



# Inch Cape Offshore Wind Farm

New Energy for Scotland

Offshore Environmental Statement:

**VOLUME 2H**

**Appendix 22A: Socio-economics and  
Tourism Baseline**



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## 22A Socio-economics and Tourism Baseline

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### 22A.1 Introduction

The following document provides details of the socio-economic, tourism and recreational context and baseline information for the Economic Study Area (as defined in *Chapter 22, Section 22.4.1*) and Tourism Study Area (as defined in *Chapter 22, Section 22.4.2*) against which the effects of the Project have been assessed.

### 22A.2 Review of Relevant Socio-economic Policy and Plans

#### 22A.2.1 The UK Policy Context

The UK Low Carbon Transition Plan 2009 (HM Government 2009a) followed the 2008 Climate Change Act, which saw Britain establish legally binding ‘carbon budgets’ aimed at reducing UK emissions through “investment in energy efficiency and clean energy technologies such as renewables, nuclear and carbon capture and storage”. The Act set a target of reducing UK greenhouse gas emissions by at least 80 per cent by 2050. The Low Carbon Transition Plan takes the Climate Change Act a step further by addressing the following areas in terms of reducing carbon emissions: power sector, homes and communities, workplaces and jobs, and transport. Key steps of relevance highlighted in the Plan are:

- Generating 40 per cent of electricity from low carbon sources by 2020 (including producing around 30 per cent of electricity from renewables by 2020 by substantially increasing the requirement for electricity suppliers to sell renewable electricity).
- Making homes greener by: funding for home energy efficiency measures, introducing the use of Smart Meters in all homes by 2020, introducing clean energy cash-back schemes, and supporting the most vulnerable in society to make their homes greener.
- Helping make the UK a centre of green industry by supporting the development and use of clean technologies, including investment in offshore wind and marine energy.
- Transforming transport: for example, by cutting average carbon dioxide emissions from new cars across the EU by 40 per cent on 2007 levels, supporting a demonstration project for new electric cars, and sourcing 10 per cent of UK transport energy from sustainable renewable sources by 2020.

The UK Renewable Energy Strategy 2009 (HM Government, 2009b) sets out the government’s plans for increasing the use of renewable electricity, heat and transport. The ambitious target scenario outlines the following:

- More than 30 per cent of electricity to be generated from renewables, including wind (on and offshore), biomass, hydro, wave and tidal power, an increase of about 5.5 per cent.
- 12 per cent of heat generated from a range of renewable sources including biomass, biogas, solar and heat pump sources in homes, businesses and communities.

- 10 per cent of transport energy to be generated from renewables, up from the current level of 2.6 per cent of road transport consumption, through support for electric vehicles and possible further electrification of the rail network.

The UK Low Carbon Industrial Strategy 2009 published by DBIS and DECC acknowledges that economic activity in the UK will need to significantly reduce its carbon impact. This extends not only to energy being produced from low carbon sources, but to its consumption that should be reduced. This includes the manufacture of goods using low carbon materials, the use of vehicles that utilise low carbon fuels, the reduction in our consumption of food and water and a complete change in the way we deal with waste. The Strategy admits that the costs of this transition will be substantial. However the benefits of reducing the UK's environmental impact and slowing down climate change will outweigh the costs. The results will change the industrial landscape, supply chains, and the way people live and work. In terms of offshore wind, the strategy states that the industry has the potential to bring in annual economic benefits and investment to the UK of £6 - £8 billion.

### **22A.2.2 Scottish Government Policy Context**

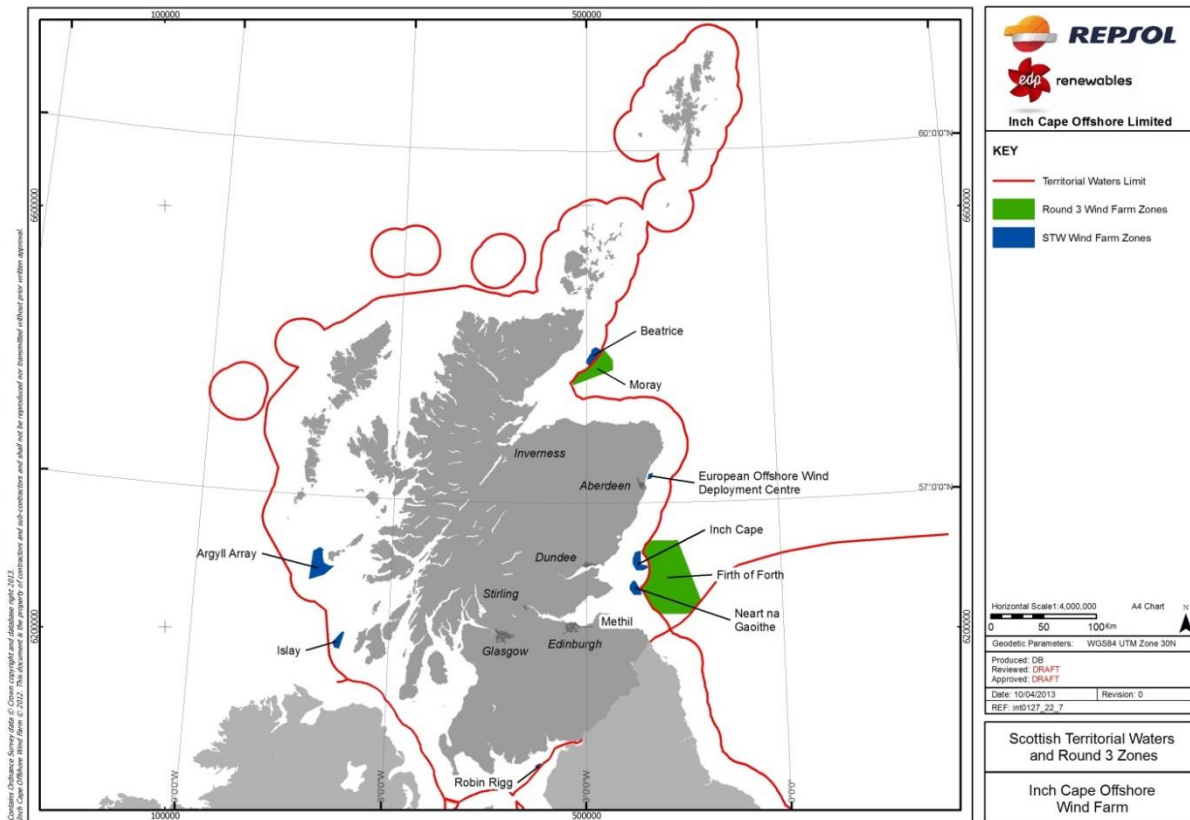
The Scottish Government has confirmed its commitment to maximising the opportunity for Scotland from renewable energy and low carbon technology in its Government Economic Strategy (Scottish Government, 2011a). This is driven by its commitment that by 2020 renewables will account for the generation of 100 per cent of domestic electricity demand and 30 per cent share of all energy and by the Climate Change (Scotland) Act (Scottish Government 2009), which commits Scotland to reduce its carbon emissions by at least 80 per cent from 1990 levels by 2050 and by at least 42 per cent by 2020. These commitments are being delivered through market incentives and direct investment and support.

Marine Scotland's (2011) Blue Seas, Green Energy Marine Plan identifies six short term Scottish Territorial Waters (STW) sites and 25 medium term areas of search to progress for offshore wind. The six sites comprise:

- Argyll Array;
- Beatrice;
- Forth Array (since withdrawn);
- Inch Cape;
- Islay; and
- Neart na Gaoithe.

There are also two Round 3 sites out-with Scottish Territorial Waters; Moray Firth (Zone 1) and Firth of Forth (Zone 2). This offshore wind capacity could equate to approximately 10 GW of generating capacity for Scotland. These sites are illustrated in Figure 22A.1.

Figure 22A.1: Scottish Territorial Waters Wind Farms and Round 3 Zones



Scotland's Offshore Wind Route Map 2010 (Scottish Government 2010), produced by the Offshore Wind Industry Group, which represents the industry strategy for Scotland, identifies seven inter-linked challenges for the industry, one of which is investment in infrastructure sites for manufacturing, installation, and the operations and maintenance supply chain, particularly ports.

Scottish Enterprise and Highlands and Islands Enterprise were tasked by the Scottish Government with addressing this challenge through:

- Development of Scotland's key ports identified in the National Renewables Infrastructure Plan (N-RIP) ;
- Attraction of inward investment to fill gaps in the current supply chain and to develop new technologies;
- The development of onshore and offshore test and demonstration facilities;
- Supporting and growing the domestic supply chain to ensure maximum local content of the industry; and
- Working alongside Scotland's oil and gas industry to encourage exchange of best practice.



NRIP stages 1-3 were undertaken to:

- Set out a group of best fit port locations based on industry requirements and a short process to develop investment cases for ports that can support the development of the industry;
- Set out investment required for the best fit locations identified in stage 1, with the public sector pump-priming investment approach for these sites and the key planning and consenting steps that have to be taken to deliver these sites in a timeframe that makes the attraction of private investment achievable. The report clusters together the ports identified in stage 1 into four clusters: Forth/Tay, West Coast, Moray Firth, and Subsea. The first three were indicated to be the key manufacturing, installation and operation and maintenance locations. Market interest was indicated to be strongest in the Forth/Tay and Moray Firth clusters, therefore these clusters should be the focus for initial investment;
- Develop and deliver investment packages driven by the asset owner with appropriate public investment where required. Key planning and consenting issues were to be progressed to ensure that users' timescales could be met and sites developed sustainably. This investment was to be based on an assessment of market interest. The regional port cluster approach detailed in the stage 2 report was to be further developed and used to draw more supply chain interest to Scotland.

The Scottish Government through Scottish Enterprise and Highlands and Islands Enterprise created the £70 million National Renewables Infrastructure Fund (N-RIF) in 2012 (Scottish Enterprise, 2012a) to lever in private sector investment to the key port demonstration and manufacturing infrastructure prioritised in the N-RIP. This fund is in addition to Regional Selective Assistance (RSA) and other funding that will potentially be available for companies in some areas, with the aim of creating and supporting new employment in the industry.

A further initiative in the Port of Leith area is the Tax Incremental Financing (TIF) scheme, which is the subject of agreement between the Scottish Government and City of Edinburgh Council that would allow the Council to access prudential borrowing to finance new infrastructure at Edinburgh Waterfront. The borrowing would require to be repaid through an increase in incremental non-domestic rates revenue within a defined geographic area for a period of up to 25 years. The current market and port ownership situation has seen a revision of the original waterfront related scheme away from more traditional property development to focus upon infrastructure to facilitate the creation of a 21st Century Port and its role in the development of the offshore wind industry. The current TIF scheme is understood to entail constructing a connecting road between Seafield and Constitution Street, thereby providing improved access in support of the port development.

In addition, in early 2012 the Scottish Government (2012) announced the creation of four Enterprise Areas on and around 14 sites in Scotland, focused upon the country's priority growth sectors, particularly the renewable energy and life sciences industries. It is intended that these will receive incentives including relief on business rates, plus potentially capital allowances for investments into new plants and machinery, fast-track planning, and priority super-fast broadband.

The Enterprise Areas relevant to this study include;

- Low Carbon/Renewable Energy Enterprise East Area, which will comprise the Port of Dundee and the Port of Leith, and  
Renewable Energy Enterprise North Area, which will focus on Hatson and Lyness in Orkney, Arnish in the Western Isles and Nigg and Scrabster in the Highlands.

### **22A.2.3 The Strategic Context of the Offshore Wind Renewables Market**

The development of the offshore wind market offers significant and long-term opportunities for Scotland, based on Scotland offering the best opportunity for high yield wind resources in Europe.

Scotland is estimated to have the largest offshore renewable energy resources in the EU (25 per cent of EU offshore wind; 25 per cent of EU tidal; and 10 per cent of EU wave power) (Scottish Government, 2011b). The 2020 Renewable Energy Route-map is based upon analysis (Scottish Enterprise 2010) that estimates that the offshore wind sector in Scotland could be worth £1.3 billion GVA in 2020 and £7.1 billion GVA in total this decade, with an additional £6 billion of GVA from wider supply chain and employee spending. This could create 28,000 full-time equivalent jobs in the sector, supporting an additional 20,000 jobs in the wider Scottish economy. These projections are based upon decisive actions being taken to deliver 6 GW installed in 2020.

It is estimated that total capital expenditure for offshore wind projects in Scottish territorial waters alone is around £15 billion to £18 billion in the next ten years. Offshore wind is a key component of a low carbon power generation mix, with planned investment levels of £100 billion in the UK over the next ten years (Scottish Enterprise 2012a).

There are more than 750 companies within Scotland already supplying the offshore wind market, or with the ambition to diversify into it (Scottish Enterprise, 2012a). Recent research has estimated Scottish employment in the market to be around half of the UK's estimated 10,800 jobs in the wind, wave and tidal sectors (Renewable UK 2011).

The Centre for Economics and Business Research (CEBR) recently prepared a scenario-based assessment of the economic impacts on the UK of alternative realisations of offshore wind capacity. CEBR's assessment of the economic value of investment in offshore wind found the following:

- Significant contribution to UK GDP under each scenario;
- Considerable employment creation; and
- Significant balance of trade through exports.

Data from the scenarios has been used in the impact analysis in *Chapter 22*.

### *Turbine Manufacturing Strategy*

A number of wind turbine manufacturers' preferred strategy is to establish their own turbine manufacturing and assembly facilities alongside key tier 1 and 2 component supply chain facilities on a single new coastal site considered to ideally be located on the East Coast of UK.

The principal and minimum requirement for such manufacturing sites is location on the North Sea coast to enable export to continental projects and proximity to wind farm allocations / sites. Other key factors comprise the following, amongst others:

- Adequate space for the manufacture and/or pre-assembly of wind turbines;
- Length and strength of quays;
- Capacity of the handling cranes;
- Ease of vessel access;
- Adequate depth of water;
- Strong enough seabed or ability to significantly strengthen (and therefore increase the weight of) quays where required;
- Good quality and extensive road and rail links into the port; and
- Suitable and appropriate workforce with the engineering and technical skills required.

#### **22A.2.4 Local Initiatives**

The following sets out the capacity and capability of the Economic Study Area to accommodate offshore wind development and provide the necessary support in terms of infrastructure and skills from which Scotland can benefit.

##### *Aberdeen and Aberdeenshire*

##### **Aberdeen Renewables Energy Group (AREG)**

Created in 2011, AREG is an organization, which aims to grow the renewables industry, become involved in renewable projects, and assist in creating jobs and local investment. It is also involved in developing the European Offshore Wind Deployment Centre off the coast of Aberdeen, and also the Energetica development corridor for low-carbon energy technology. In addition, there is considerable cross-over between the renewables industry and the oil and gas industry particularly in the North East, with renewables able to benefit extensively from the oil and gas industry's offshore experience.

*Dundee*

## Dundee Renewables

The Dundee Renewables partnership is building a renewable energy sector for the City of Dundee, the city having been identified by the Scottish Government as one of the most suitable and important ports for marine renewables. The port at Dundee is the closest to Scotland's largest offshore wind development site. Dundee has several centres of educational excellence which provide the relevant skills for the renewables industry.

*Edinburgh*

The city currently hosts a cluster of over 230 companies, which are currently involved with renewable energy, and is the location of the Green Investment Bank. It is also home to the Port of Leith, the target of development by the Scottish Government as a 21st Century Gateway Port and offshore wind manufacturing and deployment hub, currently attracting investment interest from offshore wind turbine manufacturers. The city has a wide range of research facilities in science, business and education. Edinburgh also has 43 companies who are involved in marine energy. Therefore the city has a considerable critical mass of experience in renewables.

*Fife*

Fife has a strategy to become known for its expertise in offshore renewables. It has a number of ports active in the industry including Rosyth, Methil and Burntisland, and coastal sites, which have the potential to provide support for offshore renewables companies.

## Fife Renewables

The Fife Renewables Innovation Centre, at Methil Docks Business Park, provides access to information expertise and support to those looking to enter the renewables industry.

**22A.2.5 Education and Training Infrastructure**

The east and north of Scotland possesses an extensive range of education, training and skills providers, services and infrastructure and has a broad range of training programmes and university/ college courses specifically designed to provide a skilled labour market to develop the region's energy industry. Access to nearby leading universities and corporate research further strengthens the area's capacity to achieve the full potential of the growing renewable energy market. A list of example training programmes, academic courses and R&D providers is provided below.

Regional University and College infrastructure and courses include the following:

- Edinburgh College: Offers a number of courses based on mechanical engineering and renewable energy.
- Edinburgh University: Has a range of engineering courses which are focussed on renewable energy. Examples include Mechanical Engineering with Renewable Energy (MEng) and

Electrical Engineering with Renewable Energy (MEng). There are also opportunities for postgraduate research into offshore renewable energy development.

- Heriot Watt University: From its Orkney campus the University runs The International Centre for Island Technology (ICIT) which is focused on advanced research, postgraduate training and consultancy in marine resource management and related issues. Courses available at the centre include MScs in Marine Renewable Energy and Renewable Energy Development. Its Edinburgh campus offers an engineering undergraduate course titled Electrical Power and Energy, which addresses all aspects of energy generation including wind farms. There is also a course on Mechanical Engineering and Energy Engineering which is related to renewables. These courses prepare students for employment in the energy industry. There are also postgraduate courses available related to renewables including an MSc in Renewable Energy Engineering.
- Edinburgh Napier University: The University offers a dedicated Renewable Energy course. This MSc course is designed to improve the student's employability in the renewables sector and addresses aspects including renewable energy capture, energy storage, energy audit and life-cycle analysis, as well as learning the concept of the system, design, development and applications. Various engineering courses are also available, which address all aspects of renewable energy generation, which includes an MSc in Energy and Environmental Engineering.
- Carnegie College: The college runs the Whitlock Energy Collaboration Centre, which is a new education, research and training resource dedicated to renewable energy. It was one of the first education centres to offer Wind Turbine Technician Modern Apprenticeships, and includes a variety of engineering courses focussed around renewables.
- Adam Smith College: The college recently open a new £17.5 million Future Skills Centre which is envisaged to become a leading centre for renewables and alternative energy education and training. There are a wide and comprehensive range of renewables based courses on offer including those on renewable energy technologies and systems. There are also a number of engineering courses focusing on renewable energy.
- University of Dundee: The University has a dedicated centre for renewable energy teaching and research, the Dundee University Centre for Renewable Energy (DUCRE). The University offers MSc and BSc courses in Renewable Energy. These courses are designed to help students develop the theoretical and practical skills required to make them attractive to potential employers within the renewables sector. The university also has electronic and electrical engineering courses, which address related aspects of renewable energy.
- University of Abertay Dundee: The University offers a postgraduate course related to energy entitled Energy & Environmental Management. The course addresses the technical and management skills required to identify and manage opportunities in the energy sector. Another postgraduate course entitled Energy Industry Economics, which looks at developing the business and management skills necessary to work in the energy sector.
- Angus College: Offers a number of engineering courses which have elements specific to the renewables industry. Examples include courses on welding and maintenance and on engineering systems related to the renewable energies sector.

- Aberdeen University: The University has a range of engineering courses based around the renewables sector including the introduction of new programmes including Masters in Engineering in Mechanical and Electrical Engineering with Energy Studies. Other relevant courses include Mechanical Engineering, Electrical and Electronic Engineering, MSc in Renewable Energy and MSc in Subsea Engineering.
- Robert Gordon University: The University has a focus in the renewables industry and is involved in the Aberdeen's European Offshore Wind Deployment Centre, with Vattenfall, Technip, and Aberdeen Renewable Energy Group. It has recently introduced a new MSc course on Offshore Renewables where students gain an understanding of physical, technological, economic and environmental aspects of renewable energy. Other relevant courses include Mechanical Engineering, Offshore Engineering and Electrical Engineering.
- Aberdeen College: The College offers a variety of courses related to the needs of the renewable industry. These include NC Fabrication and Welding, HND Electrical Engineering, and NC Manufacture and Mechanical Maintenance Engineering. On all of the College's HND engineering courses there are units on renewable energies.
- Banff & Buchan College: The College has a number of full-time and part-time courses, which teach the skills necessary to work in the renewables industry. Courses include electrical engineering, electronic instrumentation, control systems, fabrication and welding and mechanical manufacture and marine maintenance engineering.
- University of the Highlands and Islands: Engineering courses offered by the University related to renewables include BEng Energy Engineering, BEng Electrical and Mechanical Engineering, and BEng Electrical and Energy Engineering. There is also a Professional Development Award (PDA) in Renewable Energy Systems, which aims to give students the skillset to contribute to the renewables sector.
- Inverness College: Relevant renewables courses include NC Fabrication and Welding applications, NC Electrical installation with renewables and HNC Engineering Systems.
- Moray College: Has a number of energy related courses including an HNC in Construction Management and an HND in Engineering Systems.

There are also a number of training programmes and initiatives available throughout the Economic Study Area including the following:

- Fife Renewables Innovation Centre- research, information and expertise to those wishing to enter the renewables industry;
- Energy Training East- training and support services;
- TRESTA- Steel Engineering's recently opened renewable energy skills training academy, based in Renfrew;
- Nigg Skills Academy – Global Energy's recently opened renewable energy skills training academy, based at Nigg;
- Skills Development Scotland- provides energy operators with skills, training and funding advice. It also offers individuals career advice and on-job training throughout their career; and

- The Scottish Government aim to provide 2,000 apprenticeships specifically for the energy and climate change industries between 2011 and 2015.

