North East Lincolnshire Sector Study

Cofely GDF-Suez &

Final Report - July 2014

Notice

This document and its contents have been prepared and are intended solely for ’s information and use in relation to the local plan.

ATKINS assumes no responsibility to any other party in respect of or arising out of or in connection with this document and/or its contents.

This document has 122 pages including the cover.

Document history

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Job number: | | | Document ref: | | | |
| Version | Purpose description | Originated | Checked | Reviewed | Authorised | Date |
| 1-11 | Sectors Report | JG/RJ/SS | ID | RC | RC | July 14 |

Table of contents

Chapter Pages

[Executive Summary 5](#_Toc395103896)

[Executive Summary 6](#_Toc395103897)

[Introduction 6](#_Toc395103898)

[Local context 6](#_Toc395103899)

[The key sectors 6](#_Toc395103900)

[Recommendations 8](#_Toc395103901)

[Main Report 10](#_Toc395103902)

[1. Introduction 11](#_Toc395103903)

[1.1. Geographical Focus 11](#_Toc395103904)

[1.2. Structure 12](#_Toc395103905)

[1.3. Methodology 13](#_Toc395103906)

[2. Local Policy & Economic Context 14](#_Toc395103907)

[2.1. Introduction 14](#_Toc395103908)

[2.2. Local Policy Context 14](#_Toc395103909)

[2.3. Local economic context 21](#_Toc395103910)

[Business Survey & Economic Impact Assessment 32](#_Toc395103911)

[3. Business Survey & Economic Impact Assessment 33](#_Toc395103912)

[3.1. Sector Contribution to GDP 33](#_Toc395103913)

[3.2. Employment Impact 34](#_Toc395103914)

[3.3. Size and Type of Business 36](#_Toc395103915)

[3.4. Supply Chain Impacts 38](#_Toc395103916)

[3.5. Workforce & Skills 40](#_Toc395103917)

[3.6. Business Growth Prospects 40](#_Toc395103918)

[3.7. Location Decision 42](#_Toc395103919)

[Port & Logistics 46](#_Toc395103920)

[4. Ports & Logistics 47](#_Toc395103921)

[Food Processing 56](#_Toc395103922)

[5. Food Processing 57](#_Toc395103923)

[Chemicals and Process Industries 67](#_Toc395103924)

[6. Chemicals and Process Industries 68](#_Toc395103925)

[Renewables & Energy 76](#_Toc395103926)

[7. Renewables & Energy 77](#_Toc395103927)

[Visitor Economy, Services & Retail 89](#_Toc395103928)

[8. Visitor Economy, Services & Retail 90](#_Toc395103929)

[8.1. Context 90](#_Toc395103930)

[Summary & Conclusions 97](#_Toc395103931)

[9. Summary & Conclusions 99](#_Toc395103933)

[9.1. The Key Sectors 99](#_Toc395103934)

[9.2. Determining Factors of Future Growth 99](#_Toc395103935)

[9.3. Recommendations for Action 100](#_Toc395103936)

[Appendix A. Location Quotient Analysis 102](#_Toc395103937)

[Appendix B. Economic & Business Survey Analysis 103](#_Toc395103938)

[B.2. Size of sectors 105](#_Toc395103939)

[B.3. Gross Value Added (GVA) 107](#_Toc395103940)

[B.4. Employment impact 107](#_Toc395103941)

[B.5. Induced Employment 109](#_Toc395103942)

[B.6. Contribution to National Exchequer 111](#_Toc395103943)

[B.7. Summary of key qualitative business survey outputs 112](#_Toc395103944)

[Appendix C. Stakeholder & Business Consultation List 121](#_Toc395103945)

Executive Summary

Executive Summary

Introduction

This report presents the results of the key sectors study undertaken by Atkins on behalf of Cofely GDF-Suez and North East Lincolnshire Council. It provides an analysis of current trends and prospects for future growth in five key economic sectors: ports and logistics; food processing; chemicals and process industries; renewables and energy; and visitor economy, services and retail sectors.

The study comprised the following key components:

* A baseline economic assessment of North East Lincolnshire, issued as a separate report. This was developed in order to inform further research and set out the evidence base for the borough and surrounding areas.
* A quantitative socio-economic analysis of the key sectors, identifying trends, characteristics, opportunities and constraints.
* A qualitative analysis based on interviews with approximately 30 senior representatives from companies, industry organisations, public bodies and employer groups from across North East Lincolnshire.
* A survey of a representative sample of 370 businesses in North East Lincolnshire. This was conducted by an independent market research company, Hill Taylor Limited.

This report brings together the outputs of these research activities and provides recommendations and key actions for the Council and its partners.

Local context

The local policy context sets clear objectives and articulates opportunities for the future of the North East Lincolnshire economy. Both the Humber and Greater Lincolnshire Local Enterprise Partnerships cover the area, and the actions and sector-focussed approach outlined in both Strategic Economic Plans provide a vision relevant to the key sectors in North East Lincolnshire.

In addition to the work of the LEPs, North East Lincolnshire Council is continually engaged in identifying and pursuing the most efficient and effective ways by which to strengthen and diversify the local economy. Institutional support for the facilitation of economic growth in the area is therefore strong.

However, there are several significant challenges being faced by the North East Lincolnshire economy.

Business births have declined significantly since the onset of the recession. Though this is a nationwide trend, business survival rates in North East Lincolnshire are particularly poor. Gross value added per head has remained consistently below the national average, though is relatively strong for the region.

In terms of the labour market, unemployment is high compared to the national average, with estimates for 2013 suggesting that over 1 in 10 adults of working age are unemployed. Though exacerbated by the recession, relatively high levels of unemployment preceded the downturn. There are a large proportion of individuals with no qualifications (10.3%) and a low proportion with NVQ Level 4 and above (19.9%).

The key sectors

Collectively, the five key sectors are estimated to contribute £1,740 million to the GDP of North East Lincolnshire in 2014, representing 57.5% of the area’s total output. The breakdown of this contribution by sector is presented in Figure 1-1.

Figure - GDP Contribution of Key Sectors (2014)

Source: Atkins/IDBR 2013

The sectors also provide at least 30% of total employment in the area. However, this only represents measurement of direct employment. Once consideration is given to indirect and induced jobs, the five sectors are estimated to support 48,860 jobs nationally (see Table 1-1).

Table - Employment Contribution of Key Sectors

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Geography | Renewables | Ports & Logistics | Food processing | Chemicals & process industries | Visitor Economy | Total |
| **Direct Jobs** |  | | | | | |
| North East Lincolnshire | 3,250 | 4,820 | 4,100 | 2,230 | 4,830 | 19,230 |
| **Indirect Jobs** |  | | | | | |
| N.& N.E Lincolnshire & Humber | 1,300 | 2,580 | 600 | 1,300 | 1,570 | 7,350 |
| Elsewhere in Yorkshire and Humber | 840 | 1,830 | 390 | 800 | 1,210 | 5,070 |
| Outside L/H | 1,360 | 3,140 | 510 | 1,980 | 1,080 | 8,070 |
| **Total** | **3,500** | **7,550** | **1,500** | **4,080** | **3,860** | **20,490** |
| **Induced** |  | | | | | |
| N.& N.E Lincolnshire & Humber | 720 | 990 | 160 | 780 | 590 | 3,240 |
| Elsewhere in Yorkshire and Humber | 470 | 700 | 110 | 480 | 450 | 2,210 |
| Outside Yorkshire | 760 | 1,200 | 140 | 1,190 | 400 | 3,690 |
|  | | | | | | |
| **Total** | **8,700** | **15,260** | **6,010** | **8,760** | **10,130** | **48,860** |

Source: Source: Atkins 2013. Atkins Ref: Survey –A9-A11. Figures rounded.

For each of the five key sectors, we have modelled the contribution to Gross Value Added (GVA). Also set out in this report is an analysis of supply chain linkages, markets served and opportunities for economic growth and diversification.

Despite a diverse range of opportunities and challenges across the sectors, the research identified a number of important themes which are common to multiple sectors. This in part reflects the interdependence between some of the key sectors and the extent to which they are mutually supportive. Consequently, in prioritising interventions, consideration should be given to targeted actions that seek to reinforce linkages between the sectors and their respective supply chains.

Key prospects which emerged from the analysis include:

* The central role of the ports to the future of the area’s economy, given limited alternatives to sea transport for the movement of bulky commodities in and out of the UK.
* Reasonably strong transport links in the area, bar some specific areas for improvement.
* Investment in Hull Green Port and the ABLE Parks stands to benefit many sectors.
* The localised clustering of activity in key sectors provides for knowledge sharing, agglomeration benefits, reputation benefits and local supply chain linkages between sectors.
* Several institutions exist supporting skills provision and innovation in the area.

Whilst the above demonstrates some of the competitive strengths of the key sectors North East Lincolnshire, several challenges or areas for improvement were also identified for multiple sectors:

* For various sectors, a current shortage of available or suitable land and premises was identified as a constraint. This not only concerns the availability of premises, but also the poor quality of existing commercial or industrial areas, including port facilities. Limited supply also raises the cost of premises.
* Skills shortages were identified as an issue for various sectors, particularly ports & logistics, renewables & energy and chemicals and process industries.
* Various key sectors face considerable environmental legislation concerning their operations. Conforming with this legislation may represent a strain on some businesses.
* Whilst the renewables sector is subject to significant political support, other sectors including the chemicals and process industry identified lack of political support, particularly from central government, as a challenge.
* In order to attract businesses and workers to the area, North East Lincolnshire must be perceived as a desirable place to live and work. Additionally, the visitor economy is particularly dependent on perceptions of the area. Public realm improvements, expansion of the area’s night-time economy and increased provision of amenities could address this challenge.

Recommendations

Based on our assessment of the local economic and policy context, the empirical business survey and economic impact assessments, several key factors for future growth have been identified. These factors also form the basis for recommended future actions to be taken in order to maximise the opportunities for economic growth and the generation of economic and social benefits for local communities.

**Skills and innovation:** There is significant room for improvement in the skills profile of the North East Lincolnshire workforce. The area has a high proportion of residents with no qualifications and a low proportion of highly skilled residents in comparison to the national average. This is due to both supply and demand factors, as some sectors of the local economy could be characterised as in low-skills equilibrium. Nonetheless, technological progress in several key sectors is changing and will continue to change the skill requirements of businesses. A highly skilled, innovative workforce will be needed to facilitate growth in key sectors. Engagement between businesses and skills providers can facilitate a move towards a skills equilibrium and improve coordinate efforts into research and development and knowledge sharing.

Key recommendations are to:

* Identify critical areas for skill development, now and in the future.
* Take action to implement skill development and provide support to learners and providers.
* Take action to address ‘brain-drain’ out-migration of young and skilled workers.

**Clustering and competition:** The area’s key sectors are often mutually supportive, and linkages between industries are encouraged by historical relationships and spatial proximity. Local firms are significantly engaged across the supply chains of key sectors. However, many sectors are dominated by large companies and there is room for general and targeted SME support. Addressing some of notable constraints to the growth of small enterprises would be an important step in developing a more resilient economy.

Key recommendations are to:

* Ensure clearer communication with local communities and business regarding the benefits of the ABLE Parks and Hull Green Port.
* Develop stronger linkages with key sectors and supply chain industries in Nordic countries, Germany and the Low Countries.
* Improve access to finance for local business.

**Policy Context:** National government support for several key sectors is perceived as inadequate. Whilst the government’s localism agenda may be useful in promoting growth locally, North East Lincolnshire needs to maintain its competitiveness relative to areas elsewhere in the UK and Europe. Coordination between local policymakers with a clear vision for the economic future of the area will be important for addressing issues facing the area.

Key recommendations are to:

* Develop innovative solutions in marketing the area.
* Identify areas for cooperation in promoting the tourism industry.
* Monitor national government support for key sector developments, such as biofuel.

**Infrastructure & Environment:** In general, transport infrastructure is a strength of the area which should be maintained and developed. Constraints on utilities and the availability and quality of land and premises represent a limitation for businesses however. Additionally, poor perceptions of the area have negative consequences for local businesses.

Key recommendations are to:

* Continue to improve the Grimsby Dock area to create an attractive business environment.
* Further research and consider the ecological and environmental challenges to the area.
* Support Humberside Airport capacity expansion.
* Seek better rail connections with London and other urban centres.
* Support the improvement of local amenities and environment to improve quality of life for residents and attract visitors.

Main Report

# Introduction

In November 2013, Atkins was commissioned by Cofely GDF-Suez (CGS) on behalf of North East Lincolnshire Council (NELC) to undertake three discrete but connected studies:

* A targeted key sectors study.
* An assessment of future potential employment change in the borough taking account of policy and market demand determinants (futures study).
* An employment land review including an assessment of future land requirements (ELR).

This report presents the results of the key sectors study, supported by a separate local economic audit report. The objectives of this study were to:

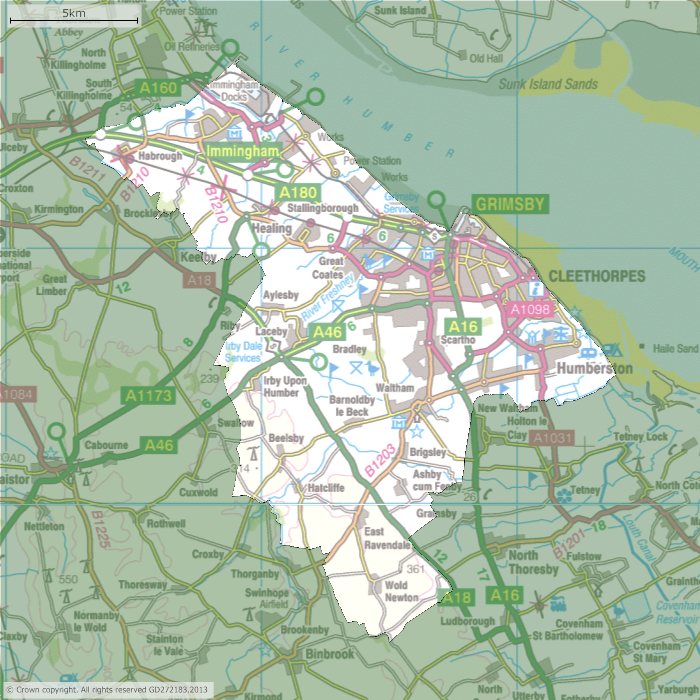
* Establish a sound evidence base on which to develop an ambitious but realistic vision for the future of the North East Lincolnshire economy.
* Prepare economic and employment growth projections & scenarios by sector.
* Provide a robust assessment to inform Local Plan land allocation and polices, with regard to both quantitative and qualitative factors.
* Prepare empirically sourced economic advice having considered prospects and trends not only in North East Lincolnshire but also those in surrounding areas likely to impact on the economy of the area.

This document provides a comprehensive assessment of the key sectors of the North East Lincolnshire economy and the findings of detailed empirical research. The outputs of the report will provide a broad evidence base to inform economic development, inward investment and land-use planning policies for the area.

## Geographical Focus

North East Lincolnshire (NEL) is a unitary authority situated on the North East coast of England, south of the Humber estuary. It is a compact community with three key urban centres (Grimsby, Cleethorpes and Immingham) and a largely rural hinterland comprised of villages and other small settlements (Figure 1-1). Outside of the NEL administrative area, Scunthorpe is situated approximately 40km to the west, Lincoln 60km to the south-west and Hull is a 50km drive to the north, across the Humber. NEL’s location is one of significant strategic importance in relation to mainland European markets and North Sea energy developments.

Figure - North East Lincolnshire Location Map



Source: Ordnance Survey 2013 Crown Copyright.

## Structure

The structure of this report is as follows:

* Section 2 outlines the local economic and policy context and provides an introduction to the key sectors.
* Section 3 summarises the results of the business survey and sets out the overall economic impact assessment for the key sectors.
* Sections 4-8 set out the analysis for each of the five key sectors.
* Section 9 presents a summary of conclusions and our high-level recommendations for economic development and planning policy.

The appendices to the report provide further information on:

* Appendix A: Location quotient analysis.
* Appendix B: Results of the business survey and economic impact report.
* Appendix C: Stakeholders and local businesses interviewed.

## Methodology

The research was conducted in four key stages:

1. **Quantitative Socio-Economic Analysis**

An analysis of government and local authority-compiled data was undertaken to identify sector trends, characteristics, opportunities and constraints, particularly in relation to the local business base, labour market, population and property market. This analysis primarily drew upon data from the Inter-departmental Business Register (IDBR), Office for National Statistics, Business Register and Employment Survey, Annual Population Survey and Mint and Experian private datasets.

1. **Qualitative Analysis**

Detailed face-to-face and telephone interviews were conducted over a three-month period with a sample of approximately 30 senior representatives from established companies, industry organisations, public bodies and employer groups located across the NEL area. Specific themes were explored including sector characteristics and trends, local economic performance, skills and labour supply, land and property quality and availability, prospects for growth and diversification and constraints to expansion. Organisations and businesses interviewed are listed in Appendix C.

1. **Business Survey**

A survey of a representative sample of businesses in NEL was undertaken, with 370 businesses surveyed in total, representing around 10% of all employers in the local economy. In addition to collecting business performance and operational information for firms, the survey also addressed similar themes to those discussed in the interview stage.

The business survey was carried out by an independent market research company (Hill Taylor Limited). In accordance with the Market Research Society’s Code of Conduct, all findings from the business survey are aggregated to preserve anonymity. Similarly, all company names and the individuals representing them in the survey remain confidential and are not made available to Atkins, our client or other organisations.

1. **Reporting**

This document pulls together and presents the outputs of the survey, interviews and secondary data analysis. Drawing directly on this evidence and considering the policy priorities of the area, our recommendations are set out in the final section of this report.

# Local Policy & Economic Context

## Introduction

This section provides a brief overview of the local and sub-regional policy and economic context for NEL and the wider sub-region. For a more detailed assessment, please refer to the local economic audit presented in a separate report. This section also provides an overview and introduction to the five key sectors.

## Local Policy Context

Under the localism agenda, central government has maintained that local authorities should play a leading role in supporting economic development and regeneration in their areas. Local authorities and their partners are particularly important for facilitating business growth, diversification and inward investment. Local authorities are also instrumental in ensuring a sufficient quality and quantity of land and premises is made available to accommodate the changing needs of existing businesses as well as potential investors in the area. This includes land for offices, industry, warehousing and logistics, housing, retail, community facilities and waste. Another key role of local authorities is to prioritise critical investment in infrastructure investment, including, but not limited to, transport provision.

### Local Enterprise Partnerships

The government initiated the establishment of Local Enterprise Partnerships (LEPs) in June 2010, based on functional economic areas. Local authorities and LEPs are charged with stimulating development that is aligned with broader government policy objectives regarding rebalancing the economy away from public sector employment and over-reliance on a narrow range of sectors, including financial services.

NEL forms part of two LEPs: the Humber LEP (largely north of the River Humber) and the Greater Lincolnshire LEP (south of the Humber). Both LEPs have published strategic economic plans (SEPs), which provide direction for the future economic development of their respective areas. Though the areas have different economic and social characteristics, there is a degree of overlap between the actions proposed in the SEPs.

#### Humber LEP’s Strategic Economic Plan 2014-2020

Aims and vision

The Humber SEP emphasises the Humber estuary as a national asset and the basis for economic opportunities in the region, particularly in regards to the expanding offshore wind sector. The plan states an ambition for the Humber ‘Energy Estuary’ to become “a renowned national and international centre for renewable energy and an area whose economy is resilient and competitive”, demonstrating the importance of this sector for the future of the regional economy.

Feeding in to this ambition are three visions: economy - for a thriving renewable sector supported by access to finance and capital schemes; skills - a better-aligned skills system and reduction in the proportion of the population with no qualifications; and place – with a strong visitor economy, increased civic pride and improved infrastructure and housing, including addressing flooding and coastal erosion.

Barriers to growth identified in the SEP include:

* A low skills level amongst the workforce, particularly regarding the high proportion of the population with no qualifications and a relatively low proportion with high qualifications. This is matched by a local economy with an overreliance on low-skilled employment.
* Relatively high levels of economic inactivity, unemployment and long-term sickness. Whilst economic activity in NEL is not far from the national average, the area does have high levels of unemployment and long-term sickness.
* Poor business survival and growth, complemented by relatively low take-up of national business support programmes. NEL has seen particularly low rates of business survival in recent years, almost half those of areas elsewhere in the Humber area.

Priority Sectors

Priority sectors identified in the SEP include renewable energy, ports and logistics, chemicals, food and the visitor economy. Given the overlap with NEL’s priority sectors, the relevance of the LEP’s aims in developing these sectors is clear.

* For the ports and logistics sector, the SEP notes that the offshore renewable sector represents the greatest opportunity for growth. Key activities proposed to support the sector include developing the Grimsby Port Delivery Plan (to include several infrastructure improvements), stimulating the expansion of specialist businesses (including prioritising physical developments), business and supply chain support and skills development programmes for local residents.
* For the chemicals sector, activities identified in the plan include fostering links between employers and skills providers in order to ensure labour supply meets demand and to promote innovation, skills development programmes and improving business support.
* Food is another key sector for both NEL and the Humber LEP. In particular, the SEP highlights the potential for encouraging linkages between NEL’s seafood cluster and the sector elsewhere in the region, including collaboration with the Greater Lincolnshire LEP. Key support activities for the sector include targeted supply chain support and support in accessing international markets, cross-LEP projects and collaboration between local specialists, closer links with training providers and support to companies in accessing higher education expertise to facilitate innovation.
* In terms of the visitor economy, the SEP notes the importance of heritage coastline and seaside resorts in NEL, and that Cleethorpes has witnessed one of the largest increases in coastal house prices in the past decade. Key support activities include skills development programmes, promotion of the Humber as a location for national and international events, development and promotion of the area’s natural and built environment, and supporting businesses in taking advantage of opportunities presented by the sector.

Proposed actions and developments

Proposed actions and developments are organised across five themes. These are presented in Table 2-1 along with selected projects.

Table - Proposed actions by theme in Humber SEP

|  |  |  |
| --- | --- | --- |
| Theme | Direct relevance to NEL | Indirect relevance |
| Creating an infrastructure that supports growth | * A160/A180 Port of Immingham improvement * Improving connectivity between port facilities and renewables development sites * Encouragement of strategic employment sites, including Europarc * Address quality of place issues to attract and retain skilled workers, including Grimsby town centre | * Reinstate services from Hull to Manchester Airport * Improving broadband connectivity |
| Supporting businesses to succeed | * Humber LEP Growth Hub * SME Growth and Innovation Programme * Providing finance to support entrepreneurship * Promoting and supporting research collaboration in priority sectors | |
| A great place to live and visit | * Sustainable urban extension for Grimsby * Regeneration of Cleethorpes promenade | * Support plan-led housing growth * Ensure schemes delivered under Affordable Homes Programme * Adapt existing homes in response to climate change, to improve energy efficiency and flood resilience |
| A skilled and productive workforce | * Environmental Logistics Learning Hub (Grimsby Institute) * CATCH Energy Offshore to support O&M providers based in Port of Grimsby | * Humber Skills Fund * Apprenticeship Hub * Humber Energy Campus/Humber University Technical College * Provide support to skills providers to introduce new courses |
| Flood risk and environmental management | * Maximise benefits of flood defence schemes by linking them with other proposals such as the Grimsby Docks Flood Defence Scheme. | * Support studies to inform flood defence schemes * Continue with the Humber Flood Risk Management Strategy * Promote sustainable development |

#### Greater Lincolnshire LEP *Strategic Economic Plan*

Aims and vision

The Greater Lincolnshire SEP presents a range of actions projected to, on the basis of continued EU funding, increase the value of the area’s economy by £3.2 billion, assist 22,000 businesses and create 13,000 jobs. Taking actions across a range of themes including housing, infrastructure, business support and the environment, the plan aims to maintain local strengths in the agri-food, manufacturing and engineering and visitor economy sectors, whilst promoting growth in the low carbon, port and logistics and health and care sectors.

The plan identifies current challenges to growth in the area as including:

* Under-developed road and rail infrastructure, constraining supply chains, labour markets and access to markets.
* Investment in flood defences and water management is required to unlock economic and housing growth.
* Housing growth and community services provision is required to support economic growth
* Youth unemployment and low skills levels in parts of Greater Lincolnshire constrain growth and limit the economic opportunities available to young people.

Priority Sectors

Various actions are proposed in the SEP to support existing and expanding sectors, many of which overlap with NEL’s priority sectors. These are presented in Table 2-2

Table - Actions proposed for sector support in Greater Lincolnshire SEP

| Sector | Actions |
| --- | --- |
| Agri-food | * Drive product and process innovation through the development of innovation hubs, including Humber Seafood Institute * Invest in infrastructure, including at the Port of Immingham * Increase supply of high-quality food-grade industrial accommodation * Build capacity and competitiveness of supply chains to address issues around energy costs, water resource management and workforce skills * Develop skills base to facilitate access to apprenticeships and employment opportunities * Facilitating expansion of Europarc through infrastructure investment, in collaboration with Humber LEP |
| Manufacturing & engineering | * Maintain supply of high-quality serviced employment sites and premises across Greater Lincolnshire, including promoting Enterprise Zones in NEL * Encourage employer engagement in apprenticeships and workforce developments through de-risking investment in training * Unlock development and housing land, including in Grimsby * Unlock development of key sites on the South Humber Bank to support the renewable and chemicals sectors * Rail gauge investment between Immingham and the East Coast mainline at Doncaster to enhance rail freight capacity |
| Visitor economy | * Work with public and private sector partners to extend network of visitor attractions across Greater Lincolnshire * Simplify and coordinate online presence in partnership with Visit England * Enhance quality of visitor experience through supporting the development of the visitor accommodation/hospitality sectors and delivering investment in local visitor infrastructure * Develop customer service and other skills of workforce * Resort renaissance programme for Cleethorpes, including providing a site for major hotel, conference and leisure developments and integrating public-realm improvements with upgrades to flood defences * Improve frequency of services between Doncaster and Cleethorpes * Development of Ice Factory in Grimsby as major new attraction |
| Low carbon | * Raise awareness of supply chain opportunities and build capacity and capability of local firms to secure contracts * Work with skills providers to deliver increased low carbon apprenticeships and training opportunities * Support research and development and technology transfer * Develop the Humber Energy Campus and CATCH facility * Deliver an integrated supply-chain development programme * Improve infrastructure at the Port of Grimsby Enterprise Zone |
| Ports & logistics | * Port of Grimsby access and employment programme * Rail gauge investment between Immingham and Doncaster * Humberside Airport surface access improvements |

Proposed Cross-Sector Actions and Developments

The SEP proposes various infrastructure, housing and business support projects and initiatives to promote growth across sectors, with particular relevance for NEL.

In terms of improving the availability of housing and employment land, the SEP proposes:

* The development of Freeman Street and West & East Marsh Road in Grimsby, to assist 166 businesses and create 280 housing units.
* Creating 600 housing units and creating employment land elsewhere in key employment zones in North East Lincolnshire.
* The Lincolnshire Lakes development in North Lincolnshire is also targeted to create employment land and provide 600 housing units.

Proposed infrastructure investment includes several growth corridors within NEL:

* The M180/A180 Scunthorpe to Grimsby route.
* The A16 Grimsby to Louth route.
* As mentioned, rail routes between Doncaster and Cleethorpes will receive gauge improvements, allowing for greater freight transport.

The LEP also intends to support small businesses by improving the provision of information and support in accessing finance, to be implemented and coordinated through a one-stop Growth Hub.

#### Enterprise Zones

**Enterprise Zones**

The Humber LEP was successful in having eight areas designated as Enterprise Zones, which enables accelerated planning procedures and discounted business rates as incentives to encourage key businesses to the areas. Of particular relevance to this study, Enterprise Zones in the area include:

* Port of Grimsby; and
* Able Marine Energy Park

**Port of Grimsby East Enterprise Zone**

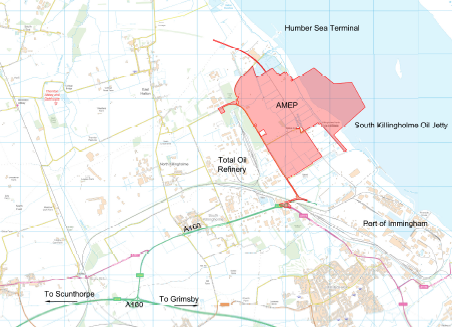
The Port of Grimsby East Enterprise Zone (Figure 2-1) specifically targets operations and maintenance (O&M) and associated supply chain activity for the offshore wind power industry. Enterprise zone status entails a business rate discount worth up to £275,000 per business over a five-year period[[1]](#footnote-2), which is intended to accelerate the development of supply chain and support service businesses.

Figure - Port of Grimsby Enterprise Zone

This Enterprise Zone designation builds upon port owner Associated British Port’s (ABP) intentions for the Port of Grimsby to be “at the forefront of the developing offshore wind industry”[[2]](#footnote-3), particularly in operations and maintenance and associated supply chain activity.

**Able Marine Energy Park Enterprise Zone**

Although the ABLE Marine Energy Park (Figure 2-2) is located in North Lincolnshire, it is expected to be a significant economic driver for growth in the renewables and ports sectors in the Humber area generally. Indeed, Immingham and Grimsby are the main urban areas in closest proximity to the Enterprise Zone. The park offers business rate discounts and enhanced capital allowances on plant and machinery. These are aimed at incentivising investment from large renewables manufacturing companies.

Figure - ABLE Marine Park 

Note: The Able Marine Energy Park’s boundaries are not fully consistent with the enterprise zone but the majority of the development will utilise the land.

#### Regional Growth Fund

The Regional Growth Fund supports projects and programmes that use private sector investment to stimulate economic growth and sustainable employment. The government established the Regional Growth Fund with two objectives:

1. To encourage private-sector enterprise by providing support for projects with the significant potential for economic growth and additional sustainable private-sector employment; and
2. To support in particular those areas and communities that currently depend on the public sector to make the transition to sustainable private-sector-led growth and prosperity.

As an area which falls within two LEPs, businesses in NEL are able to access the Regional Growth Fund programmes for both the Humber and Greater Lincolnshire. Following a successful bid made by the Humber LEP and NELC, £30 million was awarded to the Humber area. Approximately £10 million is aimed at enabling further development of the renewable energy sector on the south Humber bank (within North East and North Lincolnshire). It is estimated that the £30 million of funding will unlock £120 million worth of private sector investment.

### Local Authority

**The North East Lincolnshire Local Plan**

The upcoming Local Plan will deliver the Council's spatial vision, setting out planning policies to guide development in NEL. This research document will feed into the evidence base for the new Plan. Other evidence-gathering activities are planned and further consultation is being undertaken to contribute to the evidence base and vision. Once completed, the identified preferred options will be published for general consideration.

