limited number of local suppliers ▪ Dependence on government legislation and incentives ▪ Difficulty in gaining planning permission for new renewable initiatives and support infrastructure
<p>Opportunities</p> <ul style="list-style-type: none"> ▪ Round 3 offshore wind energy ▪ Siemens wind turbine manufacturing site in Hull, and ABLE Energy Park ▪ M180 Energy Corridor ▪ Government focus on the environmental sector, and associated incentives ▪ Collaboration across Greater Lincolnshire and Humber LEPs ▪ Collaboration between the renewable and engineering sectors 	<p>Threats</p> <ul style="list-style-type: none"> ▪ Dependence on a small number of customers ▪ Inconsistency of government legislation and incentives

- **Logistics:** logistics is a locally important industry, with concentrations of road freight, water transport, and storage activities. Although logistics, as a business services activity, is closely linked to all sectors, its concentration locally is most strongly associated with the agri food sector. Road freight is the most important activity in terms of employment. Port activities, although smaller in employment terms, are locally distinctive. The ports at Immingham and Grimsby, being the largest by tonnage in the UK, are a major asset for the Greater Lincolnshire area.
- Logistics is a growing sector for Greater Lincolnshire. Key supply chain issues include consolidation of key customers and the effect of retailer power on distribution. A key challenge is retaining competitive advantage compared with more central and well connection regions such as Northamptonshire. Areas where the LEP could support the sector include promoting use of local ports, supporting multi-modal logistics infrastructure, and the development of shared logistics facilities.

Logistics SWOT Analysis

<p>Strengths</p> <ul style="list-style-type: none"> ▪ Proximity to primary production in fresh produce ▪ Key logistic specialisms (e.g. in chill temperature/ fresh food) ▪ South of county notably a major distribution hotspot ▪ Presence of major ports at Immingham and Grimsby ▪ North of county significant distribution centre around steel ▪ Success of environmental controls / efficiencies on vehicles 	<p>Weaknesses</p> <ul style="list-style-type: none"> ▪ Poor road infrastructure in hotspots and in particular the south and east of Lincolnshire ▪ Lack of 'multi-modal' connectivity (road-rail-seaports) ▪ Key industrial sectors present but less developed integrated networks around them ▪ Difficulties in attracting skilled workers (drivers) and managers
<p>Opportunities</p> <ul style="list-style-type: none"> ▪ Integrated development of sea ports ▪ Development of logistic infrastructure in north (e.g. ABLE logistic park) ▪ Actioning of clustering and 'whole' chain integration ▪ Road/Rail hub in south Lincolnshire ▪ Shared / collaborative logistic facilities ▪ Development of alternative/ hybrid fuel ▪ Local food identity, development and distributive hubbing for 'sustainable food chains' ▪ Development of business opportunities for local airport ▪ Engagement with University and other HEI's for development skills/ higher education specific to logistics management 	<p>Threats</p> <ul style="list-style-type: none"> ▪ Better connected (neighbouring) UK regions ▪ Loss of business to better connected countries (ports and other logistical infrastructure) ▪ Further consolidation in key industries leading to depletion of local business networks ▪ Risk of loss of business though acquisition and disposal policies of transnational businesses ▪ Rising costs of industrial land ▪ Rising cost of fuel/ cost of fuel duty ▪ Rising cost of local authority business rates ▪ Competition from international hauliers

- **Health and Care:** although not a locally distinctive sector, health and care is an important and growing activity in Greater Lincolnshire. While hospital activities remain the largest area of activity, there has been growth in medical and dental practices, and complementary health activities. The growth of medical and orthopaedic equipment sales, the fastest growing sector, is thought to be directly related to demand from Lincolnshire's ageing population.
- Key supply chain issues include dominance of large international pharmaceutical companies, the internationalisation of medical supplies manufacture, and restrictions around NHS commission systems. Ways in which the LEP could support the sector include facilitating collaboration between third sector organisations, sharing best practice in prioritising local suppliers in public procurement, and ensuring a regular information flow about policy changes and new initiatives to local firms in the sector.

Logistics SWOT Analysis

<p>Strengths</p> <ul style="list-style-type: none"> ▪ Local focus for service provision ▪ Award winning care home providers ▪ Medical research presence ▪ Growing retail sector for healthcare support products 	<p>Weaknesses</p> <ul style="list-style-type: none"> ▪ Dominance of outside firms in NHS supply chains ▪ Commissioning procedures exclude some providers ▪ Dispersed settlement geography and transport infrastructure mean that access to larger markets, nationally and internationally, is compromised.
<p>Opportunities</p> <ul style="list-style-type: none"> ▪ Growing and ageing population ▪ Personal budgets giving patients greater choice and greater need for advice ▪ Growing third sector healthcare provision ▪ Research funding continues to support bio-tech and health-care research ▪ Co-operative working to supply private sector care homes ▪ Niche product development for new care needs ▪ Opportunities for small businesses and sole traders in the home-improvement sector 	<p>Threats</p> <ul style="list-style-type: none"> ▪ Reduction in public sector funding ▪ Ever-changing policy landscape could leave some businesses vulnerable ▪ Difficulty in sourcing private sector financing ▪ Price competition from overseas for basic supplies ▪ Consolidation of certain supply chains squeezes out smaller firms unless they can specialise into niches or build effective business relationships.