Scotland has several centres of excellence, which specialise in wind energy:

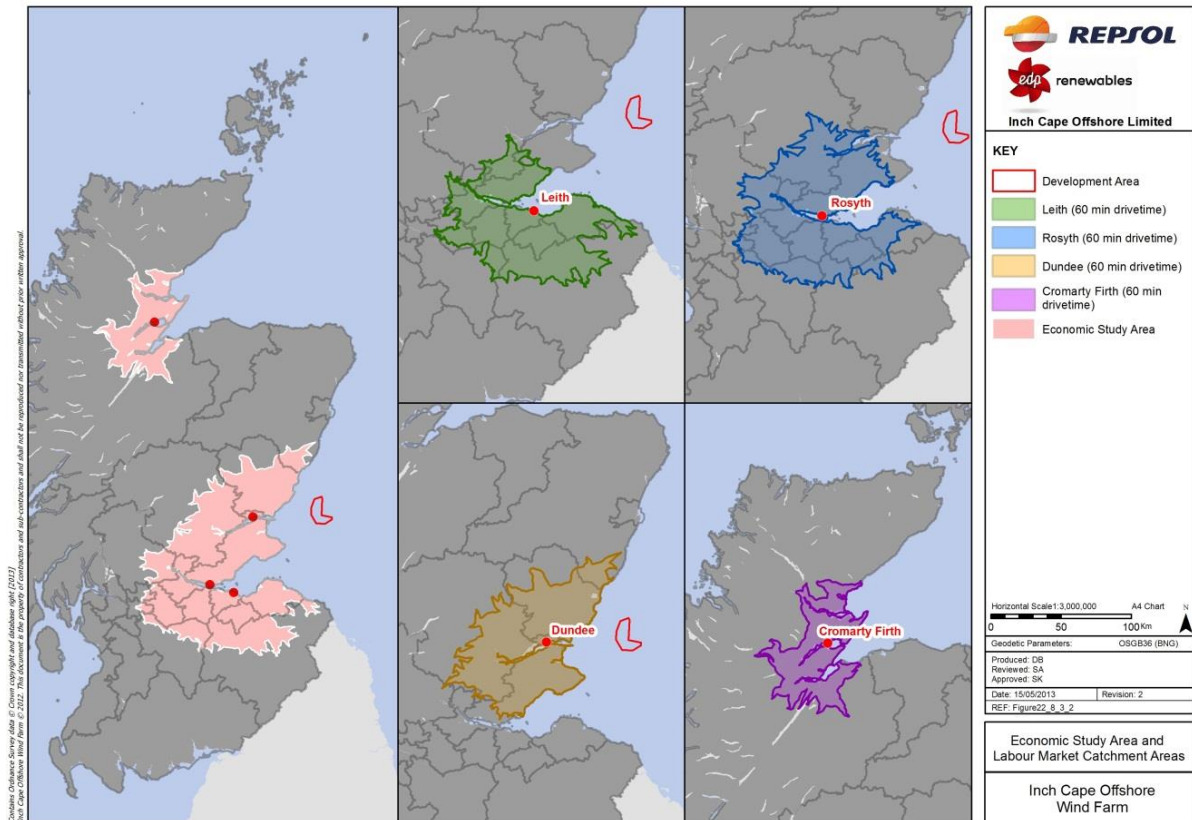
- Energy Technology Partnership (ETP)- an alliance of the Scottish universities;
- Scotland's Colleges Energy Skills Partnership (CESP) – an alliance of Scottish colleges;
- Scottish European Green Energy Centre (SEGEC)- based at the University of Aberdeen;
- Technology and Innovation Centre (TIC)- part of International Technology & Renewable Energy Zone (ITREZ) in Glasgow;
- Scottish Energy Laboratory (SEL)- part of Scottish Enterprise;
- Hydrogen Office- located at Methil Docks Business Park;
- Institute for Energy Systems (IES)- based at University of Edinburgh;
- Energy Research Group- co-ordinates energy related activities across 13 partner colleges and research institutions;
- Offshore Renewable Energy Catapult - a future £50million technology innovation project based in Glasgow funded by the Technology Strategy Board; and
- Wind Energy Systems Research Centre- University of Strathclyde.

#### **22A.2.6 Definition of Economic Study Area and Tourism Study Area**

The Economic Study Area has been defined based as the labour market catchment areas (60 minute drive-time catchments) around four representative locations. These locations are Leith (Edinburgh), Rosyth (Fife), Dundee and the Cromarty Firth (Highland) as shown in Figure 22A.2.

The baseline and assessment for the Cromarty Firth use statistics centred on Invergordon but are considered illustrative for the surrounding area which includes facilities such as Nigg and Ardersier. The four labour market catchment areas that collectively form the Economic Study Area cross local authority boundaries within Scotland. Relevant local authority areas are Edinburgh, the Lothians, North Lanarkshire, Falkirk, Fife, City of Dundee, Angus, Aberdeen City, Aberdeenshire, Moray, Highland, Perth and Kinross, Stirling, Clackmannanshire, Falkirk, East Dunbartonshire, Glasgow City, North Lanarkshire, South Lanarkshire and the Scottish Borders. Statistics are used where relevant for these local authority areas to provide baseline information.

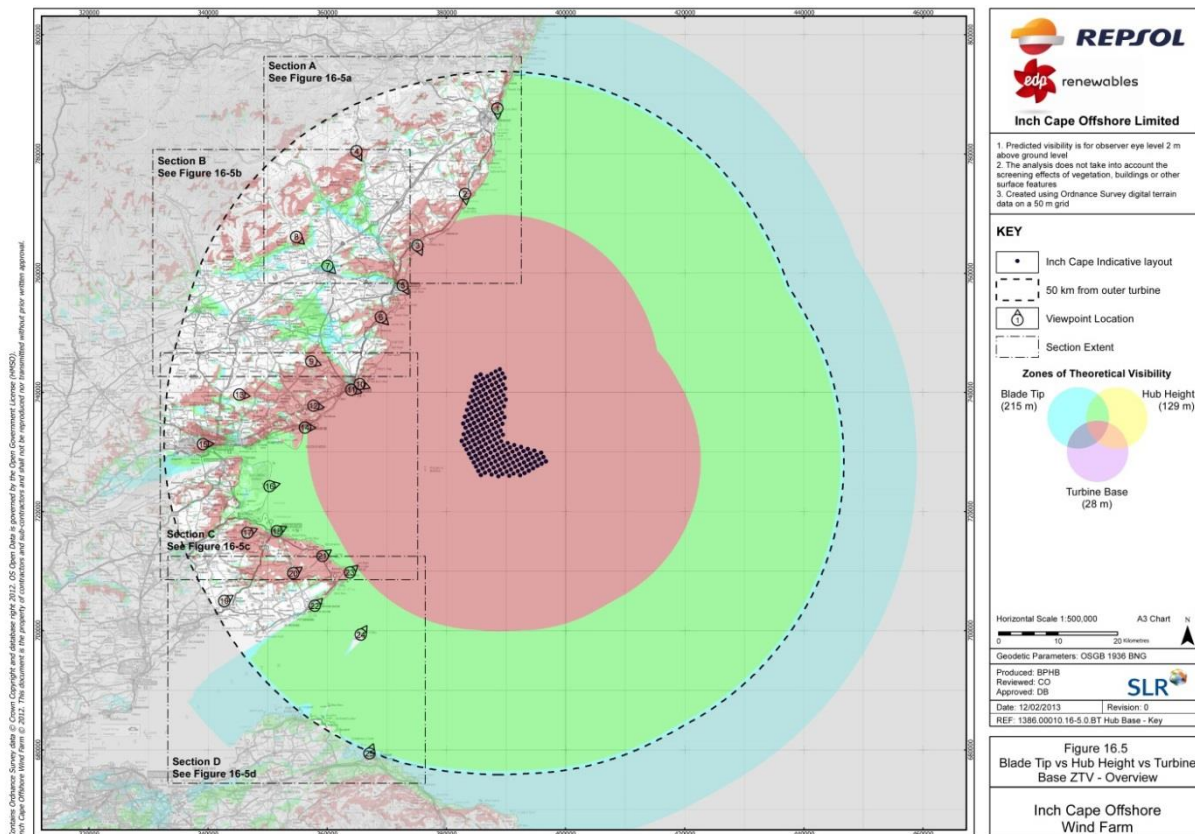
Figure 22A.2: Illustration of Economic Study Area and Labour Market Catchment Areas



The Tourism Study Area for baseline assessment has been defined as the area where the Project may be seen from land, namely parts of East Lothian, Fife, City of Dundee, Angus and Aberdeenshire as defined by the Zone of Theoretical Visibility (ZTV) identified in *Chapter 16: Seascape, Landscape and Visual* (repeated as Figure 22A.3 below). This section considers onshore tourism and recreation activities in these areas and also considers offshore tourism and recreation where relevant.



Figure 22A.3: Tourism Study Area Based on ZTV (Chapter 16, Figure 16.5)



## 22A.3 Socio-Economic Profile

### 22A.3.1 Population

The majority of the local authorities within the Economic Study Area have experienced population growth between the last two Census dates (2001 and 2011), most notably in Perth and Kinross (10.8 per cent), City of Edinburgh (10.3 per cent) and Aberdeenshire (9.1 per cent). The population in each of these areas increased at double the rate of the Scottish average (Annex 1). East Dunbartonshire was the only area to record a population decline (-3.4 per cent).

### 22A.3.2 Age Structure

City of Edinburgh (69 per cent), Glasgow City (68 per cent) and Aberdeen City (67 per cent) are the only authorities in the Economic Study Area which have a higher than average proportion of working age people (Annex 1). Areas which have notably weaker age structures with a higher dependency ratio include Scottish Borders (58 per cent), Angus (58 per cent), East Dunbartonshire (60 per cent), East Lothian (60 per cent) and Highland (60 per cent).

### 22A.3.3 Economic Activity

The economic activity rate is a useful measure of the labour market opportunities available to the population. Aberdeen City (83 per cent), Aberdeenshire (82.6 per cent), Highland (82.5 per cent) and Midlothian (82.3 per cent) have relatively high levels of economic activity compared to the Scottish average (77.1 per cent), while Dundee City (73.2 per cent) and Clackmannanshire (74.8 per cent) all exhibit markedly lower than average levels of economic activity (Annex 1).

### 22A.3.4 Employment Structure

Over half of East Dunbartonshire and City of Edinburgh workers are in highly skilled occupations, which is significantly higher than the Scottish average (40.2 per cent). Both areas have a quarter of their workers employed in professional occupations (Annex 1). The areas of Aberdeenshire (42.7 per cent), Clackmannanshire (45.3 per cent), Stirling (45.9 per cent), Aberdeen City (44.7 per cent), and Perth and Kinross (40.4 per cent) also have a higher than average proportion of highly skilled workers.

In terms of skilled workers, the majority of the Economic Study Area is comparable to the Scottish average of 32.1 per cent. The highest proportion of skilled workers are to be found in Midlothian (37.7 per cent), Highland (37.1 per cent), East Lothian (35.6 per cent) and Angus (35.3 per cent), whereas City of Edinburgh (26.4 per cent), Stirling (27.4 per cent) and East Dunbartonshire (27.2 per cent) have the lowest proportions within the Economic Study Area.

The areas of Highland, West Lothian, Dundee City, Falkirk, North Lanarkshire and the Scottish Borders are characterised as having a below average proportion of highly skilled workers and an above average proportion of unskilled workers. Out of these areas Dundee City has the highest proportion of unskilled workers at 34.5 per cent. East Dunbartonshire (17.2 per cent), City of Edinburgh (20.4 per cent) and Angus (24.1 per cent) have the lowest proportions of unskilled workers in the Economic Study Area. Job density measures the number of jobs (per resident aged 16-64) for every resident (also aged 16-64). Aberdeen City has a job density of well over 1 job per resident (1.22), significantly higher than the Scottish average of 0.76, indicating that job opportunities are good in the area (Annex 1). The City of Edinburgh has a job density of around 1 job per resident, which is also notably higher than average. Stirling (0.88), Highland (0.85) and Dundee City (0.83) also have densities higher than average. The remaining local authorities in the Economic Study Area have job densities below the Scottish average.

### 22A.3.5 Industry Structure

A number of local authorities in the Economic Study Area have a high proportion of manufacturing and construction jobs compared to Scottish averages including West Lothian, Aberdeenshire, South Lanarkshire and the Scottish Borders (Annex 1). Whereas areas such as City of Edinburgh have levels of employment in manufacturing and construction which are considerably lower than average. Conversely these areas have higher proportions of service sector jobs, which are unsurprising given the tourist offer available in the cities and the concentration of professional services found there. The offshore wind industry has the potential to generate considerable numbers of manufacturing jobs, which ultimately might lead to some rebalancing of the industrial structure in these areas.

Areas such as Angus, Scottish Borders and West Lothian have much lower levels of service sector jobs than the Scottish average. In regard to specific services, there is a particular concentration of public sector jobs in Dundee City and high levels of tourism related employment in Perth and Kinross and Highland.

### **22A.3.6 Unemployment**

The Jobs Seekers Allowance (JSA) Claimant Count is a useful measure of unemployment in an area. In comparison to the Scottish average of 3.9 per cent JSA claimant count rates were highest in Dundee City (5.8 per cent), and North Lanarkshire (5.4 per cent) (Annex 1), whereas the areas of Aberdeenshire (1.2 per cent), Perth (2.1 per cent), and Aberdeen City (2.1 per cent), recorded the lowest levels in the Economic Study Area.

### **22A.3.7 Qualifications**

City of Edinburgh and East Dunbartonshire have a notably superior educational and qualification attainment level than average (Annex 1). Residents in Aberdeen City, Angus, Aberdeenshire and Stirling also achieve higher than average levels of qualifications (Degree, HND and Highers). Whereas the areas of Midlothian, Falkirk and North Lanarkshire are characterised by a relatively low proportion of people achieving the highest level of qualifications and an above average number of people hold no qualifications. The lower than average qualification attainment levels can be attributed to a number of factors, including the existing employment profile, deprivation and unavailability of Higher Education provision.

### **22A.3.8 Earnings**

Residents of East Dunbartonshire (117 per cent), Aberdeen City (110 per cent), Aberdeenshire (110 per cent), City of Edinburgh (107 per cent), East Lothian (105 per cent), Stirling (104 per cent) and South Lanarkshire (101 per cent) receive higher salaries than the Scottish average (Annex 1). A notable disparity exists between those who work in an area and the residents who live there. Residents in East Dunbartonshire (16.5 per cent), the Scottish Borders (13.6 per cent), Aberdeenshire (12.3 per cent), East Lothian (10.9 per cent), Angus (9.7 per cent) and Fife (8.2 per cent) all receive significantly higher salaries than the people who work there. This can be mainly explained by a number of people in these locations commuting to the four main cities (Edinburgh, Glasgow, Dundee and Aberdeen) for work.

### **22A.3.9 Business Health**

VAT registration and de-registrations provide a useful guide to the pattern of business start-ups and closures, and a useful indicator of the level of entrepreneurship and health of the business population.

The latest available data (2007) shows City of Edinburgh, Aberdeenshire, Highland, Fife and South Lanarkshire as having particularly high numbers of VAT registered businesses. Registrations exceeded de-registrations in each area, contributing to an overall increase at year end (Annex 1).

### 22A.3.10 Gross Value Added (GVA)

Output GVA measures the contribution to the economy of each industry sector. The majority of the local authorities in the study contribute a relatively minor share of manufacturing; construction and primary industry GVA (see *Section 22.7, Table GVA by Sector*). The exceptions to the rule were Aberdeen City for primary industries (oil and gas) (75 per cent), Falkirk (11.8 per cent) and Fife (8.1 per cent) for manufacturing, and North Lanarkshire (9.3 per cent) for construction.

City of Edinburgh accounts for nearly a third (29 per cent) of Scotland's services GVA, while Stirling accounts for 10 per cent.

A significant proportion of total GVA produced in the Economic Study Area is derived from Aberdeen City and the City of Edinburgh.

### 22A.4 Labour Market Catchment

To understand the potential labour market impacts that may arise from the Project, 30-minute, 45-minute and 60-minute drive-time catchment areas have been considered. These drive-time areas cover the local, wider and regional catchments from each location and are shown in detail in Figures 22A.4, 22A.5, 22A.6 and 22A.7 below with further information listed thereafter for each.