Currently, the economic priority for the area, as set out in the spatial objectives of the *Core Strategy Revised Preferred Options Paper*, is to “support the growth of the local economy in ways which are compatible with environmental objectives, creating conditions that sustain more and better jobs, remove the barriers to accessing jobs and raising skills including support for rural regeneration and diversification and strengthening of the tourism offer”[[3]](#footnote-4).

A number of relevant issues were raised in the consultation undertaken in December 2012, including:

* A need to effectively work on priorities across boundaries;
* The consideration of sustainability in development;
* A requirement for a strong and competitive economy which considers the local characteristics and distinctiveness;
* Responses to environment challenges (e.g. waste water and flooding); and,
* How developments could impact upon the area spatially.

The previous Local Plan was adopted over 10 years ago in 2003. The Plan identified key sector development policies and proposals including energy generation from renewable resources and wind turbine facilities. A number of policies have been saved from the previous plan which include:

* Policy E1: Industrial Land.
* Policy E2: Estuary Related Land.
* Policy E3: Operational Port Area.
* Policy E4: Land adj. Railway, Habrough.
* Policy E5: Manby Hall Business Park, Immingham.
* Policy E6: Europarc III
* Policy E7: Convamore Road, Grimsby.
* Policy E8: Station Road, Great Coates.
* Policy E9: Former Bass Site, Birchin Way, Grimsby.
* Policy E10: Macaulay Lane, Grimsby.
* Policy E11: Grimsby District Hospital.
* Policy E12: Peaks Lane, Grimsby.
* Policy E14: Hewitts Avenue Business Park, New Waltham.
* Policy E15: Wilton Road, Humberston.
* Policy E16: Waltham Airfield.
* Policy E17: Other Sites for Employment Sites.
* Policy E19: Farm Diversification.
* Policy E20: Strategic Employment Exceptions at Europarc IV.

The new Local Plan should support existing business sectors, taking account of whether they are expanding or contracting and, where possible, identify and plan for emerging sectors likely to locate in the area.

**Strategic Housing Market Assessment (SHMA) 2013**

The SHMA (2013) provided an assessment of future population and household change under several scenarios. These ranged from growth of 5,490 to 9,375 additional households in the period up to 2030. However, the report did not include a strongly proactive policy scenario with the aim of capturing effects on housing demand and supply arising from investment in key sectors and including recent activity in the renewables sector.

**2013 Review of Sites**

As part of the update on the evidence base for the local plan, the Council has published a review of all potential housing and employment sites for consultation, in order to determine their availability, suitability and achievability for development. The Employment Land Review to be undertaken in conjunction with this study will further strengthen the evidence base in relation to the availability of suitable and viable sites for allocation.

**Development and Growth Plan 2012**

Produced by NELC in November 2012, the focus of the Development and Growth Plan was clearly targeted at several key sectors: ports and logistics; renewables; chemicals and process industries; food processing; and visitor economy, services and retail (Table 2-3). The plan seeks “to strengthen the overall economy and ensuring that growth benefits all sectors, including inter-dependent supply chains which are integral to the area’s economic success” and “represents a shift of focus to our key economic growth sectors and their priorities, as detailed in the governance chart opposite”. Some of the key themes of the Plan are summarised in Table 2-3.

Table - Development & Growth Plan 2012 - Sector Aims

|  |  |
| --- | --- |
| Sector | Aim |
| Ports & Logistics | Promote the Humber Port complex with a focus on Immingham and Grimsby together with developing the logistics offer. |
| Food Manufacturing | Secure, sustain and grow this primary sector within North East Lincolnshire to become the UK’s leading food manufacturing cluster |
| Renewables & Energy | Establish North East Lincolnshire as the leading operations and maintenance centre for offshore wind and to facilitate the provision of energy security to industry. |
| Chemicals | Support our global and local partners to sustain and grow this established sector within North East Lincolnshire. |
| Visitor Economy, Service & Retail | Enhance the visitor economy and retail offer in North East Lincolnshire. This sector is essential for developing quality of life benefits for the community and businesses, making it a good place to live as well as offering excellent development opportunities. |
| **Cross Sectorial Themes** |  |
| Environment & Infrastructure | Create the environment & infrastructure for growth including improvements or modifications to the energy security, transport, highways, flooding, coastal defence and quality of life. |
| Employment & Skills | Develop a workforce fit for industry with skills which complement the sectors above. |
| Investment & Trade | Establish North East Lincolnshire as the location for investment. |
| SME Business Support | Build a diverse and resilient SME population. |

**Retail and Hotel Studies**

Retail studies conducted in 2005 and 2013 provide a detailed evidence base on the vitality of the local area, current floorspace and a future framework in planning for retail needs. The recommendations from the 2013 study identify the need for a borough hierarchy to identify Grimsby town centre as a sub-regional centre, followed by Cleethorpes and Immingham as town centres,and with Freeman Street downgraded in order to better reflect the type of retail and service uses now found in the existing area.

Hotel studies conducted for NEL include the updated 2014 hotel study which identifies the development of proposed new hotel schemes: Premier Inn; Holiday Inn Express; and a 40 room extension to the four-star Humber Royal Hotel to meet short-term demand. The need for another hotel is also identified with the requirement for an additional hotel of approximately 100 rooms to accommodate largely business demand.

## Local economic context

The local economic and demographic context in North East Lincolnshire is explored in more detail in the baseline assessment report which has been issued as a separate document. An abridged overview of the economic context with particular relevance to the prospects for growth in the key sectors is presented below.

### Business and Enterprise

Table 2-4 demonstrates that North East Lincolnshire has an above average concentration of businesses in manufacturing, construction, motor trades, wholesale and retail, transport and storage, and accommodation and food sectors. The area, however, has a lower than average concentration of businesses in sectors including information and communication, financial and insurance, professional, scientific and technical and business administration and support services.

Table - Distribution of Businesses by Sector

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Industry | North East Lincolnshire | North Lincolnshire | Kingston upon Hull, City of | England |
| Agriculture, forestry & fishing | 1.4% | 8.7% | 0.3% | 4.4% |
| Mining, quarrying & utilities | 0.8% | 1.2% | 0.5% | 0.6% |
| Manufacturing | 7.3% | 6.3% | 9.0% | 5.3% |
| Construction | 12.5% | 11.2% | 9.2% | 10.2% |
| Motor trades | 4.5% | 4.6% | 3.6% | 3.0% |
| Wholesale | 5.5% | 4.7% | 5.6% | 4.9% |
| Retail | 16.2% | 11.1% | 15.0% | 10.7% |
| Transport & storage | 6.3% | 7.5% | 3.6% | 3.2% |
| Accommodation & food services | 7.1% | 7.4% | 6.8% | 6.2% |
| Information & communication | 2.1% | 2.1% | 2.5% | 7.1% |
| Financial & insurance | 1.8% | 1.7% | 2.3% | 2.6% |
| Property | 2.7% | 2.2% | 3.0% | 3.7% |
| Professional, scientific & technical | 9.6% | 10.1% | 8.1% | 15.3% |
| Business administration & support services | 5.3% | 5.8% | 6.3% | 7.0% |
| Public administration & defence | 0.9% | 1.2% | 4.9% | 0.9% |
| Education | 2.5% | 2.7% | 3.0% | 2.5% |
| Health | 6.5% | 5.0% | 10.6% | 5.7% |
| Arts, entertainment, recreation & other services | 6.7% | 6.5% | 5.8% | 6.8% |

Source: ONS Enterprise Counts

Figure 2-3 and Figure 2-4 demonstrate spikes in business births and deaths between 2006 and 2011. Whilst a rise in business deaths during this period is also apparent elsewhere due to the economic recession, though less pronounced, the simultaneous increase in business births is unusual. However, it appears this has not had a lasting effect, and the most recently available data indicates business survival rates in North East Lincolnshire are low: for example, only 29.5% of businesses started in 2009 survived for three years, compared to 58.4% in North Lincolnshire.

Figure - Business births as a proportion of active businesses (2004-2012)

Source: ONS Business Demography 2012.

Figure - Business deaths as a proportion of active businesses (2004-2012)

Source: ONS Business Demography 2012

### Labour Market

As shown in Table 2‑5, North East Lincolnshire has a high rate of unemployment at 10.4%, 4 percentage points higher than the national rate. Figure 2-5 shows unemployment has been severely affected by the economic recession over recent years. Though unemployment has in fact been rising since as early as 2005, this accelerated with the oncoming of the recession, increasing by 3 percentage points from 2008 to 2009, and has since been stable at between 11 and 12%.

Table 2‑5 Economic activity in North East Lincolnshire, Apr 2013 – Mar 2014

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | England (%) | North East Lincolnshire (%) | North Lincolnshire (%) | Kingston upon Hull, City of (%) |
| All People | | | | |
| Economically active | 78.6 | 76.5 | 79.3 | 73.7 |
| In employment | 73.5 | 68.6 | 74.3 | 63.3 |
| Unemployed | 6.4 | 10.4 | 7.3 | 13.5 |
| Job Density | 0.79 | 0.7 | 0.7 | 0.73 |

Source: ONS Annual Population Survey. % of those aged 16-64. Percentages are the proportion of economically active population.

Figure - Unemployment Rate, 2005-2013

Source: Annual Population Survey

In 2013 just over 25% of North East Lincolnshire’s residents were employed in the three upper tier occupational groups including managers, professionals and associate professionals (Table 2‑6). The disparity is particularly pronounced in professional and associate professional and technical occupations. This is lower than North Lincolnshire (33.4%) and Hull (30.9%) and much lower than the England average (44.7%).

Table 2‑6 Employment by Occupation (2013)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Occupations | North East Lincolnshire | North Lincolnshire | Kingston upon Hull | England |
| 1: Managers, directors and senior officials | 7.7 | 10.4 | 6.7 | 10.5 |
| 2: Professional occupations | 10.5 | 13.2 | 14.0 | 19.9 |
| 3: Associate prof & tech occupations | 8.0 | 9.8 | 10.2 | 14.3 |
| 4: Administrative and secretarial occupations | 10.8 | 10.4 | 8.9 | 10.7 |
| 5: Skilled trades occupations | 13.5 | 12.9 | 13.1 | 10.4 |
| 6: Caring, leisure and other service occupations | 10.9 | 10.0 | 9.8 | 9.0 |
| 7: Sales and customer service occupations | 8.9 | 6.3 | 11.2 | 7.8 |
| 8: Process, plant and machine operatives | 13.9 | 12.9 | 10.9 | 6.2 |
| 9: Elementary occupations | 14.5 | 13.7 | 14.5 | 10.6 |

Source: ONS Annual Population Survey (2014)

### Gross Value Added (GVA)

Figure 2-6 shows that North & North East Lincolnshire (the smallest relevant area for which data is available) is a leader in the Humber area in terms of GVA, consistently outperforming East Riding, and generally more productive compared to Hull. Gross value added represents the value of output from economic activity less the value of inputs, and therefore GVA per head indicates the economic productivity of the area. However, North & North East Lincolnshire and the wider region fall short when compared to the national average.

Figure - Workplace GVA per head at current basic prices (1997-2012)

Source: ONS Regional GVA 2013. 2012 figures provisional.

### Export Intensive Sectors

Table 2-7 shows that North East Lincolnshire has a marginally higher proportion of its employment base employed in these sectors (4.2%) compared to the average for England (4%). It is also comparable to Hull’s (4.2%) and over double North Lincolnshire’s (2%) share. However, as can be seen from Table 2-7, the chemicals industry in North East Lincolnshire is the main contributor to the Borough’s export role.

Table - % Employment in Top 5 Exporting Sectors

| Top 5 UK Exporting sectors | North East Lincolnshire | Hull | North Lincolnshire | Yorkshire and The Humber | England |
| --- | --- | --- | --- | --- | --- |
| Chemical manufacturing | 2.7% | 1.0% | 0.5% | 0.6% | 0.4% |
| Financial services, except insurance and pension funding | 0.8% | 0.7% | 0.8% | 2.1% | 1.9% |
| Motor vehicles, trailers and semi-trailers | 0.2% | 1.2% | 0.2% | 0.5% | 0.5% |
| Computer, electronic and optical products | 0.1% | 0.0% | 0.1% | 0.3% | 0.4% |
| Machinery and equipment. | 0.4% | 1.3% | 0.4% | 1.0% | 0.7% |

Source: BRES/ONS 2013

### Innovation and skills

A number of key sectors within North East Lincolnshire require high value knowledge, specialist skills and innovative activity. For example, the development of new products and processes in the Food Manufacturing sector and chemical engineering activities in the Chemicals and Process Industries. Analysis of OECD patent data from 2011 (Table 2-8) shows that North & North East Lincolnshire have a lower patents per 100,000 rate (1.4) compared to all neighbouring areas and significantly lower than the national average (7.5).

Table - OECD Patent Co-operation Treaty Patent applications 2011

| Area | Patents Per 100,000 people |
| --- | --- |
| North & North East Lincolnshire. | 1.4 |
| Kingston upon Hull | 7.1 |
| East Riding of Yorks. | 2.4 |
| Lincolnshire | 4.6 |
| Great Britain | 7.5 |

Source: OECD 2012

Despite improvement, North East Lincolnshire has a lower proportion of residents with NVQ Level 4 qualifications (degree level or equivalent) compared with neighbouring local authorities and the national average (Figure 2-7). Furthermore the gap between North East Lincolnshire’s and England’s proportion of the workforce with Level 4 qualifications has increased. This suggests that there is difficulty in matching the progress made elsewhere. This could be linked to comparative lack of Higher Education delivery in North and North East Lincolnshire[[4]](#footnote-5) and evidence of a ‘brain drain’ whereby students and well skilled workers leave to study or work in other areas but to not return to their place of origin.

Figure - % of Working Age Population (16-64) with Level 4 Qualifications

Source: Annual Population Survey 2014

The share of residents with no qualifications has fallen since 2009 (by 2.6%) but not at the same rate as the national average (drop of 3%). This indicates that the skills gap in the Borough relative to national standards is not being closed.

Figure - % of Working Age Population (16-64) with No Qualifications

Source: Annual Population Survey 2014

### Key Sectors

Following a review of data, previous research and key policy documents, the following key sectors were agreed as priorities with NELC. These sectors are expected to drive future employment growth and are integral to the economic vitality of the area:

* Port & Logistics
* Food and Fish Processing
* Chemicals and Process Industries
* Renewable Energy
* Visitor Economy, Services & Retail

Table 2-9 provides an overview of these ‘key sectors’ providing a context for more detailed sector specific assessments which are set out in subsequent sections.

Table - Overview of the five key sectors

|  |  |
| --- | --- |
| Sector | Brief Overview |
| Port & Logistics | The combined ports of Immingham and Grimsby have developed from the world’s largest fishing port to become the largest port by tonnage in the UK. The ports are geographically separate and this has led to a different profile of goods being shipped through the port complex. The Port of Immingham’s profile of goods is linked closer to heavy industry with bulk goods (like coal and oil), petro-chemical goods and ro-ro ferries. The Port of Grimsby transports dry bulk, fresh produce and ro-ro freight, and has an increasing renewables presence. The future of the ports appears positive as the UK seeks energy security and the ports align to different types of energy supplies (e.g. oil, liquefied natural gas, biomass and offshore windfarms). |
| Food and Fish Processing | Grimsby was once the principal centre for fishing in England,and developed rapidly after the arrival of the railway in 1848. At its peak in the 1950s, Grimsby was the largest and busiest fishing port in the world due to this trade. However as a result of the ‘Cod Wars’ with Iceland the fishing industry declined. Whilst Grimsby is still home to the largest fish market in England & Wales it has now developed a key niche in the fish processing industry, which has also adapted into the provision of other foods. he relative accessibility of the the North Sea is seen to be key to remaining an important fish processing centre, and considered to be a key part of the future prosperity of the local area. .. |
| Chemicals and Process Industries | The chemicals industry has a long history in the area, established in the 1950s and ‘60s. The industry is comparatively autonomous with global supply chains. Proximity to the Humber provides access to deep-water ports and raw products and therefore has supported industry growth. The industry is well established locally and continues to offer opportunities for economic growth in the future. |
| Renewable Energy | There are a range of renewable energy technologies and commercial activities including biomass, biofuel and waste management across NEL. The most prominent is the offshore wind industry, established through the development of Round 1 and 2 windfarm zones. Those operational thus far include Lynn, Inner Dowsing and Lincolnshire, whilst Humber Gateway and Westermost Rough are under construction. These windfarms have provided opportunities for local business to benefit from supply chain demand. Grimsby has established itself as a focal point for Operation and Maintenance (O&M). Further onshore windfarms in Northern Lincolnshire and biomass developments at the Port of Immingham (to support co-firing at Drax) have created the foundations for considerable economic growth opportunities. In close proximity to NEL, two major renewable energy clusters are planned: Able Marine Energy Park; and Hull Green Port, which will include a Siemens wind turbine-manufacturing facility. |
| Visitor Economy, Services & Retail | As rail opened up the UK to mass travel of goods and people, Cleethorpes became popular with visitors in the late 1800s. A pier was built in 1873 and the amusements, beach and Thorpe Park Holiday Camp are popular attractions. More recently, other visitor attractions such as the Fishing Heritage Museum in Grimsby have been established, drawing visitors interested in the maritime history of the local area during the holiday season. Further theatre, events and cultural performances have attracted visitors to the local area. NEL has always been a busy trading area and retail is an important element of the local economy. The growth in disposable income has also driven developments across NEL, with shopping centres built in Grimsby in 1984 (Abbeygate) and 1989 (Freshney Place). However, established retail centres across NEL face competition from other local areas and out-of-town shopping. |

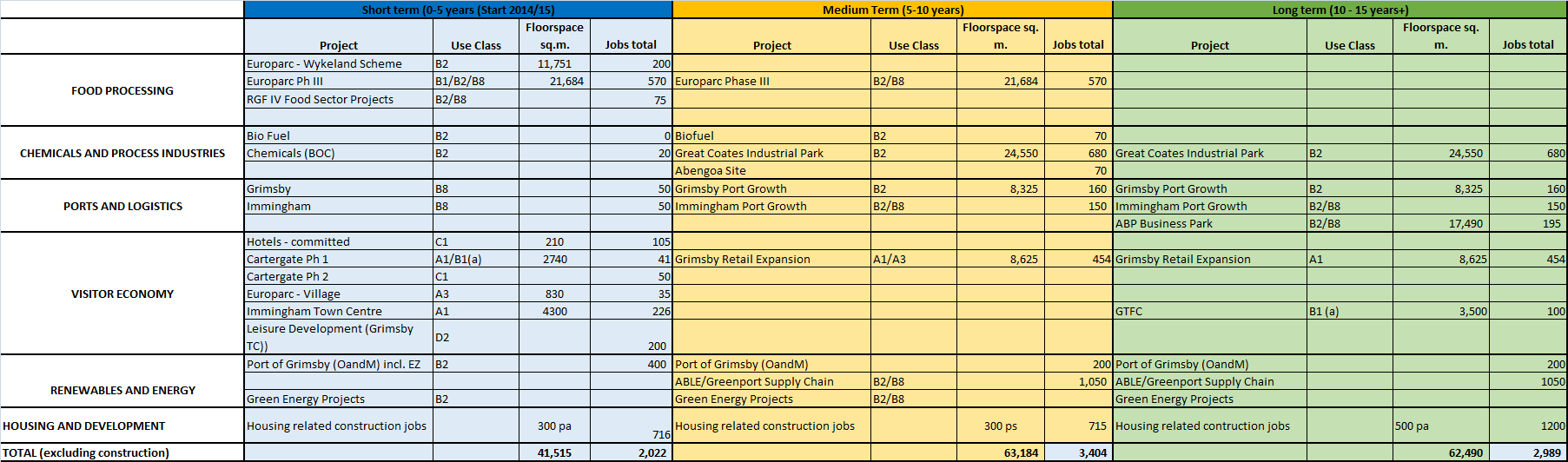
### Major Investment Proposals

The importance of the five key sectors both now and in the future is further reinforced by the fact that substantial investment projects are planned or proposed in North East Lincolnshire and adjoining areas in neighbouring authorities. Whilst the planned timescales and risks to delivery are not fully assessed in this report, the scale and mix of pipeline projects demonstrates confidence amongst both the private and public sectors regarding the collective future growth and diversification potential of the key sectors.

Tables 2-10 to 2-12 summarise the main major project proposals at the time of writing.  Also provided are indicative estimates of the gross job creation potential associated with each main project.   The table also includes estimates of temporary construction employment in the development sector.  These are derived from estimates of the capital build value of planned housing developments as well as that of the employment projects listed by sector in the rest of the table. It should be noted that the construction job estimates are excluded from the total job estimates given that they will be time-limited in nature and cannot directly be compared with full time equivalent or permanent jobs associated with the individually specified projects.

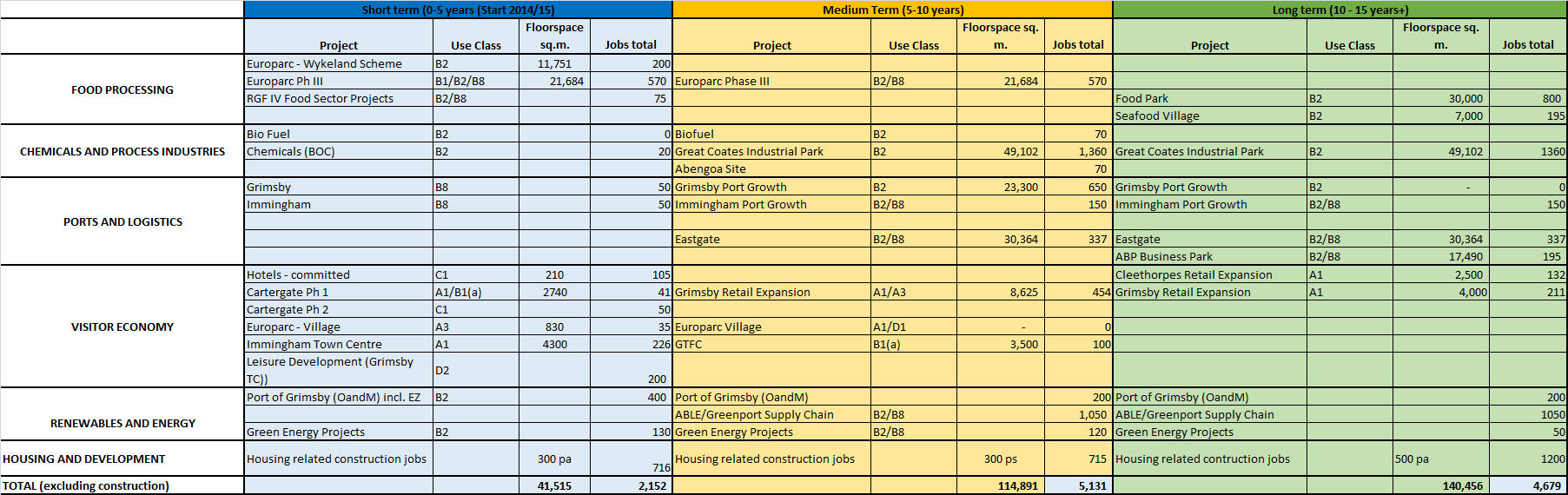
Table 2-10 considers the scenario where substantial public funding is not secured to deliver the infrastructure and environmental conditions that allow major new developments to proceed and consequently there is a reliance on existing infrastructure and assets. Table 2-11 considers Scenario 1 where there is a moderate level of success in securing public investment to create the conditions for growth and enable development. Table 2-12 sets out Scenario 2 which assumes that there is a high degree of success in securing public funding that enables, captures and accelerates growth.

**Table - - Major Project Investment Proposals – NE Lincolnshire & Neighbouring Areas: Baseline Scenario**



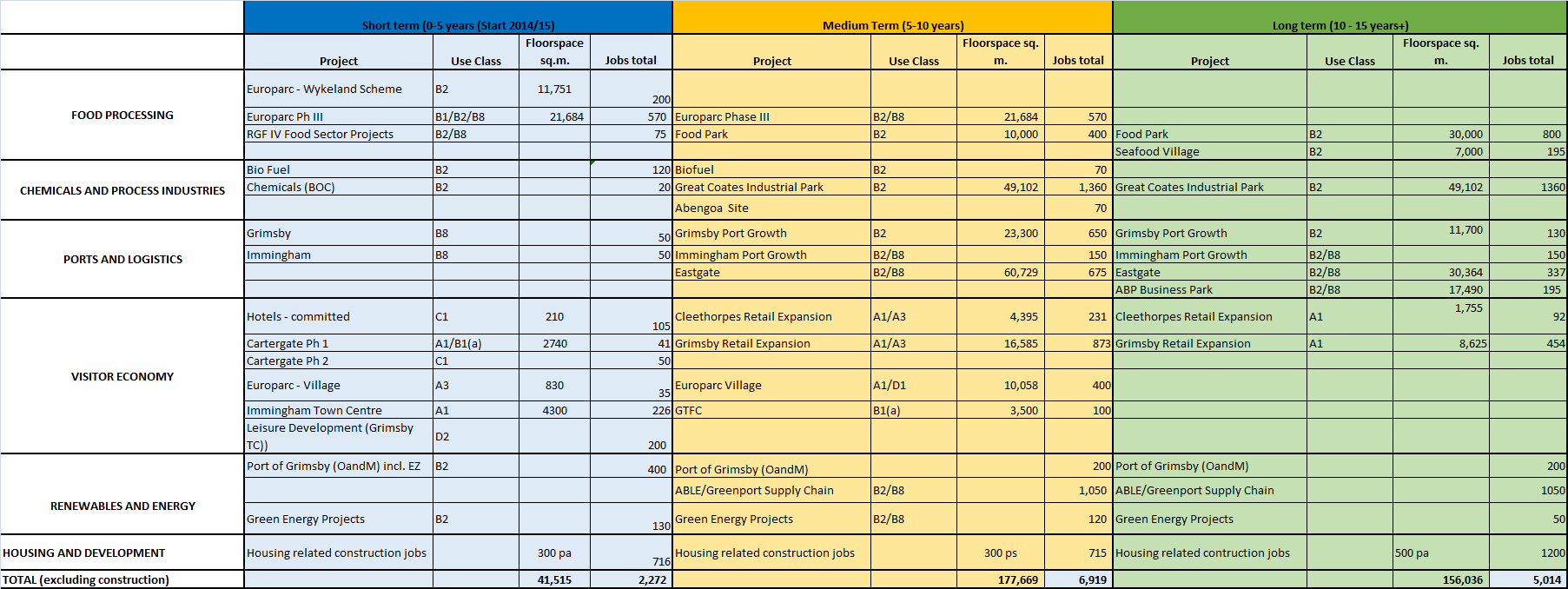
Source: Atkins / Cofely / North East Lincolnshire Council.

**Table - - Major Project Investment Proposals – NE Lincolnshire & Neighbouring Areas: Scenario 1**



Source: Atkins / Cofely / North East Lincolnshire Council.

**Table - - Major Project Investment Proposals – NE Lincolnshire & Neighbouring Areas: Scenario 2**



Source: Atkins / Cofely / North East Lincolnshire Council.

Business Survey & Economic Impact Assessment

# Business Survey & Economic Impact Assessment

This section summarises the outputs of our economic impact modelling for the five priority sectors, which are discussed in more detail by individual sector in the remaining sections of this report. This seeks to quantify the existing economic contribution of each of the key sectors whilst setting the context for policy interventions and associated investments which can facilitate further economic growth and prosperity for the North East Lincolnshire and wider economy.

## Sector Contribution to GDP

We have generated estimates of GDP for each of the key five sectors based on our empirical analysis of the statistically significant business survey. Table 3.1 indicates that collectively, the key sectors in 2014 generate a gross economic output of approximately £1.7 billion. This represents almost 60% of total GDP originating in the Borough. Table 3.2 provides our estimates of GDP contribution by sector. It also compares our empirically modelled GDP outputs with the overall contribution of each sector in employment terms. There are two key inferences from this comparison:

* Firstly, the key sectors are relatively high value in nature with above average performance in terms of productivity (output per worker).
* Secondly, the disparity between the percentage contributions of each sector by employment compared to GDP is significant which indicates strongly that employment numbers sourced through secondary sources are under-estimates of their actual contribution. The measurement of employment using standard industrial classifications (SICs) does not produce a direct estimate of job numbers given that many jobs closely associated with one or more of the key sectors will be accounted for elsewhere.

**Table - Key Sector Collective Contribution to NE Lincolnshire GDP (2014)**

|  |  |
| --- | --- |
| Key sector | £ million |
| Key Sectors Collective GDP | £1,740 |
| North East Lincolnshire GDP (estimated) | £3,021 |
| **% Contribution of Key Sectors to NEL GDP** | **57.6%** |

Source: Atkins, 2014.

**Table - Key Sector Contribution to NEL GDP and Employment**

|  |  |  |
| --- | --- | --- |
| Sector | % N.E. Lincolnshire Employment | % N.E. Lincolnshire GDP |
| Renewables & Energy | 9.8% | 12.4% |
| Ports & Logistics | 7.0% | 20.9% |
| Food Processing | 6.0% | 7.9% |
| Chemicals & Process Industries | 3.0% | 10.3% |
| Visitor Economy | 7.0% | 6.0% |
| **Total** | **30.0%** | **57.6%** |

Source: Atkins / IDBR, 2013

Table 3.3 provides a further breakdown of GDP contribution for each of the key sectors by size of company (in terms of turnover).

Table - Key Sector GDP Contribution by Sector and Company Size (by Turnover)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Turnover band | Renewables | Ports & Logistics | Food manufacturing | Chemicals & process industries | Visitor Economy & Retail |
| Less than £100K p.a. | £2,706,300 | £696,900 | £1,080,700 | £88,100 | £7,364,600 |
| £100K to £250K p.a. | £3,788,700 | £4,878,100 | £1,080,700 | £616,700 | £9,323,200 |
| £250K to £500K p.a. | £8,118,700 | £15,679,700 | £3,473,700 | £660,700 | £14,102,400 |
| £500K to £1M p.a. | £24,356,200 | £13,937,500 | £9,263,200 | £3,964,300 | £21,153,500 |
| £1M to £2M p.a. | £32,475,000 | £69,687,500 | £6,947,400 | £10,571,400 | £18,803,100 |
| £2M to 5M p.a. | £37,887,500 | £178,864,600 | £21,614,000 | £18,500,000 | £32,905,500 |
| Over £5M | £266,500,000 | £348,437,500 | £196,315,800 | £276,428,600 | £78,346,500 |
| **Total** | **£375,832,400** | **£632,181,800** | **£239,775,500** | **£310,829,800** | **£181,998,800** |
| **Total Key Sectors** | | | | | **£1,740,618,300** |

Source: Atkins 2013. Atkins Ref: Survey – A2/M45. Figures rounded.