Cross-Sector Linkages and Commonalities

- **Agri food and logistics:** there is a strong supply chain interdependency between the agri food and logistics sectors in Greater Lincolnshire, most clearly observed in North East Lincolnshire and south Lincolnshire. The logistics sector provides a link between manufacturers and retailers, with logistics providers working alongside manufacturers to deliver goods to major retailers. The logistics (road freight in particular) and agri food sectors, therefore, experience similar supply chain pressures in terms of customer demands and consolidation of food suppliers. There is thought to be further scope, however, for collaboration between the two sectors on shared facilities and shared transport, such as for produce going to the same retailer, or for delivery of linked products such as food and flowers. In terms of growth of the local and speciality food, there is thought to be scope for further logistical support for smaller providers, such as the development of a local distribution hub.

- More broadly, there are currently few linkages between transport of non-seafish related food and use of ports at Grimsby and Immingham. It is thought that the majority of food imported for processing in south Lincolnshire is transported through Felixstowe. This is thought to be related to a number of factors, including the lack of a chilled hub for fresh produce at Immingham, and that Immingham is regarded to have low visibility locally despite being the busiest UK port by tonnage. There is scope for the LEP to have closer engagement with the Associated British Ports, which manages the ports at Immingham and Grimsby, to explore these issues and opportunities further.
- **Engineering and environmental technologies:** the engineering and environmental technologies sectors have a number of linkages. Engineering companies in the power engineering sector are increasingly driven by the same agenda as the renewable energy sector, including the need to improve efficiency of power generation, improve energy security, and reduce carbon emissions. There is evidence that local engineering firms are increasingly engaging directly in low carbon activities, including technology related to biomass and alternative fuels, electrification of transport, as well as supply of components into the alternative energy supply chain. At a local level, however, there is as yet little direct engagement between engineering firms and growing sectors such as wind energy. This is thought to be partly because of the international supply chains associated with alternative energy, as well as limited knowledge of new developments taking place in the area and the technology involved. This is an area with potential for further collaboration, and it is an area where the Lincoln Engineering School could play an integral role. It has been suggested that an event that allows local engineering companies to learn about alternative energy developments and technologies in the area would be beneficial.
- **Agri food and environmental technologies:** much of the potential for low carbon energy production in Lincolnshire is intertwined with the agri food sector, whether onshore wind located on agricultural land, anaerobic digestion from agricultural waste, or the energy potential of biofuels and biomass. There are a number of examples of agri food companies diversifying into anaerobic digestion, and many schemes in development. However, it is early days for these new technologies, and there are a number of concerns about consistency of planning policy, the efficiency of the plants, and the income generated compared with other uses of food waste.. There is considerable scope for joint working between agri food companies in the development of shared anaerobic digestion facilities, subject to planning policy.

Proposed Action Points

- A series of action point for each identified sector, together with timescales, suggested lead partners and potential funding sources, are set out in the table below:

Activity	Time Frame			Lead Partner	Source of Funding
	Short	Medium	Long		
AGRI FOOD					
1 Support for smaller food growers/manufacturers in negotiating access to supply chains				Tastes of Lincolnshire, University of Lincoln	Existing University seminars funded by Tastes of Lincolnshire, Food and Drink inet Innovation Support (ERDF) EU Framework 7: call KBBE-2013-7
2 Facilitating development of cooperatives for collective purchasing of utilities and equipment				Cooperative movement	National Cooperative Movement, Keep Communities Thriving funds and foundations
3 Promotion of local provenance and PGI status				Tastes of Lincolnshire, Lincolnshire farmers markets.	Lincolnshire County Council Lincoln BIG East Midlands Fine Foods Initiative
4 Commissioning study into the water availability and irrigation solutions particularly in south Lincolnshire				Anglian Water, Environment Agency, Food Growers and Producers	DEFRA: RDPE East Midlands, EU Framework 7: call KBBE-2013-7
5 Continued support for Grimsby Trade Corridor to diversify the seafood supplier base, and develop export opportunities				Humber Seafood Institute, Humber LEP	UKTI, BIS, EU Framework 7
6 Development of a chilled hub at Immingham to enable import of fresh produce				Associated British Ports	Private sector investment, Interreg North West Europe ERDF Budget (2007-2013) – Priority 3
7 Encourage access to relevant training and development opportunities for factory staff and management from short courses to undergraduate and post graduate courses.				University of Lincoln, Grimsby Institute, Further Education colleges	Food and Drink Sector Skills Council, Biotechnologies and Biological Sciences Research Council (BBSRC)
ENGINEERING/MANUFACTURING					
8. Promoting access to the Engineering School for all SMEs for R&D and training				University of Lincoln Siemens	Technology Strategy Board, Engineering and Physical Science Research Council (EPSRC), EU Framework 7, ERC Advanced Grants
9. Promotion of cluster working, networking and company visits, in absence of RDA/Business Link support				Lincoln Engineering Breakfast, University of Lincoln	BIS local (East Midlands), Advanced Manufacturing Supply Chain initiative (Technology Strategy Board), Manufacturing Advisory Service
10. Support for development of intermediate skills, e.g. through a				University of Lincoln,	Decision on application pending