**Figure 22A.4: Leith Labour Market Catchment Drive Times**

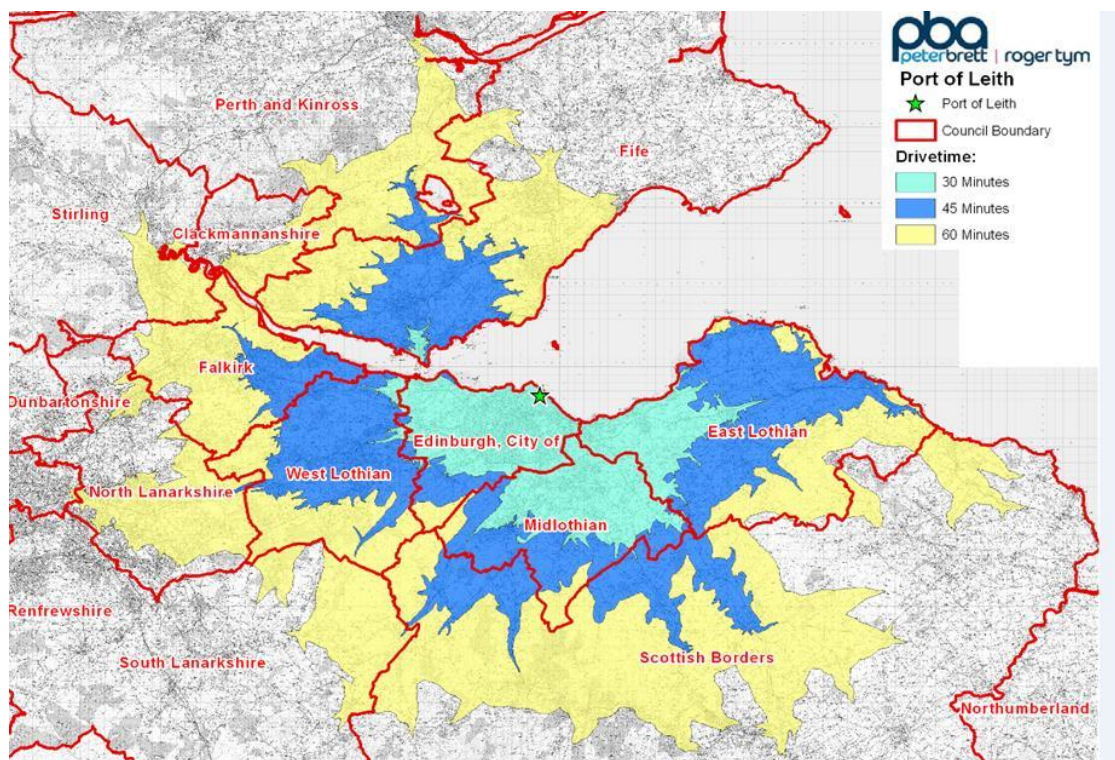


Figure 22A.5: Rosyth Labour Market Catchment Drive Times

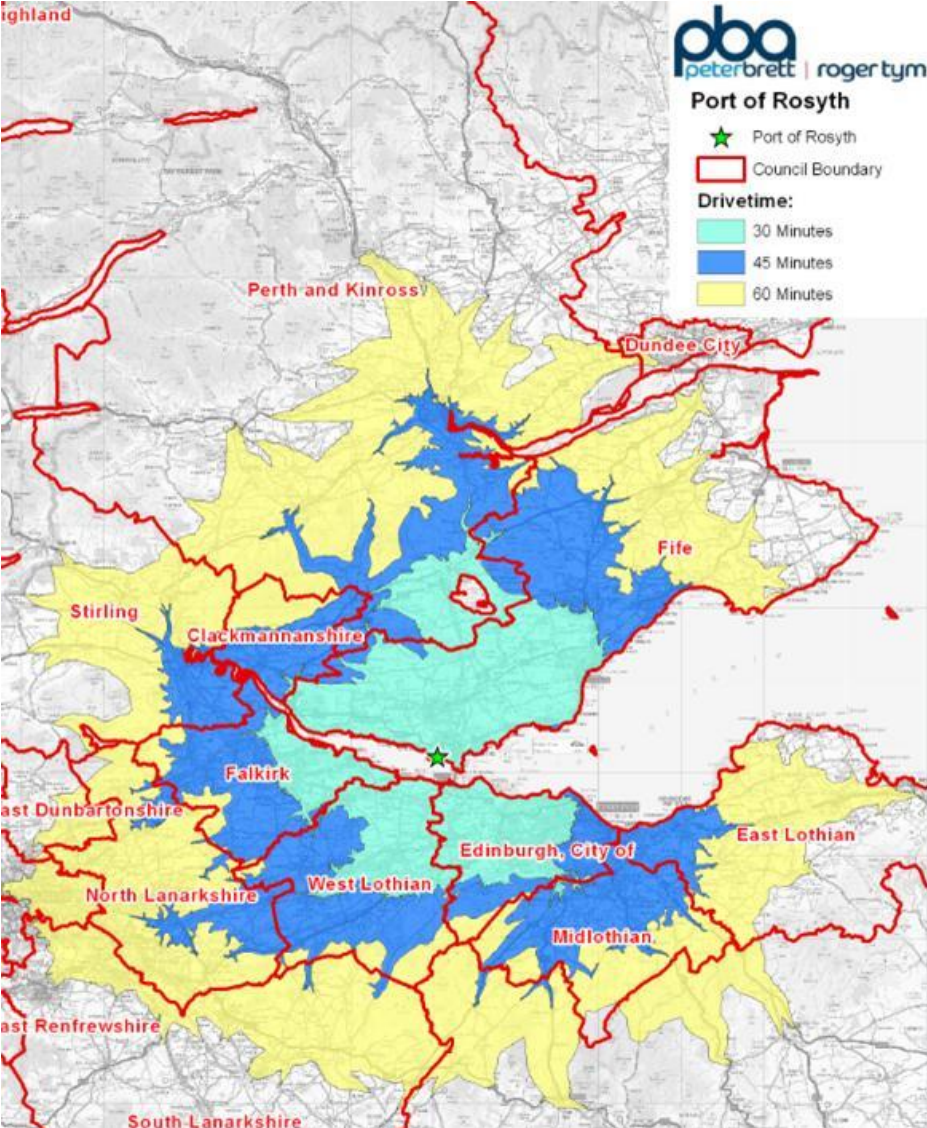


Figure 22A.6: Dundee Labour Market Catchment Drive Times

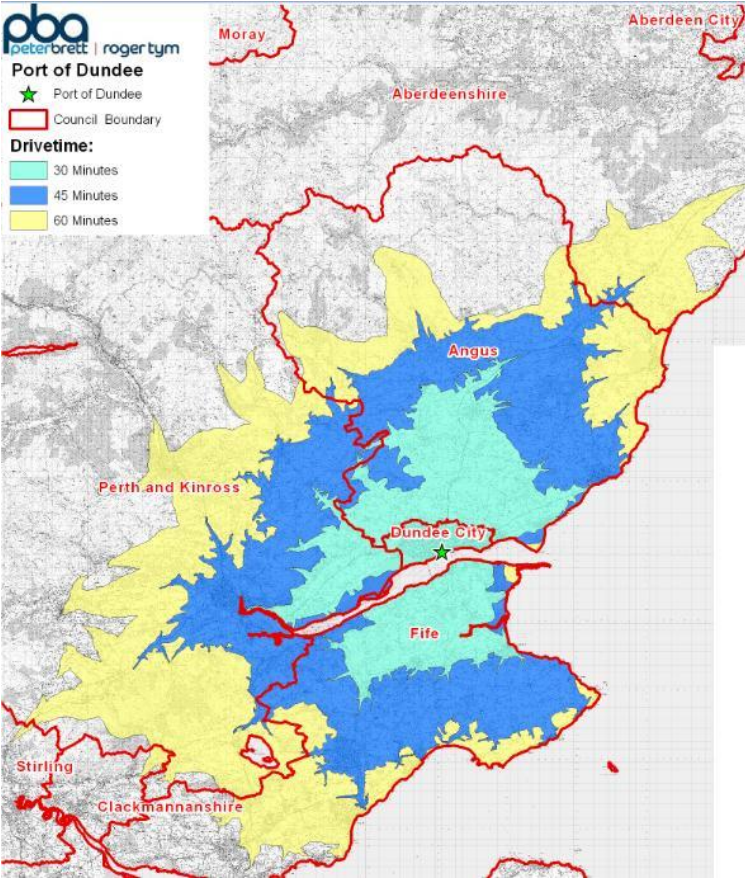
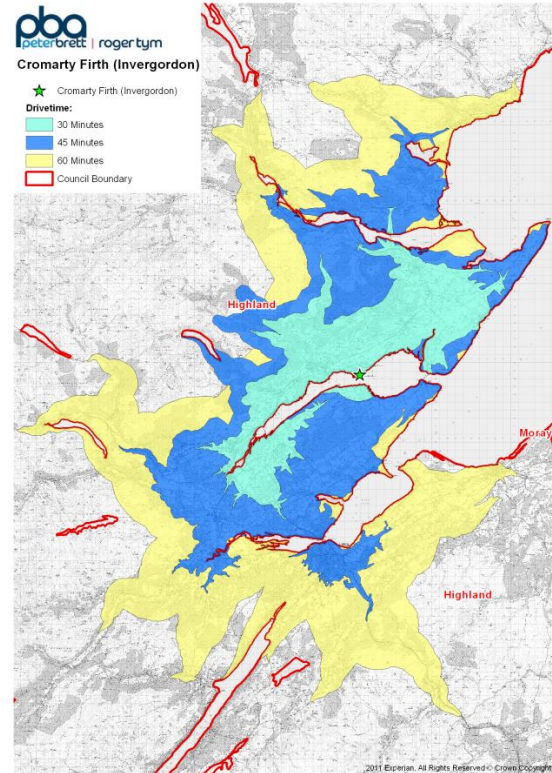


Figure 22A.7: Cromarty Firth Labour Market Catchment Drive Times



### 22A.4.1 Leith Labour Market Catchment

#### *Leith Catchment Economic Activity/Unemployment*

The economic activity and unemployment rates for Leith's catchment areas are slightly higher than the Scottish average. 30 per cent of Scotland's economically active people live within a 90 minute drive-time from Leith.

**Table 22A.1: Leith Economic Activity**

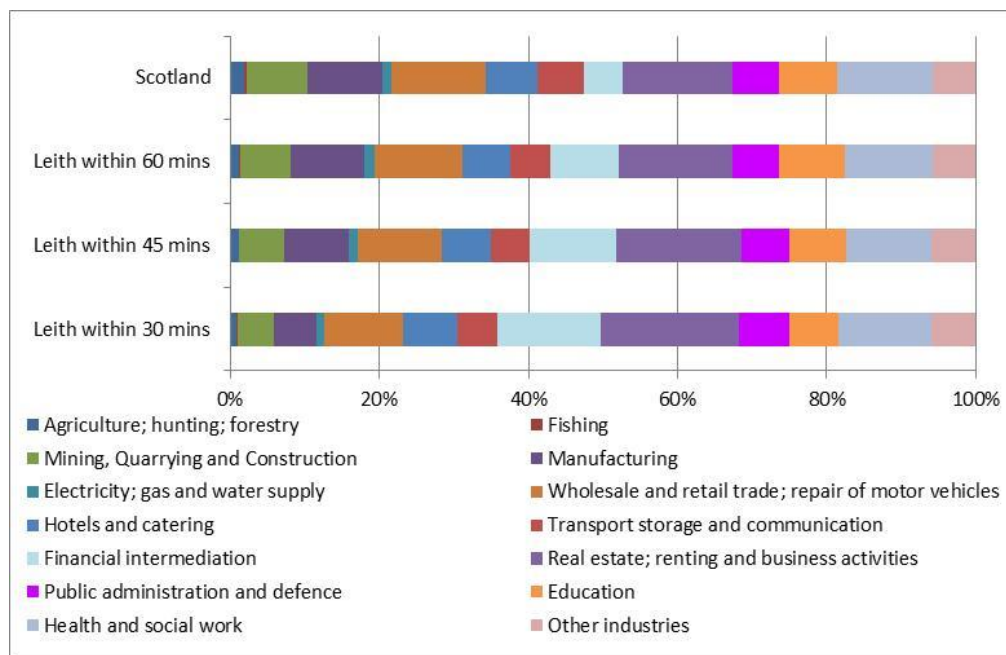
|                                   | <b>30 Minutes</b> | <b>45 Minutes</b> | <b>60 Minutes</b> | <b>Scotland</b> |
|-----------------------------------|-------------------|-------------------|-------------------|-----------------|
| All People Aged 16-74<br>Employed | 491,563           | 773,429           | 1,165,142         | 3,913,705       |
| Economically active               | 295,563           | 467,057           | 694,003           | 2,307,389       |
| Economic activity<br>rate %       | 60.1              | 60.4              | 59.6              | 58.9            |
| Unemployed                        | 21,942            | 34,871            | 58,808            | 187,232         |
| Unemployed %                      | 4.5               | 4.5               | 5.0               | 4.8             |

Source: 2011 Experian Estimates

### 22A.4.2 Leith Catchment Employment by Sector

A higher proportion of people within the drive-time areas are employed in financial intermediation, real estate, renting and business activities than the Scottish averages. The proportions of those employed in construction and manufacturing in the catchment areas are below the Scottish averages. While this proportionally represents a below average share, the number of people employed in these sectors within the Leith drive-time areas are more than those employed in the Dundee and Cromarty Firth catchments combined.

**Figure 22A.8: Leith Employment by Sector**

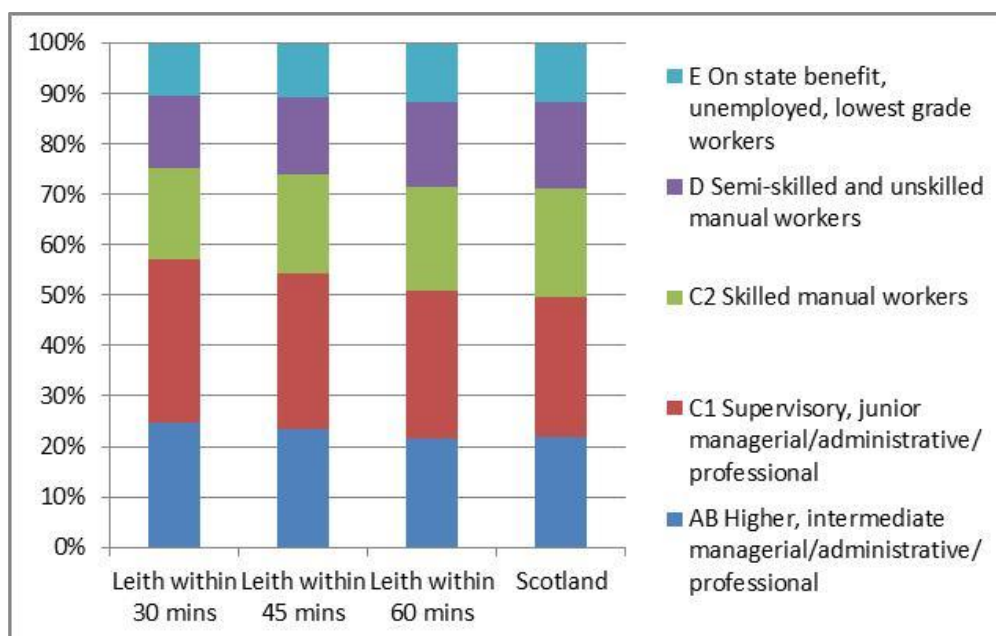


Source: 2011 Experian Estimates

### 22A.4.3 Leith Catchment Occupational Structure

In terms of occupation the Leith area has a lower proportion of workers employed in manual occupations than the Scottish averages. Within the 30-minute and 45-minute drive-time areas nearly a quarter of workers are employed in highly skilled occupations which is greater than the Scottish average.

**Figure 22A.9: Leith Occupational Structure**



Source: 2011 Experian Estimates

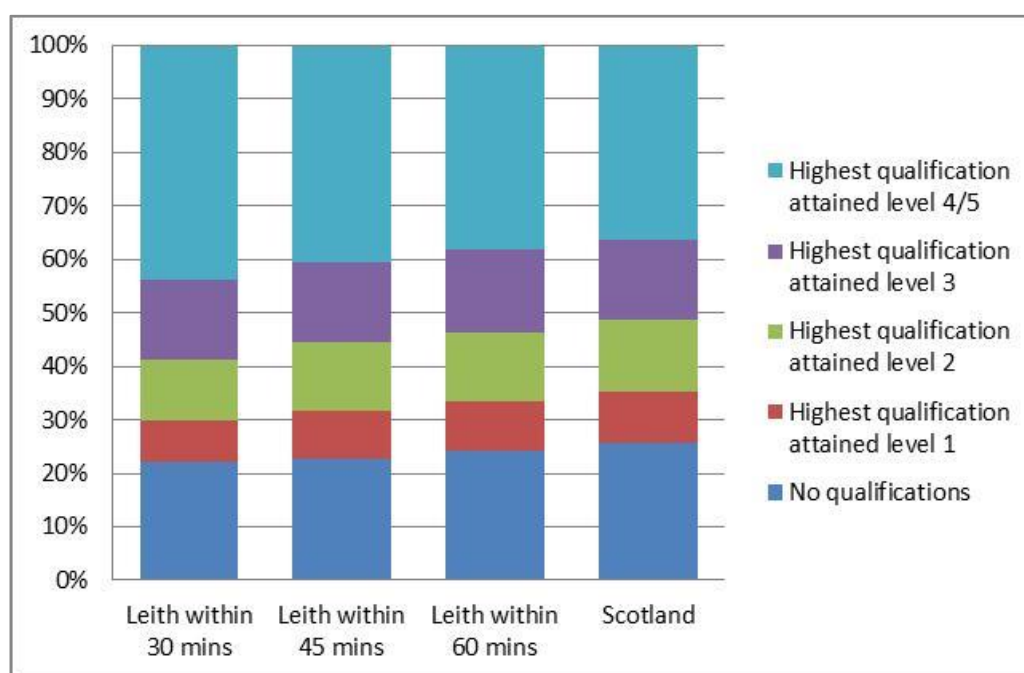


#### 22A.4.4 Leith Qualification Levels

The qualification attainment rates at the highest level across all the catchments areas are higher than the Scottish average. Nearly 45 per cent of residents in the local catchment hold degree level qualifications. Within the Leith catchment areas the proportion of residents who hold no qualifications is lower than the Scottish average.

- Level 1: 1+'O' level passes, 1+CSE/GCSE any grades, NVQ level 1, Foundation GNVQ
- Level 2: 5+'O' level passes, 5+CSEs (grade 1). 5+GCSEs (grades A-C), School Certificate, 1+'A' levels/AS levels, NVQ level 2, Intermediate GNVQ
- Level 3: 2+'A' levels,4+AS levels, Higher School certificate, NVQ level 3, Advanced GNVQ
- Level 4/5: First degree, Higher degree, NVQ levels 4 and 5, HNC, HND, Qualified Teacher status, Qualified Medical Doctor, Qualified Dentist, Qualified Nurse, Midwife, Health Visitor
- Other qualifications/level unknown: Other qualifications (e.g. City and Guilds, RSA/OCR, BTEC/Edexcel), Other Professional Qualifications.

**Figure 22A.10: Leith Qualifications Levels**



Source: 2011 Experian Estimates

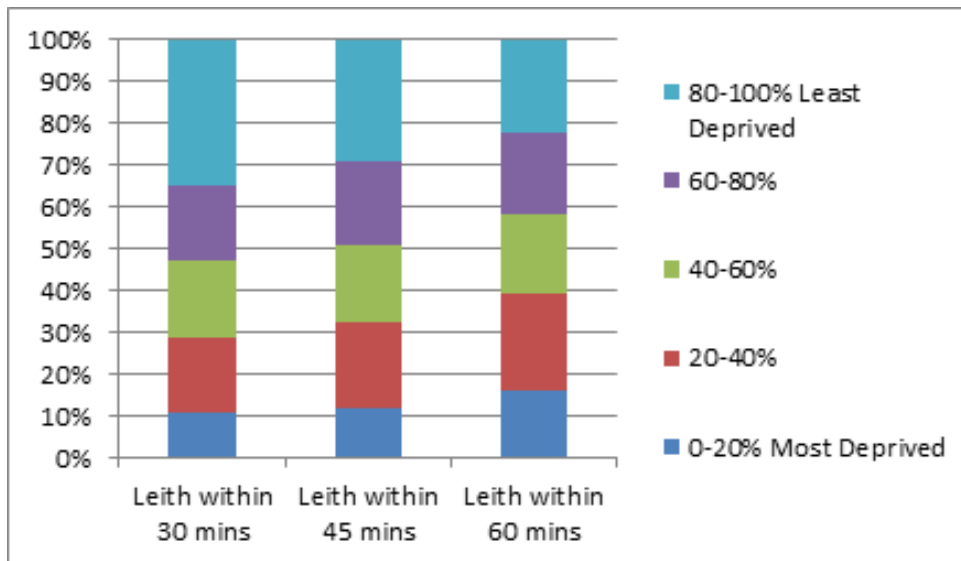
#### 22A.4.5 Deprivation

The Scottish Index of Multiple Deprivation (SIMD) is the Scottish Government's official tool for identifying small areas of deprivation across Scotland. The SIMD provides a relative ranking of 6,505 small areas (data zones) across Scotland from the most deprived (ranked 1) to the least deprived (ranked 6,505).

The level of deprivation around the local area catchment is relatively low as only 10 per cent of the data zones within the area are within the 0-20 per cent most deprived bracket. The levels of

deprivation are increased at the 45 and 60 minute catchments, but not to a level where the level of deprivation is significant.

**Figure 22A.11: Leith Deprivation Levels**



Source: 2011 Experian Estimates

#### 22A.4.6 Rosyth Labour Market Catchment

##### *Rosyth Catchment Economic Activity/Unemployment*

The economic activity rates in the 30-minute and 45-minute drive-time areas from Rosyth are slightly higher than the Scottish average. Unemployment rates in 45-minute and 60-minute drive-time catchment areas are also slightly higher than the Scottish average. This indicates that in terms of absolute numbers there may be potential supply of available labour within the Rosyth drive-time areas, as shown in Table 22A.2. However, given the specialist skills and experience required by the offshore wind industry, this available labour supply will very likely require up-skilling to satisfy the needs of the industry, together with importation of specialist labour otherwise not available in the area. This applies to the other facilities within the Economic Study Area.

43 per cent of Scotland's economically active people live within a 60 minute drive-time from Rosyth.

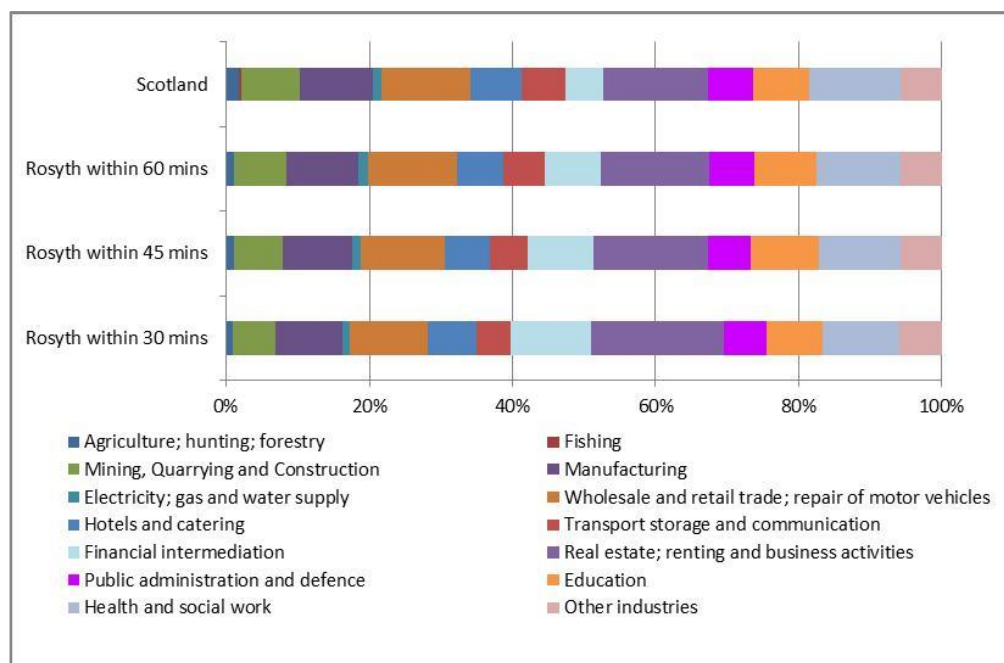
**Table 22A.2: Rosyth Economic Activity**

|                                | 30 Minutes | 45 Minutes | 60 Minutes | Scotland  |
|--------------------------------|------------|------------|------------|-----------|
| All People Aged 16-74 Employed | 590,468    | 1,102,710  | 1,701,503  | 3,913,705 |
| Economically active            | 356,209    | 657,832    | 995,554    | 2,307,389 |
| Economic activity rate %       | 60.3       | 59.7       | 58.5       | 59.0      |
| Unemployed                     | 27,512     | 54,539     | 89,386     | 187,232   |
| Unemployed %                   | 4.7        | 4.9        | 5.3        | 4.8       |

Source: 2011 Experian Estimates

**22A.4.7 Rosyth Catchment Employment by Sector**

As with Leith a higher proportion of people within the drive-time areas are employed in financial intermediation, real estate, renting and business activities than the Scottish averages. Within the 45-minute and 60-minute drive-time areas there are also a greater proportion of people employed in education. The proportions of those employed in construction and manufacturing within the Rosyth catchment areas are below the Scottish averages. Overall the proportions of jobs across the drive-time areas are generally similar to the wider Scottish averages as shown Figure 22A.12.