## Employment Impact

Whilst we have captured estimates of direct employment in each of the key sectors using secondary data sources (IDBR), the empirical business survey has enabled us to gather key data to provide more detailed estimates of downstream multiplier impacts which includes the supporting of jobs well beyond the Borough boundaries.

Table 3.4 sets out estimates of direct, indirect and inducted employment facilitated by the operation of the five key sectors within North East Lincolnshire.

* Direct employment measures jobs supported by ‘top tier’ companies solely operational in one of the key sectors in a location within North East Lincolnshire.
* Indirect employment measures the jobs supported by the supply chain to one or more of the key sectors in North East Lincolnshire. These jobs are located both within and outside the Borough.
* Induced employment estimates the employment supported in a range of sectors arising from expenditure of income from direct and indirect jobs generated by the five sectors. This will include jobs in the service sectors including retail and business services.

The table shows that the key sectors support a total of nearly 50,000 jobs of which 39% are direct jobs within North East Lincolnshire (66% are in the Yorkshire & Humberside region).

Table - Direct and Multiplier Employment Impacts of NEL Key Sectors

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Geography | Renewables | Ports & Logistics | Food manufacturing | Chemicals & process industries | Visitor Economy | Total |
| **Direct Jobs** |  | | | | | |
| North East Lincolnshire | 3,250 | 4,820 | 4,100 | 2,230 | 4,830 | 19,230 |
| **Indirect Jobs** |  | | | | | |
| N.& N.E Lincolnshire & Humber | 1,300 | 2,580 | 600 | 1,300 | 1,570 | 7,350 |
| Elsewhere in Yorkshire and Humber | 840 | 1,830 | 390 | 800 | 1,210 | 5,070 |
| Outside L/H | 1,360 | 3,140 | 510 | 1,980 | 1,080 | 8,070 |
| **Total** | **3,500** | **7,550** | **1,500** | **4,080** | **3,860** | **20,490** |
| **Induced** |  | | | | | |
| N.& N.E Lincolnshire & Humber | 720 | 990 | 160 | 780 | 590 | 3,240 |
| Elsewhere in Yorkshire and Humber | 470 | 700 | 110 | 480 | 450 | 2,210 |
| Outside Yorkshire | 760 | 1,200 | 140 | 1,190 | 400 | 3,690 |
|  | | | | | | |
| **Total** | **8,700** | **15,260** | **6,010** | **8,760** | **10,130** | **48,860** |

Source: Atkins 2013. Atkins Ref: Survey –A9-A11. Figures rounded.

Figure 3-1 presents the employment trends for the five key sectors since 2009. The food processing sector has seen a reduction in employment, reflecting reduced demand in adverse macroeconomic conditions. Despite this, by and large, employment has remained fairly stable across the key sectors since 2010, with significant gains in employment in the visitor economy, services and retail sector.

Figure - Key Sector Employment (2009 - 2013)

Source: IDBR 2013 – Atkins Ref: IDBR/BNO

### Contribution to National Exchequer

In addition the impact in terms of output and employment, the key sectors also make a significant contribution to the national exchequer in the form of taxes and national insurance contributions. Indicative estimates of this contribution are provided below.

**Income Tax and National Insurance**

The total revenue attributable to wages, both within and outside North East Lincolnshire has been calculated based on our estimates of average annual earnings which have been sourced from the business survey. The table below summarises the estimates of the income tax and national insurance contribution which amount to a total of approximately £136 million from income tax and £75 million from national insurance contributions (see Table 3.5).

Table - Income & National Insurance Contribution

|  |  |  |  |
| --- | --- | --- | --- |
|  | Wages | Income Tax | National Insurance |
| Direct Employees | £470,545,280 | £94,109,056 | £51,760,000 |
| Indirect | £77,567,787 | £15,513,557 | £8,532,000 |
| Indirect Yorkshire & Humber | £54,811,307 | £10,962,261 | £6,029,000 |
| Indirect Outside N. And N.E Lincolnshire & Humber | £79,280,640 | £15,856,128 | £8,721,000 |
| **Total** | **£682,205,014** | **£136,441,002** | **£75,042,000** |

Source: Atkins 2013. Atkins Ref: Survey –A12/D14.

**Corporation Tax**

Table 3.6 summarises the corporation tax contribution of the key sectors which we calculate amounts to approximately £105 million. Together the five key sectors contribute a total of approximately £467 million to the National Exchequer.

Table - Corporation Tax Contribution

|  |  |
| --- | --- |
| Sector | Contribution (£) |
| Renewables | £25,776,557 |
| Ports & Logistics | £42,702,525 |
| Food manufacturing | £13,723,445 |
| Chemicals & process industries | £14,058,247 |
| Visitor Economy & Retail | £9,576,063 |
| **Total** | **£105,836,837** |

Source: Atkins 2013. Atkins Ref: Survey –A12/I23

## Size and Type of Business

Analysis of secondary data enables a reasonable assessment of the size range of businesses with each key sector to be made relative to Borough averages. Table 3.7 indicates that the *Food Manufacturing* and *Chemicals and Process sectors* are typically over-represented by larger businesses (over 250 employees) relative to the average for North East Lincolnshire. Despite this, the tables makes it clear that SMEs are fundamental to the lifeblood of all key sectors in the Borough.

Table - Size of Business

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Business Size | Ports & Logistics | Renewables & Energy | Chemicals & Process Industries | Visitor Economy | Food Manufacturing | All NEL businesses |
| a. 0-10 | 62.6% | 86.8% | 51.4% | 72.6% | 63.6% | 76.4% |
| b. 11-20 | 15.2% | 6.2% | 10.8% | 12.6% | 8.0% | 10.2% |
| c. 21-50 | 12.2% | 5.1% | 13.5% | 10.8% | 12.5% | 8.4% |
| e. 51-100 | 5.2% | 0.7% | 8.1% | 3.0% | 3.4% | 2.8% |
| f. 101-250 | 3.9% | 0.7% | 10.8% | 0.8% | 3.4% | 1.5% |
| g. 250+ | 0.8% | 0.5% | 5.4% | 0.3% | 9.1% | 0.8% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Source: IDBR 2012

As indicated by Figure 3-2, a high proportion of firms in all sectors are stand-alone operations. The main exception to this is found in the ports and logistics sector were only 50% of businesses are single-site operations. The dominance of single site business units reinforces the importance of SME activity in all of the key sectors. It is expected that this pattern would be replicated across other sectors of the NEL economy.

Figure - Type of Business

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A13

The chart below indicates that the key sectors in NEL proved resilient to the recession, with the number of firms between 2009 and 2013 remaining reasonably stable, a result also indicated by previous research[[5]](#footnote-6).

Figure - Key Sector Firms (2009 - 2013)

Source: IDBR 2013 – Atkins Ref: IDBRanl/BNO

## Supply Chain Impacts

The business survey enabled us to understand better linkages between the key sectors and other sectors of the economy. This can be most directly demonstrated through an analysis of supply chain patterns. As part of the survey, businesses were asked to quantify approximately how much they spend on their supply chain purchased with details provided on the broad type of goods and services bought as well as the geographical origin of these purchases.

Table 3.8 indicates that a significant proportion of supply purchases were on:

* Energy and utilities.
* Manufactured components and products.
* Financial and insurance services.
* Professional and business services.
* Wholesale retail.

The key exceptions to this were, as would be expected, lower spending on manufacturing by the visitor economy businesses which were compensated by higher spending on catering and food.

The scale of expenditure on these goods and services indicates the potential value of capturing as much of the supply chain as possible locally. Table 3.9 demonstrates the extent to which each sector sources its supply chain from within the sub-region. It shows particularly strong linkages in the visitor economy with less local capture of the supply chain value most evident in the specialist chemicals and process industries sector. The table also shows that, as expected, the ports and logistics sector is characterised by the most geographically dispersed customer base.

Table - Types of Goods & Services Purchased

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Supply Chain Element | Renewables | Ports & Logistics | Food manufacturing | Chemicals & process industries | Visitor Economy & Retail |
| Energy & utilities | 17.3% | 17.0% | 19.0% | 15.0% | 17.9% |
| Manufactured components & products | 14.3% | 13.0% | 7.9% | 11.5% | 6.1% |
| Financial & insurance services | 17.3% | 15.2% | 17.8% | 14.2% | 16.6% |
| Business or professional services; | 9.2% | 11.8% | 9.1% | 10.6% | 7.8% |
| Real estate services | 1.0% | 2.2% | 1.2% | 3.5% | 0.2% |
| Construction services | 6.1% | 2.5% | 2.0% | 4.4% | 2.0% |
| Wholesale retail goods | 8.2% | 6.5% | 10.3% | 8.8% | 14.9% |
| Retail services (high street) | 1.0% | 0.6% | 0.0% | 0.9% | 1.7% |
| Retail - other retail goods & services | 2.0% | 1.2% | 1.2% | 0.9% | 1.9% |
| Catering and food | 2.0% | 2.8% | 15.0% | 3.5% | 14.0% |
| Education & research | 6.1% | 5.9% | 3.2% | 5.3% | 2.8% |
| Public sector services | 3.1% | 1.5% | 1.2% | 1.8% | 1.9% |
| Leisure and tourism services | 0.0% | 0.6% | 1.2% | 0.0% | 6.0% |
| Logistics, freight service, storage & distribution services | 5.1% | 10.2% | 7.9% | 9.7% | 2.4% |
| Other transport services | 5.1% | 5.9% | 2.8% | 5.3% | 1.5% |
| Minerals & aggregates supply | 2.0% | 1.2% | 0.4% | 3.5% | 0.4% |
| Other | 0.0% | 1.9% | 0.0% | 0.9% | 2.0% |

Source: Hill Taylor & Atkins 2013. Atkins Ref: Survey –A13. Note: Figures do not add up to 100% because of small results being excluded

Table - Location of Suppliers & Clients

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Geography** | **Renewables** | | **Ports & Logistics** | | **Food manufacturing** | | **Chemicals & process industries** | | **Visitor Economy & Retail** | |
| **Customers** | **Suppliers** | **Customers** | **Suppliers** | **Customers** | **Suppliers** | **Customers** | **Suppliers** | **Customers** | **Suppliers** |
| Lincolnshire / Humber | 39.4% | 37.1% | 17.0% | 34.3% | 31.3% | 41.1% | 22.4% | 26.5% | 51.2% | 52.7% |
| Elsewhere in Yorkshire and Humber | 12.1% | 17.1% | 9.3% | 18.2% | 13.0% | 16.7% | 6.1% | 20.4% | 12.1% | 18.3% |
| **Local Area** | **51.5%** | **54.3%** | **26.3%** | **52.4%** | **44.3%** | **57.8%** | **28.6%** | **46.9%** | **63.3%** | **71.0%** |
| **UK** | **69.7%** | **88.6%** | **61.3%** | **79.7%** | **84.0%** | **77.8%** | **63.3%** | **79.6%** | **81.6%** | **95.7%** |
| Europe (other than UK); | 6.1% | 5.7% | 7.7% | 9.1% | 4.6% | 13.3% | 10.2% | 10.2% | 4.8% | 2.7% |
| USA; | 0.0% | 0.0% | 3.1% | 0.7% | 0.0% | 0.0% | 0.0% | 0.0% | 0.5% | 0.5% |
| China | 0.0% | 0.0% | 2.1% | 2.1% | 0.0% | 2.2% | 0.0% | 0.0% | 0.0% | 0.0% |
| Far East; | 0.0% | 2.9% | 2.1% | 1.4% | 0.0% | 1.1% | 2.0% | 2.0% | 0.0% | 0.5% |
| Other Worldwide locations | 6.1% | 2.9% | 7.7% | 7.0% | 1.5% | 5.6% | 8.2% | 8.2% | 1.4% | 0.5% |

Source: Hill Taylor & Atkins 2013. Atkins Ref: Survey –A17/K3: Figures do not add up to 100% because of small results being excluded

## Workforce & Skills

Businesses were asked whether or not their business is currently affected by any significant shortage in skills. Approximately 22% of all businesses stated they were currently experiencing skills shortages (Figure 3.4) with the issue being most pronounced in the *ports & logistics.* *Food manufacturing* was the sector which recorded the lowest incidence of perceived skills shortages which may reflect the extent to which the majority of labour in the industry is largely unskilled or semi-skilled. Compared to the national average of skill shortage vacancies (22%[[6]](#footnote-7)), some of the key sectors are notably at risk regarding the potential for a lack of critical skills acting as a potential constraint to future growth.

Figure - Skills Shortages Key Sectors – North East Lincolnshire

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A19

In terms of the type of skills being reported in shortage, these most frequently highlighted were: managerial proficiency skills; engineering expertise; basic literacy and numeracy; and driving skills. These skills shortages were identified by both the volume business survey and face-to-face interviews with business representatives.

## Business Growth Prospects

Surveyed businesses were asked the extent to which their workforces had increased, decreased or remained stable over the last three years. During this time, more businesses in all key sectors (with the exception of the visitor economy) recorded an increase in workforce than a decrease (see Table 3.10). Notable increases in employees occurred in the chemicals industry, ports and logistics and renewables and energy which reflect positively in terms of the growth potential of these sectors despite the effects of a deep recession. Less buoyant trends occurred in the visitor economy and food manufacturing which is indicative of the susceptibility of these sectors to changes in domestic demand.

Table - Change in Key Sector Workforce 2011-2014

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Movement | Renewables | Ports & Logistics | Food manufacturing | Chemicals & process industries | Visitor Economy |
| Increased | 35.0% | 36.2% | 17.5% | 42.9% | 18.1% |
| Decreased | 5.0% | 15.9% | 17.5% | 14.3% | 18.9% |
| Remained stable | 60.0% | 47.8% | 64.9% | 42.9% | 63.0% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A20

When asked about plans to invest or growth over the next five years, businesses reported the outlook in bullish manner (Figure 3.5). Indeed, over 50% of businesses in the chemicals, ports and renewables sectors anticipate they will expand or invest in growth over the next five years. Whilst interpretation of these findings should give due consideration to optimism bias, it is reasonable to report that the key sectors demonstrate a significant degree of confidence regarding the potential for future growth in North East Lincolnshire.

Figure - Plans to expand or invest in growth over next five years

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A21

Of the companies that indicated intentions to expand in the near future, over 30% identified that this would be reflected in workforce growth (see Table 3.11). Approximately 17% stated expansion would take place in terms of land and property expansion whilst a further 17% highlighted their intentions to invest in machinery and equipment.

Table - Focus of Growth for Expanding Companies

|  |  |
| --- | --- |
| Growth Area | % |
| Workforce expansion | 32.0% |
| Land and property | 17.3% |
| Machinery / Equipment | 16.9% |
| Marketing / Sales / More customers / Website | 15.4% |
| Skills and training | 11.3% |
| Energy efficiency | 2.3% |
| All areas | 0.8% |
| Research & Development | 0.8% |
| Infrastructure | 0.4% |
| Repair from floods | 0.4% |
| Stock | 0.4% |
| Transport | 0.4% |
| Don’t know | 1.9% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A20/B29. Note: Figures do not add up to 100% because of small results being excluded

Of those companies that identified skills & training as an area for future investment, training for drivers and managers, as well as enhanced engineering skills and apprenticeships were highlighted as priority areas.

Of those companies that expressed an intention to invest in land and property over the next five years, the highest proportion of businesses (31%) indicated that they would prefer to expand their operations on their current site.

Figure - Land & Property Needs

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A23

## Location Decision

All businesses were asked why they had chosen their current site to locate their business. Answers ranged across the sectors, highlighting the need for proximity to certain facilities (e.g. the port) and markets (either physical such as the fish market or more strategic access in terms of transport connectivity).

Table - Reason for Current Location

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Reason | Renewables | Ports & Logistics | Food manufacturing | Chemicals & process industries | Visitor Economy & Retail |
| Close to waterfront and / or port facilities | 3.6% | 22.3% | 14.5% | 12.5% | 4.0% |
| Proximity to other related businesses | 3.6% | 1.4% | 2.9% | 7.5% | 0.9% |
| Proximity to key suppliers | 0.0% | 4.3% | 7.2% | 2.5% | 1.3% |
| Proximity to key clients / markets | 17.9% | 5.8% | 10.1% | 15.0% | 17.0% |
| Affordable premises | 3.6% | 2.9% | 4.3% | 7.5% | 5.4% |
| Appropriate type of premises | 3.6% | 5.8% | 5.8% | 2.5% | 11.2% |
| Proximity to skilled workforce | 0.0% | 0.7% | 0.7% | 0.0% | 0.0% |
| Access to road network | 10.7% | 13.7% | 15.2% | 17.5% | 10.3% |
| Access to rail network | 3.6% | 1.4% | 1.4% | 5.0% | 0.9% |
| Access to sea transport | 0.0% | 10.8% | 6.5% | 7.5% | 1.3% |
| Good environment / quality of life | 0.0% | 1.4% | 5.1% | 0.0% | 5.4% |
| Was already established here / Existing business | 17.9% | 22.3% | 15.9% | 17.5% | 33.9% |
| Proximity to home / Work from home | 35.7% | 6.5% | 9.4% | 5.0% | 7.1% |
| Decision made at head office / elsewhere | 0.0% | 0.0% | 0.0% | 0.0% | 0.9% |
| Gap in the market | 0.0% | 0.7% | 0.0% | 0.0% | 0.0% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A24

The majority of firms surveyed across all key sectors identified their current site as a good and competitive location. This was especially prevalent amongst renewables and energy businesses (95%). As Figure 3.5 demonstrates, businesses in all key sectors judge North East Lincolnshire to be a place where they are confident they can prosper.

Figure - Good, Competitive Location?

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A25

Although there are a variety of reasons identified for why NE Lincolnshire is a competitive location, proximity to market and access to the road network accounted for the majority of responses. This reflects the importance of the Borough geographical position both in terms of access to international markets via the ports and to other parts of the UK via the national road network.

Table - Reasons why NEL is a competitive location

|  |  |
| --- | --- |
| Reason | % |
| Proximity to key clients / markets | 22.2% |
| Access to road network | 16.8% |
| Close to waterfront and / or port facilities | 14.8% |
| Good environment / quality of life | 10.0% |
| Proximity to key suppliers | 8.2% |
| Affordable premises | 6.4% |
| Access to sea transport | 6.1% |
| Appropriate type of premises | 5.8% |
| Proximity to other related businesses | 3.4% |
| Access to rail network | 2.5% |
| Nothing specific / Don't know | 1.8% |
| Lack of competition / Niche market | 0.7% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A25. Note: Figures do not add up to 100% because of small results being excluded

Table 3.14 highlights the main reasons highlighted by a relatively few number of businesses whey the area is not considered a competitive location. Key factors reflect issues of local accessibility and poor site and/or premises conditions.

Table - Reasons why NEL is not a competitive location

|  |  |
| --- | --- |
| Reason | % |
| Poor (local) accessibility | 24.1% |
| Lack of access to key clients / markets | 21.5% |
| Poor environment / quality of life | 15.2% |
| Expensive premises | 7.6% |
| Congestion | 5.1% |
| Industry in decline / closing down | 5.1% |
| Lack of suitable sites and premises | 3.8% |
| Lack of access to key suppliers | 3.8% |
| Lack of skilled labour / labour shortages | 2.5% |
| Competition from others | 2.5% |
| Nothing particular | 2.5% |
| Rates / energy prices too high | 1.3% |
| Lack of broadband | 1.3% |
| Poor roads | 1.3% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A25. Note: Figures do not add up to 100% because of small results being excluded

Businesses were asked whether they had already tried to relocate or considered operating elsewhere, but had been unsuccessful or decided to remain at their existing premises. Only 7% of businesses reported they had tried to re-locate in the recent past (see Figure 3.6). This could reflect the economic climate (e.g. difficulties in raising capital to move) but also satisfaction with the local area.

Figure - Incidence of Re-location by Firms

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A26

Of the small number of businesses that had tried to relocate, most had considered elsewhere in North East Lincolnshire whilst some had looked at Hull, Lincoln and parts of North Lincolnshire.

Businesses were asked whether or not there were any other notable location-related issues that have impacted on the efficient operation of their business (Table 3.15). They most frequent responses to this question included parking (16%) which is common across the country when such surveys are conducted.

Table - Other Location-Related Issues Impacting on Business Efficiency

|  |  |
| --- | --- |
| Issue | % |
| Not enough parking / parking costs | 16.1% |
| Planning restrictions | 5.2% |
| Poor roads / road links / access | 2.8% |
| Premises too small | 2.3% |
| Not enough custom / declining industry | 2.3% |
| Premises not suitable | 1.8% |
| Flooding | 1.0% |
| Usage restrictions | 0.8% |
| Crime / drug culture | 0.8% |
| Poor broadband connectivity | 0.8% |
| Council not investing in the correct areas | 0.8% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A27. Note: Figures do not add up to 100% because of those lower than 0.;8% being excluded

Ports & Logistics

# Ports & Logistics

The major ports of Grimsby and Immingham dominate the NEL’s port and logistics sector. Although the two locations are geographically distinct, the ports combined represent the UK's largest port by tonnage, handling up to 66 million tonnes of cargo each year.

**Port of Grimsby**

The Port of Grimsby is located just seven miles from the open sea, on the south bank of the River Humber and within easy reach of many urban areas. The port is owned by Associated British Ports (ABP) and is one of the UK's major car import terminals with dedicated roll on/roll off berths and a new £23m two-berth river accessed facility which can handle vessels carrying up to 3,000 vehicles. The Port is also important in providing access to offshore renewables activities and handles a variety of other goods including fresh and perishable produce (e.g. fish), dry bulks, forest products and agri-bulk products.

**Port of Immingham**

The Port of Immingham is 7 miles north of Grimsby and is also owned and operated by ABP. Immingham accounts for the majority of trade being handled by the two NEL ports. Handling approximately 20 million tonnes of oil and 10 million tonnes of coal, Immingham also facilitates significant freight services including containers, ro-ro berths, forest products, general cargo, liquid bulks and steel.

**Ports of Hull and Goole (outside of North East Lincolnshire, on North Bank of Humber Estuary)**

ABP also own the ports of Hull and Goole. The Hull facility will provide the site for the Hull Green Port project, which will accommodate a planned Siemens offshore wind turbine manufacturing and assembly facility, aimed primarily at serving the Round 3 offshore windfarms. Hull is building on its strong market position in handling forest products from Scandinavia and other bulk commodities. Goole, the UK's most inland port, continues to support logistics through key distribution centres and proximity to Leeds, Sheffield, and Manchester.

**ABLE Marine Energy Park (North Lincolnshire**)

When completed, ABLE Marine Energy Park (AMEP) will offer substantial multi-user facilities for the manufacture, storage, assembly and deployment of next generation offshore wind turbines (OWTs) and their associated supply chain(s). Recently approved, AMEP is to be located on the south bank of the Humber, adjacent to the Humber Sea Terminal. Alongside Hull Green Port, AMEP will potentially contribute to the development of the Humber as an offshore renewable industry cluster of global importance, as proximity to the North Sea allows access to the largest offshore wind market in the world. In conjunction with AMEP, the ABLE Logistics Park (ALP) is also planned. This site offers 1,230 acres of waterside land with full planning permission for the creation of extensive warehousing, external storage and transportation depots.

**Humberside Airport**

NEL is located in close proximity to Humberside Airport. Driven by the offshore market, the airport is the largest in England for helicopter journeys and has three of the largest UK helicopter operators based at the airport. There are regular scheduled flights to Aberdeen and Amsterdam Schiphol, with new charter services to other European destinations (Scandinavia). The connectivity provided by the airport is important for serving business associated with the renewables and other port-related sectors in the Humber sub-region.

### Sector Size

Based on IDBR data, the port and logistics sector in NEL comprises approximately 230 firms employing almost 5,000 people (around 5% of NEL’s total labour market). Whilst there are some large employers, the sector still has a high proportion of businesses which employ less than 20 workers (77%). Many of these small businesses will be providing vital support services to port and transport operations including haulage, storage, cargo handling, shipping services and stevedoring.

Table - % of Firms by Employment Size Band

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Size | a. 0-10 | b. 11-20 | c. 21-50 | e. 51-100 | f. 101-250 | g. 250-500 | h. 500+ | Total |
| Port & Logistics | 62.6% | 15.2% | 12.2% | 5.2% | 3.9% | 0.4% | 0.4% | 100% |
| NEL Economy | 76.4% | 10.2% | 8.4% | 2.8% | 1.5% | 0.6% | 0.2% | 100% |

Source: IDBR 2013

### Sector profile

Our statistically significant empirical survey of established businesses in the area provides a direct empirical insight into the characteristics of the local economy. The following provides a summary of findings from the business survey for the sector with full details being presented in Appendix B.

**Output**

Results from our sample survey indicates that the port and logistics sector contributes approximately £632 million to the local economy, equivalent to approximately 21% of total NEL GDP (£3,021 million).

Table - Port & Logistics Economic Contribution

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sector | GDP | Total Purchases | Payroll | Land or property | Gross Profit | GVA |
| Ports & Logistics | £ 632,181,800 | £258,983,800 | £159,428,300 | £68,886,000 | £167,419,200 | £326,847,500 |
| All Key Sectors | £1,740,618,300 | £687,591,325 | £464,748,498 | £182,392,375 | £448,059,002 | £912,807,499 |

Source: Hill Taylor & Atkins 2013. Atkins Ref: Survey – A5.1/L20.

**Employment**

The sector contributes significantly to local and sub-regional employment, providing almost 5,000 direct local jobs[[7]](#footnote-8). The survey indicates that in addition, the sector supports around 5,730 indirect jobs across the whole economy with a further 2,890 induced through expenditure of income into the economy. Overall, the survey indicates that the ports and logistics sector in NEL supports a total of approximately 15,300 jobs.

Table - Key Sector Employment Summary – Ports & Logistics

|  |  |
| --- | --- |
| Geography | Ports & Logistics |
| **Direct Jobs** |  |
| North East Lincolnshire | 4,820 |
| **Indirect Jobs** |  |
| N.& N.E Lincolnshire & Humber | 2,580 |
| Elsewhere in Yorkshire and Humber | 1,830 |
| Outside L/H | 3,140 |
| **Total** | **7,550** |
| **Induced** |  |
| N.& N.E Lincolnshire & Humber | 990 |
| Elsewhere in Yorkshire and Humber | 700 |
| Outside Yorkshire | 1,200 |
| **Total** | **2,890** |
| **Total** | **15,260** |

Source: Atkins 2013. Atkins Ref: Survey –A9-A11. Figures rounded.

**Supply chain**

In order to capture empirically based estimates of the economic contribution of each sector to the NEL economy, survey respondents were asked to provide a breakdown of turnover into broad categories of purchases (supply chain), payroll, rents and gross profit.

Table - Breakdown of Annual Turnover

|  |  |
| --- | --- |
| Turnover | Ports & Logistics |
| Total Purchases | 41.0% |
| Payroll | 25.2% |
| Land property (rents) | 10.9% |
| Gross Profit | 22.9% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A14

Given that 41% of turnover from the NEL ports and logistics sector is devoted to purchases, this indicates the importance and scale of the supply chain in the sector. The following table highlights the diversity of expenditure made by the ports and logistics sector across a range of economic activities. This demonstrates how the ports and logistics sector is particularly important in supporting job creation in a wide range of other sectors, most notably energy and utilities, financial and insurance services, business and professional services and distribution and warehousing.

Table - Types of Goods & Services Purchased

| **Purchases** | **Ports & Logistics** |
| --- | --- |
| Energy & utilities | 17% |
| Financial & insurance services | 15.2% |
| Manufactured components & products | 13% |
| Business or professional services; | 11.8% |
| Logistics, freight service, storage & distribution services | 10.2% |
| Wholesale retail goods | 6.5% |
| Education & research | 5.9% |
| Other transport services | 5.9% |
| Catering and food | 2.8% |
| Construction services | 2.5% |
| Real estate services | 2.2% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A13

Significantly, a high proportion of suppliers are from the Yorkshire and Humber region (52.4%), whilst the proportion is significantly lower for the customer base (26%). It also shows how important businesses in Europe are as suppliers and the export economic values of these activities in this sector are to local suppler businesses.

Table - Location of Suppliers & Clients

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | Lincolnshire / Humber | Elsewhere in Yorkshire and Humber | Region | UK | Europe (other than UK); | USA; | China | Far East; | Other Worldwide locations |
| **Ports & Logistics** | **Customers** | 17.00% | 9.30% | **26.30%** | **61.30%** | 7.70% | 3.10% | 2.10% | 2.10% | 7.70% |
| **Suppliers** | 34.30% | 18.20% | **52.40%** | **79.70%** | 9.10% | 0.70% | 2.10% | 1.40% | 7.00% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A17/K3

**Skills**

Across all key sectors, 22.4% of businesses identified skills shortages. However, for ports & logistics, the incidence of skills shortages was significantly higher, at 42%. This reinforces the findings of the detailed interviews with businesses which identified key skills to be in particularly short supply relative to demand (such as engineering and driving). Evidence was provided by businesses to indicate that they are investing to overcome skills constraints through, for example, technology (e.g. GPS and stock monitoring) and working more closely with local colleges (e.g. through apprenticeships).

**Future Prospects**

Over the past 3 years the majority of firms (48%) in the ports and logistics sector stated that their workforce numbers had remained relatively stable. Significantly, 36% recorded an increase. Taken together, these findings suggest the sector has demonstrated considerable resilience throughout the economic downturn.

Table - Size of Workforce

|  |  |
| --- | --- |
| Movement | Ports & Logistics |
| Increased | 36.2% |
| Decreased | 15.9% |
| Remained stable | 47.8% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A20

Looking forward, the majority of firms (61%) are planning to invest to enable expansion which reflects positively on business optimism in the sector.

In terms of challenges, key constraints to competitiveness highlighted by the survey included local road network congestion around the port, competition from other UK ports and poor quality premises. Location-specific issues that negatively impacted business operations included off-port planning restrictions, poor roads and HGV parking problems.

### Economic Linkages & Supply Chain

The sector is well integrated with other key sectors, especially food processing (e.g. through import of raw materials and export of products), renewables (e.g. access to sea and offshore windfarms) and chemicals and process industries (e.g. import of bulk goods). It also enjoys close links to other important activities including construction (e.g. import of wood and steel products), the wider manufacturing sector (e.g. import of machinery and export of cars) and energy sectors (e.g. coal).