Activity	Time Frame			Lead Partner	Source of Funding
	Short	Medium	Long		
University Technical College				Lincoln College and others	
11. Consider LEP-wide 'sandpit' event for exploring new supplier opportunities in the renewables sector				Lincolnshire LEP	Office of Renewable Energy Deployment (ORED)
12. Promotion of Lincolnshire as a place to live and work				Lincolnshire County Council, VisitLincoln, Lincoln City Council	Lincolnshire County Council
RENEWABLES/ENVIRONMENTAL TECHNOLOGIES					
13. Lincolnshire has the greatest renewables potential of any area in the East Midlands – there is a need to promote the low carbon economy to foster sector growth locally				Lincolnshire LEP Sustain Lincolnshire	Sustain Lincolnshire, Green Deal (Office of Renewable Energy Deployment - ORED), UK Innovation Investment Fund (BIS), Energy Efficiency Financing (Carbon Trust/Siemens), EU Framework 7: call KBBE-2013-7
14. Work with the Engineering sector in the promotion of high technology industries and skills to schools				Lincoln Engineering School, Lincoln Engineering Breakfast	STEMnet Ambassadors Scheme, Lincolnshire and Rutland EBP
15. Foster collaboration which enables local companies to access international supply chains, including a LEP-wide 'sandpit' event for exploring new supplier opportunities				Lincolnshire LEP, Humber Renewables Partnership, Lincoln Engineering Breakfast	Sustain Lincolnshire, Office of Renewable Energy Deployment (ORED)
16. Prioritise investments to attract and retain new renewables industries to the area, e.g. infrastructure investments in Grimsby docks and the ABLE energy site					Government Offshore Wind, Manufacturing Funding (ORED) CO2Sense (for Humber only)
LOGISTICS					
18. Road improvements identified as a priority				Lincolnshire LEP, Lincolnshire County Council	Community Infrastructure Levy, Highways Improvements Lobbying role
19. Road-rail hub development				South Holland DC Lincolnshire CC Lincolnshire LEP Network Rail	Community Infrastructure Levy, Private sector investment, Interreg North West Europe ERDF Budget (2007-2013) – Priority 3
20. Skills development to improve logistics management skills				University of Lincoln and other HEIs	Funding from private companies for employees to attend MBA Logistics
21. Explore, with agri food sector, increasing use of local ports for import of fresh produce				Lincolnshire County Council, ABP	Interreg North West Europe ERDF Budget (2007-2013) – Priority 3

Activity	Time Frame			Lead Partner	Source of Funding
	Short	Medium	Long		
22. Exploring logistics support for small food producers, particularly consolidation services				Tastes of Lincolnshire	East Midlands Fine Foods Initiative, Keep Communities Thriving funds and foundations
HEALTH AND CARE					
23. Given rapid changes taking place in the NHS, there is a need to facilitate information flow about new initiatives and opportunities to Lincolnshire SMEs				Lincolnshire County Council, Lincolnshire NHS Trusts, Local Involvement Networks (LiNKs)	Lincolnshire County Council, NHS Trusts
24. Conduct further research into opportunities to prioritise local suppliers, drawing on experiences from similar initiatives such as by Procurement Lincolnshire				Lincolnshire County Council, Lincolnshire NHS Trusts	Lincolnshire County Council, Lincolnshire NHS Trusts
25. Developing a framework for third sector collaboration in Lincolnshire				Lincolnshire Compact, Individual Budgets Network Lincolnshire (IBNL), Lincolnshire County Council, NHS	Community Development Foundation, Big Local Big Society Capital
26. Maximising use of biotechnology and healthcare research funding, which has been ring fenced				University of Lincoln, NHS Trusts, private health and care SMEs	NHS East Midlands Regional Innovation Fund, Interreg North West Europe ERDF Budget (2007-2013) – Priority 4, Biotechnologies and Biological Sciences Research Council (BBSRC), Medical Research Council (MRC), National Institute for Health Research