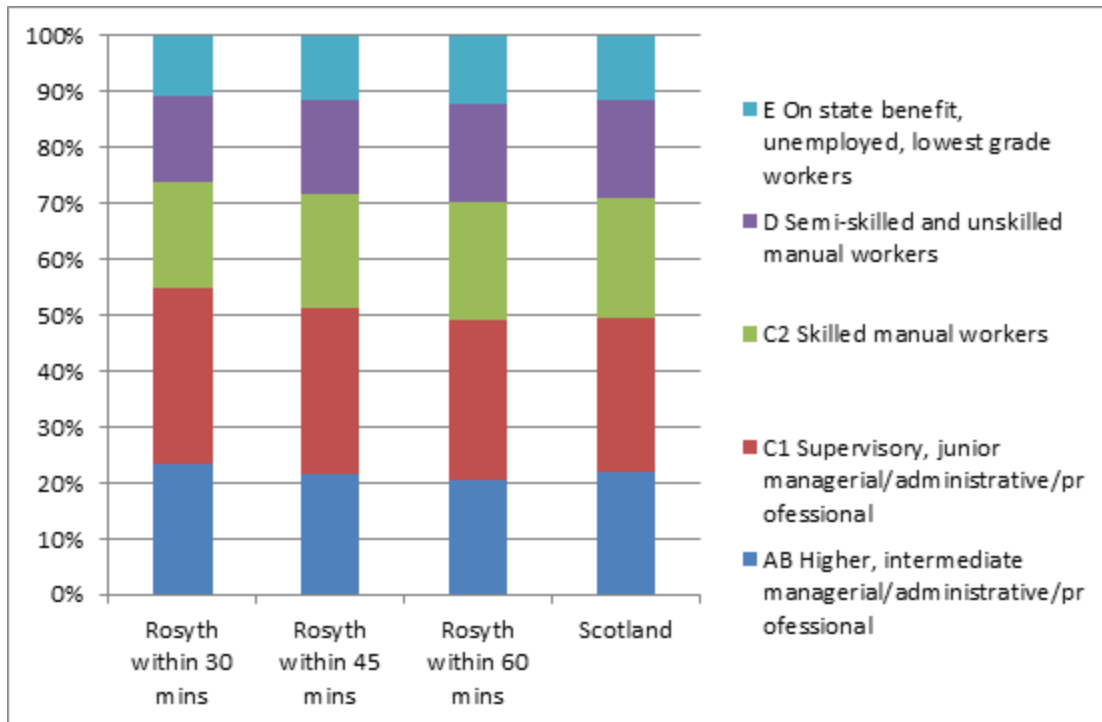
**Figure 22A.12: Rosyth Employment by Sector**

Source: 2011 Experian Estimates

### 22A.4.8 Rosyth Catchment Occupational Structure

In terms of occupation, the Rosyth area has a lower proportion of workers employed in manual occupations than the Scottish average, similar to Leith. Within the 30-minute drive-time area just over a third are employed in manual occupations compared to 39 per cent Scottish average. Within the 30-minute drive-time area, the proportion of those employed in more highly skilled occupations is greater than the Scottish averages.

**Figure 22A.13: Rosyth Occupational Structure**

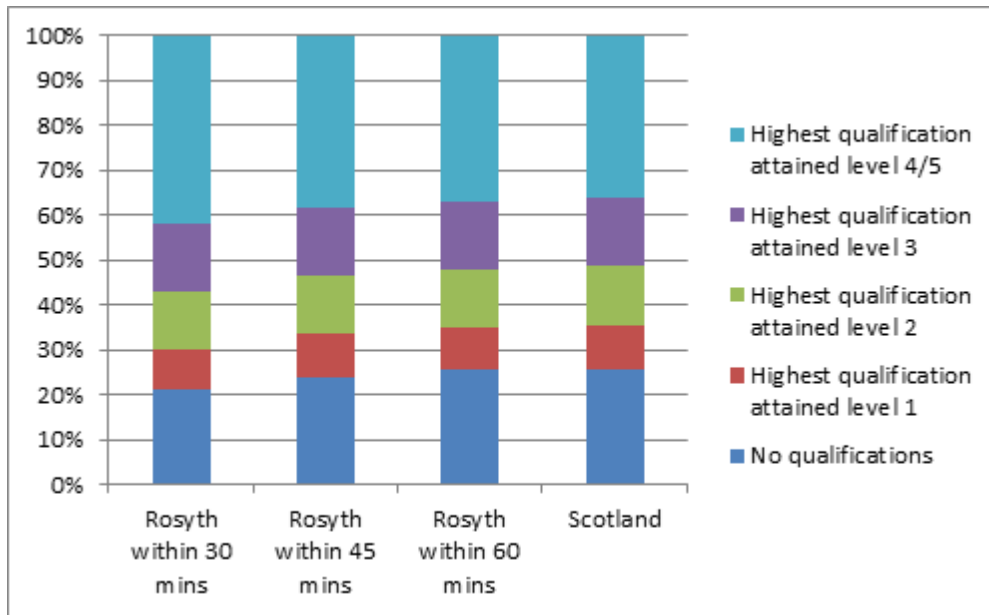


Source: 2011 Experian Estimates

### 22A.4.9 Rosyth Qualification Levels

As with Leith, the proportions of residents achieving the highest levels of qualifications across all the Rosyth drive-time catchments are higher than the Scottish average. Over a third of residents in all catchments have a degree level qualification. The proportion of residents with no qualifications is also lower across all the catchment areas when compared to the Scottish average.

**Figure 22A.14: Rosyth Qualifications Levels**

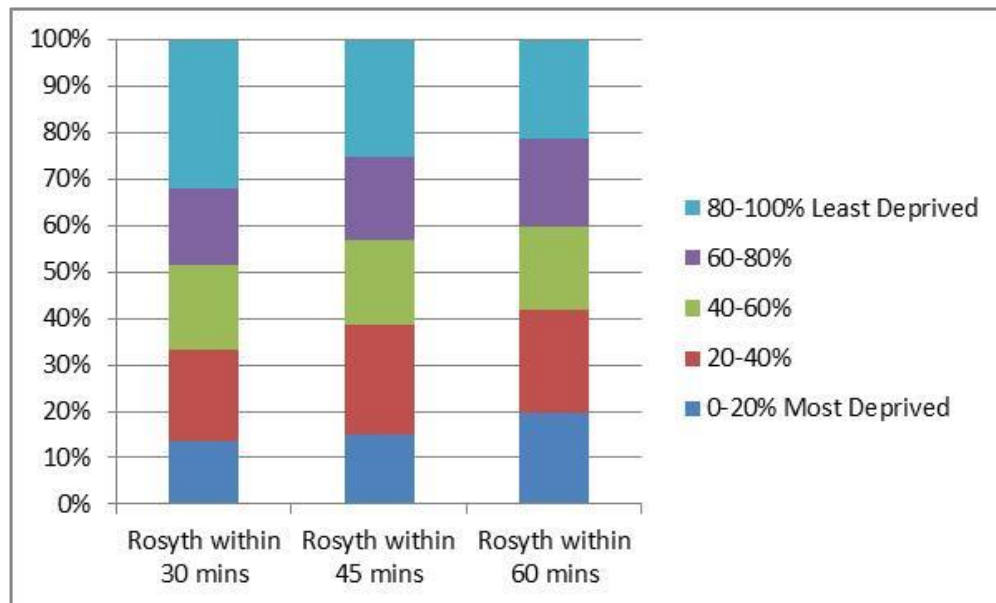


Source: 2011 Experian Estimates

**22A.4.10 Deprivation**

The levels of deprivation around the local area catchment is fairly low as only 14 per cent of the data zones within the local area are within the 0-20 per cent most deprived bracket. Moreover nearly a third of the data zones are in the least deprived bracket. The levels of deprivation are increased at the 45 and 60 minute catchments, with a fifth of data zones in the 60 minute drive-time catchment being in the most deprived bracket. Therefore, there are relatively significant clusters of deprivation scattered across this drive-time catchment.

**Figure 22A.15: Rosyth Deprivation Levels**



Source: 2011 Experian Estimates

### 22A.4.11 Dundee Labour Market Catchment

#### *Dundee Catchment Economic Activity/Unemployment*

The economic activity rates in the drive-time areas from Dundee are slightly below the Scottish average, especially within the 30-minute catchment. Only 12 per cent of Scotland's economically active people live within a 60 minute drive-time from Dundee. However, the rates of unemployment are generally comparable to the Scottish average.

**Table 22A.3: Dundee Economic Activity**

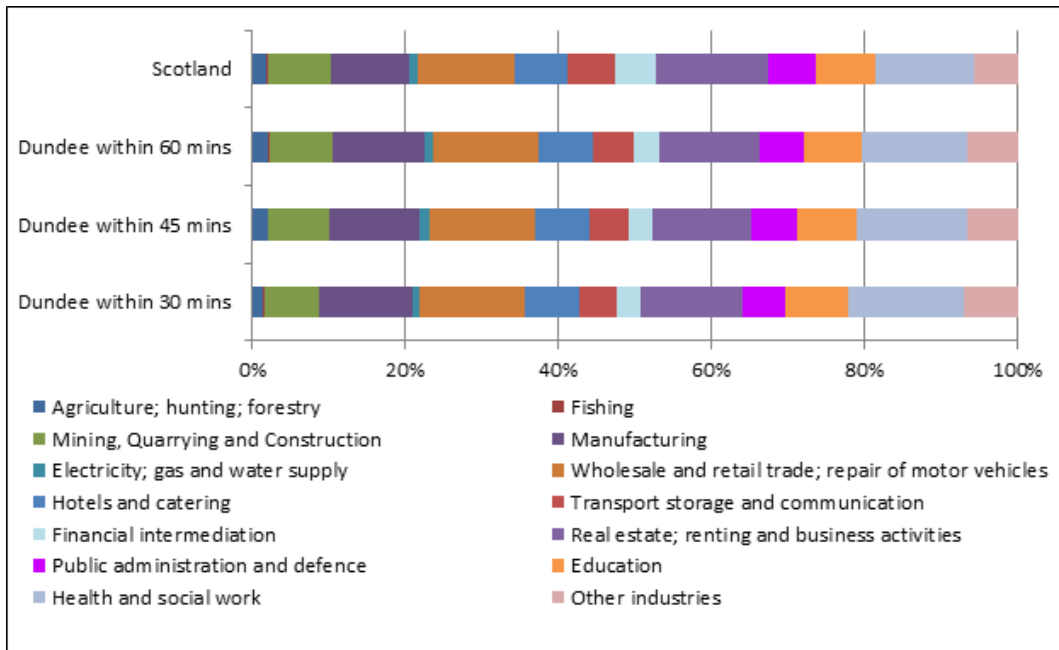
|                                   | <b>30 Minutes</b> | <b>45 Minutes</b> | <b>60 Minutes</b> | <b>Scotland</b> |
|-----------------------------------|-------------------|-------------------|-------------------|-----------------|
| All People Aged 16-74<br>Employed | 185,453           | 348,495           | 482,398           | 3,913,705       |
| Economically active               | 105,367           | 200,907           | 277,932           | 2,307,389       |
| Economic activity<br>rate %       | 56.8              | 57.6              | 57.6              | 59.0            |
| Unemployed                        | 8,183             | 16,026            | 23,762            | 187,232         |
| Unemployed - %                    | 4.4               | 4.6               | 4.9               | 4.8             |

Source: 2011 Experian Estimates

### 22A.4.12 Dundee Catchment Employment by Sector

A higher proportion of people within the Dundee catchment areas are employed in manufacturing compared to the Scottish average. An above average proportion of workers within these areas are also employed in retail and the hotel and catering industry.

**Figure 22A.16: Dundee Employment by Sector**

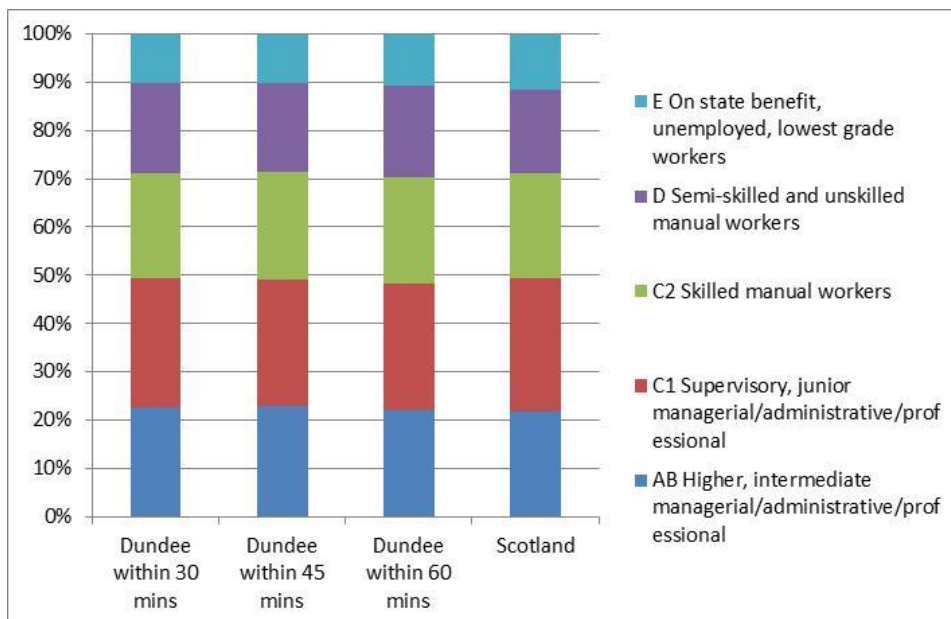


Source: 2011 Experian Estimates

**22A.4.13 Dundee Catchment Occupational Structure**

In terms of occupation, the Dundee area has a slightly higher proportion of workers employed in manual occupations compared to the Scottish average. The area also has a higher proportion of workers in the most highly skilled occupational bracket which includes gaming, computing, cancer research and other medical research.

**Figure 22A.17: Dundee Occupational Structure**

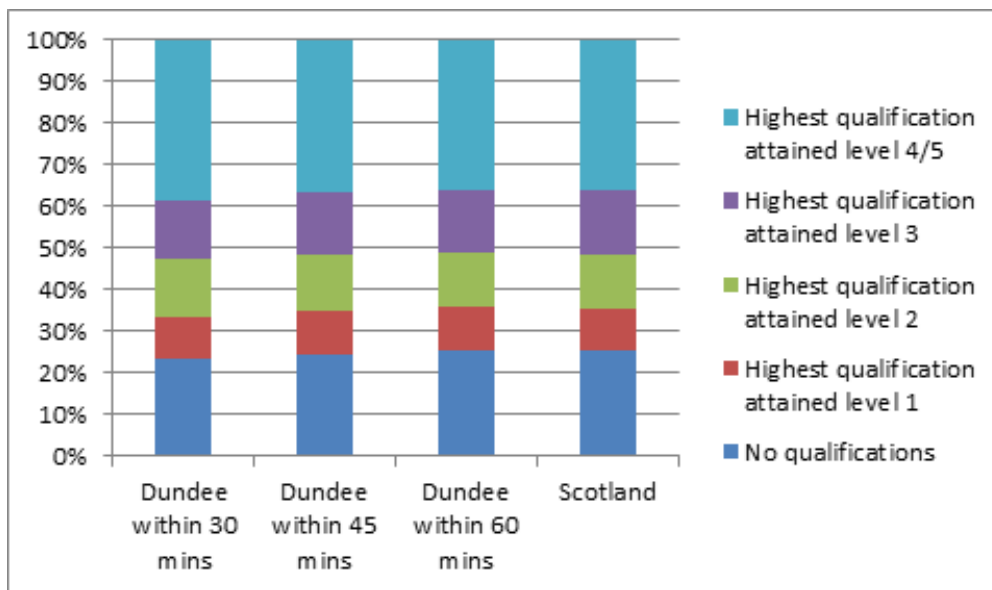


Source: 2011 Experian Estimates

#### 22A.4.14 Dundee Qualification Levels

The proportions of residents achieving the highest levels of educational qualifications across the 45 and 60 minute drive-time catchments are generally comparable to the Scottish average. Whereas the proportion of residents within the local catchment are achieving are slightly better results. The proportions of residents achieving no qualifications across the catchment areas are generally comparable to the Scottish average. Therefore, it can be surmised that the educational attainment levels within the Dundee drive-time catchments is at a reasonable level, especially with the local area catchment.

**Figure 22A.18: Dundee Qualifications Levels**



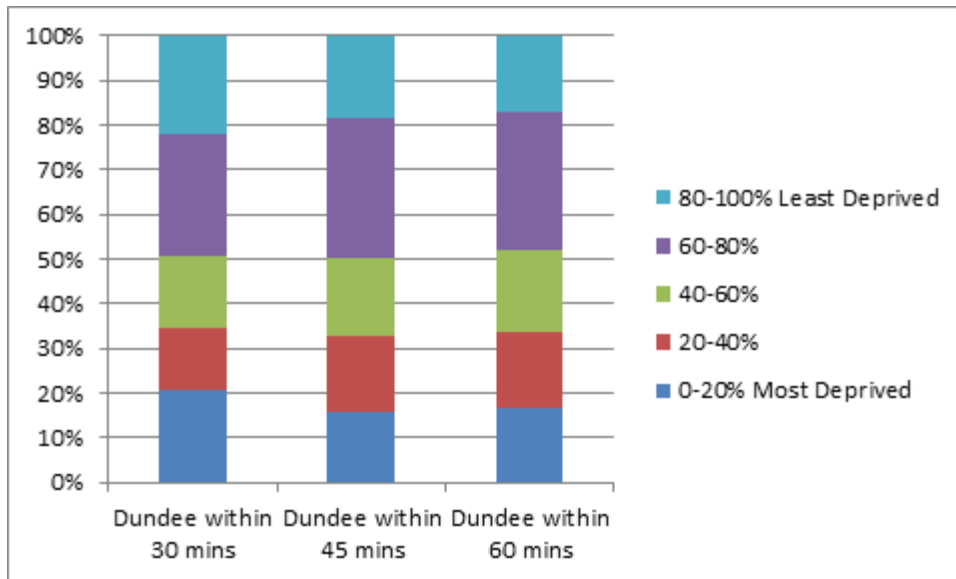
Source: 2011 Experian Estimates

#### 22A.4.15 Deprivation

There are clusters of deprivation throughout the drive-time catchments especially around the local area where over a fifth of data zones were in the most deprived bracket. However, around half of the data zones within each catchment were in some of the least deprived brackets (i.e. 60-100 per cent). This suggests that whilst there are pockets of severe deprivation across the catchment areas, the majority of data zones are not in the most deprived bracket.



**Figure 22A.19: Dundee Deprivation Levels**



Source: 2011 Experian Estimates

**22A.4.16 Cromarty Firth Labour Market Catchment**

The drive-time catchments for the Cromarty Firth are based on statistics for Invergordon as the most representative centre point in the area for the purposes of the baseline and assessments.

**22A.4.17 Cromarty Firth Catchment Economic Activity/Unemployment**

The economic activity rates in the drive-time areas from the Cromarty Firth (Invergordon) are significantly higher than the Scottish average. The unemployment rates in the catchment-areas are also lower than the Scottish average, indicating that employment opportunities are good in the area.

**Table 22A.4: Cromarty Firth Economic Activity**

|                                | 30 Minutes | 45 Minutes | 60 Minutes | Scotland  |
|--------------------------------|------------|------------|------------|-----------|
| All People Aged 16-74 Employed | 21,589     | 73,576     | 93,382     | 3,913,705 |
| Economically active            | 13,673     | 47,654     | 60,737     | 2,307,389 |
| Economic activity rate %       | 63.3       | 64.8       | 65.0       | 59.0      |
| Unemployed                     | 758        | 2,383      | 2,861      | 187,232   |
| Unemployed - %                 | 3.5        | 3.2        | 3.1        | 4.8       |

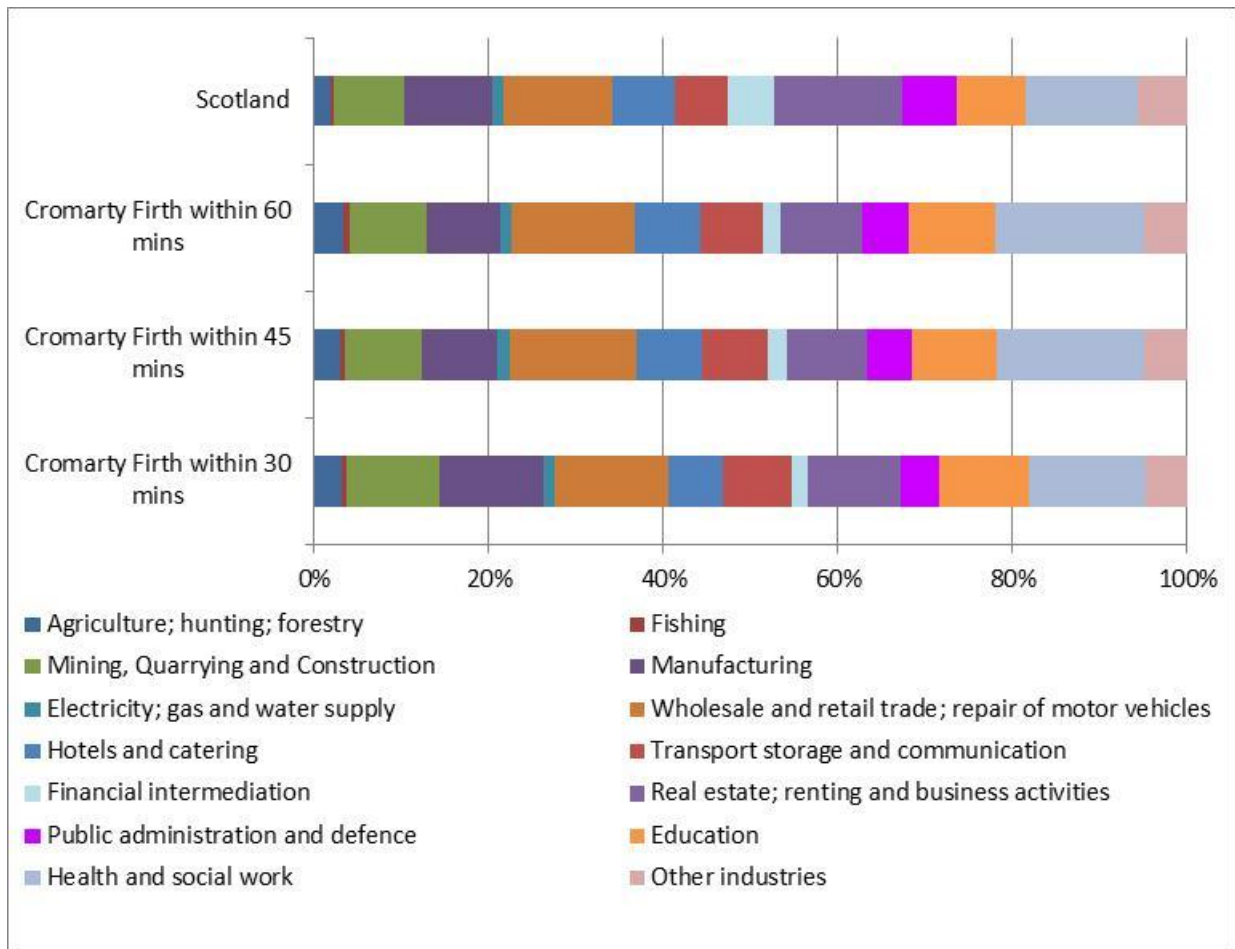
Source: 2011 Experian Estimates

**22A.4.18 Cromarty Firth Catchment Employment by Sector**

A higher proportion of people within the 30-minute catchment area are employed in manufacturing, construction and agriculture compared to the Scottish averages. The proportion of people employed in retail, health, social work and education across the drive-time areas are also higher than the Scottish averages

Areas such as financial intermediation, real estate, renting and business activities are under-represented when compared to the Scottish averages.