Examples of cross-sector linkages are highlighted below:

* Port operator – ABP’s ownership of all ports on the Humber means that they are the single most important organisation in this sector. Their investment into facilities and positive contribution to the local and regional economy is of high importance to the local economy. ABP directly employs 400 people whilst the combined port community directly employs some 4,700 people and estimates suggest that some 15,000 jobs rely on the local ports and transport sector within the Humber sub-region area[[8]](#footnote-9).
* Ro-Ro freight – A range of operations use ABP ro-ro facilities at Immingham and Grimsby including importing and exporting car companies such as Volkswagen and Toyota. Companies which provide added value and logistics solutions include DFDS and GBA Group.
* Distribution – A range of distribution and transport companies in the local area play a key role in transporting goods, materials and products to and from the dock sites. These include sector-specific businesses, such as Quayside and ACS & T (frozen foods), DB Schenker Rail (steel and coal) and East Trans (Manufacturing).
* Power stations and refineries - Key assets in and around the area include Drax Power Station (Selby), Ferrybridge power station (Ferrybridge), Eggborough Power Station (Goole) and the Lindsey and Humber refineries (Killingholme/Immingham). These are destinations for a significant amount of bulk materials from the Port of Immingham.
* Storage and warehousing – The area has a significant amount of temporary storage for materials or products. This is most evident in the shifting numbers of cars which are visible on the Grimsby Dock site. Key companies include DFDS, GBA, Simon Storage and Immingham Transport (pallet goods).
* Logistics solutions (e.g. port and shipping agents) – A number of companies including Arthur Smith, GBA Group and Inchscape play an important role in providing a range of logistics solutions including brokering, stevedoring, operating, chartering and forwarding. Furthermore, there is a range of related supply chain activities including administration, recruitment, solicitors, accountants with a specific logistics and port focus.
* Multi-modal transport – This sees the transportation of goods and products using more than one transport method. This has been effectively utilised by companies such as DFDS and Samskip using sea vessel and truck movements to get products moved effectively.
* Manufacturers – There is a range of key manufacturers which make use of ports to export products and import materials including TATA steel at Scunthorpe and Toyota in Derby.

### Local Strengths

Economic strengths in this sector were explored through secondary data and consultation with local businesses and stakeholders. Using location quotients (LQs) as a statistical measure, these show the relative concentration of employment within a sub-sector compared to national averages. The higher the figure, the more concentrated this industry’s employment is compared with the national economy. A measure of 1 indicates the sector’s local representation is similar to the national average.

This analysis indicates that NEL has strengths in:

* Cargo handling for water transport activities – Economic activities within this sub-sector include loading and unloading of goods or passengers' luggage travelling via water transport, and stevedoring.
* Service activities incidental to water transportation – There are a variety of economic activities in this sub-sector and many are related to water transport of passengers, animals or freight:
* Operation of terminal facilities such as harbours and piers.
* Operation of waterway locks etc.
* Navigation, pilotage and berthing activities.
* Lighterage, salvage activities.
* Lighthouse activities.
* Repair of machinery – Although this is related to many sectors it includes welding repair services (e.g. automotive) and the repair of heavy and industrial machinery and equipment (e.g. forklifts and other materials handling equipment, machine tools, commercial refrigeration equipment, construction equipment and mining machinery). Many repair activities are therefore related to logistics activities.

Table - Employment LQ Analysis - Ports & Logistics

|  |  |
| --- | --- |
| Sector activity | Emp LQ |
| 52241 : Cargo handling for water transport activities - | 31.8 |
| 52220 : Service activities incidental to water transportation | 22.0 |
| 33120 : Repair of machinery | 13.1 |
| 52290 : Other transportation support activities | 6.8 |
| 49410 : Freight transport by road | 2.5 |
| 49390 : Other passenger land transport not else classified. | 1.6 |
| 52103 : Operation of warehousing and storage facilities for land transport activities - | 1.2 |

Source: BRES 2013

### Economic Trends

Firm numbers in ports & logistics have seen a small fall between 2009 and 2013 (approximately 20 businesses). However, despite these losses employment within the sector has risen over the same period which indicates overall confidence in the sector.

Figure - Port & Logistics Firm Trends (2009-2013)

Source: IDBR 2013

Despite a decline in firm numbers, employment change has exhibited a decline between 2009 and 2010, little change between 2010 and 2012 and a rise of approximately 250 between 2012 and 2013. The small changes experienced in employment and firm numbers suggests that the sector has been resilient to the recession over the past 3-4 years. Recent improvements in employment trends suggest that economic recovery is being realised and the sector is well placed for further growth over forthcoming years. As already highlighted, this conclusion was supported by consultation with local businesses.

Figure - Port & Logistics Employment Trends (2009 - 2013)

Source: IDBR 2013

### Competition

Competition in the port and logistics sector across Europe is strong[[9]](#footnote-10). The OECD indicates that port competition plays an important role in determining the final prices of many products[[10]](#footnote-11). There are 120 commercially active ports in the UK, of which 52 are categorised as major ports (ports that handle at least 1 million tonnes of cargo).

Although the Humber is viewed as a distinct geographic market, all ports need to constantly develop their offer to ensure they remain competitive. Although by far the largest handler of many products, Grimsby and Immingham’s main competition is Dover for ro-ro freight, with facilities at the Port of London, London Thamesport and Peel Ports also providing some competition and the potential for more advantageous proximity to markets. Grimsby and Immingham also face competition for liquid bulk from Forth ports, Teesport and Milford Haven.

Developments at ports such as Liverpool’s £350 million deep water container terminal and the proposed Liverpool 2 development will provide new competition for Grimsby and Immingham as logistics firms seek to reduce costs. Competition also exists from other ports such as Hartlepool, Teesport, Port of Tyne, Ellesmere and Southampton. Forecasts prepared for the Department for Transport suggest that demand for port services is likely to grow by an average of 1% per year until 2030. Remaining competitive is therefore especially important given that activity is forecast to increase. This has been seen in some of the developments by ABP at Grimsby and Immingham, including:

* New £25 million investment to develop a two-berth river terminal capable of handling vessels carrying up to 3,000 vehicles.
* State of the art Humber International Terminals (1 & 2).
* Dock gate improvements at Port of Grimsby
* Deepwater channel
* Further planned development of ABP Business Park at Immingham including £75m on new bulk silos.

NEL is strongly positioned to remain one of the leading port and logistics clusters in the country. However, concerns were raised during consultation regarding:

* Vision for the ports and local area – Some businesses expressed the view that other areas are more inventive and ‘aspirational’ in their plans for ports, new facilities and future investment. It was felt that although the ABLE Marine Park represents a substantial opportunity, continual investment is required so that other ports do not challenge Grimsby and Immingham’s strong position in the UK’s port hierarchy.
* Capacity of land – Concern was raised regarding the quantity and quality of land available for future development for port and closely related activities. This is particularly the case close to the Humber River where the amount of land is restricted and space is needed for storage and access to vessels. Many port activities are ‘land hungry’ and require lots of space for materials, storage and other infrastructure. One respondent indicated that the ratio between space and employment can be as low as 1.3 jobs per acre for port activity.
* Ownership – It was highlighted by a number of businesses that single ownership of Humber’s portfolio of ports is perceived to give rise to relatively high prices for port access and the use of critical port infrastructure.

### Prospects for the sector

The evidence gathered during this study indicates that prospects for the ports and logistics sector are positive. Key drivers behind this optimism include the following:

Government policy is strong in supporting investment in ports and related infrastructure.

The UK has limited alternatives to sea transport for the movement of bulky commodities and materials. Air freight is often used for high-value and express items and the Channel Tunnel can also carry goods but is restricted by capacity. As a consequence, ports and associated logistics infrastructure will continue to provide the most effective way to transport goods to and from the UK. The opportunities for increased short-sea freight shipping connections is also a driver of potential demand over the next 10 years.

Recent investment in port infrastructure is driving expansion in local economic activity in other directly and indirectly related sectors.

The area has strong transport links with roads connecting the area to Yorkshire and the North West. Improvements such as better access to the A180, deregulated roads, road surface upgrades and connections to Lincoln were seen as supporting this.

The sector will be further strengthened by substantial investment and developments at Hull Green Port, ABLE Marine Energy Park and ABLE Logistics Park. These will help consolidate the critical mass necessary to ensure that the Humber remains the single most important cluster of port, renewables and chemicals activity in the UK.

Technological advancement is a central driver to the sector’s future growth and diversification prospects.

Smart logistics: NEL is well placed to take advantage of market opportunities driven by having well integrated logistics systems. These range from multi-modal opportunities to reverse logistics and third-party logistics.

### Challenges

Key challenges and potential constraints to growth and diversification in the sector include:

1. Shortage of waterside land and suitable land outside port areas. The land-hungry nature of most port activities (such as the import of cars) reflects the need to find sufficient land to accommodate any growth in demand. In addition to a full assessment of land availability options through the Local Plan process there is an increasing need to consider how more efficient use of port land can be achieved, for example, through multi-storey car storage to increased rail freight usage.
2. The sector faces skills shortages including both professionals and technicians in the engineering disciplines and semi-skilled workers such as HGV drivers with the required certification and skills (e.g. low carbon driving, customer friendly).
3. The general quality of port-related commercial and industrial areas is perceived by many as poor. This may act as a constraint to the operations of some existing businesses and deter the attraction of new businesses.
4. Concentration of port ownership in the sub-region is perceived by some as a challenge to expansion and diversification of small businesses.
5. There are some environmental challenges relevant to port activities. This includes new EU legislation[[11]](#footnote-12) which is driving technical modifications to reduce sulphur emissions in seafaring vessels. This may impact on the type of vessels that can be used and is likely to increase operational costs.

Food Processing

# Food Processing

Food, and particularly fish, processing is strongly established in the culture, economy and society of NEL[[12]](#footnote-13). Grimsby in particular has a long heritage in producing seafood (and food) products from local catches and more recently from seafood imports and the harvest of nearby agricultural land. The seafood industry, which thrived in Grimsby between the mid 1800s and 1900s, has now expanded to incorporate other food processing activities. The Grimsby fish processing sector is recognised as one of the most significant industrial clusters in the UK. As such, it has been referred to as “Europe’s Food Town”.

Fish consumption in the UK has risen steadily since the 1970s and is now a multi-billion pound industry in the UK. Four out of five households consume seafood at least once a month and total purchases of seafood in the UK were worth £5.6 billion in 2011. There is an established trend of steadily growing market demand whilst overall supply of fish and fish products by volume have been falling. This demand-supply imbalance is reflected in significant increases in the wholesale price of seafood and rising food prices in general[[13]](#footnote-14).

Since the 1960s, there have been huge changes in the way in which raw food materials (especially fish) are converted into food products, the way products are marketed and the way consumers buy and use them. The market for fish is highly competitive and processors are constantly under pressure to reduce costs, stimulate demand and improve the end product. This is often difficult to do using traditional practices, and so the industry has developed innovative processing methods. There is confidence in Grimsby that the industry will maintain its dominance and potentially grow.

It is felt by many businesses that the future of NEL will also be linked to fish. As the brief economic history above explained, the area had previously been central to the UK’s maritime and fishing economy, with trawlers landing their catch at the docks. The legacy of this historic role is evident in the current NEL economy with:

* Key businesses in the fish processing industry like Young’s and Icelandic Seachill.
* Key assets like the Grimsby Fish Market and training facilities at Grimsby Institute for Further Education.
* A workforce with skills in seafood processing and preparations.
* A supply chain which supports the industry and specialist businesses that contributes to the economic future of the industry.
* Links with other seafaring nations like Norway and Iceland.

### Sector Size

The sector accounts for some of the largest employers in NEL: for example, Young’s employ approximately 1,800 people in the Humber area. In 2013, the sector employed approximately 4,100 people across 90 firms. The industry has a smaller proportion of SMEs and micro-businesses compared to the other 4 key sectors which reflects the importance of relatively large firms in the sector (see Table 5.1).

Changes within large companies can therefore affect the overall employment levels for the sector. There are a large proportion of employees that can be affected by structural changes within a firm. Furthermore, there are important headquartered firms in the local area: Youngs, for example, generates jobs in other areas of the county with processing activities, transport and other functions based around the UK.

Table - % of Firms by Employment Size Band

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Size (employees) | 0-10 | 11-20 | 21-50 | 51-100 | 101-250 | 250-500 | 500+ | Total |
| Food Processing | 63.6% | 8.0% | 12.5% | 3.4% | 3.4% | 9.1% | 0.0% | 100.0% |
| Whole NEL Economy | 76.4% | 10.2% | 8.4% | 2.8% | 1.5% | 0.6% | 0.2% | 100.0% |

Source: IDBR 2013

It should be highlighted that employment in the sector can be subject to notable variation according to fluctuations in consumer demand and factors related to seasonality. This volatility requires a flexible labour market to accommodate part-time, seasonal and short-term contract work.

### Sector Profile

The following provides a summary of the key economic features of the sector. Further details are set out in Appendix B.

**Output**

Based on the business survey sample, we estimate that the sector contributes approximately £240 million to economic output. This is equivalent to approximately 8% of NEL’s GDP (£3,021 million).

Table - Food Processing Economic Contribution

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Sector | GDP | Total Purchases | Payroll | Land or property | Gross Profit | GVA | GVA % of GDP |
| Food manufacturing | £239,775,500 | £120,587,095 | £40,854,056 | £28,293,509 | £60,971,484 | £101,825,541 | 42.5% |
|  | | | | | | | |
| All key sectors | **£1,740,618,300** | **£687,591,325** | **£464,748,498** | **£182,392,375** | **£448,059,002** | **£912,807,499** | 57.4% |

Source: Hill Taylor & Atkins 2013. Atkins Ref: Survey – A5.1/L20.

**Employment**

The sector contributes significantly to local, sub-regional and regional employment by providing just over 4,100 direct local jobs[[14]](#footnote-15). In addition, we estimate that the sector supports a further 1,500 indirect jobs across the whole economy as well as approximately 410 induced jobs.

Table - Key Sector Employment Summary – Food Processing

|  |  |
| --- | --- |
| Geography | Food Processing |
| **Direct Jobs** |  |
| North East Lincolnshire | 4,100 |
| **Indirect Jobs** |  |
| N.& N.E Lincolnshire & Humber | 600 |
| Elsewhere in Yorkshire and Humber | 390 |
| Outside L/H | 510 |
| **Total** | **1,500** |
| **Induced** |  |
| N.& N.E Lincolnshire & Humber | 160 |
| Elsewhere in Yorkshire and Humber | 110 |
| Outside Yorkshire | 140 |
| Total | 410 |
| **Total** | **6,010** |

Source: Atkins 2013. Atkins Ref: Survey –A9-A11. Figures rounded.

**Supply chain**

Turnover within the sector is split between purchases, payroll, land and property. As with ports and logistics, the breakdown demonstrates that purchasing represents a high proportion of total turnover. Payroll costs are relatively low which indicates a low wage sector with a high number of unskilled workers. Despite the skills profile of the sector, the importance of the food processing industry in NEL in providing local job opportunities should not be understated.

Table - Breakdown of Annual Turnover

|  |  |
| --- | --- |
|  | Food processing |
| Total Purchases | 50.3% |
| Payroll | 17.0% |
| Land property | 11.8% |
| Gross Profit | 25.4% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A14

Key supply chain activities (in terms of expenditure) include energy & utilities (19%) reflecting costs associated with running machinery, using water and waste water. Financial and insurance services (17.8%) are also important and there are a range of local firms who provide specialist support and services to the sector. The significance of catering and food purchase is also important (15%), as it demonstrates the importance of inter-industry trading in the sector.

Table - Types of Goods & Services Purchased

|  |  |
| --- | --- |
| **Supply Chain Element** | **Food processing** |
| Energy & utilities | 19% |
| Financial & insurance services | 17.8% |
| Catering and food | 15% |
| Wholesale retail goods | 10.3% |
| Business or professional services; | 9.1% |
| Manufactured components & products | 7.9% |
| Logistics, freight service, storage & distribution services | 7.9% |
| Education & research | 3.2% |
| Other transport services | 2.8% |
| Construction services | 2% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A13

A high proportion of suppliers are from the Humber area or wider region (57.8%), reflecting in particular the established nature of the supply base around Grimsby. Given that Grimsby supplies fish and other food products to most of the UK’s supermarkets, it is not surprising that a lesser proportion of customers are based locally (44%). Nevertheless, the degree of local customer concentration remains high, again demonstrating the importance of inter-dependence between local businesses in the sector.

Interestingly, exports are low with only 4.6% of customer purchases being based in Europe and a further 1.5% in other worldwide locations. A higher proportion of suppliers are from Europe compared to other key sectors which indicates the extent to which fish is imported to Grimsby for processing and onward distribution to the UK market.

Table - Location of Suppliers & Clients

|  |  |  |
| --- | --- | --- |
|  | Food Processing | |
| **Customers** | **Suppliers** |
| Lincolnshire / Humber | 31.3% | 41.1% |
| Elsewhere in Yorkshire and Humber | 13.0% | 16.7% |
| **Local Area** | **44.3%** | **57.8%** |
| **UK** | **84.0%** | **77.8%** |
| Europe (other than UK); | 4.6% | 13.3% |
| China | 0.0% | 2.2% |
| Far East; | 0.0% | 1.1% |
| Other Worldwide locations | 1.5% | 5.6% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A17/K3

**Skills**

A relatively low proportion of firms identified skills shortages in the sector (12.3%), which reflects the low skills profile of the sector. However, in addition to providing employment for large number of unskilled workers in the area, it is important to highlight the role played by key organisations and training bodies in the area, such as the Grimsby Institute, in ensuring an adequate supply of skilled workers.

**Future Prospects**

Over the past 3 years the majority of businesses (64.9%) have remained stable in terms of workforce. This is positive given the extent of consolidation within in the sector, which has occasionally resulted in high profile job losses, and demonstrates the resilience of the cluster in adapting to rapidly changing economic circumstances.

Table - Size of Workforce

|  |  |
| --- | --- |
| Movement | Food processing |
| Increased | 17.5% |
| Decreased | 17.5% |
| Remained stable | 64.9% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A20

Looking forward, around 37% of businesses in the sector are planning to invest to enable growth. Very few businesses (around 4%) were seeking to relocate, highlighting the strength of the area in this industry and the commitment to keeping operations in Grimsby. A high proportion of businesses surveyed (84.2%) felt that the local area was a strong and competitive location with other key locational advantages including proximity to key clients and markets (18.4%) and access to the road network (22%).

### Economic Linkages & Supply Chain

**Processing**

A range of firms across the area are involved in processing foods which can be divided into primary and secondary activities:

* Primary processes include cutting, filleting, picking, peeling, washing, chilling, packing, heading and gutting.
* Secondary processes include brining, smoking and cooking. Some smoking businesses, such as Alfred Enderby Ltd and Jaines & Son, have been awarded Protected Geographical Indication (PGI).

**Packaging**

Many firms are engaged in both packaging food and the provision of packaging materials. These activities include packaging for transit as well as for sale to consumers. Developments in ‘green’ packaging are reducing costs and wastage as well as leading to less debris around employment sites.

**Logistics**

Specialist providers of logistics for the food industry offer chilled or frozen transport options for products. Companies in this sector offer a diverse range of services and capacities, yet increases in home delivery and multimodal and reverse logistics are placing considerable pressure on the market. The market leader of temperature-controlled transport in the UK is Quayside, whose operations include international distribution and are headquartered in Grimsby. The Humberside airport is also expected to play an important role in the future as it reduces travel time and strengthens the transport connections to key markets.

**Fishing Companies and Traders**

Despite the industry’s historical legacy, very few trawlers exist in Grimsby today. As a result, the UK exports most of its catch and imports much of the fish it consumes. Key imports include:

* + Cod, haddock, pollock and other demersal/whitefish from Iceland, Norway, the northern USA and Canada, as well as part-processed whitefish from these locations via China.
  + Salmon from Norway, Scotland and the Faroe Islands.
  + Warm-water prawns from Thailand, Indonesia, India and East Asia.
  + Exotic species such as: sea bass from Greece and Turkey; pangasius from Vietnam; tilapia and Nile perch from the East Asia; and tuna from Mauritius, Ghana and the Seychelles.
  + Cold-water prawns from Greenland and Canada.

**Support activities**

Key activities include:

* Accountancy and finance – Delivery of accountancy and finance support to firms in the local area including payment of wages (e.g. weekly), bookkeeping and VAT/tax control. Often these will have specific knowledge of the market, seasonality of work and cashflow management techniques associated with the work.
* Legal – As a highly regulated industry, food has specific guidelines connected to safety and hygiene. There are also services connected to legal advice on aspects of domestic and European fisheries legislation.
* Engineering and maintenance – A range of providers of specialist engineering and maintenance play an important role in keeping machinery working and fixing issues with technology throughout food processing plants. This has resulted in a particular local specialism in refrigeration technologies. As the industry moves forward this is seen as an increasingly important service as the industry increases its use of technology driven by the need to reduce costs and respond to markets.
* Research and development – Research and development is undertaken within firms and public sector institutions such as the Humber Seafood Institute and Grimsby Institute's Food Refrigeration & Process Engineering Research Centre (FRPERC). Many of these have been key in developing new products (e.g. fish fingers or Saucy Fish©), refrigeration methods (e.g. energy saving methods) and the use of co-products (JHS Fish Ltd’s use of Cod heads, trimmings and backbones).

**Tourism and the visitor economy**

Given the history of the area, the food processing sector supports a number of important heritage and visitor attractions connected with the fishing industry (e.g. Grimsby Fishing Heritage Centre), built landscape features (e.g. Grimsby Dock Tower), cultural activities including plays and festivals and events such as the Fish Craft Championships. The sector also supports a high level of business tourism as business people attend meetings in the local area, staying in local accommodation and spending money on food and drink.

**Knowledge Transfer and Collaboration**

The fish processing industry in NEL benefits from well established and robust networks which support the sector’s positioning in the UK market. Key factors highlighted during the study included:

* Entrepreneurship and enterprise – local business leaders have a strong allegiance with and commitment to the area. Consequently, the skills and knowledge of key individuals and firms have largely remained in the area and many new spin-off companies have been established as a result.
* Technological expertise – Workers across the sector are reported to be aware of new technological developments and equipment being used and typically share knowledge over the operations and suitability of machinery.
* Market information – Linkages between companies helped to share information about changes to market conditions, growth markets and trends. For example, decline in ready meals and growth in certain packaged foods.
* Formal networking – A range of local, sub-regional and national formal networking groups exist. The platforms and aims of these groups varies but their information sharing and linkage building capacities are clear (for example, the Fish Merchants Association provides governmental lobbying and networking opportunities).
* Research & development – The industry benefits from close linkages with the Grimsby Institute of Further Education and some its faculties such as the Food Refrigeration and Process Engineering Research Centre.
* Staff recruitment – Workers are aware of employment opportunities and able to identify suitable prospects. In the case of past redundancies, many other workers found employment within other food manufacturing operations.
* Policy and regulation – Linkages with bodies such as the Marine Management Organisation and Seafish supports a stronger understanding of strategic and regulatory developments.

### Local Strengths

The Grimsby food processing industry represents the largest fish-processing cluster in Europe and possibly the world. The Cluster Mark Awards identified the cluster’s strengths of entrepreneurial dynamism, innovation, skills base and level of internationalisation.

Using location quotient ratio measured against national averages, Table 5.8 highlights the particular importance of the fish-processing sector in NEL.

Table - Employment LQ Analysis – Food Processing

|  |  |
| --- | --- |
| Industry | North East Lincolnshire |
| 10200 : Processing and preserving of fish, crustaceans and molluscs | 174.46 |
| 10720 : Manufacture of rusks and biscuits; manufacture of preserved pastry goods and cakes | 8.56 |
| 28930 : Manufacture of machinery for food, beverage and tobacco processing | 8.28 |
| 22220 : Manufacture of plastic packing goods | 5.50 |

Source: BRES 2013

### Economic Trends

NEL is home to approximately 70% of all fish processing companies in England. Reflecting a downturn in consumption demand, the sector experienced some consolidation amongst businesses during the recession.

Despite challenging macro-economic conditions, the number of food processing firms has remained fairly stable between 2009 and 2013.

Figure - Food Processing Firm Trends (2009 - 2013)

Source: IDBR 2013

Following a drop in food processing employment between 2009 and 2011, employment has remained comparatively stable, yet not returned to 2009 levels.

Figure - Food Processing Employment Trends (2009 - 2013)

Source: IDBR 2013

### Competition

Key competitor locations in the UK for food processing include parts of Wales, the Midlands and particularly the north east of Scotland, which has benefited from the expansion of aquaculture, proximity to market for some species and strong political support. There is also competition from locations outside the UK, such as Boulogne in France.

Fish is considered to be an expensive protein (in comparison with other animal proteins) and therefore demand, both in terms of quantity and for particular species, varies with macroeconomic conditions. Consequently, short-term peaks of increased competition are a feature of the food manufacturing industry

As a consequence of low profit margins, competition and a need to reduce costs, some businesses have relocated to other countries. However, many remain optimistic about Grimsby’s future because of the high standards that must be met in serving the UK food market.

### Prospects for sector

Grimsby remains a principal location for fish processing in Europe, and local firms continue to innovate and keep ahead of the market.

The food processing cluster in Grimsby supports the sharing of knowledge and technologies. This makes an important contribution to improving competitiveness, nurturing new firm formation (through facilities like Seafood Village), the ability to influence policy (e.g. Grimsby Fish Merchants Association) and stimulating innovation (e.g. firms supplying new markets or innovative business models).

Developments in the global food market mean that international consumption patterns are changing. Companies stated that emerging BRIC economies will drive future fish demand. This could result in a number of possible impacts, including operations relocating to these countries and the restriction of domestic supply.

Despite the perception that there is little UK government support for the industry, it is believed that strong linkages with the agricultural technologies sector in Lincolnshire will be able to support the sector’s ambitions for growth. The government’s aim is for[[15]](#footnote-16):

*“the UK to become a world leader in agricultural technology, innovation and sustainability; exploits opportunities to develop and adopt new and existing technologies, products and services to increase productivity; and thereby contributes to global food security and international development.”*

This may provide a key role for firms in the food processing sector across NEL to contribute to “sustainable intensification”; producing more output with reduced inputs and environmental impact.

Innovation will be central to the heart of many industries, not least the fish-processing sector. Maintaining and investing in on-going innovation, new technology and R&D will be essential to ensure that Grimsby retains its competitive position in the UK market.

Of equal importance is the need to maximise the opportunities presented by supplying a well-educated and skilled workforce to sustain Grimsby’s pre-eminence in the sector. The Grimsby Institute plays a major role in this regard and continually improving linkages with private training providers and specialist units such as the University of Lincoln’s National Centre for Food Manufacturing will be important.

### Challenges

The key challenges to the sector are discussed below.

Protectionist policy in Norway and Iceland can lead to supply constraints or increased costs. Strong leadership from the sector and lobbying by local businesses and political leaders has resolved these disputes previously and also contributed to improvements in relationships between countries.

The local fish industry developed at a time preceding concern regarding environmental impacts. In the modern climate, environmental issues are at the forefront of policy decisions and are increasingly subject to legislation. Government policy now focuses on the protection of resources, promoting sustainable utilisation and reducing emissions to the environment. Fishing opportunities are reduced and waste generation is increasingly penalised. Concerns about the spread of diseases are resulting in the closure of some of the existing methods of waste utilisation and adding further restriction and costs to waste disposal: this has become a significant issue for many sectors of the fishing industry and is unlikely to improve. Fish processors are facing dramatic increases in costs for discharging the effluent produced in fish-processing, which also represents considerable use of clean water resources.

The sector faces challenges in gain access to funding for business growth and development. The fish processing industry has been supported by the European Fisheries Fund but faces challenges of competition and profile issues in securing access to other funding streams. The main sources of EU funding are[[16]](#footnote-17):

1. European Fisheries Fund - £38 million fund available to help the fishing industry in England to adapt to changing needs. Money is available for fishermen, processing and aquaculture businesses, the marketing of fish products and for projects that benefit fishing industry workers, such as harbour improvements.
2. EU Aid - This programme allows bodies that enforce the Common Fisheries Policy to apply for co-funding from the EU for expected expenditure related to their enforcement work.

Fisheries Challenge Fund - This fund assists fishermen and other interested parties develop ideas to improve fisheries management.

The fish processing industry is seeing increased mechanisation of activities. This mostly results from reluctance to move operations to developing countries, where operations could take advantage of a cheaper labour supply. High profile examples include the Birds Eye facilities relocation to Bremerhaven to utilise high quality machinery and therefore reducing labour requirements This has led to developments in technology which enables efficient heading, gutting, filleting, splitting, skinning, pin-bone pulling and meat recovery without the need for paid (and skilled) workers. A common issue raised in discussions with businesses was their need to invest in technology and reduce employment. In some cases this was down to difficulties in recruitment and training whereas for others it was to reduce costs generally. It was noted that increased mechanisation would change both the profile of the workforce (more technology, operation and maintenance focused) and training provision (often undertaken by the original equipment manufacturer).

In maintaining Grimsby’s competitiveness, it will be important to ensure that greater choice in the availability of accommodation appropriate for food processing is provided. This will need to be reflected in future land supply policies to be included in the new Local Plan.

Given the local skills profile, it is essential that the skills of the workforce are kept up to date with advancements in technology and its application to the industry. Moreover, there is an opportunity to build on the existing strengths of the local workforce to broaden the representation of NEL in other food processing activities.

Chemicals and Process Industries

# Chemicals and Process Industries

The chemicals and process industry is one of the largest and diverse manufacturing sectors in the UK. The sector includes activities associated with the refinery and manufacturing of:

1. Petrochemicals
2. Commodity chemicals
3. Speciality chemicals
4. Composite materials
5. Pigments and paints
6. Pharmaceuticals

The sector has close linkages with many other economic activities including logistics, construction, pharmaceuticals, food and drink, research and development and retail. NEL is at the centre of the chemicals and process industries in the Humber area, which employed approximately 15,000 people in 120 companies in 2010, with a collective annual turnover of more than £6 billion.