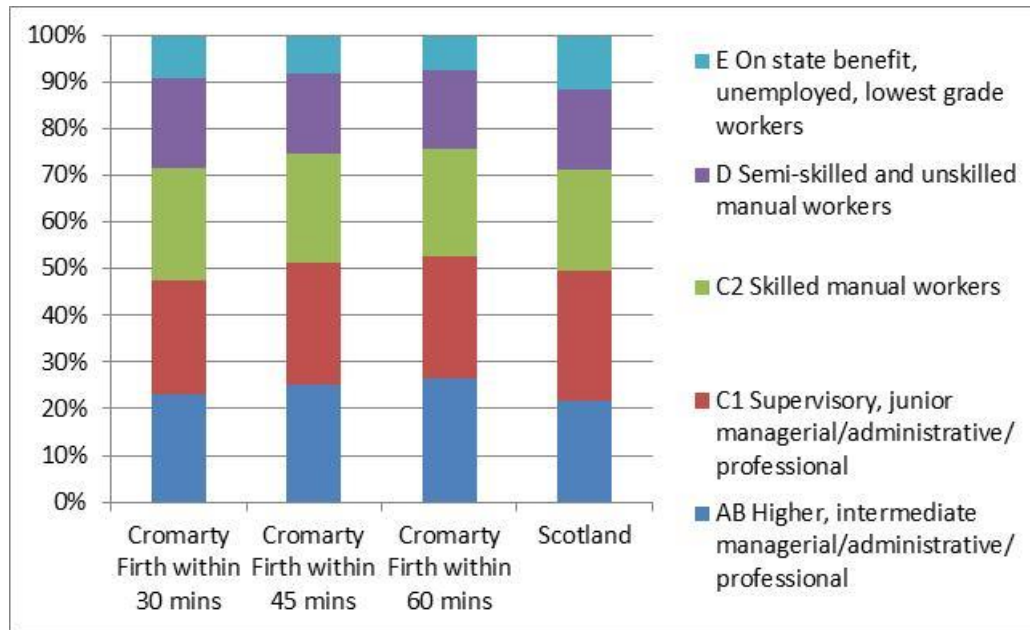
**Figure 22A.20: Cromarty Firth Employment by Sector**



Source: 2011 Experian Estimates

**22A.4.19 Cromarty Firth Catchment Occupational Structure**

As with the Dundee area, the Cromarty Firth drive-time area has a slightly higher proportion of workers employed in manual occupations compared to the Scottish average. Over a quarter of workers in the 45-minute and 60-minute drive-time areas are employed in the most highly skilled occupations, greater than the 22 per cent Scottish average. The proportion of workers in the highly skilled bracket in the 30-minute drive-time catchment is also higher than the Scottish average.

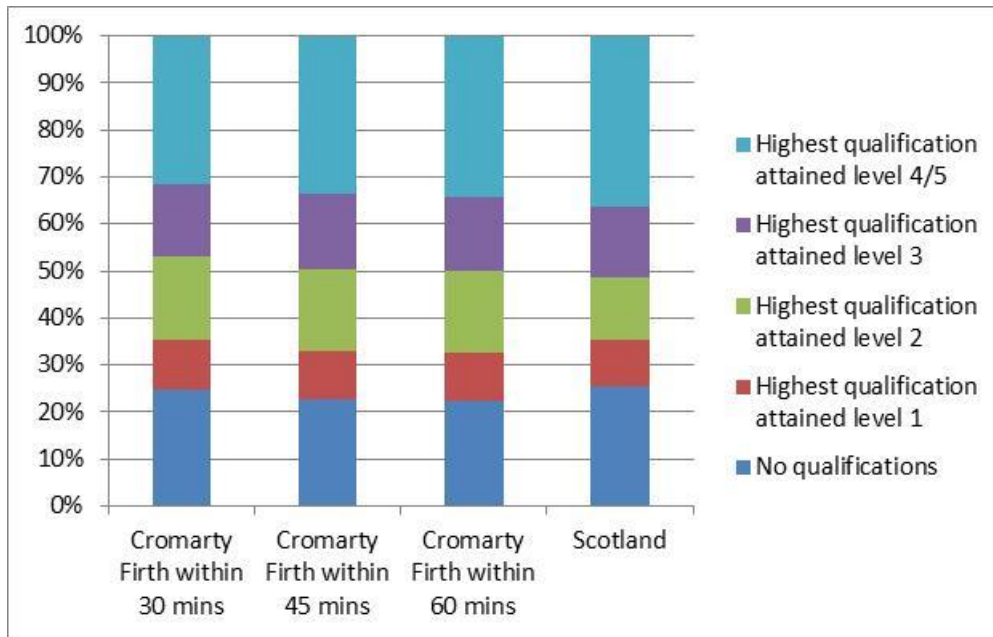
**Figure 22A.21: Cromarty Firth Occupational Structure**

Source: 2011 Experian Estimates

#### 22A.4.20 Cromarty Firth Qualification Levels

The proportions of residents achieving the highest levels of educational qualifications across all the drive-time catchments are lower than the Scottish average. Whereas the proportions of residents in these areas obtaining other lower level qualifications are higher than the Scottish averages. The proportions of those achieving no qualifications in the drive-time catchments are lower than the Scottish average. Therefore, it can be concluded that whilst the catchment areas may not have the largest numbers of highly skilled residents, the educational attainment levels are still generally good.

**Figure 22A.22: Cromarty Firth Qualifications Levels**

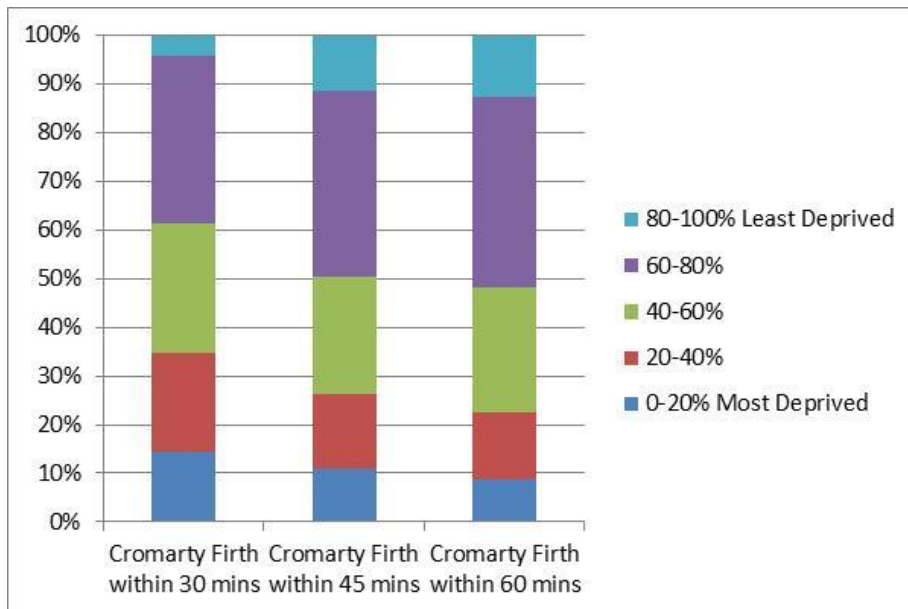


Source: 2011 Experian Estimates

**22A.4.21 Deprivation**

There are relatively low levels of deprivation across the drive-time catchment areas. The majority of data zones are within the mid to low level range of deprivation (i.e. 40-80 per cent). The levels of deprivation are diminished the greater distance away from the port.

**Figure 22A.23: Cromarty Firth Deprivation Levels**



Source: 2011 Experian Estimates

### 22A.4.22 Summary

The main socio-economic characteristics of each of the facility drive-time catchments are summarised below.

#### *Leith*

- Relatively high economic activity rate. Nearly a third of Scotland's economically active people live within a 60 minute drive-time from Leith;
- High proportion of people employed in financial and business services work. Lower than average proportion of people employed in construction and manufacturing;
- Higher than average proportion of workers employed in highly skilled occupations;
- Relatively high educational attainment level; and
- Low levels of extreme deprivation.

#### *Rosyth*

- Relatively good economic activity rate with an unemployment rate comparable to the Scottish average. Just under a half of Scotland's economically active people live within a 60 minute drive-time from Rosyth;
- High proportion of people employed in the financial and business services sector as well as education. The proportion of people employed in construction and manufacturing is below the Scottish average;
- Lower proportion of workers employed in manual occupations compared to the Scottish average. Within the local area catchment there is a relatively high proportion of people employed in highly skilled occupations;
- Good proportion of residents achieving the highest qualification levels ; and
- Low levels of extreme deprivation, especially within the local area.

#### *Dundee*

- Economic activity rates which are below the Scottish average. Only 12 per cent of Scotland's economically active people live within a 60 minute drive-time from Dundee;
- High proportion of people employed in manufacturing compared to the Scottish average. Also a high proportion employed in retail and the hotel industry;
- Slightly higher proportion of workers employed in highly skilled and manual occupations compared to the Scottish averages;

- Educational attainment level generally comparable to the Scottish averages; and
- Clusters of extreme deprivation, especially around the local area.

#### *Cromarty Firth*

- Strong economic activity rate;
- High proportions of people in the local area are employed manufacturing and construction compared to the Scottish average;
- Higher than average proportion of people employed in highly skilled and manual occupations;
- Higher than average proportion of people achieving some level of qualification. However, the proportion of people achieving the highest grade qualifications is below the Scottish average; and
- Relatively low levels of extreme deprivation across the catchment areas.

## **22A.5 Tourism Baseline Profile**

This section provides a tourism profile of the Tourism Study Area relative to Scotland in terms of visitor attractions and trends, visit volume and value, visitor patterns, visitor accommodation occupancy rates and expenditure patterns. Data at a Council level have been used where available, otherwise regional data has been used as an alternative.

### **22A.5.1 Top Visitor Attractions**

The top visitor attractions in Edinburgh and Lothians, Fife, Dundee and Angus and Aberdeen and Grampians are listed in Table 22A.5. The majority are out-with the ZTV of the Project with the following seven attractions (within 50km from the outer turbine) having the potential to have visibility of the Project: Scottish Fisheries Museum (Anstruther), St Andrews Museum, British Golf Museum, Dundee Contemporary Arts, Monikie Country Park, The McManus: Dundee's Art Gallery & Museum and Crombie Country Park.

Visitor numbers to the top visitor attractions in the Tourism Study Area generally increased between 2010 and 2007 (Table 22A.5). Some attractions recorded significant increases, such the Dundee Contemporary Arts (110 per cent), The National Museum of Scotland (78 per cent) and St Giles Cathedral (75 per cent). However, some other attractions saw their visitor number drop considerably including The Scottish National Gallery (-36 per cent) and the Abbot House Heritage Centre & Gardens (-25 per cent).

**Table 22A.5: Top visitor attractions in Edinburgh and Lothians, Fife, Dundee and Angus and Aberdeen and Grampians (Paid and Unpaid)**

|  | 2011 Rank | 2011 Visitors | % change since 2007 |
|--|-----------|---------------|---------------------|
| <b><i>Edinburgh and Lothians</i></b>               |           |               |                     |
| National Museum of Scotland                        | 1         | 1,494,728     | 78%*                |
| Edinburgh Castle                                   | 2         | 1,302,825     | 6%*                 |
| Scottish National Gallery                          | 3         | 925,574       | -36%*               |
| St Giles Cathedral                                 | 4         | 851,375       | 75%*                |
| Royal Botanic Garden Edinburgh                     | 5         | 790,545       | 30%*                |
| <b><i>Fife</i></b>                                 |           |               |                     |
| Lochore Meadows Country Park, by Lochgelly         | 1         | 590,000*      | -                   |
| Scottish Fisheries Museum, Anstruther              | 2         | 90,000*       | 15%*                |
| St Andrews Museum, St Andrews                      | 3         | 70,000*       | 51%*                |
| Abbot House Heritage Centre & Gardens, Dunfermline | 4         | 60,000*       | -25%*               |
| British Golf Museum, St Andrews                    | 5         | 55,000*       | -2%*                |
| <b><i>Dundee and Angus</i></b>                     |           |               |                     |
| Dundee Contemporary Arts                           | 1         | 386,123*      | 110%*               |
| Monikie Country Park, Dundee                       | 2         | 240,000*      | -12%*               |
| Forfar Loch Country Park, Forfar                   | 3         | 220,000*      | 18%*                |
| The McManus: Dundee's Art Gallery & Museum         | 4         | 160,000*      | -                   |
| Crombie Country Park, Broughty Ferry               | 5         | 120,000*      | -1%*                |
| <b><i>Aberdeen and Grampians</i></b>               |           |               |                     |
| David Welch Winter Gardens, Aberdeen               | 1         | 308,661       | 3%*                 |
| Aden Country Park, Mintlaw                         | 2         | 220,962       | 37%*                |
| Aberdeen Art Gallery                               | 3         | 165,967       | -8%*                |
| Aberdeen Maritime Museum                           | 4         | 76,877        | -24%                |
| WDCS Wildlife Centre, Spey Bay                     | 5         | 73,974        | -                   |

Sources: Visit Scotland Tourism in Eastern Scotland 2011, Visit Scotland Tourism in Northern Scotland 2011, Visitor Attraction Monitor 2011 Overview. \*Approximate figures based on tables recorded in the Visit Scotland regional summaries

## 22A.5.2 Domestic Trips and Expenditure

### *Edinburgh and Lothians*

Domestic tourist trips and visitor expenditure increased significantly between 2010 and 2011 by nearly a fifth (Table 22A.6), mirroring a national trend. The increase could be attributed to more people holidaying at home instead of going abroad due to the prevailing economic climate.

The Edinburgh and Lothians area is heavily dependent on English domestic visitors, as nearly two thirds (61 per cent) of expenditure is from this market.

Overall the Edinburgh and Lothians area is important to the Scottish domestic tourism market as it accounts for a fifth of all trips and expenditure.

**Table 22A.6: Domestic Tourists to Edinburgh and Lothians by Country of Residence 2011**

|           | Trips (%)              |          |                      | Domestic Tourism Expenditure (%) |          |                     |
|-----------|------------------------|----------|----------------------|----------------------------------|----------|---------------------|
|           | Edinburgh and Lothians | Scotland | % change since 2010* | Edinburgh and Lothians           | Scotland | % change since 2010 |
| England   | 61                     | 46       | 0                    | 73                               | 61       | +3                  |
| Scotland  | 36                     | 52       | +3                   | 20                               | 34       | 0                   |
| Wales     | 3                      | 2        | +1                   | 7                                | 5        | +5                  |
| Total (m) | 2.75                   | 13.36    | +19                  | £616                             | £3,018   | +17                 |

Source: VisitScotland Tourism in Eastern Scotland 2011. \*Note that 2010 figures are UK based

### *Fife*

Domestic tourism trips (-25 per cent) and expenditure (-8 per cent) in Fife fell between 2010 and 2011 (Table 22A.7). There has been a decrease in the number of Scottish visitors to the area (-16 per cent), with an increased proportion of visitors from England (+13 per cent). Expenditure from English visitors increased significantly by 26 per cent.

In relation to the Scottish domestic tourism market as a whole, Fife plays a fairly small role as it accounts for only 3 per cent of trips and 2 per cent of total expenditure.



**Table 22A.7: Domestic Tourists to Fife by Country of Residence 2011**

|           | Trips (%) |          |                     | Domestic Tourism Expenditure (%) |          |                     |
|-----------|-----------|----------|---------------------|----------------------------------|----------|---------------------|
|           | Fife      | Scotland | % change since 2010 | Fife                             | Scotland | % change since 2010 |
| England   | 43        | 46       | +13                 | 69                               | 61       | +26                 |
| Scotland  | 54        | 52       | -16                 | 52                               | 34       | -5                  |
| Wales     | 4         | 2        | +4                  | 2                                | 5        | +2                  |
| Total (m) | 0.43      | 13.36    | -25                 | £74                              | £3,018   | -8                  |

Source: VisitScotland Tourism in Eastern Scotland 2011. \*Note that 2010 figures are UK based

### *Dundee and Angus*

Whilst the number of domestic visitors to Dundee and Angus has increased considerably (29 per cent) between 2010 and 2011, domestic tourism expenditure declined by (-6 per cent) (Table 22A.8). Overall the Dundee and Angus domestic tourism market is mainly made up of visitors from within Scotland, suggesting that their tourism offer is focussed around its local tourism market appeal. When compared to Scottish domestic tourism market, Dundee and Angus accounts for 5 per cent of total trips and 3 per cent of total expenditure.

**Table 22A.8: Domestic Tourists to Dundee and Angus by Country of Residence 2011**

|           | Trips (%)        |          |                     | Domestic Tourism Expenditure (%) |          |                     |
|-----------|------------------|----------|---------------------|----------------------------------|----------|---------------------|
|           | Dundee and Angus | Scotland | % change since 2010 | Dundee and Angus                 | Scotland | % change since 2010 |
| England   | 29               | 46       | -9                  | 39                               | 61       | -7                  |
| Scotland  | 70               | 52       | +13                 | 60                               | 34       | +7                  |
| Wales     | 1                | 2        | -3                  | 1                                | 5        | 0                   |
| Total (m) | 0.66             | 13.36    | +29                 | £82                              | £3,018   | -6                  |

Source: VisitScotland Tourism in Eastern Scotland 2011. \*Note that 2010 figures are UK based

### *Aberdeen and Grampians*

The domestic tourism market in Aberdeen and Grampians has seen a significant increase in both trips (22 per cent) and spend (29 per cent) between 2010 and 2011 (Table 22A.9). As with Edinburgh and Lothians and Fife, the market is fairly dependent on English visitors. Although accounting for just over a third of trips (37 per cent) these visitors contribute more than half of the expenditure (52 per cent).

The Aberdeen and Grampians domestic tourism market is relatively important to Scotland as a whole as it accounts for a tenth of total trips and expenditure.

**Table 22A.9: Domestic Tourists to Aberdeen and Grampian by Country of Residence 2011**

|           | Trips (%)             |          |                     | Domestic Tourism Expenditure (%) |          |                     |
|-----------|-----------------------|----------|---------------------|----------------------------------|----------|---------------------|
|           | Aberdeen and Grampian | Scotland | % change since 2010 | Aberdeen and Grampian            | Scotland | % change since 2010 |
| England   | 37                    | 46       | -1                  | 52                               | 61       | +6                  |
| Scotland  | 61                    | 52       | +3                  | 37                               | 34       | -13                 |
| Wales     | 3                     | 2        | -1                  | 10                               | 5        | +6                  |
| Total (m) | 1.37                  | 13.36    | +22                 | £260                             | £3,018   | +29                 |

Source: VisitScotland Tourism in Northern Scotland 2011. \*Note that 2010 figures are UK based

### 22A.5.3 Overseas Trips and Expenditure

#### *Lothians*

Overseas visitors to the Lothians (excluding Edinburgh as the project would not be visible from the city) are predominately made up of those from the 'Rest of the World' (69 per cent) (Table 22A.10). This sector contains key emerging visitor markets such as Russia, China and India, renowned for high average spending per head, and who contribute the greatest proportion of overseas tourism spend (92 per cent). The Lothians play a fairly small role in the Scottish overseas tourism market, as it captures only 2 per cent of total Scottish overseas trips and 1 per cent of the expenditure received.

**Table 22A.10: Overseas Trips and Expenditure by Country of Residence (Lothians) 2011**

|               | Trips (%)     |               | Expenditure (%) |                 |
|---------------|---------------|---------------|-----------------|-----------------|
|               | Lothians      | Scotland      | Lothians        | Scotland        |
| USA           | 11            | 14            | 5               | 15              |
| Germany       | 4             | 11            | 1               | 9               |
| Ireland       | 6             | 8             | 1               | 5               |
| Spain         | 0             | 6             | 0               | 5               |
| France        | 6             | 7             | 0               | 9               |
| Australia     | 0             | 6             | 0               | 7               |
| Netherlands   | 2             | 6             | 0               | 4               |
| Italy         | 0             | 4             | 0               | 3               |
| Canada        | 2             | 4             | 1               | 6               |
| Norway        | 0             | 4             | 0               | 8               |
| Rest of World | 69            | 30            | 92              | 29              |
| <b>Total</b>  | <b>0.05 m</b> | <b>2.35 m</b> | <b>£13 m</b>    | <b>£1,494 m</b> |

Source: VisitScotland Tourism in Eastern Scotland 2011

### *Fife*

Visitors from the USA account for a quarter of trips and expenditure in the overseas tourism market in Fife, more than any other country (Table 22A.11). However, as with the wider Scotland statistics, there is a fairly even distribution of overseas visitors from different countries.

Overseas visitor numbers (-53 per cent) and related tourism expenditure (-37 per cent) fell significantly between 2010 and 2011. This again could be a result of the recession and more people deciding to holiday in their own country.

As with the Lothians, Fife only accounts for a small proportion of Scottish overseas tourism market, 2 per cent of trips and 4 per cent of expenditure.

Both the domestic and overseas markets are important to the Fife tourism market. Whilst there are a far greater number of domestic visitors (430,000 compared to 60,000), expenditure levels are comparable (56 per cent of expenditure attributed to the domestic market, 44 per cent to the overseas).

**Table 22A.11: Overseas Trips and Expenditure by Country of Residence (Fife) 2011**

|               | Trips (%)     |               |                          | Expenditure (%) |                 |                         |
|---------------|---------------|---------------|--------------------------|-----------------|-----------------|-------------------------|
|               | Fife          | Scotland      | Fife % change since 2010 | Fife            | Scotland        | Fife% change since 2010 |
| USA           | 26            | 14            | +8                       | 25              | 15              | -6                      |
| Canada        | 8             | 4             | 0                        | 23              | 6               | +16                     |
| Germany       | 8             | 11            | +1                       | 3               | 9               | +2                      |
| Switzerland   | 6             | 2             | +3                       | 10              | 2               | +9                      |
| Italy         | 6             | 4             | -                        | 2               | 3               | -                       |
| Spain         | 6             | 6             | -                        | 3               | 5               | -                       |
| Sweden        | 5             | 3             | -                        | 3               | 3               | -                       |
| Norway        | 5             | 4             | -                        | 6               | 8               | -                       |
| Finland       | 4             | 2             | -                        | 5               | 1               | -                       |
| Australia     | 4             | 6             | -                        | 3               | 7               | -                       |
| Rest of World | 21            | 44            | -12                      | 17              | 41              | -27                     |
| <b>Total</b>  | <b>0.06 m</b> | <b>2.35 m</b> | <b>-53%</b>              | <b>£59 m</b>    | <b>£1,494 m</b> | <b>-37%</b>             |

Source: VisitScotland Tourism in Eastern Scotland 2011

### *Dundee and Angus*

Visitors from Ireland, USA, Germany and Spain account for over 40 per cent of overseas trips to Dundee and Angus (Table 22A.12). However, in general there is a fairly even split of overseas visitors from various countries. In terms of expenditure, visitors from Denmark have become more important to Dundee and Angus. Whilst Danish visitors only makeup 6 per cent of total visits they contribute nearly a quarter of expenditure received (23 per cent), more than any other country.

Whilst overseas visitor numbers have increased between 2010 and 2011 (6 per cent), expenditure received has gone down by over a fifth (-21 per cent). This has been mainly driven by significant reductions in spend received from German and Rest of the World visitors.

In comparison with the Scottish overseas tourism market as a whole, Dundee and Angus accounts for only 3 per cent of total trips and 2 per cent of total expenditure.

The Dundee and Angus tourism market is more reliant on visitors from home than abroad, with 90 per cent of trips being from domestic visitors who contribute nearly three quarters of tourism expenditure.

**Table 22A.12: Overseas Trips and Expenditure by Country of Residence (Dundee and Angus) 2011**

|               | Trips (%)        |               |                                      | Expenditure (%)  |                 |                                      |
|---------------|------------------|---------------|--------------------------------------|------------------|-----------------|--------------------------------------|
|               | Dundee and Angus | Scotland      | Dundee and Angus % change since 2010 | Dundee and Angus | Scotland        | Dundee and Angus % change since 2010 |
| Ireland       | 13               | 8             | +4                                   | 9                | 5               | +4                                   |
| USA           | 11               | 14            | -4                                   | 10               | 15              | +1                                   |
| Germany       | 9                | 11            | -6                                   | 3                | 9               | -16                                  |
| Spain         | 9                | 6             | +2                                   | 4                | 5               | -3                                   |
| Belgium       | 7                | 2             | 0                                    | 9                | 1               | 0                                    |
| Sweden        | 6                | 3             | 0                                    | 11               | 3               | 0                                    |
| Denmark       | 6                | 1             | 0                                    | 23               | 2               | 0                                    |
| Italy         | 6                | 4             | +2                                   | 2                | 3               | 0                                    |
| Poland        | 4                | 2             | 0                                    | 1                | 1               | 0                                    |
| Australia     | 4                | 6             | -2                                   | 3                | 7               | +1                                   |
| Rest of World | 25               | 43            | -3                                   | 25               | 49              | -25                                  |
| <b>Total</b>  | <b>0.07 m</b>    | <b>2.35 m</b> | <b>+6%</b>                           | <b>£34 m</b>     | <b>£1,494 m</b> | <b>-21%</b>                          |

Source: VisitScotland Tourism in Eastern Scotland 2011

### *Grampian*

The 'Rest of the World' sector makes up over a third of overseas trips to the Grampians (excluding Aberdeen) and nearly half of the expenditure received (48 per cent) (Table 22A.13). Visitors from Norway and the USA account for around a quarter of Grampian's overseas visitors and tourism expenditure. The Grampian overseas tourism market accounts for 14 per cent of total trips and 9 per cent of total expenditure when compared to the total of the Scottish overseas tourism market.

**Table 22A.13: Overseas Trips and Expenditure by Country of Residence (Grampian) 2010**

|               | Trips (%)     |               | Expenditure (%) |                 |
|---------------|---------------|---------------|-----------------|-----------------|
|               | Grampian      | Scotland      | Grampian        | Scotland        |
| Norway        | 13            | 4             | 10              | 5               |
| USA           | 12            | 14            | 12              | 10              |
| Netherlands   | 8             | 6             | 7               | 3               |
| Spain         | 8             | 6             | 3               | 3               |
| France        | 6             | 7             | 3               | 6               |
| Italy         | 6             | 4             | 5               | 2               |
| Germany       | 9             | 11            | 5               | 6               |
| Denmark       | 4             | 1             | 7               | 1               |
| Rest of World | 34            | 47            | 48              | 64              |
| <b>Total</b>  | <b>0.33 m</b> | <b>2.35 m</b> | <b>£138 m</b>   | <b>£1,494 m</b> |

Source: VisitScotland Tourism in Northern Scotland 2011

#### 22A.5.4 Purpose of Trip

The majority of domestic and overseas visitors come to the Tourism Study Area for a holiday stay (Table 22A.14). Across the Tourism Study Area the proportion of domestic visitors visiting friends and family are higher than the Scottish average.

In terms of domestic and overseas visitors, the proportion of those visiting for business (32 per cent domestic, 33 per cent overseas) in Aberdeen and Grampian is significantly higher than the rest of the Tourism Study Area. This highlights the area's importance as a business focus and it can safely be assumed that a number of these visits are related to the area's oil and gas and emerging renewable energy industry.

Table 22A.14: Purpose of Trip 2011

| Domestic Trips (%)                             |                |                 |                                    | Overseas (%)   |                 |                                    |
|--|----------------|-----------------|------------------------------------|----------------|-----------------|------------------------------------|
| <b><i>Edinburgh and Lothians (E and L)</i></b> |                |                 |                                    |                |                 |                                    |
|  | <b>E and L</b> | <b>Scotland</b> | <b>E and L % change since 2010</b> | <b>E and L</b> | <b>Scotland</b> | <b>E and L % change since 2010</b> |
| Holiday  | 65             | 67              | -1                                 | 66             | 53              | -1                                 |
| Visiting Friends and Relatives                 | 18             | 13              | +11                                | 19             | 26              | 0                                  |
| Business                                       | 11             | 16              | -13                                | 12             | 18              | +2                                 |
| Other  | 6              | 4               | +3                                 | 3              | 3               | -1                                 |
| <b><i>Fife</i></b>                             |                |                 |                                    |                |                 |                                    |
|  | <b>Fife</b>    | <b>Scotland</b> | <b>Fife % change since 2010</b>    | <b>Fife</b>    | <b>Scotland</b> | <b>Fife % change since 2010</b>    |
| Holiday  | 54             | 67              | -23                                | 53             | 53              | +3                                 |
| Visiting Friends and Relatives                 | 19             | 13              | +3                                 | 32             | 26              | 0                                  |
| Business                                       | 12             | 16              | +6                                 | 10             | 18              | -1                                 |
| Other  | 15             | 4               | +14                                | 5              | 3               | -2                                 |
| <b><i>Dundee and Angus (D and A)</i></b>       |                |                 |                                    |                |                 |                                    |
|  | <b>D and A</b> | <b>Scotland</b> | <b>D and A % change since 2010</b> | <b>D and A</b> | <b>Scotland</b> | <b>D and A % change since 2010</b> |
| Holiday  | 61             | 67              | +1                                 | 51             | 53              | +12                                |
| Visiting Friends and Relatives                 | 20             | 13              | -1                                 | 32             | 26              | -11                                |
| Business                                       | 13             | 16              | -1                                 | 14             | 18              | +2                                 |
| Other  | 6              | 4               | +1                                 | 2              | 3               | -4                                 |
| <b><i>Aberdeen and Grampian (A and G)</i></b>  |                |                 |                                    |                |                 |                                    |
|  | <b>A and G</b> | <b>Scotland</b> | <b>A and G % change since 2010</b> | <b>A and G</b> | <b>Scotland</b> | <b>A and G % change since 2010</b> |
| Holiday  | 47             | 67              | -7                                 | 45             | 53              | +11                                |
| Visiting Friends and Relatives                 | 19             | 13              | +10                                | 20             | 26              | -5                                 |
| Business                                       | 32             | 16              | -4                                 | 33             | 18              | -3                                 |
| Other  | 3              | 4               | +2                                 | 2              | 3               | -3                                 |

Sources: Visit Scotland Tourism in Eastern Scotland 2011, Visit Scotland Tourism in Northern Scotland 2011

### 22A.5.5 Accommodation

#### *Edinburgh and Lothians*

Within the area, the majority of domestic tourists (70 per cent) stay with either friends or relatives or in a hotel. A small proportion (12 per cent), stay in self-catering or B&B accommodation (Table 22A.15). The types of accommodation chosen by domestic tourists to the area has remained fairly consistent between 2010 and 2011, with only a small reduction (-7 per cent) noted in the proportion of people using hotel accommodation. Nearly two-thirds of overseas visitors (61 per cent) to Edinburgh and Lothians stayed with friends and relatives, and between 2010 and 2011 there was a significant increase (35 per cent) in the proportion of people choosing this type of accommodation. This highlights the fact that tourists are trying to find ways to save money during the current economic climate. This is confirmed by the fact that the proportion of overseas visitors staying in hotels (22 per cent) is less than the Scottish average (30 per cent).

#### *Fife*

Many of the domestic visitors to Fife (49 per cent) stay with friends and relatives or decide to camp or caravan. The proportion of people camping/caravanning has increased by 12 per cent between 2010 and 2011, reiterating the point that tourists are seeking means of finding cost effective accommodation while on holiday. As with domestic tourists, a high proportion of overseas visitors choose to stay with friends and family (30 per cent). However, there has been a 24 per cent drop in the proportion of tourists choosing this option between 2010 and 2011. There has been a large increase in the proportion of overseas tourists choosing alternative accommodation types instead of the more traditional forms.

#### *Dundee and Angus*

A considerable number of domestic visitors to Dundee and Angus choose to stay with friends and relatives (52 per cent), consistent with the rest of the Tourism Study Area. There has also been a slight increase recorded in the proportion of visitors using this accommodation type between 2010 and 2011 (8 per cent), whereas over the same time period there has been a reduction in the proportion of people choosing to camp or use a caravan (-15 per cent). As with Edinburgh and Lothians, a considerable proportion of overseas tourists stay with family and friends (54 per cent). There has also been an increase in the proportion of people using this type of accommodation (16 per cent) as well as those using hotel accommodation (12 per cent). There has been a significant decrease (-36 per cent) in the proportion of people choosing to use self-catering accommodation.

#### *Aberdeen and Grampian*

The majority of domestic and overseas tourists use either hotels or stay with friends or relatives (79 per cent), which mirror the national trend. Between 2010 and 2011 there was a minimal change in the types of accommodation used by domestic and overseas tourists, indicating that the market is relatively stable.



Table 22A.15: Accommodation Used 2011

| Domestic Trips (%)                             |                |                 |                  | Overseas (%)   |                 |                  |
|--|----------------|-----------------|------------------|----------------|-----------------|------------------|
| <b><i>Edinburgh and Lothians (E and L)</i></b> |                |                 |                  |                |                 |                  |
|  | <b>E and L</b> | <b>Scotland</b> | <b>E and L %</b> | <b>E and L</b> | <b>Scotland</b> | <b>E and L %</b> |
| Hotel  | 34             | 27              | -7               | 22             | 30              | -12              |
| Friends/ Relatives                             | 36             | 32              | -2               | 61             | 35              | +35              |
| Self-catering                                  | 6              | 14              | +1               | 4              | 10              | -7               |
| Camping/ Caravanning                           | 15             | 16              | 0                | 1              | 3               | -1               |
| B&B  | 6              | 4               | +2               | 10             | 8               | +2               |
| Other  | 3              | 6               | 0                | 2              | 14              | -17              |
| <b><i>Fife</i></b>                             |                |                 |                  |                |                 |                  |
|  | <b>Fife</b>    | <b>Scotland</b> | <b>Fife %</b>    | <b>Fife</b>    | <b>Scotland</b> | <b>Fife %</b>    |
| Hotel  | 13             | 27              | +4               | 19             | 30              | +10              |
| Friends/ Relatives                             | 26             | 32              | -34              | 30             | 35              | -24              |
| Self-catering                                  | 6              | 14              | -1               | 12             | 10              | -5               |
| Camping/ Caravanning                           | 23             | 16              | +12              | 0              | 3               | -13              |
| B&B  | 2              | 4               | -1               | 8              | 8               | +2               |
| Other  | 29             | 6               | +19              | 31             | 14              | +30              |
| <b><i>Dundee and Angus (D and A)</i></b>       |                |                 |                  |                |                 |                  |
|  | <b>D and A</b> | <b>Scotland</b> | <b>D and A %</b> | <b>D and A</b> | <b>Scotland</b> | <b>D and A %</b> |
| Hotel  | 19             | 27              | -1               | 21             | 30              | +12              |
| Friends/ Relatives                             | 52             | 32              | +8               | 54             | 35              | +16              |
| Self-catering                                  | 7              | 14              | +3               | 7              | 10              | -36              |
| Camping/ Caravanning                           | 13             | 16              | -15              | 3              | 3               | +1               |
| B&B  | 3              | 4               | +1               | 4              | 8               | -1               |
| Other  | 7              | 6               | +5               | 11             | 14              | +8               |
| <b><i>Aberdeen and Grampian (A and G)</i></b>  |                |                 |                  |                |                 |                  |
|  | <b>A and G</b> | <b>Scotland</b> | <b>A and G %</b> | <b>A and G</b> | <b>Scotland</b> | <b>A and G %</b> |
| Hotel  | 34             | 27              | +1               | 20             | 30              | 0                |
| Friends/ Relatives                             | 45             | 32              | +3               | 50             | 35              | 0                |
| Self-catering                                  | 8              | 14              | +2               | 9              | 10              | 0                |
| Camping/ Caravanning                           | 6              | 16              | -4               | 2              | 3               | 0                |
| B&B  | 2              | 4               | 0                | 7              | 8               | 0                |
| Other  | 5              | 6               | -2               | 13             | 14              | +1               |

Sources: Visit Scotland Tourism in Eastern Scotland 2011, Visit Scotland Tourism in Northern Scotland 2011

### 22A.5.6 Occupancy

Unsurprisingly occupancy rates in the main types of accommodation across the Tourism Study Area are generally highest in the summer and autumn during the main holiday seasons (Table 22A.16). Occupancy rates for hotels and self-catering accommodation across the entire Tourism Study Area are on average higher than the Scottish average. The average occupancy rate for guesthouses/B&Bs in Fife (62 per cent) is also significantly higher than the Scottish average (44 per cent). For the remaining regions in the Tourism Study Area, the average occupancy rates for guesthouses/B&Bs are comparable to the Scottish average.

**Table 22A.16 Occupancy Levels 2011**

|  | Hotel (%) | % change since 2009 | Guesthouse/<br>B&B (%) | % change since 2009 | Self-Catering (%) | % change since 2009 |
|--|-----------|---------------------|------------------------|---------------------|-------------------|---------------------|
| <b><i>Edinburgh and Lothians</i></b>   |           |                     |                        |                     |                   |                     |
| Winter                                 | 55        | -3                  | 17                     | -14                 | 47                | -8                  |
| Spring                                 | 78        | +4                  | 41                     | -2                  | 47                | -28                 |
| Summer                                 | 87        | -2                  | 70                     | -6                  | 72                | -16                 |
| Autumn                                 | 67        | -14                 | 40                     | -12                 | 55                | -18                 |
| <i>Average for region</i>              | 75        | -1                  | 42                     | -8                  | 55                | -20                 |
| <i>Annual average for all Scotland</i> | 65        | +2                  | 44                     | -2                  | 36                | -15                 |
| <b><i>Fife</i></b>                     |           |                     |                        |                     |                   |                     |
| Winter                                 | 46        | 16                  | 0                      | 16                  | 0                 | 0                   |
| Spring                                 | 66        | 4                   | 57                     | 4                   | 37                | -17                 |
| Summer                                 | 83        | 9                   | 74                     | 9                   | 67                | -2                  |
| Autumn                                 | 70        | 13                  | 0                      | 13                  | 0                 | 0                   |
| <i>Average for region</i>              | 66        | 10                  | 62                     | 10                  | 50                | -9                  |
| <i>Annual average for all Scotland</i> | 65        | 2                   | 44                     | 2                   | 36                | -15                 |
| <b><i>Dundee and Angus</i></b>         |           |                     |                        |                     |                   |                     |
| Winter                                 | 56        | +3                  | 34                     | +5                  | 39                | +7                  |
| Spring                                 | 68        | +8                  | 41                     | +15                 | 48                | -1                  |
| Summer                                 | 71        | 0                   | 58                     | +8                  | 78                | +5                  |

|  | Hotel (%) | % change since 2009 | Guesthouse/<br>B&B (%) | % change since 2009 | Self-Catering (%) | % change since 2009 |
|--|-----------|---------------------|------------------------|---------------------|-------------------|---------------------|
| Autumn                                 | 70        | +1                  | 35                     | -14                 | 61                | +13                 |
| <i>Average for region</i>              | 66        | +2                  | 42                     | +6                  | 55                | +3                  |
| <i>Annual average for all Scotland</i> | 65        | +2                  | 44                     | -2                  | 36                | -15                 |
| <b>Aberdeen and Grampian</b>           |           |                     |                        |                     |                   |                     |
| Winter                                 | 58        | +7                  | 29                     | +12                 | 28                | +3                  |
| Spring                                 | 65        | +4                  | 37                     | +3                  | 41                | -3                  |
| Summer                                 | 75        | +3                  | 55                     | -3                  | 59                | -7                  |
| Autumn                                 | 74        | +8                  | 45                     | +6                  | 49                | +14                 |
| <i>Average for region</i>              | 67        | +5                  | 42                     | +4                  | 43                | -1                  |
| <i>Annual average for all Scotland</i> | 65        | +2                  | 44                     | -2                  | 36                | -15                 |

Sources: Visit Scotland Tourism in Eastern Scotland 2011, Visit Scotland Tourism in Northern Scotland 2011

### 22A.5.7 Offshore Tourism

Recreational boating is present on the east coast of Scotland but is more concentrated in the west (Scottish Government 2011c). The Moray Firth has a limited number of recreational boating routes (UK Coastal Atlas 2008). The routes leading from Inverness are all of medium recreational use or light recreational use. The Firth of Forth also has a limited number of routes. Most of these routes are of medium recreational use. There are a limited number of routes near Dundee. Baseline information and impact assessment for recreational vessels is included in *Chapter 19: Shipping and Navigation* and associated appendices.

Recreational sea angling is popular on the east coast of Scotland, particularly at Edinburgh, Fife and the south east. Scottish Government (2009b) reported that during 2008 over 20,000 sea anglers fished at Edinburgh, Fife and the south east. In addition, 8,904 sea anglers fished in the north east. Baseline information and impact assessment for recreational vessels is included in *Chapter 19* and associated appendices.