Many of the firms in the sector are located close to the Humber estuary and play a key role in intra-European supply chains for the sector. Several companies have a long history within the local area and benefit from a range of locational assets including:

1. Proximity to oil refineries which provides a particular advantage to the newly emerging advanced biofuels sector in gaining access to market. Both the Humber and Lindsey refineries are located nearby in North Lincolnshire.
2. The Port of Immingham has a vital role in the import and export of energy supplies including oil, liquefied natural gas and biomass, as well as in the construction and servicing of offshore energy installations and in supporting terminals for oil and gas pipelines. Coal is also imported through Immingham, though is being replaced by biomass, which is likely to result in larger volumes of imports to maintain the same effective supply of fuel. The port is one of the largest petroleum processing, handling and distribution centres in Europe, with around 20 million tonnes of fuel products being handled per annum.
3. Industry led partnership Humber Chemical Focus (HCF) leads regional chemical initiatives, with more than 100 members across the Humber area. The HCF works with companies and organisations within the region to run business support programmes, network groups, skills programmes, conferences, events and publications aimed at encouraging best practice, knowledge exchange and business excellence.
4. CATCH, the Centre for the Assessment of Technical Competence Humber, is a unique £8 million training facility for the process industries which can simulate a chemical plant without the risks of handling dangerous substances at high temperatures and pressures. The facility works with a variety of training providers which can offer a range of technical and health and safety courses that are relevant not just to process industries but also other key sectors including renewables.
5. Strong transport links (sea, road, rail and air) which help to transfer people, products, chemicals and materials to and from the local area. There are many firms which are specialist in the transfer of particular chemical goods and equipment.
6. Proximity to important energy assets such as the Drax Power Station is also significant. The port and rail infrastructure in NEL is key to enabling the transport of coal and biofuel to powerstations. It also supports the development of new power stations or energy options like renewables. The area is also a growing focal point for the bioenergy market because of its close proximity to the major bulk materials port in the UK and access to Lincolnshire’s agricultural products. There are two biodiesel plants at the port of Immingham and plans are in place to develop more bioethanol plants in the future..

### Sector Size

In 2013 there were approximately 40 chemicals and process industry firms employing 2,230 people in NEL. The actual size of the industry is likely to be larger as the industry is not effectively captured by SIC codes and there is some overlap with the manufacturing and energy sectors. A more inclusive definition would probably see around 70 chemicals and process industries employing around 3,500 people.

The industry has some major employers in the Humber area, such as Phillips 66, who employ 750 people, with Novartis and Cristal each employing around 500 people. These major employers are indicative of the employment size profile of the industry which has much higher proportion of firms in the 250-500+ bracket (5.4%) than the local average (0.8%).

Table - % of Firms by Employment Size Band

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Industry | 0-10 | 11-20 | 21-50 | 51-100 | 101-250 | 250-500 | 500+ | Total |
| Chemicals & Process Industries | 51.4% | 10.8% | 13.5% | 8.1% | 10.8% | 5.4% | 0.0% | 100% |
| Wider Chemicals & Process industries definition | 54.3% | 11.4% | 18.6% | 5.7% | 7.1% | 2.9% | 0.0% | 100% |
| **Total Local Economy** | **76.4%** | **10.2%** | **8.4%** | **2.8%** | **1.5%** | **0.6%** | **0.2%** | **100%** |

Source IDBR 2013. Note – the figure for 500+ is inconsistent with employment records above and reflects the capturing of firm statistics by the Government which can sometimes have multiple counts for firms.

### Sector Profile

**Output**

Based on the sample business survey, the chemicals and process sector contributes approximately £310 million to the local economy’s GDP. This is equivalent to approximately 10% of the total NEL economy (£3,021 million). The sector is also significant for GVA output providing added value of £180 million to the local economy.

Table - Chemicals & Process Industries Economic Contribution

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sector | GDP | Total Purchases | Payroll | Land or property | Gross Profit | GVA |
| Chemicals & process industries | £310,829,800 | £107,624,818 | £124,677,286 | £30,694,443 | £55,560,827 | £180,238,113 |
| All key sectors | **£1,740,618,300** | **£687,591,325** | **£464,748,498** | **£182,392,375** | **£448,059,002** | **£912,807,499** |

Source: Hill Taylor & Atkins 2013. Atkins Ref: Survey – A5.1/L20.

**Employment**

The sector also contributes significantly to local and regional employment, providing around 2,230 direct jobs[[17]](#footnote-18), 4,080 indirect jobs and a further 2,450 induced jobs.

Table - Key Sector Employment Summary – Chemicals & Process Industries

|  |  |
| --- | --- |
| Geography | Chemicals & process industries |
| **Direct Jobs** |  |
| North East Lincolnshire | 2,230 |
| **Indirect Jobs** |  |
| N.& N.E Lincolnshire & Humber | 1,300 |
| Elsewhere in Yorkshire and Humber | 800 |
| Outside L/H | 1,980 |
| **Total** | **4,080** |
| **Induced** |  |
| N.& N.E Lincolnshire & Humber | 780 |
| Elsewhere in Yorkshire and Humber | 480 |
| Outside Yorkshire | 1,190 |
| **Total** | **2,450** |
| **Total** | **8,760** |

Source: Atkins 2013. Atkins Ref: Survey –A9-A11. Figures rounded.

**Supply chain**

Turnover within the sector is split between purchases, payroll, land and property. This shows that payroll (40%) is one of the main costs for businesses which reflects both the requirement for skilled workers and high number of workers overall in the industry.

Table - Breakdown of Annual Turnover

|  |  |
| --- | --- |
|  | Chemicals & process industries |
| Total Purchases | 34.6% |
| Payroll | 40.1% |
| Land property | 9.9% |
| Gross Profit | 17.9% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A14

A range of supply chain products and services are important to the sector. These include energy & utilities (15%), financial & insurance services (14.2%), manufactured components & products (11.5%) and business and professional services (10.6%). This shows the complexity of the supply chain and the range of technical and non-technical activities required to support the efficient operation of the industry. It also highlights the importance of the business and professional services sector in the local area and the potential for localisation of the supply chain.

Table - Types of Goods & Services Purchased

|  |  |
| --- | --- |
| **Supply Chain Element** | **Chemicals & process industries** |
| Energy & utilities | 15.0% |
| Financial & insurance services | 14.2% |
| Manufactured components & products | 11.5% |
| Business or professional services; | 10.6% |
| Logistics, freight service, storage & distribution services | 9.7% |
| Wholesale retail goods | 8.8% |
| Education & research | 5.3% |
| Other transport services | 5.3% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A15/K3

A low proportion of customers (28.6%) are based in the region compared with other key sectors reflecting the export nature of the industry. Around 47% of suppliers are based in the region which indicates reasonably strong local linkages with potential for more supply-chain value to be captured.

Table - Location of Suppliers & Clients

|  |  |  |
| --- | --- | --- |
| Geography | Chemicals & process industries | |
| **Customers** | **Suppliers** |
| Lincolnshire / Humber | 22.4% | 26.5% |
| Elsewhere in Yorkshire and Humber | 6.1% | 20.4% |
| **Local Area** | **28.6%** | **46.9%** |
| **UK** | **63.3%** | **79.6%** |
| Europe (other than UK); | 10.2% | 10.2% |
| USA; | 0.0% | 0.0% |
| China | 0.0% | 0.0% |
| Far East; | 2.0% | 2.0% |
| Other Worldwide locations | 8.2% | 8.2% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A17/K3

**Skills**

A significant proportion of firms (28.6%) identified skills shortages with some firms highlighting the challenge of attracting appropriately skilled personnel to the area.

**Future Prospects**

Despite wider economic challenges over the past 3 years a high proportion of chemical and process firms have increased the size of their workforce (42.9%). This was confirmed to some extent in interviews with firms, who had seen small increases in the size of the workforce. However, prior to three years ago many had seen a significant drop in employment as demand for output had declined with some companies having to restructure.

Table - Size of Workforce

|  |  |
| --- | --- |
| Movement | Chemicals & process industries |
| Increased | 42.9% |
| Decreased | 14.3% |
| Remained stable | 42.9% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A20

Looking forward, this optimism remains with 57.1% of firms intending to invest in the future. This was confirmed with companies identifying that an upturn in commercial activity had taken place, but had not yet reached pre-recession levels.

Very few companies had sought to move (5%) and a high proportion (90.5%) consider that their location was good and competitive. Access to the road network was seen as the one of the most important factors that gives the area a locational advantage.

### Economic Linkages & Supply Chain

Despite an industry with global reach, the sector is well connected within the local economy. Examples are provided below:

**Manufacturing**

A wide variety of products and chemicals are manufactured in the local area. These include:

* Pharmaceuticals & chemical manufacturer Novartis, which has recently expanded operations.
* BASF, which manufactures performance products used to enhance industrial processing in industries such as papermaking, mining, oil extraction, wastewater treatment and textile processing.
* Cristal, which produces titanium dioxide at its site near Stallingborough. Another site, Huntsman Tioxide, closed in 2009 because of ageing processes and infrastructure and the challenging economic conditions. This creates issues for the re-use of sites due to potential contamination issues and cleanup operation costs

**Refineries**

Although the two main refineries serving the local area are in North Lincolnshire, they provide an important source of employment for NEL residents and are vital to the future of the sector. There is a strong belief that the manufacturing and refinery operations have long futures in the local area given the cost involved in shutting down sites. Competition,, cost reduction measures and wider economic and regulatory factors may however impact site viability in the long-term. This competition will largely be driven by the availability of affordable energy.

**Biofuel**

A range of biofuel assets already exist although there is potential for further growth and investment. This is dependent on future government support for the industry. Additional facilities and appropriate logistics solutions will need to be provided if there is a rapid increase in the demand for biofuels.

**Specialist Engineering**

A range of specialist engineering firms are based in the area in order to support the chemicals and processing sector. These include:

* + Jacobs LES Ltd., a mechanical and electrical engineering firm which provides input across design, installation and manufacture.
  + Bilfinger Industrial Services, who provide a wide range of services including professional engineering, project management, engineering design and construction services
  + Redhall Jex, who support pharmaceutical and other manufacturing production processes.

**Storage**

The storage of materials and chemicals is important for the importing and exporting of products and liquids. Many companies based in or near Immingham docks are able to support the local industry and support the delivery of bulk liquids and chemicals to site or market. Firms such as Simon Storage play an important role in delivering this.

There are also clear linkages with other key sectors including:

* Companies involved in biotechnology that use fish waste in biotech research or extract Omega-3 oils from fish.
* The growing spread of renewable technologies, particularly wind and biofuel, allows for mutual support between the sectors. This includes shared political interests, training centres and skills and occupations.

### Local Strengths

Across the Humber area the chemicals, process and energy generation sectors have seen investment exceeding £1bn in the last decade. The industry has a range of key sub-sectors which demonstrate particular strength. These are highlighted in the Table 5-8.

Table - Employment LQ Analysis – Chemicals and Process Sector

|  |  |
| --- | --- |
| Industry | North East Lincolnshire |
| 20120 : Manufacture of dyes and pigments | 74.7 |
| 20150 : Manufacture of fertilisers and nitrogen compounds | 32.2 |
| 20140 : Manufacture of other organic basic chemicals | 21.9 |
| 20160 : Manufacture of plastics in primary forms | 10.3 |
| 19201 : Mineral oil refining | 9.3 |
| 22190 : Manufacture of other rubber products | 6.2 |

Source: BRES 2013

### Economic Trends

The recession has seen the loss of some high profile firms in the local area. This is partly demonstrated in the graphs below, highlighting reduced levels of employment during the period 2009-2012 and growth in the total number of firms stalling between 2009 and 2011.

Figure - Chemicals and Process Industries Firm Trends (2009 – 2013)

Source: IDBR 2013

Figure - Chemicals and Process Industries Employment Trends (2009 – 2013)

Source: IDBR 2013

### Competition

Several areas in the UK are aiming to expand their chemicals and process sectors. Some of the key competing locations are identified below.

1. Teesside – This area is one of the major competitors for the Humber chemicals industry. It benefits from having key facilities ( the deep water port at Tees Port, for example) and available land (e.g. Tesside Advanced Manufacturing Park has 11 hectares available). The area also has 1,400 companies directly involved or in the supply chain, the CATS pipeline bringing in gas from the North Sea, and enterprise zones seeking to attract firms.
2. Grangemouth/Falkirk – Based mainly around the large refinery site at Grangemouth, which represents one third of the Scottish chemicals industry’s turnover (around £3billion of the total £9billion turnover). The refinery site has recently been threatened with closure although developments are occurring including chemical manufacturing at KemFine, exploration at BP, a dye plant investment at FujiFilm and petro-chemicals and bio-fuels at the Ineos refinery. The local area also has a number of employment land sites specific to chemicals businesses (e.g. Earls Gate Park and Grangemouth Technology Park).
3. North West (based mainly around Runcorn & Widnes) – The North West is another strong chemical manufacturing region with around 650 businesses operating in the sector, employing 50,000 people and contributing £3bn to the regional economy annually. Organisations supporting the sector include Chemicals North West.

A view highlighted by some business and stakeholder consultees was that although NEL has strong prospects over the short to medium term, over the long term there is less certainty with economic pressures likely to drive industry consolidation or movement to low cost areas. The capacity expansion under way in developing countries is considered by some to be likely to result in significant overcapacity and perhaps the introduction of protectionist measures to support local industry. Furthermore, new plants will be able to produce at a lower cost and therefore be more profitable. Such trends could threaten the viability of older facilities in the UK.

### Prospects for sector

The sector is highly innovative, efficient and valuable to the national economy. There are a range of factors which were identified as being important to support future growth, including:

* Resilience – Although like other industries the chemical industry felt an impact from the recent global recession, it was felt that locally there was strong resilience and diversification in response to changes in demand. For example, many logistics firms noted a shift in transported products from chemicals to fuel.
* Political engagement – It is felt that the industry could be better represented locally and nationally to support the growth ambitions of firms and the sector’s future sustainability. There is a feeling that the HCF needs to be more active in local economic development at a LEP level and contributing to national dialogue around the future economic growth of the sector. This dialogue would provide an opportunity for not only the HCF but for other stakeholders such as local authorities, businesses and politicians to promote future growth, particularly around subjects like the adoption of biomass technologies.
* Specialisation – Looking at future growth of the industry abroad, there is a feeling that many firms could specialise further to focus on speciality chemicals or blended chemical products. A move towards specialisation would improve access to strong speciality markets, add value to processes and increase the need for technical capability in activities around bio- and nanotechnology.
* Transport infrastructure – It is felt that the local area has the transport infrastructure to support the future growth, specialism development and delivery of added-value products. Few major constraints were identified although relatively minor improvements were highlighted as being required (e.g. better access roads and roundabout functioning and capacity).
* Biomass – TPorts will need to be responsive both to changes in different types of energy supplies needed and to possible changes in the geographical pattern of demand for fuel, including with the development of (existing and new) power stations fuelled by biomass. There is potential for biomass from energy crop projects to create more jobs throughout the supply chain, particularly given the proximity to crop areas in Lincolnshire.

### Challenges

Businesses face challenges in recruiting appropriately trained and qualified personnel, particularly in the context of increasing specialisation within the sector. Linkages with local and regional higher education institutions could also be strengthened according to some consultees. Supporting NEL and the Humber area in building linkages and matching supply of skilled labour with demand is an important step in addressing the skills and recruitment challenge.

Onerous environmental legislation is seen as an added cost which can restrict investment in activities. The new EU strategy regarding legislation concerning sulphur dioxide emissions is seen as having stimulated investment in plant facilities. It was felt that working more closely with public bodies (such as local authorities and DEFRA) could help plan for and mitigate the potential impacts associated with forthcoming environmental legislation.

It is felt that some competing areas such as Teesside are better placed and more proactive in responding to future challenges: seeking funding to develop the local skills base, for example.

Some consultees expressed uncertainty regarding the future of bio-energy in the UK. It is currently felt that the government is favouring the retrofitting of existing power stations for biomass rather than the building of new plants. This has had implications for some planned developments and may alter supply chain requirements. Although the Port of Immingham is well placed to develop biofuel activities, there is some uncertainty over the potential scale of bioenergy and biomass in the area. Companies involved in bioenergy and biomass projects in the area include Greenergy, Total, Vireol, Abengoa Bioenergy, Helius/RWE Innogy, Siemens and Encycle. However, there is a feeling that lack of government subsidy mechanisms and delays in key projects (e.g. the conversion of Drax) has left investors undecided as to how the sector will develop.

It is felt that there is a need for liquefied natural gas facilities in the local area, although space constraints may restrict this. A number of considerations are needed in developing a site, including where to locate the facilities (proximity to other products and chemicals, logistics, etc.) and the potential need for changes to existing facilities, such as the installation of new pipelines and the expansion of site facilities.

Distance in supply chains is increasingly becoming important as there are hazards associated with storage and transport. As a sector where safety is critical and therefore subject to significant regulation there is a need to consider the geographical and logistical implications of new developments. This can add time and cost to decision making. As a consequence reducing decision-making time and working proactively with planning departments can support development.

Renewables & Energy

# Renewables & Energy

NEL forms an important part of what is referred to by the Humber LEP as the ‘Energy Estuary’:

*“Predicted as the region to produce the energy of the future, the Humber Estuary and surrounding regions are already home to influential energy leaders E.ON, Centrica, Renewable Energy Systems, DONG Energy, Vestas and Siemens. With investments in wind, tidal, biofuels and renewable energy, the region is building on its credentials in chemicals, offshore and marine engineering and exploring opportunities to capitalise on the global demand for sustainable energy”*.[[18]](#footnote-19)

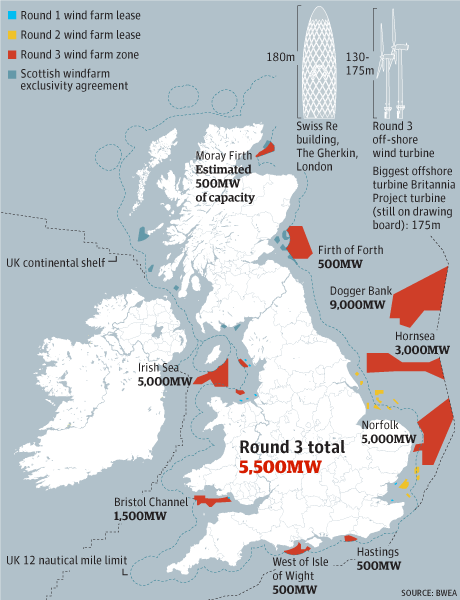
NEL plays an important part in driving forward the renewable energy economy. The Humber has been designated a Centre for Offshore Renewable Engineering by the government and is seeing an increasing number of firms and range of offshore wind energy activities. In the Humber there are 484ha of Enterprise Zone (EZ) sites (11 Ha in NEL) fronting or close to the estuary. An enterprise zone is available on the north wall of the Port of Grimsby for operations and maintenance (O&M) activities. Whilst this designation offers attractive incentives to investors, the site remains constrained by challenges regarding the port’s condition and facilities, and commercial viability is questionable without further public sector intervention.

With considerable potential to grow, the on- and offshore wind industries are likely to form the core of the renewables sector in NEL. However, there are wider strengths in biomass, geothermal and solar energy which add to the wider renewable sector;

* Onshore wind – Since the UK’s first commercial windfarm was built in Cornwall in 1991 onshore wind energy has established itself and is now the UK’s largest source of renewable energy generation. In the wider North Lincolnshire area there are planned and existing onshore wind projects, ranging from single turbines to larger, multi-turbine schemes.
* Offshore wind – The growing offshore wind industry is predicted to become a major driver for UK manufacturing activity, leading to significant new inward investment and the creation of firms and jobs in strategically located areas. Since 2000, the Crown Estate have run six rounds of offshore wind which have increased in scale and technical complexity. Round 3, released in 2010 is the largest so far and features nine zones across the UK. The largest, Dogger Bank, is based in the North Sea, between 125 to 290km off the coast of East Yorkshire and NEL. There is strong national government support for offshore wind in playing a “key role” in allowing the UK to meet 2020 renewable energy targets[[19]](#footnote-20).
* Biomass – Since many of the conventional power generating assets in North Yorkshire such as Drax and Ferrybridge are converting to ‘co-firing’ in order to reduce their carbon emissions, significant amounts of biomass, generally pelleted wood are being imported and stored at Immingham and distributed by rail to the relevant power plants. This activity has led to the construction of new infrastructure at the port including silos and conveyor systems.

### Offshore Wind

The development of Round 3 offshore wind zones represent a huge opportunity for renewables in NEL and the Humber, as the developments are much larger than those awarded in Round 2 (the Round 3 development zones have the potential for the construction of multiple windfarm sites).

Figure - Round 3 Windfarm Locations 

Source: BWEA/GMG 2014.

* Wave & tidal – Although other estuary and tidal areas are also developing technology, the Humber area has a range of key advantages including use of the University of Hull’s Total Environment Simulator research facility and the tidal estuary for research into wave and tidal technology.
* Small-scale renewables– There are a range of other renewable technologies across the NEL area currently gaining traction. These include geothermal and photovoltaic technologies which are often at a smaller scale than wind and wave developments.
* Biomass and biofuel – The conversion of existing national power plants (e.g. Drax) to biomass and the granting of planning consent for new biomass facilities are expected to drive future growth and contribute to changes in the development of infrastructure. There is some uncertainty as to how this sector will develop over the short to medium term despite new silos at the Port of Immingham.
* Geothermal – Currently in its infancy, developments within the local area are seeking to establish this source of renewable energy and Hull University is aiding the sector’s development through innovative research.

It is thought that the Humber offers the only portside land location in the UK able to support an energy and wind turbine-manufacturing cluster. Supported by research at Hull University, developments in Hull and the East Riding include Siemens and ABP’s Green Port, a turbine nacelle and pre-installation assembly plant. It is thought the plant may create 1,000 jobs.

The existing ports and planned ABLE Marine Park development have deep-water ports and quayside areas that will support the establishment of an offshore windfarm O&M subsector as well as the construction of wind turbine sites. North Lincolnshire’s Able Marine Energy Park and Logistics Park are situated on the Humber estuary, and therefore ideally positioned to serve the lucrative North Sea offshore wind market.

### Sector Size

The size of the renewables industry is difficult to measure through national statistics as activities are not assigned a Standard Industrial Classification (SIC) code. A portion of renewable energy related output and employment is captured in other energy sectors, for example offshore windfarm activity by large energy firms like E.ON will be categorised under the core function of the business like the ‘Electricity, Gas, Steam and Hot Water Supply’ SIC code. To overcome this challenge, a top-down and bottom-up approach are utilised:

* The top-down approach identifies likely SIC codes with renewables activities and this provides a foundation for analysing trends and employment size. This utilises SIC codes identified in the bottom up approach as well as other relevant sectors.
* The bottom-up approach requires identifying firms known to the researchers, employer networks (like Grimsby Renewables Partnership) and staff at NELC and CGS. This utilised different data sources to identify firms as well as building in proxy figures for firms which were not apparent in national statistics due to their organisation structure or other reasons (VAT threshold, etc). The team also searched for businesses using key words such as offshore, wind, renewables and biomass to identify firms in the sector.

A wider definition of the energy industry in NEL identifies 430 firms employing 3,250 people in 2013 and it is estimated that the renewables industry constitutes around 7-10% of this total[[20]](#footnote-21). The bottom-up approach identified 30 firms employing approximately just over 2,000 people in the local authority; including proxy figures for firms unable to be identified, this is closer to 40 firms and 2,500 people. The top-down approach is therefore likely to overestimate firms and employment figures. However, it is the most reliable figure of the two.

Using a broad sector review, it is clear that the sector is mainly dominated by small–scale operations in NEL although some business units form part of much larger organisations. For example, E.On employs 13,000 in the UK with 20 being based at the Grimsby site. Small firms are concentrated in specialist engineering, marine operations and other specialist supply chain activities.

Table - % of Firms by Employment Size Band

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 0-10 | 11-20 | 21-50 | 51-100 | 101-250 | 250-500 | 500+ |
| Renewables (& Energy)  - Top down | 86.8% | 6.2% | 5.1% | 0.7% | 0.7% | 0.5% | 0.0% |
| Renewables –  Bottom up | 64.5% | 3.2% | 3.2% | 12.9% | 3.2% | 9.7% | 3.2% |
|  |  |  |  |  |  |  |  |
| Total | 76.4% | 10.2% | 8.4% | 2.8% | 1.5% | 0.6% | 0.2% |

Source: IDBR 2013 (& Mint 2013)

Further research at a national, LEP and local level would result in a clearer quantitative indication of the current state of the industry.

### Sector Profile

**Output**

Although there are some methodological challenges in assessing this sector, the data collected can provide an estimate of the size of the sector. The results of our sample business survey indicate that the renewables sector contributes £375 million to the local economy’s GDP (12% of total) and £214 million to the local GVA. This demonstrates the importance of the sector to the local area in terms of productivity and employment, and suggests significant impacts of sector growth on the local economy and labour market.

Table - Renewables & Energy Economic Contribution

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sector | GDP | Total Purchases | Payroll | Land or property | Gross Profit | GVA |
| Renewables | £375,832,400 | £133,591,335 | £96,213,094 | £28,396,226 | £118,387,206 | £214,600,300 |
| Total | **£1,740,618,300** | **£687,591,325** | **£464,748,498** | **£182,392,375** | **£448,059,002** | **£912,807,499** |

Source: Hill Taylor & Atkins 2013. Atkins Ref: Survey – A5.1/L20.

**Employment**

The sector also contributes significantly to local, sub-regional, regional and national employment with 3,250 direct local jobs[[21]](#footnote-22), 3,500 indirect jobs across the whole economy and a further 1,950 induced jobs. In total the sector supports approximately 8,700 jobs. As noted previously, this figure does not represent renewable energy alone but includes energy activities more broadly. The novelty of the sector means that it is both difficult to identify in existing data, and some firms are likely to still be adapting to the sector from other energy activities.

Table - Key Sector Employment Summary – Renewables & Energy

|  |  |
| --- | --- |
| Geography | Renewables |
| **Direct Jobs** |  |
| North East Lincolnshire | 3,250 |
| **Indirect Jobs** |  |
| N.& N.E Lincolnshire & Humber | 1,300 |
| Elsewhere in Yorkshire and Humber | 840 |
| Outside L/H | 1,360 |
| **Total** | **3,500** |
| **Induced** |  |
| N.& N.E Lincolnshire & Humber | 720 |
| Elsewhere in Yorkshire and Humber | 470 |
| Outside Yorkshire | 760 |
| **Total** | **1,950** |
| **Total** | **8,700** |

Source: Atkins 2013. Atkins Ref: Survey –A9-A11. Figures rounded.

**Supply chain**

Businesses were asked about how turnover is split between purchases, payroll, land and property. This shows that purchases (35.5%) and payroll (25.6%) are of particular importance to the sector. The sector appears to be the most profitable of the key sectors, which, particularly given the economic and political challenges the sector has faced, suggests a solid foundation for future growth.

Table - Breakdown of Annual Turnover

|  |  |
| --- | --- |
|  | Renewables |
| Total Purchases | 35.5% |
| Payroll | 25.6% |
| Land property | 7.6% |
| Gross Profit | 31.5% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A14

Key supply chain activities include energy & utilities (17.3%), manufactured components & products (14.3%) and financial & insurance services (17.3%). This demonstrates the diverse range of linkages between the sector and its supply chain.

Table - Types of Goods & Services Purchased

|  |  |
| --- | --- |
| **Supply Chain Element** | **Renewables** |
| Energy & utilities | 17.3% |
| Financial & insurance services | 17.3% |
| Manufactured components & products | 14.3% |
| Business or professional services; | 9.2% |
| Wholesale retail goods | 8.2% |
| Education & research | 6.1% |
| Construction services | 6.1% |
| Logistics, freight service, storage & distribution services | 5.1% |
| Other transport services | 5.1% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A14

Around half of renewables customers (51.5%) and suppliers (54.3%) are from the local area which shows that this sector is already well embedded locally. This means an unusually low proportion of businesses have customers or suppliers from outside the UK., however the variety of firms in the sector means that the customer and supplier profile is likely to be equally varied, and therefore may not be in line with expectations.

Table - Location of Suppliers & Clients

|  |  |  |
| --- | --- | --- |
|  | Renewables | |
| **Customers** | **Suppliers** |
| Lincolnshire / Humber | 39.4% | 37.1% |
| Elsewhere in Yorkshire and Humber | 12.1% | 17.1% |
| **Local Area** | **51.5%** | **54.3%** |
| **UK** | **69.7%** | **88.6%** |
| Europe (other than UK); | 6.1% | 5.7% |
| USA; | 0.0% | 0.0% |
| China | 0.0% | 0.0% |
| Far East; | 0.0% | 2.9% |
| Other Worldwide locations | 6.1% | 2.9% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A17/K3

**Skills**

A significant proportion of firms (30%) identified skills shortages as a major challenge for the sector. Research into strategies regarding sector-specific skills[[22]](#footnote-23) has highlighted challenges in recruiting apprenticeships, certified trades people and day-boat activities (anchor handling, scour protection, piloting, O&M etc.).

**Future Prospects**

Over the past 3 years 35% of business reported an increase in size, with 60% remaining stable. Only a small proportion of businesses (5%) decreased in size, despite the recent economic climate. This suggests the sector has significant latent growth potential.

Table - Size of Workforce

|  |  |
| --- | --- |
| Movement | Renewables |
| Increased | 35.0% |
| Decreased | 5.0% |
| Remained stable | 60.0% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A20

Looking forward around 50% of businesses have stated their intention to invest in forthcoming years. Very few firms had sought to relocate. Importantly, 95% of businesses in the sample identified the local area as a good and competitive location.

### Economic Linkages & Supply Chain

**Operations & Maintenance (O&M)**

Operations refers to activities contributing to the management of technology and materials, such as monitoring, environmental assessment, sales, safety, and administration tasks. Maintenance is a more significant activity with greater costs and levels of risk. It includes the up-keep and repair of the physical plant and systems and includes both preventative and corrective maintenance. Manufacturers will often have their own preferred specifications for an O&M facility.

Many of the O&M activities in NEL are connected to the existing offshore windfarms (Lynn and Inner Dowsing) and the Humber Gateway, Race Bank, Triton Knoll and Westermost Rough windfarms under construction. The sector is rapidly developing and is expected to become more important in the local area due to the planned windfarm developments. Given that O&M activity accounts for approximately 25% of the life-time cost of an offshore windfarm, substantial opportunities exist in serving this demand. Key companies in the wind sector locally include Siemens, Centrica, DONG and E.ON.

In the future, more and larger offshore wind projects will be built (e.g. Round 3) and these will be further from shore. Accessing the turbines to carry out maintenance will require new logistical solutions. This will include different approaches to workboat support as well as helicopter support and offshore working bases.

**Logistics**

Bespoke transport solutions are required for the transport of materials and people across the whole spectrum of windfarm activities including construction, manufacture and O&M. Transport activities included transporting technicians to and from turbines and offshore substations to carry out work, transporting turbines and towers to offshore sites and transporting materials to and from manufacturing sites and assembly points. Key companies that operate locally include Tidal Transit (Norfolk based but UK Wide), Turbine Transfers (Welsh), Windcat Workboats (Lowestoft), Wind Power Support (NEL owned and operated) and Collet Transport (based in Goole but UK wide). A range of opportunities therefore exists for logistics companies and local SMEs have been able to take advantage of these. Additionally, these opportunities could increase as manufacturing sites are increasingly established locally and in other areas of the UK.

**Port Operators**

Port operators are critical to the success of the sector, as often they are proprietors of ports and are central to decision-making and investment. ABP’s port ownership is ultimately important and the support for the industry from Grimsby Fish Dock Enterprises Ltd has enabled the growth of facilities and activities in the Grimsby area. Flexibility in working closely with windfarm developers and other organisations is vital particularly since the port facility is likely to remain operational for at least 20 years. Furthermore, access is also important; most O&M facilities currently operate a 12 hour day, whilst in the future 24 hour access will be required. The building of the ABLE Marine Energy Park and Hull Green Port will also further support substantial investment in the renewables sector.

**Marine Engineering**

A range of marine engineering firms exist which have previously served the trawler fleet and currently serve the leisure boating and freight activities. Existing facilities including slipways, dock gates and cranes can be used by firms, although some are in poor condition or unsuitable for larger vessels. These organisations and facilities play an important role in all aspects of the current supply chain by providing design, construction and maintenance engineering solutions. A range of other services also exist that contribute to the area’s marine engineering and wider offshore wind offers, including naval architects, shipwrights, painting, fuel bunkering, electrical, fuel & water services and construction.

**Manufacturing**

A current government goal[[23]](#footnote-24) is to attract major manufacturing facilities to the UK in order to provide for long-term growth. Potential manufacturing activities for the wind sector include turbines, foundations, cables and substations and related operations like installation, operations and maintenance. The ABLE Marine Energy Park has signed memorandums of understanding with key manufacturing firms such as Strabag, and plans for a turbine manufacturing facility at Hull Green Port have received approval. This will create a critical mass of economic activities locally and provide a range of employment opportunities.

**Facilities**

Facilities built for use by other sectors (e.g. the chemicals, oil and gas sector) are seen as supporting the area’s ability to attract and maintain .investment. Specific facilities include:

* CATCH – The CATCH facility is being developed to provide training infrastructure to a large number of organisations. A conversion of the Stallingborough site’s existing 22m column and supporting structure is used to mimic a typical wind turbine tower.
* Grimsby Institute – The institute is currently working with key offshore wind businesses like Siemens, RES and in previously with Cosalt Wind Energy to develop tailor-made courses, through the state-of-the-art Engineering and Renewable Energy Centre. This will develop engineering skills for young people and the existing workforce and also look to provide training in other areas of the renewables sector such as biomass (e.g. through the HETAS Solid Fuel & Biomass Training Centre).
* Humberside Engineering Training Association – HETA is a key organisation in providing suitably skilled apprentices to the sector and is developing its renewables capabilities in biofuels.
* Private Training Providers & Partnerships – a range of private training providers have been attracted, established themselves or adapted their course offer to meet the needs of the industry. There are a range of courses on offer supporting skills development throughout the supply chain, including health and safety, experiential learning and regulatory training.

The renewables sector therefore has linkages to a range of different sectors, with particular linkages to the port & logistics and chemical and process sectors due to the shared requirements for transport and engineering expertise. Links to retail and tourism are less overt but may be stimulated by an increased influx of workers to the local area requiring retail and tourism facilities, and regeneration of the port area.

### Local Strengths

As discussed, the SIC system does not provide for direct analysis of the renewables sector. However, as a form of proxy, the following LQ analysis identifies relevant sub-sectors which may capture some renewables and related activities.

Table - Employment LQ Analysis – Renewables & Energy

|  |  |
| --- | --- |
| Industry | Emp LQ |
| 52241 : Cargo handling for water transport activities of division 50 | 31.8 |
| 52220 : Service activities incidental to water transportation | 22.0 |
| 33120 : Repair of machinery | 13.1 |
| 52290 : Other transportation support activities | 6.8 |
| 38210 : Treatment and disposal of non-hazardous waste | 4.8 |
| 71129 : Other engineering activities | 1.6 |
| 71121 : Engineering design activities for industrial process and production | 1.3 |

Source: BRES 2013

The LQ analysis appears to support the qualitative findings regarding the strengths of the local area. Strengths are particularly evident in:

* O&M activities: Five of the largest offshore wind firms (Centrica, DONG Energy, E.ON, Siemens and Vestas) have chosen to base their O&M teams in Grimsby.
* Logistics: Transport connections including direct access to the world’s largest offshore windfarms and the largest UK port capable of handling major projects.
* Engineering: Local engineering expertise has developed over many years with particular specialisation in marine construction, design and manufacturing due to the economic history of the area.
* Biomass: Local strengths in the sector are becoming increasingly apparent, including port facilities (described as UK’s most technically-advanced biomass handling terminal) and further planned developments and training centres.

### Economic Trends

Current trends in number of firms and employment in the renewables sector indicate growth, and it is expected that future growth will be much more substantial. The recession appears to have had a delayed impact on the sector with fewer firms in 2011 than 2009. This may also highlight the political and economic sensitivity of the sector, with changes in government and the economic climate leading to a lack of clarity regarding the future direction of the sector. Despite this, future growth is expected to be significant, with the ABLE Marine and Logistics Parks to provide 4,100 jobs on site and 10,000 jobs in total. If NEL capture of these jobs is consistent with the estimations of renewables & energy jobs created in NEL and elsewhere in Table 7-3, it might be expected that this results in 3,700 jobs for NEL. In addition, Hull Green Port is projected to support around 1,000 direct jobs.

Despite drops in the number of firms between 2010 and 2011, employment in the sector has expanded between 2011 and 2013, demonstrating the contribution of the sector to local economic growth and diversification. That 50 firms were created between 2011 and 2013 is a strong indication of the dynamism of the sector.

Figure - Renewables Firms Trends (2009 – 2013)

Source: IDBR 2013

Employment in the sector experienced a small decline of around 200 jobs between 2009 and 2010, but has risen by 850 jobs over the period as a whole. This may reflect variation in commercial confidence regarding the sector’s prospects and strong growth by a number of firms.

Figure - Renewables Employment Trends (2009 – 2013)

Source: IDBR 2013

### Competition

Competition in taking advantage of the offshore renewables industry is strong. Although NEL has the capability to meet demand and enjoys a strategic location in terms of access to windfarms, other areas on the east coast of England are viewed as direct competitors for attracting inward investment and securing employment growth opportunities. These include:

* Scotland – Although recently subject to some uncertainty[[24]](#footnote-25), there is strong political support for expansion of Scotland’s offshore wind capabilities. Public investment continues to assist the sector’s development and the transferable skills, occupations and commercial acumen of the established oil and gas sector are seen to contribute to a compelling offer.
* Teesside – Teesside is seen to be competitive because of the local support, the land available and nearby universities.
* Lowestoft/Great Yarmouth – Both ports, although much smaller than ports in Scotland, Teesside and the Humber provide a competitive location for access to the Dogger Bank, Hornsea and Norfolk windfarms.

The UK is in fierce competition with the rest of Europe for the jobs that will be created by the offshore wind industry. Anticipated increases in installation activity from 2017 onwards will drive many companies to invest in new facilities and port infrastructure between now and 2017. In consultation with businesses, all were in agreement that the renewables industry promised benefits for the profile, the economic diversity and the future of NEL. However, there was some uncertainty regarding the potential impact of the industry on the local labour market, regarding both the extent to which jobs would be filled by local people, and how many jobs would be created. This suggests that key impacts of developments in the sector on the local labour market could be better communicated, and there is a willingness from local firms to see renewable industry jobs taken by local people. Although a complex sector of the labour market, the offshore renewables workforce are often highly mobile and workers may be attracted from elsewhere by a particular development, although this depends in part on the development’s supply chain activities. However, there have been efforts by some windfarm developers and O&M firms to recruit locally to reduce costs. Such behaviour maximises the benefits received by local communities and is therefore an approach to be encouraged in the sector.

### Prospects for sector

Round 3 developments are the most significant opportunity for large-scale offshore wind O&M, manufacturing and supply chain activities in the UK to date. Round 3 has a far larger scope than previous rounds, featuring nine zones across the UK. Windfarm developers will be selecting the most appropriate sites for windfarm development within the zones, developing project plans for individual windfarms, consulting with stakeholders (e.g. the Marine Management Organisation, Local Authorities, Natural England etc) and then applying for project consent. Successful projects will then be installed and operated.

Initial preparation for Round 3 applications is already generating business opportunities and further stages will see jobs created in the manufacture of components and the construction and operation of the windfarms. Although the proposed site at Dogger Bank has recently been scaled back in size from 9GW to 7GW, this is still likely to generate a significant number of jobs. Previous estimates suggest each MW installed creates around 15 jobs, and around 0.4 jobs in O&M[[25]](#footnote-26).

A number of key supply chain advantages exist for the offshore renewables industry in NEL and the surrounding area:

* There is a legacy of marine engineering in the area and existing marine engineering firms are entering the sector’s supply chains, from their more traditional base in fishing, logistics and shipping. Businesses in the local area who have expanded into supporting wind activities have experienced growth.
* The sector receives support from training providers in the area who are willing to create and adapt courses to meet employers’ needs. The Grimsby Institute for Further Education has identified renewable energy as a key sector to be aligned with and is developing its ability to engage with the private sector.
* The area’s ports are capable of handling major project infrastructure and can support equipment and material transfer. This is important for supporting Round 3 projects, which are likely to be larger and require more complicated logistical arrangements than in the past, due to increased mass of materials and different construction methods.

A range of offshore renewables operations and maintenance firms (e.g. DONG, Centrica, Siemens, E.ON) have established locations in the Port of Grimsby; many have chosen the site because of the available facilities and infrastructure as well as proximity to existing windfarms and planned developments. Positive perceptions of the development of the O&M sector in Grimsby are founded on the need for continual O&M service to existing windfarms and the likelihood of demand for such services to expand. However, it is expected that future wind farms will be larger[[26]](#footnote-27) and situated further offshore, and this may present a challenges for the current O&M facilities and available infrastructure in NEL.

Along with supply chain advantages there are skills and occupational experience advantages to situating in the area which can support future development in the sector, including:

* Skills for oil, gas and chemical operations including staff with similar skills such as mechanical, electrical and civil engineers, project managers, coordinators, office based (e.g. finance, HR, communications) and other key work such as health and safety.
* Current employment in construction can be transferred to renewables including jobs that support construction, operation and maintenance of windfarms. Occupations include engineers, site managers, electricians, welders and
* There are a range of skills and occupations within traditional manufacturing and engineering which can be transferred across to the renewables industry (e.g. retrofitting and assembly). Engineers, technicians and operatives often have the right skill set to make a transition.
* Offshore windfarms often require seafaring, stevedore and navigation workers to contribute to the successful operation and management of windfarms. The local areas proud maritime history means that workers with these skill sets can be recruited locally.
* Availability of local trades persons has also been identified by previous research, with the capacity for recruitment of panel wiremen, industrial electricians, high voltage wiremen, fully skilled welders, and skilled fitters.
* NEL’s historic links with Denmark and Germany are also felt to be supportive to the renewables industry. This is because of the leads that these two countries have in renewables is key to developing inward investment but also knowledge and partnership to support the local areas further. Key companies from these countries are already based in the local area (DONG – Denmark, E.ON – Germany) and it is felt that nurturing these relationships could bring further investment and expertise to the local area. The area can benefit from the maturity of the Danish market and the significant investment that Germany is making into onshore and offshore renewables domestically. These linkages also form part of the relationships that exist in fish processing.

### Challenges

The port infrastructure is not perceived positively, attributed to insufficient investment following the decline of the fishing industry. Many firms were vocal about the poor state of the dock area. This included buildings, facilities like the slip ways and the port locks. These facilities were felt to require significant investment and could unlock further development in the future if facilities, infrastructure and aesthetics are improved. New buildings on the Port of Grimsby quayside form part of redevelopment of the north wall. These facilities and buildings were often highlighted as a point of contrast with some of the poorer quality buildings and debris in other areas of the port. This is seen as a barrier to investment, as firms are hesitant to show clients and other stakeholders around the port.

The ownership structure of much of the port’s land is identified as a challenge for the future growth of the sector. Both the Ports of Immingham and Grimsby are owned by ABP and there is little prospect for development without action by the owners. As such, firms would prefer improved infrastructure and note there is little proactive development of the port in order to attract firms, with improvements only occurring after a commercial contract has been agreed. Furthermore, there has been some consternation at tenancy costs. Tenancy arrangements are often complicated and combined with space constraints are felt by some firms to potentially restrict development and growth of the industry.

There is significant uncertainty regarding the prospects for renewable energy development in the UK. This is seen by all in the industry as a key stumbling block to future economic and employment growth. It is felt that that strategies such as the UK Renewable Energy Roadmap do not provide enough support for the industry and many would like to see a stronger government commitment to renewable energy.

The trade and industry group RenewableUK has been regarding the lack of support and direction the industry has been afforded by politicians. Several policy documents produced identify the need for support in the face of a market which is rapidly developing, and many firms have well-advanced investment plans. It is felt that there is uncertainty over the labour requirements of the renewable energy sector and that the government has not effectively communicated with business on this issue. Investment in the offshore renewables is also affected by uncertainty over support for onshore renewables and long term plans for both. RenewableUK has called on UK government and industry to “agree on a long term vision for offshore wind that will give industry confidence to invest in the technology and facilities that will be critical to bringing down the cost of offshore wind”[[27]](#footnote-28). The government has responded with the Industrial Strategy for Offshore Wind and the Energy Market Reform. Long term certainty of support from the government would catalyse project deployment and is an essential element of any policy package for the industry to flourish.

The government has declared ambitions regarding offshore wind and the ability to provide sufficient generating capacity to meet renewable energy targets in 2020. However, it is felt that this is a relatively short-term horizon for companies looking to make significant investment in infrastructure, tooling and new products. This impression is supported by comparison with other European governments; the German government, for example, has provided a stronger indication of support to investors by announcing wind energy targets for 2030.

Local support for the industry is strong and this needs to be maintained to provide an economic case for development. Support at all levels of government is needed since plans for offshore windfarms in other parts of the country have been completed[[28]](#footnote-29). Achieving adequate support may require working with neighbouring LA and LEP areas in order to push the investment case and encourage the government to support the industry further in the area.

Port access and land constraints at the Port of Grimsby mean there is limited space available for businesses that require direct port access, and there are considerable costs associated with creating further space and associated facilities. This also constitutes a constraint in further development of O&M operations at the port.

There is a strong requirement for mechanical, electrical, civil and structural engineering skills across the sector particularly at technician and engineer level. A solid understanding of engineering principles and technical knowledge of applied engineering is key to many operations in the sector. Whilst this demand is likely to require the transfer of workers from other sectors, engineers from other sectors often lack exposure to renewable energy projects and the associated modelling and risk analysis processes and technologies, many of which are constantly evolving. However, their experience and skills gained in other sectors can be highly valuable.

During the consultation period of this project (December 2013), the ABLE Marine Energy Park received planning permission for proposals to build a deepwater jetty, and has since been subject to delays. The resulting uncertainty associated with the project was perceived as having negative impacts. It was therefore felt that in the future strong and efficient planning would be required to support the future of the renewables sector in the Humber.

Visitor Economy, Services & Retail

# Visitor Economy, Services & Retail

This section provides an assessment primarily of the visitor economy in North East Lincolnshire. It should be highlighted that the visitor economy is closely related to the wider retail service sectors in the Borough. Whilst some consideration is given to the retail sector, particularly when analysing secondary data, it should be emphasised that the empirical business survey conducted for this study only sampled the visitor economy and therefore excluded the retail and related service sector activities.

## Context

NEL has a range of distinctive visitor and retail economy strengths, making it well placed to support future economic growth. Visitor and retail activities contribute to economic, social and cultural vitality and have been recognised by policy makers as playing a key role in the prosperity of local areas.

The visitor economy is one of the fastest growing employment sectors in the UK[[29]](#footnote-30). It includes economic activity supported by hotels, restaurants and attractions as well as supply chain activities and the expenditure of visitors in the wider economy.

Visitors are drawn to the NEL by a diverse profile of visitor and retail assets located across the area. These are briefly described below:

* Beaches – The beach at Cleethorpes is one of NEL’s premier attractions, with traditional amusements and leisure activities including a pier, donkey rides and arcade games. Hotels (mainly bread and breakfasts) and food outlets cater to seasonal visitors. Aside from the beach, one of the largest visitor attractions is the Pleasure Island theme park, featuring rides and family shows and open on weekends and school holidays from March until November, and every day in July and August. Cleethorpes also has a boating lake, small zoo and a station for a miniature steam coastal railway at the southern end of the resort. Meridian Point and the Showground are located here and offer a multiplex cinema/theatre and a number of fast food chain restaurants. NEL also acts as a base to visit the rest of the east coast, including the Viking Way and other east coast beaches such as Mablethorpe, Skegness, Donna Nook and North Somercotes.
* Retail & Town Centres – Grimsby and Cleethorpes are the two main retail centres visited by tourists. Whilst Grimsby does not promote a night-time economy, Cleethorpes offers a variety of restaurants, bars and nightclubs. Both could be improved to attract visitors for longer. The retail sector in Grimsby is seen as reasonably strong, in part due to being relatively distant from competing urban centres.
* Marina – There are 3 yacht clubs in NEL, two in Grimsby and one in Cleethorpes. These cater for visitors with berths that provide electricity supply as well as laundry and bar facilities. There are plans for further marina developments although businesses noted some opposition regarding intended use of space.
* The Lincolnshire Wolds – The southern rural parts of NEL make up parts of the Lincolnshire Wolds, which is an Area of Outstanding Natural Beauty (AONB). The Wolds have a range of natural attractions including flora and fauna not found anywhere else in the UK.
* Fishing Heritage Centre– The museum provides an insight into Grimsby’s maritime history, fishing heritage and the life of trawlermen in the 1950s. Other assets include the 300ft Italianate Dock Tower and the Ice Factory.
* Thorpe Park **–** Thorpe Park is a family fun holiday park in Cleethorpes, which is predominately aimed at families. There is a variety of on-site entertainment options and activities and some guests visit other attractions in Cleethorpes. The resort is a major employer and provides a seasonal boost to the economy during the summer.
* Wildlife – The area’s wildlife attracts visitors, particularly for those visiting the Wolds and seeking to observe migratory birds.
* Festivals **–** A range of festivals are held across NEL. Events held at Meridian Point include scooter festivals and military weekends. There are also several events that take place further afield, such as the vintage car fair in June at the Cadwell Park circuit and events at the Market Rasen racecourse.

### Sector Size

As one of the largest sectors in the UK, it is understandable that the sector also employs the largest number of people out of all key sectors (15,710) and also has the largest number of firms (1,360). This is around 31% of the firm base and almost a quarter of the employment base in NEL. A detailed assessment of the size of the sector makes it clear that the majority of firms and employment is attributable to retail. Subsectors with significant employment include non-specific food stores (3,250 jobs), sale of clothing (870) and wholesale of other foods including fish, crustaceans and molluscs (750). Wholesale accounted for 200 businesses and 1,820 jobs in 2013.

Table - Sector Employment Profile

|  |  |  |
| --- | --- | --- |
| Sub-Sector | Firms | Employment |
| Accommodation and food service activities | 270 | 3,190 |
| Administrative and support service activities (Tours, travel agencies) | 10 | 80 |
| Arts, entertainment and recreation | 110 | 1,550 |
| Cultural Education | 10 | 10 |
| **Visitor Economy** | **400** | **4,830** |
| Retail (and wholesale) | 970 | 10,880 |
| **Total Visitor Economy, Services & Retail** | **1,370** | **15,710** |

Source: IDBR 2013. Figures rounded to nearest 10.

In terms of company size, the sector has a similar profile to the total local economy. Like the total local economy, it is particularly characterised particularly by micro-businesses (0-10 employees).

Table - % of Firms by Employment Size Band

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Business Size | | | | | | |
|  | **0-10** | **11-20** | **21-50** | **51-100** | **101-250** | **250-500** | **h. 500+** |
| **Retail & Tourism** | 72.6% | 12.0% | 10.8% | 3.0% | 0.8% | 0.3% | 0.0% |
| **Total Local Economy** | **76.4%** | **10.2%** | **8.4%** | **2.8%** | **1.5%** | **0.6%** | **0.2%** |

Source: IDBR 2013

### Sector Profile

The following provides a summary of the outputs of the sample business survey for the retail and visitor economy. Full results are set out in Appendix B.

**Output**

Based on our sample business survey, the sector contributes £181 million to local GDP and £89 million in GVA. We estimate that this is equivalent to approximately 6% of the NEL economy. At this stage it should be noted that this relates purely to the visitor economy and does not represent the whole of the retail and service economy which would be much more significant in terms of total economic value.

Table - Visitor Economy - Economic Contribution

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sector | GDP | Total Purchases | Payroll | Land property | Gross Profit | GVA |
| Visitor economy | £181,998,800 | £66,804,265 | £43,575,713 | £26,122,181 | £45,720,305 | £89,296,017 |
| Total | £1,740,618,300 | £687,591,325 | £464,748,498 | £182,392,375 | £448,059,002 | £912,807,499 |

Source: Hill Taylor & Atkins 2013. Atkins Ref: Survey – A5.1/L20.

**Employment**

The visitor economy also contributes to local employment providing approximately 4,830 direct local jobs[[30]](#footnote-31), 3,860 indirect jobs across the whole economy and supporting a further 1,440 jobs through induced expenditure.

Table - Key Sector Employment Summary – Visitor Economy

|  |  |
| --- | --- |
| **Geography** | **Visitor Economy** |
| **Direct Jobs** |  |
| North East Lincolnshire | 4,830 |
| **Indirect Jobs** |  |
| N.& N.E Lincolnshire & Humber | 1,570 |
| Elsewhere in Yorkshire and Humber | 1,210 |
| Outside L/H | 1,080 |
| **Total** | **3,860** |
| **Induced** |  |
| N.& N.E Lincolnshire & Humber | 590 |
| Elsewhere in Yorkshire and Humber | 450 |
| Outside Yorkshire | 400 |
| **Total** | **1,440** |
| **Total** | **10,130** |

Source: Atkins 2013. Atkins Ref: Survey –A9-A11. Figures rounded.

**Supply chain**

Turnover within the sector is split between purchases, payroll, land and property, This shows that purchases is of greatest importance to the sector, constituting 36.7% of turnover, whilst payroll makes up almost 25%.

Table - Breakdown of Annual Turnover – Visitor Economy

|  |  |
| --- | --- |
|  | Visitor Economy |
| Total Purchases | 36.7% |
| Payroll | 23.9% |
| Land property | 14.4% |
| Gross Profit | 25.1% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A14

Key purchases and services include energy & utilities (17.9%), financial & insurance (16.6%), wholesale retail goods (14.9%) and catering and food (14%).

Table - Types of Goods & Services Purchased

|  |  |
| --- | --- |
| **Purchases** | **Visitor Economy** |
| Energy & utilities | 17.9% |
| Financial & insurance services | 16.6% |
| Wholesale retail goods | 14.9% |
| Catering and food | 14% |
| Business or professional services; | 7.8% |
| Manufactured components & products | 6.1% |
| Leisure and tourism services | 6% |
| Education & research | 2.8% |
| Logistics, freight service, storage & distribution services | 2.4% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A13

A high proportion of customers (63.3%) and suppliers (71%) are based in the region, which indicates the strength of local supply chain linkages.

Table - Location of Suppliers & Clients – Visitor Economy

|  |  |  |
| --- | --- | --- |
| Geography | Visitor Economy | |
| Customers | Suppliers |
| Lincolnshire / Humber | 51.2% | 52.7% |
| Elsewhere in Yorkshire and Humber | 12.1% | 18.3% |
| **Local Area** | **63.3%** | **71.0%** |
| **UK** | **81.6%** | **95.7%** |
| Europe (other than UK); | 4.8% | 2.7% |
| USA; | 0.5% | 0.5% |
| China | 0.0% | 0.0% |
| Far East; | 0.0% | 0.5% |
| Other Worldwide locations | 1.4% | 0.5% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A17/K3

**Skills**

A relatively small proportion of firms identified skills shortages (13.4%), reflecting the occupations predominant in the sector and the associated skills requirements. Despite this, organisations like People 1st have identified issues with the productivity of the sector and how raising standards and skills could address issues like high turnover of staff and expected increases in customer expectations. This may also reflect the low skills equilibrium in the local area as there are few skills challenges and comparatively low productivity. The survey did not identify any clear trends associated with skills shortages or gaps and to do so may require further research.

**Future Prospects**

Over the past 3 years the majority of the business base (63%) has remained stable. This suggests that the sector is resilient but not overly dynamic, although approximately 36% of surveyed businesses stated their intention to invest. Those that are looking to invest often identified land, property and the workforce as the focus of investment plans.

Table - Size of Workforce – Visitor Economy

|  |  |
| --- | --- |
| Movement | Visitor Economy |
| Increased | 18.1% |
| Decreased | 18.9% |
| Remained stable | 63.0% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A20

Very few firms have recently sought to relocate and an impressive 85% consider the area to be a good and competitive location for their business.

### 7.1.3. Economic Linkages & Supply Chain

The sector has a different profile to the other key sectors given that it is a service-based activity and particularly diverse in nature. Some key linkages with the wider economy are described below.

**Independent Shops**

Independent retail is important for the vitality of shopping areas and plays an important part in supporting the local community, buying locally and employing local people, in comparison to larger chain stores which often do not use local suppliers. Although high streets have been affected by the 2008-2009 recession, independent retailers have sometimes proved resilient due to local support, low rents and smaller retail spaces reducing risk. Areas such as Seaview Street in Cleethorpes and the Abbeygate shopping area in Grimsby demonstrate the demand for independent shops.

**Larger Stores and Multiples**

Supermarkets, chain stores and department stores can contribute significantly to the local area through employment and community and social responsibility activities. There has been an increase in the number of supermarkets and, despite negative associations with supermarket expansion, the employment opportunities created are often well matched to local labour supply. New supermarkets can also offer training courses with guaranteed employment upon completion. There has been a decline in the presence of chain stores and department stores on high streets nationally in place of expansion in out-of-town retail sites. In Grimsby, the this process has left key retail spaces empty, presenting opportunities for entrepreneurial retail activity (e.g. nail salons) and other retail activities looking to expand.

**Visitor Attractions**

There are many visitor attractions in NEL. These include:

* History – Victorian seaside resort and fishing heritage attractions.
* Natural beauty – Countryside, seaside and ecological variety.
* Cultural activities – Theatrical, arts and cinematographic exhibitions, events and shows at the Grimsby Auditorium, Caxton Theatre and Parkway Cinema.
* Sporting heritage and present activities – Football, swimming and airshows attractions, events and performance. Grimsby FC is seeking to build a new stadium in the future, and have been supported by NELC in exploring options for developing surrounding land, possibly for retail purposes.

**Food & Drink**

Despite traditional fish and chips being the major temptation for visitors and local residents, different types of cuisine have established themselves across NEL (e.g. Chinese, Indian, Italian). Food and drink has the potential to take advantage of fresh produce from the agricultural hinterland of Lincolnshire and seafood from the fishing industry.

**Visitor Accommodation**

NEL has a variety of hotels, apartments, B&Bs and holiday homes for those visiting for leisure or work. These accommodation options provide for a range of requirements. Business demand has supported growth in the local hotel economy with two new branded hotels currently under construction..

**Seafood retail**

Due to the fish processing industry and the Grimsby fish market, there are a number of seafood retail and wholesale companies serving fishmongers, restaurants and shops across the country. This clearly offers a major business opportunity for improvement and growth over forthcoming years.

### Local Strengths

The local economy has a number of strengths, identified here through a location quotient analysis. These highlight the strength of the local area in terms of camping grounds (Thorpe Park) and amusement and theme parks (Cleethorpes beach).

Table - Employment LQ Analysis - Visitor Economy

|  |  |
| --- | --- |
| Industry | Emp LQ |
| 55300 : Camping grounds, recreational vehicle parks and trailer parks | 5.351445 |
| 93210 : Activities of amusement parks and theme parks | 4.3202 |

Source: BRES 2013

### Economic Trends

The broad sector, including retail, has seen a decline in firm and employment numbers between 2009 and 2013, illustrating the vulnerability of the sector to macroeconomic conditions.

Figure - Visitor Economy, Services & Retail Firm Trends (2009 - 2013)

Source: IDBR 2013

Employment dropped significantly between 2009 and 2010, although has stabilised at this reduced level since 2010. This trend shows the impact of challenging macroeconomic conditions and of reduced household disposable income.

Figure - Visitor Economy, Services & Retail Employment Trends (2009 - 2013)

Source: IDBR 2013

### Competition

Retail and tourism are highly competitive sectors. The catchment area of a retail centre and the ability to attract visitors to an area depend on a number of factors, including accessibility, demographics and competition. NEL competes largely with Scunthorpe, Doncaster and Hull for retail expenditure. Local residents may also travel to Leeds or Sheffield for shopping trips, given the significant investment in the retail economies of these cities.

NEL offers a variety of visitor attractions and competes with other coastal areas (Mablethorpe, Skegness, Donna Nook and North Somercotes), heritage sites (Thornton Abbey, Barton Upon Humber, Lincoln and Hull), areas of maritime heritage (North Yorkshire Coast) and pleasure boating locations (Hull, facilities on the River Trent and wider afield). The area benefits from its distance from competing visitor economy centres, reflected in a high degree of expenditure retention in the local area, particularly for convenience goods.

### Prospects for sector

Despite the fact the visitor economy in NEL faces a range of significant challenges, there are notable opportunities for growth and diversification. These include:

* Business tourism – Increasing investment in other key sectors will provide an important driver for business-related tourism, particularly in the short to medium term as the initial stages of developments attract workers. There is potential for a high quality hotel to improve the perception of accommodation options in the area and engage in a greater range of tourism markets. Upcoming developments of branded hotels may address this opportunity.
* Grimsby town centre – Considerable momentum has been achieved in regenerating Grimsby town centre. Major opportunities exist to significantly improve the perception of the town centre amongst potential visitors and investors. For example, there is potential for a cultural quarter around Grimsby Minster to be developed, attracting visitors and creating a more cohesive town centre. The recently announced Cartergate development is the first step in creating new office accommodation and improving the area around the Minster
* Cleethorpes visitor economy & town centre – Ongoing investment in Cleethorpes town centre reinforces the emerging role of the area as a sustainable tourism destination. The ageing population in the UK and growing urban populations in South Yorkshire and the northern Midlands will create an increased demand for leisure activities; in this context, Cleethorpes is well positioned to attract significant tourism expenditure over the next decade. The Cleethorpes Strategic Development Framework 2010 provided a vision for to become a year round visitor centre.
* There is potential for increasing tourism to the area due by taking advantage of proximity to the Lincolnshire Wolds. Improved transport connections develop will allow the area to become a start or end point for visitors.
* The lack of night-time economy could be addressed through promotion of the subsector as a channel for inward investment and local enterprise.
* Yacht and marina users are seen as very important for the future of leisure in the local area.
* The impact of a new stadium on a local area can be significant. KC Stadium in Hull, Doncaster’s Keepmoat Stadium and Bolton’s Macron Stadium have been able to provide an attractive venue for sport and cultural events, valuable business and conferencing facilities and act as a focal point for regeneration efforts in their communities. However, in the past the economic legacy of new stadia has often fallen short of expectations: Darlington and Coventry are examples of now-redundant stadia.
* Investment in the Fishing Heritage Centre and Ice Factory could be a significant driver for jobs and further investment as well as improving external perceptions of the area as a tourism destination. Similarly, hosting events in the area linked with the industrial heritage of NEL represents an important opportunity for attracting visitor expenditure to the area.
* A key initiative taken by the Council is the establishment of a private-sector led Visitor Economy, Services & Retail group to establish key priorities for investment in town centres and to oversee marketing and promotional activities. This provides a dynamic forum for connecting local retail and expenditure with family and business visitor markets.