### 22A.5.8 Tourism Baseline Summary

The Project has the potential to be visible from seven main visitor attractions located in Fife, Dundee and Angus.

Between 2010 and 2011 there were increases in domestic tourist trips and expenditure recorded in Edinburgh and Lothians and Aberdeen and Grampians. Whilst over the same time period Fife and Dundee and Angus have experienced a fall in domestic tourism expenditure. Visitors from England are extremely important to the majority of the Tourism Study Area's domestic tourism market as they made up the majority of visitors and spend the most money. The Edinburgh and Lothians and Aberdeen and Grampians regions play a significant role in the domestic tourism market, as collectively they account for approximately a third of total trips and expenditure across Scotland.

There are a wide range of overseas tourists from across the world visiting the various regions within the Tourism Study Area. In the Lothians and the Grampians the 'rest of the world' sector makes up the majority of visitors, whilst in Fife visitors from the USA contribute most in terms of expenditure. In Dundee and Angus, visitors from Denmark are becoming increasingly important as they now account for nearly a quarter of expenditure received.

The tourism market of the Tourism Study Area as a whole is more dependent on domestic visitors as they account for the majority of tourism expenditure received.

The majority of visitors to the Tourism Study Area, both domestic and overseas, come for a holiday stay. However, a significant number of overseas visitors to Aberdeen and Grampians come for business purposes.

The most popular forms of accommodation for visitors to the Tourism Study Area are either staying with friends and family or staying in a hotel.

Occupancy rates for hoteliers and proprietors of B&B's, guesthouses and self-catering accommodation in the study has been relatively high throughout the year. This suggests that tourism market is performing fairly well across the Tourism Study Area.

### 22A.6 Ex Post Tourism assessment

This section provides an assessment of the post-development tourism impact onshore from a number of existing and operational offshore wind farms. These have been selected to be as similar as possible with the Project in terms of visibility from the shore (up to 12 km) and are shown in Table 22A.17 and Figure 22A.24 below. The wind farms are listed travelling anti-clockwise round the UK.

**Table 22A.17: Operational Offshore Wind Farms – Up to 12km from Shore Crown Estate (2012)**

| Wind Farm     | TCE Round   | Start Date of Operation | Output MW | Status    | Distance offshore (km) | Onshore Tourism District or Focus    |
|---------------|-------------|-------------------------|-----------|-----------|------------------------|--------------------------------------|
| Robin Rigg    | East & West | September 2009-2010     | 180       | Operating | 11.0-11.5              | Dumfries and Galloway, North Cumbria |
| Barrow        | R1          | March 2006              | 90        | Operating | 7.5-12.8               | Lake District NP                     |
| Burbo Bank    | R1          | July 2007               | 90        | Operating | 6.4-8.0                | Merseyside                           |
| Rhyl Flats    | R1          | December 2009           | 90        | Operating | 8.0-10.7               | Colwyn Bay and Rhyl                  |
| Kentish Flats | R1          | June 2005               | 90        | Operating | 8.5-9.8                | Herne Bay and Kent                   |
| Scroby Sands  | R1          | July 2004               | 60        | Operating | 2.3-3.5                | Norfolk and East Anglia              |
| Lynn          | R1          | March 2009              | 97.2      | Operating | 5.0-6.9                | South Lincolnshire                   |
| Inner Dowsing | R1          | March 2009              | 97.2      | Operating | 5.0-6.3                | South Lincolnshire                   |

**Figure 22A.24: Offshore Wind Farm and Relevant Onshore Area**

The assessment (where data are available) reviews the following distinct phases: pre-construction, construction and post construction. The tourism data tables are also coloured as follows to clearly illustrate the key phases of construction:

|                   |
|-------------------|
| Pre-Construction  |
| Construction      |
| Post Construction |

### 22A.6.1 Methodology

Domestic tourism data sets for the onshore local area were compared with time periods of pre-construction to post construction to identify any correlation. The domestic tourism data in the local onshore area is also set in context within the wider domestic tourism data at the regional level. In some cases it was not possible to collect pre-construction data due to the time at which the wind farm came into operation.

### 22A.6.2 Data Sources

Data on domestic tourism trips and bed-nights were sourced from Visit England, Visit Wales and Visit Scotland. Graphical summaries are included in *Section 22.8* Figures 22A.27 to 22A.29.

### 22A.6.3 Robin Rigg

#### *Size and Location*

Robin Rigg offshore wind farm (180 MW) became operational in 2009. The wind farm consists of 60 turbines and is located in the Solway Firth on the England/Scotland border, 9 km from the North Cumbrian coast and 9 km from Balcary Point on the coast of Dumfries and Galloway. The onshore substation is located near Seaton, Cumbria.

Tourism data for Allerdale is the most relevant dataset and can be set against tourism data for the wider Cumbria area. Tourism volume in Dumfries and Galloway is also assessed.

#### *Tourism Context*

The Lake District National Park is located in Cumbria. It is England's largest national park and is a popular destination for walking and other outdoor activities. However, the section of the national park in Allerdale does not reach the coast. Dumfries and Galloway's visitor profile is also characterised by outdoor activities, particularly walking, cycling and fishing.

#### *Tourist Trips and Bed-nights*

The number of domestic tourist trips increased in Allerdale and Cumbria during the pre-construction phase and continued to increase throughout the construction and operational phases of the wind farm. The number of bed-nights in Allerdale remained relatively stable during pre-construction, construction and post construction. The number of bed-nights in Cumbria has generally followed an upward trend from pre-construction to post construction.

Dumfries and Galloway experienced a decline in domestic tourism trips during the pre-construction, construction and operational phase of the wind farm. During this time the UK experienced above average levels of rainfall (*Annex 22B.4*) and this may have been influential in discouraging people from taking trips, particularly involving outdoor activities. However, 2011 saw a significant increase in the number of trips which may be a result of increased investment in tourism in the area. Bed-nights remained stable between 2007 and 2009 before reaching their highest level in 2010.

Recessionary influences are also likely to have affected the area's tourism numbers. The data indicate that more tourists may be foregoing overseas trips for domestic trips, but staying for a shorter period of time. Floods in Cumbria in 2009 did not seem to have negatively impacted upon domestic tourism levels.

Assessment of the tourism data indicates that construction and post-construction operation of Robin Rigg offshore wind farm has had no noticeably negative tourism impact on the surrounding tourism region. At the Scottish level the numbers of trips were declining between 2006 and 2008. However, neither Allerdale nor Cumbria showed this trend. From 2008 onwards the national trend shows an increase in number of trips, with a distinct rise between 2010 and 2011, with a similar trend shown in Allerdale and Cumbria.

**Table 22A.18: Volume of Domestic Tourism and % Change on Previous Dataset**

|         | Trips     |          |           |          | Nights    |          |            |          |
|---------|-----------|----------|-----------|----------|-----------|----------|------------|----------|
|         | Allerdale | % change | Cumbria   | % change | Allerdale | % change | Cumbria    | % change |
| 2006-08 | 730,000   |          | 3,508,000 |          | 2,489,000 |          | 11,968,000 |          |
| 2007-09 | 796,000   | +8.3     | 3,712,000 | +5.5     | 2,890,000 | +13.9    | 12,845,000 | +6.8     |
| 2008-10 | 799,000   | +0.4     | 3,717,000 | +0.1     | 2,890,000 | 0        | 12,559,000 | -2.3     |
| 2009-11 | 841,000   | +5.0     | 3,782,000 | +1.7     | 3,176,000 | +9.0     | 13,136,000 | +4.4     |

Source: Visit England

**Table 22A.19: Volume of Domestic Tourism and % Change on Previous Year**

|      | Trips                 |          | Nights                |               |
|------|-----------------------|----------|-----------------------|---------------|
|      | Dumfries and Galloway | % change | Dumfries and Galloway | % change      |
| 2007 | 0.8                   |          | 2.6                   |               |
| 2008 | 0.79                  | -1.3     | 2.6                   | 0             |
| 2009 | 0.75                  | -5.3     | 2.6                   | 0             |
| 2010 | 0.72                  | -4.2     | 3                     | +13.3         |
| 2011 | 0.83                  | +13.3    | Not available         | Not available |

Source: VisitScotland

#### 22A.6.4 Barrow

##### *Size and Location*

Barrow offshore wind farm (90 MW) is located in the East Irish Sea, approximately 7 km south west of Walney Island, near Barrow-in-Furness. The wind farm became operational in 2006. The most relevant tourism regions, for which data are available, are Barrow-in-Furness and Cumbria.

##### *Tourism Context*

Barrow-in-Furness is a large industrial town, which has become an established hub for energy generation. The area offers beaches, museums and a castle but is not renowned as a popular tourist destination.

##### *Tourist Trips and Bed-nights*

The number of tourist trips increased in Barrow following the construction of the wind farm. There was also a significant increase in bed-nights (32.9 per cent), which indicates extended visitor stays. The number of trips has fallen in recent years, however bed-nights for the most recent period are at their highest level. This is possibly due to the recession and people taking longer holidays at home as opposed to going abroad.

In Cumbria the number of domestic tourist trips also increased following the construction and remained relatively stable before peaking during the 2009-11 period. Bed-nights also peaked during 2009-11.

Tourism numbers in Barrow-in-Furness and the wider Cumbria appear unaffected by Barrow offshore wind farm. Indeed bed-nights in Barrow-in-Furness and bed-nights and trips increased to their highest level during 2009-11.



**Table 22A.20: Volume of Domestic Tourism and % Change on Previous Dataset**

|         | Trips             |          |           |          | Nights            |          |            |          |
|---------|-------------------|----------|-----------|----------|-------------------|----------|------------|----------|
|         | Barrow-in-Furness | % change | Cumbria   | % change | Barrow-in-Furness | % change | Cumbria    | % change |
| 2006-08 | 82,000            |          | 3,508,000 |          | 200,000           |          | 11,968,000 |          |
| 2007-09 | 85,000            | +3.5     | 3,712,000 | +5.5     | 298,000           | +32.9    | 12,845,000 | +6.8     |
| 2008-10 | 76,000            | -11.8    | 3,717,000 | +0.1     | 274,000           | -8.8     | 12,559,000 | -2.3     |
| 2009-11 | 74,000            | -2.7     | 3,782,000 | +1.7     | 363,000           | +24.5    | 13,136,000 | +4.4     |

Source: Visit England

### 22A.6.5 Burbo Bank

#### *Size and Location*

Burbo Bank offshore wind farm (90 MW) consists of 25 turbines and is situated on the Burbo Flats in Liverpool Bay, 7 km from North Wirral. The substation is located in North Wales. The Wirral and Merseyside tourism regions are the most relevant datasets available to assess the tourism impact of Burbo Bank.

#### *Tourism Context*

Wirral possesses a variety of tourist attractions, being well known for its good quality beaches and golf courses. The area is also due to host the Golf Open Championships in 2014. Liverpool is a popular destination within Merseyside due to its sporting events, musical heritage and museums.

#### *Tourist Trips and Bed-nights*

Between construction and operation of the wind farm the Wirral experienced a significant drop in numbers of trips (19 per cent). However tourist trips increased following the construction phase and peaked in 2009-11. Bed-nights have fallen however to their lowest level, which could be a result of the prolonged economic downturn.

The number of domestic trips and bed-nights spent in Merseyside dipped during the construction phase but has now returned to a higher level than the initial recession of 2008.

The tourism data indicates that neither Wirral, nor Merseyside have been adversely affected by Burbo Bank. Table 22A.21 below shows that the number of trips has increased post construction, indicating that there is no negative correlation between the wind farm and the number of trips to the area.

**Table 22A.21: Volume of Domestic Tourism and % Change on Previous Dataset**

|         | Trips   |          |            |          | Nights  |          |            |          |
|---------|---------|----------|------------|----------|---------|----------|------------|----------|
|         | Wirral  | % change | Merseyside | % change | Wirral  | % change | Merseyside | % change |
| 2006-08 | 181,000 |          | 1,534,000  |          | 614,000 |          | 4,188,000  |          |
| 2007-09 | 152,000 | -19.1    | 1,477,000  | -3.9     | 573,000 | -7.2     | 3,926,000  | -6.7     |
| 2008-10 | 177,000 | +14.1    | 1,572,000  | +6.0     | 669,000 | +14.3    | 3,937,000  | +0.3     |
| 2009-11 | 198,000 | +10.6    | 1,741,000  | +9.7     | 497,000 | -34.6    | 4,019,000  | +2.0     |

Source: Visit England

### 22A.6.6 Rhyl Flats

#### *Size and Location*

Rhyl Flats offshore wind farm (90 MW) is located 8 km off the coast of North Wales near Cowlyn Bay. The substation is in Towyn, a seaside resort on the North Wales coast. Rhyl Flats became operational in 2009.

#### *Tourism Context*

Tourism is a vital industry in North Wales accounting for a third of the overall Welsh tourism industry (Tourism Partnership North Wales, 2009). North Wales is known for its scenic beauty, and countryside.

#### *Tourist Trips and Bed-nights*

The number of trips to North Wales varied during the pre-construction period and fell slightly during construction. This may have been as a result of the UK economic recession and downturn. However post-construction trips and bed-nights have increased to their highest level since 2006.

Based on this it appears that Rhyl Flats has had no noticeable impact on North Wales tourism.

**Table 22A.22: Domestic Tourist Trips and Bed-nights and % Change on Previous Year**

|      | Trips (millions) |          |       |          | Bed-nights (millions) |          |       |          |
|------|------------------|----------|-------|----------|-----------------------|----------|-------|----------|
|      | North Wales      | % change | Wales | % Change | North Wales           | % change | Wales | % Change |
| 2006 | 3.24             |          | 9.61  |          | 12.91                 |          | 36.4  |          |
| 2007 | 2.95             | -9.8     | 8.9   | -8.6     | 11.43                 | -12.9    | 32.1  | -13.5    |
| 2008 | 3.18             | +7.2     | 8.5   | -4.2     | 11.98                 | +4.6     | 31.9  | -0.6     |
| 2009 | 2.99             | -6.4     | 9.0   | +5.1     | 12.17                 | +1.6     | 32.9  | +3.0     |
| 2010 | 3.40             | +12.1    | 8.7   | -3.0     | 13.03                 | +6.6     | 32.9  | +0.0     |

United Kingdom Tourism Survey

### 22A.6.7 Kentish Flats

#### *Size and Location*

Kentish Flats offshore wind farm (90 MW) is located 8.9 km north of Herne Bay and 10 km north of Whitstable in Kent. It became the largest wind farm in the country when it became operational in 2005.

#### *Tourism Context*

Herne Bay and Whitstable are popular tourist destinations due to their coastal location and surrounding countryside. Herne is part of the City of Canterbury local government district, and Canterbury's tourism statistics relate to an inland area. Hence to assess the broader coastal area in tourism terms data for the wider area of Thanet have been used in the assessment. This is set within the context of Kent's tourism numbers.

#### *Tourist Trips and Bed-nights*

Data are only available for the post-construction period for Kentish Flats, during which the Thanet area experienced a distinct decrease in the number of trips and bed-nights.

Significantly the Thanet Local Plan addresses this issue and concludes that tourism in Thanet has declined due to seaside holidays becoming less popular. The Plan recognises Thanet needs to invest in the area's tourism infrastructure to improve its visitor appeal.

It remains a possibility that Kentish flats may have had some negative impacts on Thanet's tourism although the number of trips recorded is very small and therefore may be volatile statistically. However given the Local Plan's assessment of the area's tourism products and the prevailing

decline in the wider Kent region it is more likely that the downward trend is attributable to other factors.

**Table 22A.23: Volume of Domestic Tourism and % Change on Previous Dataset**

| Year    | Trips  |          |           |          | Nights |          |           |          |
|---------|--------|----------|-----------|----------|--------|----------|-----------|----------|
|         | Thanet | % change | Kent      | % change | Thanet | % change | Kent      | % change |
| 2006-08 | 348    |          | 3,717,000 |          | 1,147  |          | 9,673,000 |          |
| 2007-09 | 282    | -23.4    | 3,485,000 | -6.7     | 882    | -30.0    | 9,246,000 | -4.6     |
| 2008-10 | 258    | -9.3     | 3,291,000 | -5.9     | 774    | -14.0    | 8,779,000 | -5.3     |
| 2009-11 | 219    | -17.8    | 3,212,000 | -2.5     | 544    | -42.3    | 8,176,000 | -7.4     |

Source: Visit England

### 22A.6.8 Scroby Sands

#### *Size and Location*

Scroby Sands offshore wind farm (60 MW) is located 2.5 km off the shore of Great Yarmouth in East Anglia. It has 30 turbines and began operating in 2004.

#### *Tourism Context*

The wind farm has its own visitor centre, which has emerged as a popular local tourist attraction, attracting over 35,000 visitors each year. Great Yarmouth is popular with families because of the presence of long-established attractions including the Pleasure Beach, museums and theme parks.

#### *Trips and Bed-nights*

Only post-construction tourism data were available for Great Yarmouth. The number of trips made to Great Yarmouth generally increased between 2006 and 2011. However the number of bed nights has decreased. The most significant decrease was between 2006 and 2009 (10.2 per cent). This decrease coincided with the economic recession and it indicates that people were still visiting Great Yarmouth, but were taking shorter trips. The wider Norfolk region experienced a similar trend to that of Great Yarmouth over the whole period 2006 to 2011.

Scroby Sands is unique in that it has become a tourist attraction in itself and has had a distinct measurable positive affect (c.35,000 visits per annum). Tourist visits to Great Yarmouth and Norfolk also reached their highest level for the most recent data period (2009-11).

**Table 22A.24: Volume of Domestic Tourism and % Change on Previous Dataset**

|         | Trips          |          |           |          | Nights         |          |            |          |
|---------|----------------|----------|-----------|----------|----------------|----------|------------|----------|
|         | Great Yarmouth | % change | Norfolk   | % change | Great Yarmouth | % change | Norfolk    | % change |
| 2006-08 | 707,000        |          | 2,938,000 |          | 3,545,000      |          | 11,448,000 |          |
| 2007-09 | 724,000        | +2.3     | 2,933,000 | -0.2     | 3,217,000      | -10.2    | 11,230,000 | -1.9     |
| 2008-10 | 698,000        | -3.7     | 2,885,000 | -1.7     | 2,998,000      | -7.3     | 11,200,000 | -0.3     |
| 2009-11 | 725,000        | +3.7     | 3,084,000 | +6.5     | 3,018,000      | +0.7     | 11,614,000 | +3.6     |

Source: Visit England

### 22A.6.9 Lynn and Inner Dowsing

#### *Size and Location*

Lynn and Inner Dowsing are two adjacent offshore wind farms (both 97.2 MW) located in the North Sea about 5 km off the Lincolnshire coast. Both started operating in March 2009. The substation for both wind farms is in Skegness, on the Lincolnshire coast. Skegness is the most relevant dataset available in order to assess the impact on tourism.

#### *Tourism Context*

Skegness is a popular family seaside destination situated in Lincolnshire. The beach and the pier are popular outdoor attractions.

#### *Tourist Trips and Bed-nights*

Skegness has experienced a continuous increase in number of trips between 2006 and 2011. There was a distinct increase (8 per cent) in number of trips between the construction phase and operational period. It is likely that this is as a result of people holidaying at destinations closer to home due to the economic recession. There has also been an increase in number of trips and bed nights in the wider Lincolnshire area.

It would appear neither Lynn nor Inner Dowsing wind farms have had detrimental effects on domestic tourism levels in Skegness or Lincolnshire as a whole.

**Table 22A.25: Volume of Domestic Tourism and % Change on Previous Dataset**

|         | Trips     |          |              |          | Nights    |          |              |          |
|---------|-----------|----------|--------------|----------|-----------|----------|--------------|----------|
|         | Skegness  | % change | Lincolnshire | % change | Skegness  | % change | Lincolnshire | % change |
| 2006-08 | 865,000   |          | 2,202,000    |          | 3,644,000 |          | 8,163,000    |          |
| 2007-09 | 876,000   | +1.3     | 2,184,000    | -0.8     | 3,679,000 | +1.0     | 7,810,000    | -4.5     |
| 2008-10 | 952,000   | +8.0     | 2,330,000    | +6.3     | 4,149,000 | +11.3    | 8,579,000    | +9.0     |
| 2009-11 | 1,013,000 | +6.0     | 2,528,000    | +7.8     | 4,353,000 | +4.7     | 9,051,000    | +5.2     |

Source: Visit England

#### 22A.6.10 Tourism Trends

Most areas included in this assessment have experienced an increase in number of trips (*Annex 22B.4*). In all cases it does not seem likely that the wind farms have had a negative impact on the local or wider onshore areas. There is limited information available on the effects of wind farms on recreational users and tourists, although research undertaken on behalf of the Scottish Government '*The economic impacts of wind farms on Scottish tourism*' (Scottish Government 2008) found that, in relation to onshore wind farms, three-quarters of respondents thought wind farms had a positive or neutral impact on the landscape, and this increased for respondents who were engaged in outdoor recreational activities i.e. they were less sensitive to wind farms. In addition, the Scottish research found that the vast majority (93 per cent) of respondents who had seen a wind farm suggested that this would not have any effect on their likelihood to return to an area. External factors such as the economic recession have been most likely the greatest influence on the way in which number of trips and expenditure has changed.