### Challenges

A range of challenges exist for the visitor economy, these include:

* The night-time economy in Grimsby is weak and is considered a deterrent, especially to families and professionals. Continued investment into major regeneration opportunities will be an important driver in changing perceptions and improving property market conditions in order to improve the viability of a night-time economy.
* It is felt by many that the area is missing a high quality hotel. There are few vacancies in hotels during the week and visitors connected to the chemicals and renewable sectors in particular have requested and sought high quality hotel accommodation. This has led to many staying outside the area, which represents a leakage of potential expenditure for the local economy.
* National-level strategies seek to support improved customer service and the uptake of management qualifications in the industry. The local area has scope for improvement in order to ensure competitiveness.
* Tourism in the UK is dependent on public funds for much of its destination marketing activity. The diverse nature of the industry means that best-practise examples of successful co-operation to improve the quality and promotion of local tourism are not often applied elsewhere. A coordinated effort is required to attract people to the area.
* Despite the discussed strengths of Grimsby as a retail destination, some key retailers (e.g. Starbucks) have decided to leave despite apparent demand.
* Whilst regeneration efforts are expected to improve the performance of the retail sector in the area’s town centres, provision of appropriate facilities and economic confidence are required to support further growth.
* The portrayal of the area in film and television needs to be considered. Positive adverts such as [Tesco’s Finest Fish](http://www.youtube.com/watch?v=EWQ-3FFbf4w) and [Young’s Great Grimsby Advert](http://www.tellyads.com/show_movie.php?filename=TA5848) are possibly counteracted by other television shows such as SKINT and an upcoming Sasha Baron Cohen film set in the local area.

Summary & Conclusions

Summary & Conclusions

# Summary & Conclusions

Atkins were commissioned by Cofely GDF-Suez (CGS) on behalf of North East Lincolnshire Council (NELC) to undertake a targeted sector study.

This report focuses upon five key sectors, recognised in a variety of existing policy initiatives as being of strategic importance to the NEL economy:

* Port & Logistics
* Food and Fish Processing
* Chemicals and Process Industries
* Renewable Energy
* Visitor Economy, Services & Retail

## The Key Sectors

The key sectors in 2013 collectively employ approximately 19,230 people across 1,180 firms. This represents 27% of the total firms in the local area and at least 30% of total employment in the area. The breakdown by sector is as follows:

* Ports & Logistics – 220 firms employing 4,820 people
* Renewables (& Energy) - 430 firms employing 3,250 people
* Chemicals & Process Industries - 40 firms employing 2,230 people
* Tourism & Retail - 400 firms employing 4,830 people
* Food Processing - 90 firms employing 4,100 people.

Based on an empirical and representative sample of existing businesses in NEL, we estimate that an additional 49,000 indirect jobs are supported through the operation of the five key sectors. A significant proportion of these jobs are located beyond NEL’s boundaries.

Both total employment and the number of firms have been fairly stable in the key economic sectors since 2009, with growth most notable in the renewable energy sector.

Our analysis indicates that the key sectors contribute at least £1,740 million, or 57%, of the area’s GDP:

* Ports & Logistics - £832 million
* Renewables - £376 million
* Chemicals & process industries - £311 million
* Food manufacturing - £240 million
* Visitor Economy, Services & Retail - £182 million.

In terms of Gross Value Added (GVA), the key sectors together contribute just over £1billion in value.

## Determining Factors of Future Growth

A range of factors important to the future growth of the key sectors have emerged during the study. These concern skills and innovation, clustering and competition, infrastructure and environment. These factors will shape the scale and nature of future growth and should be the focus of action to be taken in order to fully realise the economic potential of the key sectors.

### Skills and innovation

Many industries are adopting high-value, knowledge-intensive activities to ensure competitiveness, and there is an increased requirement for highly skilled workers as a result. However, major sectors in the economy, particularly retail and the fish-processing industry could be described as low-skill equilibrium activities, characterised by low value added activities, low skill requirements and relatively low wages.

As technological progress in several key sectors is changing the skills requirements of businesses, local skill shortages are evident, particularly in high-skilled roles. As such, many valuable skilled workers currently travel in from outside NEL. Encouraging the development of these skills locally and emphasising relevant transferable skills will ensure the full participation of local communities in skill-led economic growth.

Furthermore, a range of sector-specific legislation, standards and certification requirements exist across the priority sectors. Ensuring that the skills exist locally to fulfil these regulatory requirements can be influential in retaining or attract businesses.

The local economy would therefore benefit from a strong local skills base, suitable for the requirements of businesses now and in the future. This can be developed through strong relationships between local skills providers and education institutions and local business. Consequently, there are significant roles for the LEPs and local authorities in taking leadership in improving the skill profile of the area.

Additionally, the strong, localised relationships between sectors suggest potential for improved knowledge transfer partnerships and collective support for research and development efforts, contributing to innovation across all sectors. This would raise the value added by local industry, providing for business growth and increased earnings.

### Clustering and competition

The area’s key sectors are mutually supportive. Significant and valuable linkages between the industries exist, often based on historical relationships and reinforced by spatial clustering effects. Local firms are well integrated into the supply chains of key sectors, including the area’s renewable energy industry. These advantages should be further built on by future developments, particularly in the renewable energy sector.

However, our research highlighted that large companies dominate several of the key sectors and there is potential for future SME growth in all sectors. The predominance of large companies is a significant issue for various reasons, including concerns regarding the resilience of the local economy were these firms to relocate. The ownership of the area’s ports and much of its private land by a few large firms may represent a barrier to growth of some smaller businesses. Additionally, barriers to accessing finance restrict many firms’ ability to grow. These businesses may therefore require targeted support in order to mitigate these constraints.

### Policy Context

National government support for several key sectors is perceived by some businesses as inadequate and strong institutional support is required for sector growth and diversification.

While the national government’s localism agenda could be used to support future growth, policymakers must be aware that the economic future of the NEL depends on its ability to compete across all key sectors with areas elsewhere in the UK and Europe, particularly regarding renewable energy.

Local policymakers, in local authorities and in both LEPs, have a clear vision for the economic future of the area. Coordinated efforts by these institutions have the potential to address many of the issues currently faced by the key sectors. The future of the Borough’s economy will, in part, be determined by the willingness and commitment to implement current economic development policies designed by the LEPs and the local authority.

### Infrastructure and environment

Natural assets and the associated infrastructure provide the basis for North East Lincolnshire’s economy. As such, transport connectivity was generally considered a strength of the area, though could benefit from certain specific improvements. The airport in particular is perceived by businesses as a significant asset.

However, constraints on utilities and the availability and quality of land and premises represent a limitation for many businesses. The issue is particularly acute as many of the area’s key sectors require large premises and are characterised by low space to employment ratios.

Additionally, poor perceptions of the built environment of the area have negative consequences for local business. Regenerating urban areas and protecting local heritage will be important in ensuring the area is an attractive place to live and visit.

## Recommendations for Action

Building on the factors for future growth, recommendations for action are identified below. These are based on the analysis of current areas for improvement and opportunities for growth identified in the research.

### Skills and innovation

* Engage with employers and training providers and conduct further research in order to identify critical areas for skill development, now and in the future.
* Take action to implement skill development in critical areas across the labour market, including supporting young people in undertaking apprenticeships and older age groups in retraining. Providing support to the Grimsby Institute in particular will allow it’s highly important role in the local economy to be maintained.
* Address the ‘brain drain’, or out-migration of skilled younger people, by ensuring effective links between local education and training providers and employers. Achieving this will not only ensure a greater supply of skills locally, but also address demographic challenges related to an aging population. This is therefore a crucial long-term step in future proofing the workforce and ensuring sustainable development.

### Clustering and competition

* Clearer communication with local communities and businesses regarding the benefits of the ABLE Marine and Logistics Parks and Hull Green Port will encourage participation in the renewable energy sector and encourage businesses to take advantage of the benefits available from clustering.
* Develop stronger linkages and relationships with key sectors and supply chain industries in Nordic countries, Germany and the Low Countries to ensure international competitiveness and reputation.
* Improve access to finance for local business. This may include consideration of support measures for businesses in order to promote inward investment, as well as contributing to dialogue with banking groups.

### Policy Context

* Develop innovative solutions in marketing the area. For example, pooling private sector funding from industry bodies and other sources to promote the area and attract visitors may allow campaigns to be more efficient and effective in presenting a coherent vision to a wider audience. Use of social media and identifying opportunities to encourage political support may also be effective.
* Similarly, identify areas for cooperation within the wider sub-region in supporting and promoting the tourism industry.
* Monitor industry developments and national government support for biofuel. Further research may be valuable in understanding the scope and timeframe of potential local activity in the sector.

### Infrastructure & Environment

* Improve the Grimsby Dock area through ongoing regeneration, restoration and investment by working closely with land owners, employers and waste disposal companies to create an attractive environment for businesses.
* Further research and consideration of the ecological and environmental challenges that the area faces will be important for ensuring sustainable development.
* Support Humberside Airport in expanding capacity, services and facilities, in collaboration with LEPs to develop the area’s international connectivity.
* Coordinate with and support LEPs in seeking better rail connections with London and other urban centres to facilitate rail haulage, therefore maximising the area’s potential for the logistics sector.
* Support the improvement of local amenities, heritage and the night-time economy to in order to improve quality of life for residents and attract visitors. This should include supporting efforts for securing finance to redevelop the Ice Factory and other historic buildings.

###### Location Quotient Analysis

Location quotients can be interpreted as a measure of industrial specialisation in local areas. A LQ analysis compares, for each industry, the industry's share of local employment with its share of total employment, using the following formula.

LQ = (Ei,r / Er ) / (Ei / E)

* Ei,r is the number of employee jobs in industry i region r, Er is the number of employee jobs in region r
* Ei is the number of employee jobs in industry i, and E is the number of employee jobs in Great Britain.

A value of 1 means that an industry's share of employee jobs in region r is the same as its share of national employee jobs in Great Britain. A value greater than 1 means that industry i makes up a larger share of employee jobs in the local area than at the national level. This is also built upon by using employment which is above 0.2% of the local labour market.

Table - Top 25 Employment LQs in North East Lincolnshire

|  |  |
| --- | --- |
| Industry | Emp LQ |
| 10200 : Processing and preserving of fish, crustaceans and molluscs | **174.46** |
| 20600 : Manufacture of man-made fibres | **90.91** |
| 20120 : Manufacture of dyes and pigments | **74.70** |
| 20150 : Manufacture of fertilisers and nitrogen compounds | **32.2** |
| 52241 : Cargo handling for water transport activities of division 50 | **31.83** |
| 52220 : Service activities incidental to water transportation | **22.04** |
| 20140 : Manufacture of other organic basic chemicals | **21.94** |
| 46380 : Wholesale of other food, including fish, crustaceans and molluscs | **17.73** |
| 33120 : Repair of machinery | **13.11** |
| 20160 : Manufacture of plastics in primary forms | **10.30** |
| 19201 : Mineral oil refining | **9.31** |
| 10720 : Manufacture of rusks and biscuits; manufacture of preserved pastry goods and cakes | **8.56** |
| 28930 : Manufacture of machinery for food, beverage and tobacco processing | **8.28** |
| 52290 : Other transportation support activities | **6.83** |
| 81222 : Specialised cleaning services | **6.75** |
| 22190 : Manufacture of other rubber products | **6.25** |
| 22220 : Manufacture of plastic packing goods | **5.50** |
| 55300 : Camping grounds, recreational vehicle parks and trailer parks | **5.35** |
| 38210 : Treatment and disposal of non-hazardous waste | **4.80** |
| 93210 : Activities of amusement parks and theme parks | **4.32** |
| 84130 : Regulation of and contribution to more efficient operation of businesses | **3.02** |
| 71200 : Technical testing and analysis | **2.93** |
| 10850 : Manufacture of prepared meals and dishes | **2.91** |
| 25110 : Manufacture of metal structures and parts of structures | **2.61** |
| 85320 : Technical and vocational secondary education | **2.61** |

###### Economic & Business Survey Analysis

As part of the study on the key sectors in the North East Lincolnshire economy, Hill Taylor undertook a business survey on behalf of Atkins in order for business information to be captured within the economic study area.

The main objective of the survey was to gather key data including company turnover, employment, expenditure and operational requirements. This information was used to formulate the development of an economic impact model for key sector activities in the economic study area. It also provides critical information which can be used to inform the development of planning and economic development strategies in the sub-region.

This Appendix sets out the key findings of the business survey and describes the economic characteristics of the key sectors. It is structured as follows:

* Methodology
* Survey sample details (Size of Sectors, contribution to GDP and Gross Value Added (GVA))
* Employment Impact
* Contribution to National Exchequer
* Summary of other business survey results

Methodology and sample

A survey of indigenous firms within the economic study area was conducted in order to provide a statistically significant assessment of the key sector related business community. The difficulties of defining certain sectors are highlighted in the main report, but our final 18 activities have been used consistently throughout the following analysis as the definitive description of key sectors.

This survey provides an empirical source of data which can be used along with supplementary analysis provided by the manipulation of secondary data sources.

The key topics researched included:

* General company information;
* Turnover & profit information;
* Employment information;
* Supply chain demand and connectivity;
* Current & future skill requirements;
* Future growth plans & requirements;
* Issues concerning the physical location of their operation.

Survey Process

The information was collected through a series of 15 minute interviews with firms located within NEL. Interviews were conducted with owners, managers and directors or other senior employees of the individual firms.

All 294 responses from the survey relate to firms which operate directly or indirectly as one of the core sectors activities defined in main report (over 50% of turnover being sourced from the key sectors). The 294 firms operate in the key sectors of the economy:

* Renewables (& energy);
* Ports & Logistics;
* Food manufacturing;
* Chemicals & process industries;
* Visitor Economy & Retail.

A certain number of results were filtered out from the survey because of their activities not aligning with core sector activities (e.g. manufacturing or services not related to the key sectors).

Survey Sample

The sample frame was taken from the IDBR database. Actual business contact details were provided by the Experian database and key sector firms were identified using SIC codes and detailed activity definitions.

Exclusions

It is important to highlight that the sample for this quantitative assessment included private sector business types only. The analysis also excludes the impact of public sector organisations such as colleges and universities. The survey was unable to contact some of the larger firms and therefore omits their contribution to the local economy. As a consequence we have factored in these firms’ financial results during research, obtained from privately held and council owned data.

Sample Frame

Providing a statistical definition of each sector is not a straight-forward task. Many of the sectors and their activities cannot be easily defined through national statistics, the activities of firms can overlap sectors and some firms are hidden in national data because of their head office location, Despite these challenges, it remains necessary to provide an estimate of the total ‘population’ of firms in each sector within NEL. This is required in order to provide a basis by which the results from the sample survey can be extrapolated to provide a reasonable representation of the key sectors in the economic study area.

As discussed elsewhere in the report, the renewables sector is difficult to define and capture in assessments. We have attempted to refine our assessment of this sector through modifications to factoring and analysis outputs. Having spoken to firms and assessed some key firm data, we feel that this assessment is robust.

Using the best available information, Table 0-2 sets out indicative estimates of the total sector business populations in the economic study area.

Having closely analysed the secondary information, it is estimated that there are approximately 4,390 firms in NEL which can be classified as operating directly in the key sectors or being significantly reliant on these sectors. On this basis, our survey sample represents approximately 8% of all key sector firms within the study area. This represents a good foundation on which to extrapolate the business survey findings to resemble the NEL economy.

Table - IDBR Firm Numbers and Employees

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sector | Count of Firms | % of key sector | Number of Employees | % of key sector employment |
| Renewables (& Energy) | 430 | 36.7% | 3,250 | 16.9% |
| Port & Logistics | 220 | 18.9% | 4,820 | 25.1% |
| Food Processing | 90 | 7.5% | 4,100 | 21.3% |
| Chemicals & Process Industries | 40 | 3.1% | 2,230 | 11.6% |
| Visitor Economy & Retail | 400 | 33.8% | 4,830 | 25.1% |
|  |  |  |  |  |
| Total Key Sector | 1,180 | 100% | 19,230 | 100% |
| Proportion of Total Economy |  | 26.9% |  | 29.8% |
|  |  |  |  |  |
| **Total Economy** | **4,390** |  | **64,540** |  |

Source: IDBR 2013, Note: Multiplier for Renewables (& Energy) is reduced in the analysis because of previous analysis on firm size of the sector. Atkins Ref: Survey – A.0. Figures rounded.

Outputs (where possible and where needed) were also stratified by employee size information, with the size of businesses from IDBR information utilised to provide the sampling frame (Table 0-3).

Populating the Sample

Based on the key sector definitions, the business survey was stratified using a sampling frame to be as representative as possible of the wider key sector population. By categorising the sample using the broader definitions it was possible to make a comparison of the proportional number of firms within our sample with the wider population.

Table - Sample Frame by Sub-Sector

|  |  |  |  |
| --- | --- | --- | --- |
| Sector | Survey | % of key sectors | Multiplier |
| Renewables (& Energy) | 20 | 6.8% | 10.85 |
| Ports & Logistics | 69 | 23.5% | 4.63 |
| Food manufacturing | 57 | 19.4% | 1.54 |
| Chemicals & process industries | 21 | 7.1% | 1.76 |
| Visitor Economy & Retail | 127 | 43.2% | 3.90 |
|  |  |  |  |
| **Total Key Sectors** | **294** | **100%** | **4.01** |

Source: Hill Taylor & Atkins 2013. Note: Renewables and Energy multiplier reduced because of size of sector . Source: IDBR 2013 Atkins Ref: Survey – A0.

In addition to stratifying the sample by sector and business size (as measured by number of employees), the sample was also analysed and stratified with consideration to annual turnover and business size.

There were differences in the number of responses to certain questions because of the sensitivity of the topic. For example, all of the 294 firms interviewed gave responses to the questions regarding the number of staff but only 236 responded to turnover. Where sample sizes were too small this has been noted.

Survey Outputs

The remainder of this appendix details the main quantitative findings from the quantitative telephone surveys, including our estimates of the overall gross domestic product (GDP) contribution to the economy and the gross value added (GVA) by the sectors within the economic study area.

When undertaking business surveys of this nature, asking respondents about the nature of their operation and the scale in terms of employment will typically yield a high response rate. However, firms are often reticent to respond to questions asking about detailed financial information. As such, when asking about the size of business in terms of turnover, respondents were offered a number of ranges as options as opposed to giving precise details. Whilst this will normally yield a higher response rate, it is a limiting factor in terms of assessing the size of sectors.

Size of sectors

**Sector Contribution to GDP**

From our sample, we have established the range of total annual turnover of each business within each sector (see Table 0-4).

Table - Total Annual Turnover for Survey Sample

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Turnover band | Renewables | Ports & Logistics | Food manufacturing | Chemicals & process industries | Visitor Economy & Retail |
| Less than £100K p.a. | £250,000 | £150,000 | £700,000 | £50,000 | £2,350,000 |
| £100K to £250K p.a. | £350,000 | £1,050,000 | £700,000 | £350,000 | £2,975,000 |
| £250K to £500K p.a. | £750,000 | £3,375,000 | £2,250,000 | £375,000 | £4,500,000 |
| £500K to £1M p.a. | £2,250,000 | £3,000,000 | £6,000,000 | £2,250,000 | £6,750,000 |
| £1M to £2M p.a. | £3,000,000 | £15,000,000 | £4,500,000 | £6,000,000 | £6,000,000 |
| £2M to 5M p.a. | £3,500,000 | £38,500,000 | £14,000,000 | £10,500,000 | £10,500,000 |
| Over £5M | £20,000,000 | £75,000,000 | £30,000,000 | £15,000,000 | £25,000,000 |
|  |  |  |  |  |  |
| **Total** | **£30,100,000** | **£136,075,000** | **£58,150,000** | **£34,525,000** | **£58,075,000** |

Source: Atkins 2013. Atkins Ref: Survey – A2/L3. Figures rounded.

The values shown in the table above give the total approximate turnover for our sample. We have aggregated these numbers in order to estimate the total turnover of the sectors as a whole. To weight our data effectively, we have used the IDBR database to estimate the total population of firms that fall within each of the sector bands. This provides an extrapolation factor which provides an estimation of the total sector turnover in the local authority.

The ‘over £5 million’ turnover data was also moderated following analysis of turnover from other sources. However, it has not been stratified as gaps in the data have been identified (e.g. unusual turnover figures and missing key company data). Further turnover figures were added to account for these missing figures and the oversampling of small firms in the data.

The results of the estimates of total turnover for the key sectors within North East Lincolnshire is shown in Table 0-5.

Table - Total Annual Turnover for Sectors

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Turnover band | Renewables | Ports & Logistics | Food manufacturing | Chemicals & process industries | Visitor Economy & Retail |
| Less than £100K p.a. | £2,706,300 | £696,900 | £1,080,700 | £88,100 | £7,364,600 |
| £100K to £250K p.a. | £3,788,700 | £4,878,100 | £1,080,700 | £616,700 | £9,323,200 |
| £250K to £500K p.a. | £8,118,700 | £15,679,700 | £3,473,700 | £660,700 | £14,102,400 |
| £500K to £1M p.a. | £24,356,200 | £13,937,500 | £9,263,200 | £3,964,300 | £21,153,500 |
| £1M to £2M p.a. | £32,475,000 | £69,687,500 | £6,947,400 | £10,571,400 | £18,803,100 |
| £2M to 5M p.a. | £37,887,500 | £178,864,600 | £21,614,000 | £18,500,000 | £32,905,500 |
| Over £5M | £266,500,000 | £348,437,500 | £196,315,800 | £276,428,600 | £78,346,500 |
| **Total** | **£375,832,400** | **£632,181,800** | **£239,775,500** | **£310,829,800** | **£181,998,800** |
| **Total Key Sectors** | | | | | **£1,740,618,300** |

Source: Atkins 2013. Atkins Ref: Survey – A2/M45. Figures rounded.

Using business turnover we are able to assess GDP (the contribution of each economic unit by estimating the value of an output like goods or services less the value of inputs used in that output's production process).  As shown, the range in total turnover for the key sectors within the economic study area is estimated to be £1,740 Million.

Putting this in context, the European Commission estimates the North and North East Lincolnshire GDP to be €7,598 million (NUTS III, Eurostat, 2011) or £6,350 Million. Therefore, the key sector’s account for 27.4 % of the total North and North East Lincolnshire economy GDP. Taking this further we have estimated North East Lincolnshire’s GDP to be worth £3,021 million and therefore the key sectors make up 57% of North East Lincolnshire’s total output. This demonstrates the significance of the key sectors in terms of output value, productivity and their importance to the local economy. Furthermore, our estimates exclude a number of key operations and activities such as education and wider supply chain activities (e.g. legal and financial). Inclusion of these activities would significantly increase the contribution of the key sectors to the local economy. Indeed, the economic impact estimates should be considered as reasonably conservative as they reflect the impact of a narrow range of businesses.

Gross Value Added (GVA)

In order to calculate the GVA contribution to the economy, estimates of total gross profit and expenditure on wages have been provided by the survey. These two values combined give a reasonable approximation of the GVA contribution to the economy.

Respondents were asked in the business survey to estimate their proportion of total turnover that is attributable to purchases, wages, rent & other overheads, and gross profit. As shown below, the GVA contribution to the economy of the key sectors is approximately £912 million. This is equivalent to approximately 17% of total GVA within North East Lincolnshire (£5,838 million – ONS 2011)

Table - Total GVA for Sectors

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Sector | GDP | Total Purchases | Payroll | Land or property | Gross Profit | GVA | GVA % of GDP |
| Renewables | £375,832,400 | £133,591,335 | £96,213,094 | £28,396,226 | £118,387,206 | £214,600,300 | 57.1% |
| Ports & Logistics | £632,181,800 | £258,983,811 | £159,428,348 | £68,886,017 | £167,419,180 | £326,847,528 | 51.7% |
| Food manufacturing | £239,775,500 | £120,587,095 | £40,854,056 | £28,293,509 | £60,971,484 | £101,825,541 | 42.5% |
| Chemicals & process industries | £310,829,800 | £107,624,818 | £124,677,286 | £30,694,443 | £55,560,827 | £180,238,113 | 58.0% |
| Visitor Economy & Retail | £181,998,800 | £66,804,265 | £43,575,713 | £26,122,181 | £45,720,305 | £89,296,017 | 49.1% |
|  | | | | | | | |
| Total | **£1,740,618,300** | **£687,591,325** | **£464,748,498** | **£182,392,375** | **£448,059,002** | **£912,807,499** | 52.4% |

Source: Hill Taylor & Atkins 2013. Atkins Ref: Survey – A5.1/L20.

Employment impact

The survey also explored the impact of the industries on local employment and employment from outside the local area. Secondary data provides us with a firm understanding of direct employment in all of the sectors and it is therefore important to explore how activities support employment locally and across different areas.

**Indirect Employment**

Indirect employment relates to the proportion of jobs that are supported by that part of the supply chain which is reliant on key sectors in the North East Lincolnshire area. In order to provide a greater degree of statistical confidence, three methods for measuring indirect employment have been employed:

1. Wage-driven method
2. Turnover per employee
3. Simple Type 1 Multiplier (Type 1 multipliers provide an estimate of the ratio between direct and indirect employment.)

It is important to highlight that both the wage-driven and turnover per employee methods provide estimates of only the first round of supplier effects. In reality, these suppliers will have their own suppliers meaning additional rounds of jobs are safeguarded or generated by key sector activities. Consequently, the wage and turnover based approaches potentially under-estimate the amount of indirect employment.

On a point of caution, a number of key assumptions have to be made in making estimates of indirect employment. The assumptions adopted in this model are based on empirical information provided by the business survey, which represents the best available information.

***Method 1: Wage-driven method***

The business survey indicated that the total purchases (cost of goods sold) by the key sectors equates to around £769 million. Other firms both in and outside the study area will receive these monies as revenues. From our survey we have also calculated the proportion of this expenditure that is attributable to North East Lincolnshire area and other areas of the country and the world.

At the sector level we can assume that the proportion of purchases expenditure/supplier revenue spent on wages amounts to 10.5% (based on data from our survey). Figures for the key sectors were also calculated allowing us to analyse the total value spent on indirect employment by the key sectors.

By calculating average wages of employees within the sectors (using the Annual Survey of Hours and Earnings, from the Office for National Statistics[[31]](#footnote-32)) we can then estimate the number of indirect employees supported by the key sectors as 18,670, as shown in the Table 0-7. The majority are based in North And North East Lincolnshire and the Humber area.

Table - Indirect Employees (First Round Supply Chain)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sector | Purchase | Payroll | Lincolnshire/Humber | Other Yorkshire& Humber | Outside Lincolnshire & Humber | Average Wages |
| Renewables | £133,591,300 | £96,213,100 | 1,300 | 840 | 1,360 | £27,000 |
| Ports & Logistics | £258,983,800 | £159,428,300 | 1,960 | 1,390 | 2,380 | £26,521 |
| Food manufacturing | £120,587,100 | £40,854,100 | 600 | 390 | 510 | £26,266 |
| Chemicals & process industries | £107,624,800 | £124,677,300 | 1,300 | 800 | 1,980 | £28,790 |
| Visitor Economy & Retail | £66,804,300 | £43,575,700 | 1,570 | 1,210 | 1,080 | £11,239 |
| **Total** | **£769,524,700** | **£515,186,000** | **6,730** | **4,630** | **7,310** |  |
|  | | | **Total Employment: 18,670** | | |

Source: Atkins 2013 and ASHE 2013 Atkins Ref: Survey – A9/J65. Figures rounded.

***Method 2: Turnover per Employee***

Our sample provides an estimate of the average turnover per employee for each sector (the figure for all key sectors aggregated is approximately £97,300). Given that earlier information from the survey provides us with the total amount the key sectors spend on their supply chain in the study area and elsewhere, we can estimate the number of employees by applying the turnover per employee estimate.

Table - Indirect Employees (First Round Supply Chain)

|  |  |  |  |
| --- | --- | --- | --- |
| Sector | N.& N.E Lincolnshire & Humber | Elsewhere in Yorkshire and Humber | Outside Y&H |
| Renewables | 300 | 200 | 320 |
| Ports & Logistics | 400 | 280 | 480 |
| Food manufacturing | 270 | 180 | 230 |
| Chemicals & process industries | 270 | 170 | 410 |
| Visitor Economy & Retail | 470 | 360 | 320 |
| Total | 1,710 | 1,190 | 1,760 |
| **Total: 4,660** | | | |

Source: Atkins 2013. Atkins Ref: Survey – A10/W33. Figures rounded.

As shown in Table 0-8, by this method we estimate that there are 4,660 indirect jobs attributable to the key sectors of which the majority are in the economic study area.

***Method 3: Type 1 Employment Multiplier***

Applying a range of simple Type 1 multipliers provided by the Scottish Executive (Scottish Executive Statistics Input-Output Multipliers) enables a third estimate to be made of indirect employment (see Table 0-9).

When applying this method, it is important to highlight that multipliers vary depending on the size of the study / impact area. Typically, the larger the area, the greater the multiplier will be as a higher proportion of supply expenditure is retained / recycled within the defined economy. Whilst the multipliers used are based on the Scottish economy, they provide one of the few reliable sources of detailed sector-based multipliers at the sub-national level (from input-output tables). Whilst the Scottish economy is larger than the North East Lincolnshire economy, the data presented by the analysis suggest that the multipliers used can be reasonably applied for the purposes of this study.

Based on this method the number of new indirect jobs driven by the key sectors within the study area equates to 24,020.

Table - Indirect Employees (First Round Supply Chain)

|  |  |  |  |
| --- | --- | --- | --- |
| Sector | Direct Jobs | Employment multiplier | Implied new Jobs |
| Renewables | 3,250 | 1.6 | 1,950 |
| Ports & Logistics | 4,820 | 2.3 | 6,270 |
| Food manufacturing | 4,100 | 2 | 4,100 |
| Chemicals & process industries | 2,230 | 4.3 | 7,360 |
| Visitor Economy & Retail | 4,830 | 1.9 | 4,350 |
|  |  |  |  |
| **Total** | **19,230** |  | **24,020** |

Source: Atkins 2013. Atkins Ref: Survey – A11/E1. Figures rounded.

Reflecting on the three approaches, estimates of indirect employment supported by the key sectors within the economic study area varies from 4,600 to 24,020. Consequently, we consider that a reasonable estimate of around 20,490 should be adopted for the purposes of this study. Therefore, the estimates provided by method 1 (wage-driven assessment) are taken forward in this study.

Induced Employment

In addition to indirect employment supported by the key sectors there will be a further level of induced employment, derived by income spent by direct and indirect employees within and outside the economic study area.

To estimate induced employment, we have applied Type II employment multipliers by key sectors (Type II multipliers estimate the ratio between direct employment and indirect and induced employment (source: Scottish Executive)). Given that Type II multipliers provide estimates of indirect and induced employment combined, we have calculated the induced element by subtracting the Type I results (indirect only) from the Type II results (indirect + induced). Table 0-10 indicates that the induced effect of key sector activities amounts to over 9,160 jobs.

Table - Induced Employees

|  |  |  |  |
| --- | --- | --- | --- |
| Sector | Direct Jobs | Type II multiplier | Induced (Type II – Type I) |
| Renewables | 3,250 | 2.2 | 1,950 |
| Ports & Logistics | 4,820 | 2.9 | 2,890 |
| Food manufacturing | 4,100 | 2.1 | 410 |
| Chemicals & process industries | 2,230 | 5.4 | 2,450 |
| Visitor Economy & Retail | 4,830 | 2.2 | 1,450 |
| **Total** | **19,230** |  | **9,150** |

Source: Atkins 2013. Atkins Ref: Survey – A11/M1. Figures rounded.

Table 0-11 summarises the total employment impact of the key sector activities. This shows that the key sectors support a total of 48,860 jobs of which 39.4% are direct jobs within North East Lincolnshire (65.9% are in the Yorkshire & Humber Area). However, it is critical to highlight that this excludes employment at relevant public sector organisations. Including these activities, total employment reliant on the key sector is likely to be higher.

Importantly, the analysis of employment and GDP impact demonstrates that the key sectors relatively high value activity should be harnessed as part of future policy making and these sectors should form the basis for future economic growth.

Table - Key Sector Employment Summary

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Geography | Renewables | Ports & Logistics | Food manufacturing | Chemicals & process industries | Visitor Economy & Retail | Total |
| **Direct Jobs** |  | | | | | |
| North East Lincolnshire | 3,250 | 4,820 | 4,100 | 2,230 | 4,830 | 19,230 |
| **Indirect Jobs** |  | | | | | |
| N.& N.E Lincolnshire & Humber | 1,300 | 1,960 | 600 | 1,300 | 1,570 | 7,350 |
| Elsewhere in Yorkshire and Humber | 840 | 1,390 | 390 | 800 | 1,210 | 5,070 |
| Outside L/H | 1,360 | 2,380 | 510 | 1,980 | 1,080 | 8,070 |
| **Total** | **3,500** | **5,730** | **1,500** | **4,080** | **3,860** | **20,490** |
| **Induced** |  | | | | | |
| N.& N.E Lincolnshire & Humber | 720 | 990 | 160 | 780 | 590 | 3,240 |
| Elsewhere in Yorkshire and Humber | 470 | 700 | 110 | 480 | 450 | 2,210 |
| Outside Yorkshire | 760 | 1,200 | 140 | 1,190 | 400 | 3,690 |
| Total | 1,950 | 2,890 | 410 | 2,450 | 1,440 | 9,140 |
| **Total** | **8,700** | **13,440** | **6,010** | **8,760** | **10,130** | **48,860** |

Source: Atkins 2013. Atkins Ref: Survey –A9-A11. Figures rounded.

Contribution to National Exchequer

In addition to the impact in terms of output and employment, the key sectors also make a significant contribution to the national exchequer in the form of taxes and other levies. Indicative estimates of this contribution are provided below.

**Income Tax and National Insurance**

With an average annual wage of around £24,469 across all key sectors, we have assumed that for the majority of employees the basic rate of income tax of 20% applies. Though there will be a proportion of workers paying the high rate of income tax, in order not to over-estimate the sector’s tax contribution, we have not made a separate measurement of high income tax payers. We have also assumed that the vast majority of employees are not self-employed and pay National Insurance contributions of 11%.

The total revenue attributable to wages, both within and outside the economic study area has been calculated using the estimates of employment and average annual earnings. Table 0-12 summarises the estimates of the income tax and national insurance contribution which amount to a total of approximately £136 million from income tax and £75million from National Insurance.

Table - Income Tax Contribution

|  |  |  |  |
| --- | --- | --- | --- |
|  | Wages | Income Tax | National Insurance |
| Direct Employees | £470,545,280 | £94,109,056 | £51,760,000 |
| Indirect | £77,567,787 | £15,513,557 | £8,532,000 |
| Indirect Yorkshire & Humber | £54,811,307 | £10,962,261 | £6,029,000 |
| Indirect outside N. And N.E Lincolnshire & Humber | £79,280,640 | £15,856,128 | £8,721,000 |

Source: Atkins 2013. Atkins Ref: Survey –A12/D14.

**Corporation Tax**

Based on our sample, we have estimated the number of firms in each sector that achieves profits of over £1.5 million. Therefore, it has been assumed that these firms pay corporation tax on their gross profits at a rate of 30%. Other firms are assumed to pay the lower rate of 20%. Table 0-13 summarises the corporation tax contribution which amounts to £105 million.

Table - Corporation Tax Contribution

|  |  |  |
| --- | --- | --- |
| Sector | Corporation Tax Contribution | |
| **30% Tax** | **20% Tax** |
| Renewables | £6,297,351 | £19,479,206 |
| Ports & Logistics | £27,656,071 | £15,046,454 |
| Food manufacturing | £4,587,447 | £9,135,998 |
| Chemicals & process industries | £8,838,247 | £5,220,000 |
| Visitor Economy & Retail | £1,296,008 | £8,280,055 |

Source: Atkins 2013. Atkins Ref: Survey –A12/I23

The table above summarises the overall tax and levy contribution to the national exchequer arising from direct key sector activity in the economic study area. This is shown to amount to be approximately £467 million.

Summary of key qualitative business survey outputs

The remainder of this appendix sets out the findings of the rest of the business survey, which largely focuses on qualitative issues. As previously mentioned, it should be noted that not all questions were answered by the entire sample and therefore, total responses vary from question to question.

Type of Business

Respondents were asked to describe their type of business. As shown in Figure 0-1, A high proportion of firms in all sectors indicated that they are a stand-alone operation, with a higher proportion in Food manufacturing saying they were a single site (84%) and very few indicating that they are multi-sites. A lower proportion of businesses in Ports & Logistics were single site establishments (50.7%)

The high proportion of stand-alone operations indicates the importance of relatively small firms within each of the sectors. These results need to be considered in combination with analysis of employment and firm size-bands. It shows the importance of SMEs and micro-firms is heightened for some sectors compared with others. It also demonstrates a high degree of industrial maturity which comes about from the development of well established networks of suppliers and customers.

Figure - Description of Type of Business

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A13

Financial Performance

Respondents were asked what proportion of their annual turnover was attributable to total purchases, wages, rent and other costs, and gross profit. Pay roll is highest in Chemicals and Process Industries, whilst the lowest in Food Manufacturing. These results demonstrate some of the reasoning behind increased mechanisation of activities in some of the core sectors due to high cost of wages (e.g. in Chemicals and Process Industries) but also a need to increase the margin on products (e.g. Food manufacturing). Qualitative information from interviews suggested that the cost of land and property to Renewables may be smaller than other sectors due to existing incentives and the current focus upon O&M activities. The results are shown in the Table 0-14 below.

Table - Breakdown of Annual Turnover

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Renewables | Ports & Logistics | Food manufacturing | Chemicals & process industries | Visitor Economy & Retail |
| Total Purchases | 35% | 41% | 50% | 34% | 36% |
| Payroll | 25% | 25% | 17% | 40% | 23% |
| Land property | 7% | 10% | 11% | 9% | 14% |
| Gross Profit | 31% | 26% | 25% | 17% | 25% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A14. Note: Figures do not add up to 100% because of rounding.

Supply Chain

Energy & utilities, manufactured components & products and financial & insurance services were most cited as the types of goods and services most commonly purchased. Some energy and utility concerns were identified in the interviews and this table shows how firms in the key sectors rely on energy & utility products. Manufacturing as a wider economic activity is key across many of the key sectors (not Visitor economy & retail) and shows how the fortunes of the wider manufacturing sector are also important.

Table - Types of Goods & Services Purchased

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Supply Chain Element | Renewables | Ports & Logistics | Food manufacturing | Chemicals & process industries | Visitor Economy & Retail |
| Energy & utilities | 17.3% | 17.0% | 19.0% | 15.0% | 17.9% |
| Manufactured components & products | 14.3% | 13.0% | 7.9% | 11.5% | 6.1% |
| Financial & insurance services | 17.3% | 15.2% | 17.8% | 14.2% | 16.6% |
| Business or professional services; | 9.2% | 11.8% | 9.1% | 10.6% | 7.8% |
| Real estate services | 1.0% | 2.2% | 1.2% | 3.5% | 0.2% |
| Construction services | 6.1% | 2.5% | 2.0% | 4.4% | 2.0% |
| Wholesale retail goods | 8.2% | 6.5% | 10.3% | 8.8% | 14.9% |
| Retail services (high street) | 1.0% | 0.6% | 0.0% | 0.9% | 1.7% |
| Retail - other retail goods & services | 2.0% | 1.2% | 1.2% | 0.9% | 1.9% |
| Catering and food | 2.0% | 2.8% | 15.0% | 3.5% | 14.0% |
| Education & research | 6.1% | 5.9% | 3.2% | 5.3% | 2.8% |
| Public sector services | 3.1% | 1.5% | 1.2% | 1.8% | 1.9% |
| Leisure and tourism services | 0.0% | 0.6% | 1.2% | 0.0% | 6.0% |
| Logistics, freight service, storage & distribution services | 5.1% | 10.2% | 7.9% | 9.7% | 2.4% |
| Other transport services | 5.1% | 5.9% | 2.8% | 5.3% | 1.5% |
| Minerals & aggregates supply | 2.0% | 1.2% | 0.4% | 3.5% | 0.4% |
| Other | 0.0% | 1.9% | 0.0% | 0.9% | 2.0% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A15. Note: Figures do not add up to 100% because of small results being excluded

A high proportion of the customers and suppliers for all sectors are located within the Lincolnshire & Humber. There is also a significant proportion of each sector’s customer base and suppliers concentrated within the Yorkshire & Humber area. These represent key supplier source markets and customer bases for the sectors (Table 0-16). As expected, Ports & Logistics has the most geographically spread customer and supplier base. This represents an opportunity for future export activities and supply chain linkages to be made in other countries, especially where linkages already exist (Nordic countries).

Table - Location of Suppliers & Clients

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Renewables | | Ports & Logistics | | Food manufacturing | | Chemicals & process industries | | Visitor Economy & Retail | |
| **Customers** | **Suppliers** | **Customers** | **Suppliers** | **Customers** | **Suppliers** | **Customers** | **Suppliers** | **Customers** | **Suppliers** |
| Lincolnshire / Humber | 39.4% | 37.1% | 17.0% | 34.3% | 31.3% | 41.1% | 22.4% | 26.5% | 51.2% | 52.7% |
| Elsewhere in Yorkshire and Humber | 12.1% | 17.1% | 9.3% | 18.2% | 13.0% | 16.7% | 6.1% | 20.4% | 12.1% | 18.3% |
| **Local Area** | **51.5%** | **54.3%** | **26.3%** | **52.4%** | **44.3%** | **57.8%** | **28.6%** | **46.9%** | **63.3%** | **71.0%** |
| **UK** | **69.7%** | **88.6%** | **61.3%** | **79.7%** | **84.0%** | **77.8%** | **63.3%** | **79.6%** | **81.6%** | **95.7%** |
| Europe (other than UK); | 6.1% | 5.7% | 7.7% | 9.1% | 4.6% | 13.3% | 10.2% | 10.2% | 4.8% | 2.7% |
| USA; | 0.0% | 0.0% | 3.1% | 0.7% | 0.0% | 0.0% | 0.0% | 0.0% | 0.5% | 0.5% |
| China | 0.0% | 0.0% | 2.1% | 2.1% | 0.0% | 2.2% | 0.0% | 0.0% | 0.0% | 0.0% |
| Far East; | 0.0% | 2.9% | 2.1% | 1.4% | 0.0% | 1.1% | 2.0% | 2.0% | 0.0% | 0.5% |
| Other Worldwide locations | 6.1% | 2.9% | 7.7% | 7.0% | 1.5% | 5.6% | 8.2% | 8.2% | 1.4% | 0.5% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A17/K3. Note: Figures do not add up to 100% because of small results being excluded

Workforce

Respondents were asked whether their business is currently affected by any serious skills shortages. Around 22.4% of all respondents said they were currently experiencing skills shortages (Figure 0-2) with Ports & Logistics the sector which had the highest proportion of businesses with skills shortages. Food Manufacturing had the lowest proportion of respondents with skills shortages, whilst Renewables identified the issue as a potential challenge to future growth, with a third of businesses surveyed in the sector identifying skills shortages. Although a comparatively low proportion of businesses identifed skills shortages, the figure for some sectors is higher than the UK’s aggregate proportion of skills shortage vacancies (around 22%)[[32]](#footnote-33). As noted by UKCES, this could be a significant barrier to future growth.

Figure - Skills Shortages

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A19

When asked about the types of skills where there are particular shortages, low response rates make any analysis difficult. However, managerial proficiency, engineering expertise, basic literacy and numeracy and driving skills were identified as issues for firms. This supports the qualitative findings from interviews, which identified engineers, drivers and managerial and professional staff as occupations that firms experienced difficulty in recruiting.

Future Growth

Over the past three years more companies have increased rather than decreased in size in most sectors. However, in Food Manufacturing similar proportions of firms increased and decreased in size and in Visitor Economy and Retail, by a small margin, more firms decreased in size). This represents the challenges that many firms in these sectors have faced following the recession of 2008/09. However, the stability of many firms represents the strength of the local economy, with firms noting in the qualitative interviews that businesses had worked hard to maintain the scale of operations.

Table - Size of Workforce

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Movement | Renewables | Ports & Logistics | Food manufacturing | Chemicals & process industries | Visitor Economy & Retail |
| Increased | 35.0% | 36.2% | 17.5% | 42.9% | 18.1% |
| Decreased | 5.0% | 15.9% | 17.5% | 14.3% | 18.9% |
| Remained stable | 60.0% | 47.8% | 64.9% | 42.9% | 63.0% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A20

Over half of companies in the Chemicals & Process Industries (57.1%) and Ports & Logistics (60.9%) sectors and 50% of businesses in Renewables indicated that they intended to invest and expand over the next five years. This reflects the qualitative interviews, where firms noted that over the past few years they had focused on ‘keeping their head above water’ and now could explore future opportunities for growth. Further support for firms in the Visitor Economy and Retail and Food Manufacturing sectors looking to expand is a potential focus for future local action.

Figure - Planning to expand or invest

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A21

Of the companies that indicated that they intend to expand in the future, the most prevalent area of expected growth is set to be in workforce expansion (32%). Land and property (17.3%) and machinery and equipment (16.9%) were considered other key areas of future planned growth (Table 0-18). This analysis was aggregated across all key sectors because of low response levels from individual sectors. Firms could realise plans to expand by seeking support from the Regional Growth Fund, Growth Accelerator and sector-specific funding (e.g. Manufacturing Advisory Service improvement funding).

Table - Planned Growth Areas for Expanding Companies

|  |  |
| --- | --- |
| Growth Area | % |
| Workforce expansion | 32.0% |
| Land and property | 17.3% |
| Machinery / Equipment | 16.9% |
| Marketing / Sales / More customers / Website | 15.4% |
| Skills and training | 11.3% |
| Energy efficiency | 2.3% |
| All areas | 0.8% |
| Research & Development | 0.8% |
| Infrastructure | 0.4% |
| Repair from floods | 0.4% |
| Stock | 0.4% |
| Transport | 0.4% |
| Don't know | 1.9% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A20/B29. Note: Figures do not add up to 100% because of small results being excluded

Of those companies that identified skills & training as a future area of growth, training for drivers and managers, as well as the acquisition of electrical and mechanical engineering skills and apprenticeships were highlighted as key areas for investment. This demonstrates the role of local training providers to contribute to future growth and equip firms with young people and other skilled people.

Of those companies that expressed an intention to invest in land and property over the next five years, the highest proportion of respondents (31.3%) indicated that they would want to expand operations on their current site. This highlights the need for property and land in the local area and could present future challenges for growth if the supply of land is not adequate.

Figure - Details of Land & Property Needs

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A23

Location

All respondents were asked why they had chosen their current site to locate their business. Answers varied across sectors, highlighting sector-specific needs for proximity to certain facilities (e.g. the port) and markets (either physical like the Fish Market or otherwise).

Table - Reason for Current Location

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Reason | Renewables | Ports & Logistics | Food manufacturing | Chemicals & process industries | Visitor Economy & Retail |
| Close to waterfront and / or port facilities | 3.6% | 22.3% | 14.5% | 12.5% | 4.0% |
| Proximity to other related businesses | 3.6% | 1.4% | 2.9% | 7.5% | 0.9% |
| Proximity to key suppliers | 0.0% | 4.3% | 7.2% | 2.5% | 1.3% |
| Proximity to key clients / markets | 17.9% | 5.8% | 10.1% | 15.0% | 17.0% |
| Affordable premises | 3.6% | 2.9% | 4.3% | 7.5% | 5.4% |
| Appropriate type of premises | 3.6% | 5.8% | 5.8% | 2.5% | 11.2% |
| Proximity to skilled workforce | 0.0% | 0.7% | 0.7% | 0.0% | 0.0% |
| Access to road network | 10.7% | 13.7% | 15.2% | 17.5% | 10.3% |
| Access to rail network | 3.6% | 1.4% | 1.4% | 5.0% | 0.9% |
| Access to sea transport | 0.0% | 10.8% | 6.5% | 7.5% | 1.3% |
| Good environment / quality of life | 0.0% | 1.4% | 5.1% | 0.0% | 5.4% |
| Was already established here / Existing business | 17.9% | 22.3% | 15.9% | 17.5% | 33.9% |
| Proximity to home / Work from home | 35.7% | 6.5% | 9.4% | 5.0% | 7.1% |
| Decision made at head office / elsewhere | 0.0% | 0.0% | 0.0% | 0.0% | 0.9% |
| Gap in the market | 0.0% | 0.7% | 0.0% | 0.0% | 0.0% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A24

The majority of firms surveyed across all sectors described their current location as good and competitive - as many as 95% of firms in the renewable energy sector. Slightly lower satisfaction scores were found for the visitor economy and food manufacturing sectors, where cost, technological and market-driven factors were identified as challenges in recent years. However, in general the results are strongly indicative of positive perceptions of a strong local economy and prospects for growth.

Figure - Good, Competitive Location?

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A25

Amongst respondents who indicated they had a strong location, 22.2% stated this was due to proximity to key clients and markets, a further 16.8% identified access to the road network, and 14.8% proximity to the waterfront and port facilities. This supports the findings of the qualitative interviews, where transport connections were identified as highly important for businesses now and in the future.

Table - Reasons why location is competitive

|  |  |
| --- | --- |
| Reason | % |
| Proximity to key clients / markets | 22.2% |
| Access to road network | 16.8% |
| Close to waterfront and / or port facilities | 14.8% |
| Good environment / quality of life | 10.0% |
| Proximity to key suppliers | 8.2% |
| Affordable premises | 6.4% |
| Access to sea transport | 6.1% |
| Appropriate type of premises | 5.8% |
| Proximity to other related businesses | 3.4% |
| Access to rail network | 2.5% |
| Nothing specific / Don't know | 1.8% |
| Lack of competition / Niche market | 0.7% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A25. Note: Figures do not add up to 100% because of small results being excluded

Of those respondents who said they were not in a strong location, the most prevalent reason was poor accessibility and lack of access to key clients and markets. This may represent the challenges that some businesses regarding congestion, the rail network and quality of roads. The second most cited reason was environment and poor quality of life. This may reflect points that were raised during the interviews regarding need for regeneration, reputation management and wider deprivation in the local area.

Table - Reasons why location is not competitive

|  |  |
| --- | --- |
| Reason | % |
| Poor accessibility | 24.1% |
| Lack of access to key clients / markets | 21.5% |
| Poor environment / quality of life | 15.2% |
| Expensive premises | 7.6% |
| Congestion | 5.1% |
| Industry in decline / closing down | 5.1% |
| Lack of suitable sites and premises | 3.8% |
| Lack of access to key suppliers | 3.8% |
| Lack of skilled labour / labour shortages | 2.5% |
| Competition from others | 2.5% |
| Nothing particular | 2.5% |
| Rates / energy prices too high | 1.3% |
| Lack of broadband | 1.3% |
| Poor roads | 1.3% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A25. Note: Figures do not add up to 100% because of small results being excluded

Respondents were asked whether they had already tried to relocate or considered operating elsewhere but had either been unsuccessful or decided to remain at their existing premises. Only 7% of respondents claimed they had tried to re-locate in the recent past. This could reflect the economic climate (e.g. difficulties in raising capital to facilitate relocation), but also satisfaction with the local area.

Figure - Incidence of Re-location by Firms

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A26

Of those respondents that had tried to relocate, there were few clear trends. Most had looked to relocate elsewhere within North East Lincolnshire but a small number had also considered Hull, Lincoln and North Lincolnshire.

Respondents were asked whether there were any other location-related issues that have impacted on their business. The most frequent responses to this question referred to parking (16.1%) and challenges regarding planning and infrastructure. In the qualitative interviews, it was often noted how, although generally the location was perceived as good, further planning support (e.g. speed and coverage) could make it excellent.

Table - Other Location-Related Issues Impacting Business

|  |  |
| --- | --- |
| Issue | % |
| Not enough parking / parking costs | 16.1% |
| Planning restrictions | 5.2% |
| Poor roads / road links / access | 2.8% |
| Premises too small | 2.3% |
| Not enough custom / declining industry | 2.3% |
| Premises not suitable | 1.8% |
| Flooding | 1.0% |
| Usage restrictions | 0.8% |
| Crime / drug culture | 0.8% |
| Poor broadband connectivity | 0.8% |
| Council not investing in the correct areas | 0.8% |

Source: Hill Taylor and Atkins 2013. Atkins Ref: Survey –A27. Note: Figures do not add up to 100% because of small results being excluded

###### Stakeholder & Business Consultation List

**Consultees:**

Lorna Reeve – CGS

David Robinson – CGS

Rachael Markham – CGS

Emma Toulson – CGS

Kate Walker – CGS

Phil Glover – CGS

David Brierley – CGS

Alison Blakeway – CGS

Damien Jaines-White – NELC

Andy Such – Thorpe Park

Kurt Christensen - Windpower support (Renewables)

Martyn Boyes - Grimsby Fish Dock Enterprises (Fish)

Anne Tate - Hull & Humber Chamber Of Commerce (all)

Andrew Goudie - Grimsby Institute (all)

Paul Litten, Commercial Director - Humber International Airport (all)

Alfred Enderby – Enderby Fish Entreprise (Fish& Visitor)

Kevin Francis – ABP (Ports & Chemicals)

Mike Sellers – ABP (Ports & Chemicals)

Jeffe Baker – ABP (Ports and Renewables)

Stephen Norton – Grimsby Fish Merchants (Fish & Renewables)

Allan Hull – DFDS (Ports & Chemicals)

Ivan Jaines-White – Grimsby Seafood Village (Fish)

Mike Woods – Albert Darnell Ltd (Fish)

Chris Broughton– PD Ports (Ports & Chemicals)

Paul McGrath – PD Ports (Ports & Chemicals)

Andrew Wright – East Trans (Ports)

Paul Hickling – East Trans (Ports)

Martin Eley - Icelandic Seachill (Fish)

Howard Sims – Morrisons (Fish & Property)

Mike Mitchell – Youngs (Fish)

Sam Jubah– GBA Group (Renewables & Ports)

Alison Mitchell– GBA Group (Renewables & Ports)

Keith Jackson – Simon Storage (Ports & Chemicals)

Paul Barnett – Cristal (Chemicals)

Chris Duffill – North East Lincolnshire Council (all)

E-factor – Mark Webb (all)

Lawrence Brown – Commercial Property Group

Liz Parry

Julia Thompson – East Coast Pictures

Remove Persons when disseminated publicly.

**Richard Coburn**

Euston Tower,

286 Euston Rd,

London

NW1 3AD

**richard.coburn@atkinsglobal.com**

1. At time of writing only a few enterprise zones have secured enhanced capital allowances for companies. [↑](#footnote-ref-2)
2. <http://www.abports.co.uk/Our_Locations/Grimsby_Immingham/Grimsby/> [↑](#footnote-ref-3)
3. <http://consult.nelincs.gov.uk/portal/localdevelopmentplans/cs/corestrategyrpo?pointId=1207924352226> [↑](#footnote-ref-4)
4. Although Grimsby Institute of Further & Higher Education and other colleges in North Lincolnshire offer university courses, this is through a ‘Higher Education in Further Education’ model which is more selective of the courses on offer and is far smaller than Hull and Lincoln University’s course offer. There is also less research funding and opportunities for progression. However, the ‘HE in FE’ model does have significant advantages including; lower costs, more vocational focus and attracting more people from diverse backgrounds. [↑](#footnote-ref-5)
5. See North East Lincolnshire STEAM 2012 Report. [↑](#footnote-ref-6)
6. <http://www.ukces.org.uk/news/press-releases/2014/jan/skills-shortages-accelerate> [↑](#footnote-ref-7)
7. IDBR 2013: **Direct employment** refers to on-site employment. Indirect employment relates to the employment supported through the supply chain which is depending on direct activities. Induced employment measures the number of jobs supported in the wider economy through the expenditure of income earned by those in direct and indirect jobs. [↑](#footnote-ref-8)
8. <http://www.abports.co.uk/admin/content/files/Port%20of%20Immingham%20Master%20Plan%202010%20-2030.pdf> [↑](#footnote-ref-9)
9. The private ownership model found at Grimsby and Immingham (and most UK ports) is in contrast to the majority of ownership arrangements found in Europe where the harbour authority functions are often retained by a public-sector organisation. Across several large European ports such as Antwerp and Rotterdam, a public body retains the harbour authority functions and downstream operators often lease facilities from the public body. In the UK, ports like those on the Humber tend to be vertically integrated between port ownership and harbour operation. Competition exists at the port services level with multiple tenants on port estate operating a wide range of transport, warehousing and manufacturing services. [↑](#footnote-ref-10)
10. <http://www.oecd.org/daf/competition/sectors/48837794.pdf> [↑](#footnote-ref-11)
11. <http://ec.europa.eu/environment/air/transport/ships.htm> [↑](#footnote-ref-12)
12. To the extent that Grimsby F.C who play in nearby Cleethorpes are known as the ‘Mariners’ and many visitor attractions (e.g. Fishing heritage Centre) and cultural events (Grimsby Fish Festival at Freshnay Place) are linked to the fish processing and historic fishing industry. [↑](#footnote-ref-13)
13. <http://www.seafish.org/research--economics/industry-economics/processing-sector-statistics> [↑](#footnote-ref-14)
14. IDBR 2013 [↑](#footnote-ref-15)
15. <https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/227259/9643-BIS-UK_Agri_Tech_Strategy_Accessible.pdf> [↑](#footnote-ref-16)
16. <http://www.marinemanagement.org.uk/fisheries/funding/index.htm> [↑](#footnote-ref-17)
17. IDBR 2013 [↑](#footnote-ref-18)
18. http://www.commercialtraining.co.uk/The-UKs-Energy-Estuary.php [↑](#footnote-ref-19)
19. Department of Energy and Climate Change, 2013. *UK Renewable Energy Roadmap Update 2013*. [↑](#footnote-ref-20)
20. Using data from Energy and Utility Skills, RenewableUK and UKCES, in 2012, the energy sector employed 473,000 people within the UK, whilst the Renewables industry employed 34,380 jobs (7.3% of all energy jobs). There are no similar research figures on firm numbers. [↑](#footnote-ref-21)
21. IDBR 2013 [↑](#footnote-ref-22)
22. See Humber Sub-Regional Renewable Energy Sector Skills and Training Study (2012) [↑](#footnote-ref-23)
23. <https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/243987/bis-13-1092-offshore-wind-industrial-strategy.pdf> [↑](#footnote-ref-24)
24. <http://www.scotsman.com/news/environment/scotland-s-offshore-wind-farms-investment-halved-1-3283585> [↑](#footnote-ref-25)
25. <http://www.ewea.org/fileadmin/ewea_documents/documents/publications/factsheets/EWEA_FS-employment.pdf> [↑](#footnote-ref-26)
26. For example Alstom’s  6-MW Haliade 150 turbine which is sunk to a depth of over 60 metres, a 61 metre tall jacket, a 78 metre tower, a nacelle that stands 100 metres above sea level, and blades that are over 73 metres long. The entire structure is said to weigh around 1,500 tonnes [↑](#footnote-ref-27)
27. Renewable UK & The Crown Estate, 2013. *Building an Industry.* <http://www.renewableuk.com/en/publications/index.cfm/BAI2013> [↑](#footnote-ref-28)
28. <http://www.telegraph.co.uk/earth/energy/windpower/10474562/Developers-pull-the-plug-on-one-of-the-worlds-largest-offshore-windfarms.html> [↑](#footnote-ref-29)
29. <http://www.visitbritain.org/insightsandstatistics/visitoreconomyfacts/> [↑](#footnote-ref-30)
30. IDBR 2013 [↑](#footnote-ref-31)
31. We adopted the average wage for key business activities in the 2007 SIC. Additionally, there is no average wage for in this for Renewables so it has been assumed this is close to the average wage in the UK. [↑](#footnote-ref-32)
32. <http://www.ukces.org.uk/news/press-releases/2014/jan/skills-shortages-accelerate> [↑](#footnote-ref-33)