#### 22A.6.11 Wider Tourism Trends

Between 2007 and 2011 domestic tourism figures in Scotland have remained fairly steady. After an initial decrease in number of trips between 2007 and 2008 there has been a general increase in number of trips. By 2011 the number of trips was at its highest over this period (*Annex 22.B.4*).

Welsh domestic tourism figures have remained relatively stable between 2007 and 2010, and then increased substantially in 2011 (*Annex 22.B.4*).

England recorded a high volume of trips in 2009, declining in 2010 but with another peak in 2011. This trend is likely to have continued in England due to the Olympics and the large number of trips associated with the games.

### 22A.6.12 Weather

The weather plays an important part in whether people take domestic trips. Research undertaken by RTP in 2006 in the Ayrshire sub-region showed a strong statistical correlation between weather one year and number of trips the following year. For example, if it rains one year it is likely that tourism trips will fall in the following year. Figure 22A.29 shows the total annual rainfall in the UK from 2007 until 2011. 2007 to 2009 were very wet years with above average rainfall, particularly 2008. Whilst at a UK level this did not seem to negatively impact on total domestic trips in 2009 it may have been one of the reasons why trips to some areas decreased between 2008 and 2009 as seen in the local scale data. A summary of key UK weather events is shown in Table 22A.26 below.

**Table 22A.26: Key Weather Events in the UK Between 2006 and 2011**

| Year | Key Weather Events   |
|------|--|
| 2006 | Record breaking heat and sunshine in July (South east England) |
| 2007 | Flooding in May, June, July (South Midlands)                   |
| 2008 | Flooding in September (South west England, south & mid Wales)  |
| 2009 | Cumbria floods (November)                                      |
| 2010 | Severe wintry weather (UK)                                     |
| 2011 | Warm in September, and October (England and Wales)             |

Source: Met Office

### 22A.6.13 Ex-Post Tourism Assessment Summary

This assessment of domestic tourism volume has, in general, shown that local onshore areas have not been negatively affected by the construction, presence and visibility of offshore wind farms. The assessment is based on a comparison of pre-construction tourism figures with post construction tourism figures. In most cases the volume of tourism has actually increased over time. Scroby Sands offshore wind farm near Great Yarmouth has become a tourist attraction in itself. Where a decrease in tourism volume has occurred, particularly between 2007 and 2009, this is likely due to a combination of above average rainfall and the economic recession.

### 22A.6.14 Socio-Economic and Tourism Summary

There is strong strategy and policy support for low carbon and offshore wind energy development across every level of government. There is also strong strategic support from Economic Development Agencies across the country, all of which is aimed at capitalising on the economic potential of the renewable energy industry including offshore wind.

There has been a significant amount of activity and investment in creating a critical mass of support infrastructure necessary to aid and support the offshore wind farm industry. This is especially true across the east coast of Scotland as considerable investment is planned to enhance port capacity and capability, to improve skills and training delivery, and to increase co-ordination across local and regional partners. All of this investment has been designed to promote substantial

economic activity across the country. The Project has the potential to contribute towards this increase in economic benefit.

The profile of the Economic Study Area is characterised by an increasing population, which has a generally strong working age profile. On a wider basis there are relatively good labour market opportunities with a relatively strong manufacturing and construction base in a number of areas including West Lothian, Aberdeenshire, South Lanarkshire and the Scottish Borders. Allied to the increasing number of education and skills training courses available in Scotland directly related to renewables, there is capacity in and beyond the Economic Study Area to provide significant pools of skilled labour to service the needs of the Project.

The Tourism Study Area and the east coast of Scotland in general, has a robust tourism sector with a significant number of tourism attractions. The Project has the potential to be visible from seven main visitor attractions located in Fife, Dundee and Angus. However, a detailed study into the post-development effects that existing offshore wind farms have had on domestic tourism shows there is no evidence to suggest that tourist and visitor numbers have been negatively affected by the construction, presence and/or visibility of offshore wind farms.



## 22A.7 Socio-Economic Tables

## 22A.7 Socio-Economic Tables

## Population

|  | City of Edinburgh | West Lothian | Midlothian | East Lothian | Fife    | Dundee City | Angus   | Aberdeenshire | East<br>Dunbartonshire | Falkirk | South Lanarkshire | North Lanarkshire | Clackmannanshire | Stirling | Glasgow City | Scottish Borders | Perth & Kinross | Aberdeen City | Highland | Scotland  |
|--|-------------------|--------------|------------|--------------|---------|-------------|---------|---------------|------------------------|---------|-------------------|-------------------|------------------|----------|--------------|------------------|-----------------|---------------|----------|-----------|
| <b>2001</b>                                    | 449,020           | 159,030      | 80,950     | 90,180       | 349,770 | 145,460     | 108,370 | 226,940       | 108,250                | 145,270 | 302,340           | 321,180           | 48,070           | 86,200   | 578,710      | 106,950          | 134,950         | 211,910       | 208,920  | 5,064,200 |
| <b>2011</b>                                    | 495,360           | 172,990      | 82,370     | 98,170       | 367,370 | 145,570     | 110,630 | 247,600       | 104,570                | 154,380 | 312,660           | 326,680           | 50,770           | 90,770   | 598,830      | 113,150          | 149,520         | 220,420       | 222,370  | 5,254,800 |
| <b>% change<br/>2001-<br/>2011</b>             | 10.3%             | 8.8%         | 1.8%       | 8.9%         | 5.0%    | 0.1%        | 2.1%    | 9.1%          | -3.4%                  | 6.3%    | 3.4%              | 1.7%              | 5.6%             | 5.3%     | 3.5%         | 5.8%             | 10.8%           | 4.0%          | 6.4%     | 3.8%      |
| <b>2011<br/>pop'n as<br/>% of<br/>Scotland</b> | 9.4%              | 3.3%         | 1.6%       | 1.9%         | 7.0%    | 2.8%        | 2.1%    | 4.7%          | 2.0%                   | 2.9%    | 5.9%              | 6.2%              | 1.0%             | 1.7%     | 11.4%        | 2.2%             | 2.8%            | 4.2%          | 4.2%     | 100.0%    |

Source: Mid-2011 Population Estimates Scotland

**Age Structure**

|                  | City of Edinburgh | West Lothian | Midlothian | East Lothian | Fife | Dundee City | Angus | Aberdeenshire | East<br>Dunbartonshire | Falkirk | South Lanarkshire | North Lanarkshire | Clackmannanshire | Stirling | Glasgow City | Scottish Borders | Perth & Kinross | Aberdeen City | Highland | Scotland |
|------------------|-------------------|--------------|------------|--------------|------|-------------|-------|---------------|------------------------|---------|-------------------|-------------------|------------------|----------|--------------|------------------|-----------------|---------------|----------|----------|
| Working age      | 69.0              | 63.0         | 61.0       | 60.0         | 61.0 | 63.0        | 58.0  | 62.0          | 60.0                   | 62.0    | 62.0              | 63.0              | 62.0             | 62.0     | 68.0         | 58.0             | 60.0            | 67.0          | 60.0     | 63.0     |
| Non- working age | 31.0              | 37.0         | 39.0       | 40.0         | 39.0 | 37.0        | 42.0  | 38.0          | 40.0                   | 38.0    | 38.0              | 37.0              | 38.0             | 38.0     | 32.0         | 42.0             | 40.0            | 37.0          | 40.0     | 37.0     |

Source: Mid-2011 Population Estimates Scotland

**Economic Activity**

|                       | City of Edinburgh | West Lothian | Midlothian | East Lothian | Fife | Dundee City | Angus | Aberdeenshire | East<br>Dunbartonshire | Falkirk | South Lanarkshire | North Lanarkshire | Clackmannanshire | Stirling | Glasgow City | Scottish Borders | Perth & Kinross | Aberdeen City | Highland | Scotland |
|-----------------------|-------------------|--------------|------------|--------------|------|-------------|-------|---------------|------------------------|---------|-------------------|-------------------|------------------|----------|--------------|------------------|-----------------|---------------|----------|----------|
| Economically active   | 76.0              | 78.1         | 82.3       | 79.2         | 77.8 | 73.2        | 78.0  | 82.6          | 79.1                   | 77.6    | 78.6              | 77.5              | 74.8             | 75.7     | 71.3         | 76.2             | 80.8            | 83.0          | 82.5     | 77.1     |
| Economically inactive | 24.0              | 21.9         | 17.7       | 20.8         | 22.2 | 26.8        | 22.0  | 17.4          | 20.9                   | 22.4    | 21.4              | 22.5              | 25.2             | 24.3     | 28.7         | 23.8             | 19.2            | 17.0          | 17.5     | 22.9     |

Source: Annual Population Survey Jul 2011 - Jun 2012

## Employment by Occupation (%)

|  | City of Edinburgh | West Lothian | Midlothian  | East Lothian | Fife        | Dundee City | Angus       | Aberdeenshire | East<br>Dunbartonshire | Falkirk     | South Lanarkshire | North Lanarkshire | Clackmannanshire | Stirling    | Glasgow City | Scottish Borders | Perth & Kinross | Aberdeen City | Highland    | Scotland    |
|--|-------------------|--------------|-------------|--------------|-------------|-------------|-------------|---------------|------------------------|-------------|-------------------|-------------------|------------------|-------------|--------------|------------------|-----------------|---------------|-------------|-------------|
| <b>Highly skilled</b>                    | <b>52.8</b>       | <b>36.8</b>  | <b>36.5</b> | <b>39.8</b>  | <b>39.8</b> | <b>34.8</b> | <b>40.0</b> | <b>42.7</b>   | <b>55.7</b>            | <b>34.3</b> | <b>38.5</b>       | <b>29.7</b>       | <b>45.3</b>      | <b>45.9</b> | <b>41.7</b>  | <b>39.3</b>      | <b>40.4</b>     | <b>44.7</b>   | <b>32.8</b> | <b>40.2</b> |
| Managers, directors and senior officials | 8.0               | 7.3          | 7.7         | 9.1          | 7.7         | 4.8         | 8.9         | 13.5          | 10.2                   | 7.9         | 8.0               | 6.0               | 9.2              | 11.6        | 7.4          | 9.4              | 10.7            | 6.9           | 9.0         | 8.3         |
| Professional occupations                 | 27.5              | 15.7         | 15.5        | 18.4         | 19.7        | 17.8        | 18.2        | 19.3          | 29.2                   | 14.4        | 18.0              | 12.3              | 21.2             | 22.5        | 21.6         | 17.7             | 16.9            | 21.4          | 14.7        | 19.0        |
| Associate professional & technical       | 17.3              | 13.8         | 13.3        | 12.3         | 12.4        | 12.2        | 12.9        | 9.9           | 16.3                   | 12.0        | 12.5              | 11.4              | 14.9             | 11.8        | 12.7         | 12.2             | 12.8            | 16.4          | 9.1         | 12.9        |
| <b>Skilled</b>                           | <b>26.4</b>       | <b>32.1</b>  | <b>37.7</b> | <b>35.6</b>  | <b>33.0</b> | <b>30.3</b> | <b>35.3</b> | <b>30.7</b>   | <b>27.2</b>            | <b>34.1</b> | <b>34.7</b>       | <b>34.8</b>       | <b>28.2</b>      | <b>27.4</b> | <b>29.7</b>  | <b>32.3</b>      | <b>30.6</b>     | <b>29.5</b>   | <b>37.1</b> | <b>32.1</b> |
| Administrative & secretarial             | 10.0              | 13.4         | 13.4        | 9.9          | 11.8        | 10.3        | 13.0        | 9.3           | 11.2                   | 11.8        | 15.9              | 11.7              | 7.9              | 9.0         | 10.0         | 9.6              | 10.4            | 11.5          | 9.3         | 10.9        |
| Skilled trades occupations               | 7.5               | 11.6         | 12.0        | 14.9         | 12.8        | 10.2        | 13.9        | 13.5          | 7.6                    | 11.8        | 10.0              | 12.3              | 9.6              | 11.4        | 8.6          | 13.4             | 10.8            | 9.2           | 15.7        | 11.4        |
| Caring, leisure and Service occupations  | 8.9               | 7.1          | 12.3        | 10.8         | 8.4         | 9.8         | 8.4         | 7.9           | 8.4                    | 10.5        | 8.8               | 10.8              | 10.7             | 7.0         | 11.1         | 9.3              | 9.4             | 8.8           | 12.1        | 9.8         |
| <b>Unskilled</b>                         | <b>20.4</b>       | <b>31.3</b>  | <b>25.5</b> | <b>24.3</b>  | <b>26.9</b> | <b>34.5</b> | <b>24.1</b> | <b>25.9</b>   | <b>17.2</b>            | <b>31.4</b> | <b>26.7</b>       | <b>34.4</b>       | <b>26.6</b>      | <b>26.5</b> | <b>27.8</b>  | <b>27.9</b>      | <b>28.5</b>     | <b>27.4</b>   | <b>29.4</b> | <b>27.3</b> |
| Sales and customer service               | 8.9               | 11.4         | 9.0         | 7.6          | 9.7         | 13.7        | 8.6         | 5.9           | 7.1                    | 9.3         | 9.9               | 12.6              | 9.4              | 12.3        | 8.9          | 7.4              | 9.8             | 7.2           | 9.1         | 9.2         |
| Process plant & machine operatives       | 3.3               | 7.5          | 4.9         | 5.4          | 6.3         | 6.3         | 6.2         | 8.6           | 4.1                    | 9.9         | 7.7               | 8.8               | 6.7              | 5.1         | 5.5          | 7.0              | 6.3             | 7.3           | 6.6         | 6.6         |
| Elementary occupations                   | 8.2               | 12.4         | 11.6        | 11.3         | 10.9        | 14.5        | 9.3         | 11.4          | 6.0                    | 12.2        | 9.1               | 13.0              | 10.5             | 9.1         | 13.4         | 13.5             | 12.4            | 12.9          | 13.7        | 11.5        |

Source: ONS annual population survey: Jul 2011 Jun 2012

**Job Density (number of jobs per resident aged 16 to 64)**

|                     |                   |              |            |              |      |             |       |               |                        |         |                   |                   |                  |          |              |                  |                 |               |          |          |
|---------------------|-------------------|--------------|------------|--------------|------|-------------|-------|---------------|------------------------|---------|-------------------|-------------------|------------------|----------|--------------|------------------|-----------------|---------------|----------|----------|
|                     | City of Edinburgh | West Lothian | Midlothian | East Lothian | Fife | Dundee City | Angus | Aberdeenshire | East<br>Dunbartonshire | Falkirk | South Lanarkshire | North Lanarkshire | Clackmannanshire | Stirling | Glasgow City | Scottish Borders | Perth & Kinross | Aberdeen City | Highland | Scotland |
| <b>Jobs density</b> | 0.96              | 0.72         | 0.56       | 0.51         | 0.6  | 0.83        | 0.62  | 0.67          | 0.4                    | 0.61    | 0.6               | 0.62              | 0.48             | 0.88     | 1            | 0.71             | 0.75            | 1.22          | 0.85     | 0.76     |

Source: ONS jobs density 2010

## Industry Structure (%)

|   | City of Edinburgh | West Lothian | Midlothian | East Lothian | Fife    | Dundee City | Angus  | Aberdeenshire | East<br>Dunbartonshire | Falkirk | South Lanarkshire | North Lanarkshire | Clackmannanshire | Stirling | Glasgow City | Scottish Borders | Perth & Kinross | Aberdeen City | Highland | Scotland  |
|---|-------------------|--------------|------------|--------------|---------|-------------|--------|---------------|------------------------|---------|-------------------|-------------------|------------------|----------|--------------|------------------|-----------------|---------------|----------|-----------|
| <b>Total employee jobs</b>                    | 304,500           | 76,300       | 26,600     | 28,300       | 130,300 | 73,500      | 36,900 | 89,100        | 24,500                 | 59,600  | 121,900           | 125,600           | 14,300           | 45,500   | 413,500      | 43,900           | 62,200          | 176,300       | 109,300  | 1,962,100 |
| <b>Full-time</b>                              | 69.3              | 73.2         | 67.3       | 65           | 66.4    | 68.1        | 64.1   | 63.4          | 63.9                   | 67.6    | 68.8              | 68.1              | 66               | 69.5     | 69.5         | 63.5             | 65.6            | 71.5          | 65.9     | 67.8      |
| <b>Part-time</b>                              | 30.8              | 26.8         | 32.7       | 35           | 33.6    | 31.9        | 35.9   | 36.6          | 36.1                   | 32.4    | 31.2              | 31.9              | 34               | 30.6     | 30.5         | 36.5             | 34.4            | 28.5          | 34.1     | 32.2      |
| <b>Employee Jobs by Industry %</b>            |                   |              |            |              |         |             |        |               |                        |         |                   |                   |                  |          |              |                  |                 |               |          |           |
| <b>Manufacturing</b>                          | 3.3               | 14.4         | 7.6        | 7.1          | 12.5    | 9.8         | 14.8   | 13.5          | 10.8                   | 14      | 12.7              | 11.7              | 12.3             | 6.3      | 5.3          | 13.3             | 6.3             | 6.8           | 8        | 8.7       |
| <b>Construction</b>                           | 3.6               | 10.7         | 12.1       | 7.9          | 5.3     | 5.2         | 5.8    | 8.7           | 6.5                    | 8.9     | 9.9               | 7.9               | 6.7              | 6.5      | 4.3          | 7.3              | 6.8             | 3.6           | 6.7      | 5.9       |
| <b>Services</b>                               | 92.4              | 73.7         | 77.5       | 78.5         | 79      | 84.7        | 71.8   | 68.6          | 81.2                   | 76      | 75.1              | 78.6              | 79.9             | 84.9     | 89.5         | 73.3             | 76.3            | 77.8          | 82.8     | 81.9      |
| <b>Distribution, hotels &amp; restaurants</b> | 20                | 23.6         | 23.7       | 21.2         | 22.4    | 23.4        | 23.3   | 23            | 26                     | 24.1    | 22.4              | 22.8              | 22.2             | 25.7     | 20           | 24.7             | 28.8            | 18.5          | 25.6     | 22.2      |
| <b>Transport &amp; communications</b>         | 4.7               | 5.9          | 3.8        | 3.2          | 3.4     | 4.2         | 3.3    | 4.4           | 2.4                    | 6.6     | 5.2               | 7.2               | 4                | 3        | 5            | 3.3              | 4.3             | 5.3           | 6        | 5.1       |
| <b>Finance, IT, other business activities</b> | 31.8              | 14.5         | 13.1       | 14.2         | 13.6    | 14.1        | 10.2   | 13.7          | 16.5                   | 10.7    | 16.6              | 15.4              | 12               | 18.6     | 27.5         | 9.2              | 14.2            | 25.2          | 14.9     | 19.1      |
| <b>Public admin, education &amp; health</b>   | 30.5              | 22.6         | 32.1       | 29.5         | 32.4    | 37.5        | 29     | 22.5          | 28.9                   | 30.6    | 25.4              | 28.8              | 33.9             | 33.5     | 31.3         | 31.1             | 24              | 25.1          | 31.1     | 30        |
| <b>Other services</b>                         | 5.5               | 7.1          | 4.9        | 10.6         | 7.3     | 5.4         | 6      | 4.9           | 7.4                    | 4       | 5.4               | 4.5               | 7.8              | 4.2      | 5.5          | 4.9              | 5               | 3.6           | 5.3      | 5.4       |
| <b>Tourism Related</b>                        | 10.2              | 6.2          | 7.4        | 11.5         | 9       | 7.6         | 9.7    | 8.2           | 9.9                    | 8       | 8.2               | 6.8               | 7.8              | 10       | 7.2          | 8.7              | 13.1            | 7.1           | 12.8     | 8.9       |

Source: ONS annual business inquiry employee analysis 2008

**Job Seekers Allowance (September 2012)**

|                            | City of Edinburgh | West Lothian | Midlothian | East Lothian | Fife  | Dundee City | Angus | Aberdeenshire | East<br>Dunbartonshire | Falkirk | South Lanarkshire | North Lanarkshire | Clackmannanshire | Stirling | Glasgow City | Scottish Borders | Perth & Kinross | Aberdeen City | Highland | Scotland |
|----------------------------|-------------------|--------------|------------|--------------|-------|-------------|-------|---------------|------------------------|---------|-------------------|-------------------|------------------|----------|--------------|------------------|-----------------|---------------|----------|----------|
| <b>No. JSA claimants</b>   | 11,029            | 3,981        | 2,101      | 1,919        | 9,824 | 5,515       | 2,061 | 1,858         | 1,662                  | 4,264   | 8,844             | 11,295            | 1,676            | 1,844    | 23,340       | 1,969            | 1,938           | 3,180         | 3,621    | 134,454  |
| <b>Claimant Count Rate</b> | 3.2               | 3.5          | 4.0        | 3.1          | 4.2   | 5.8         | 3.0   | 1.2           | 2.5                    | 4.3     | 4.4               | 5.3               | 5.1              | 3.2      | 5.6          | 2.8              | 2.1             | 2.1           | 2.6      | 3.9      |

Source: ONS claimant count with rates and proportions September 2012

**Qualifications**

|                             | City of Edinburgh | West Lothian | Midlothian | East Lothian | Fife | Dundee City | Angus | Aberdeenshire | East<br>Dunbartonshire | Falkirk | South Lanarkshire | North Lanarkshire | Clackmannanshire | Stirling | Glasgow City | Scottish Borders | Perth & Kinross | Aberdeen City | Highland | Scotland |
|-----------------------------|-------------------|--------------|------------|--------------|------|-------------|-------|---------------|------------------------|---------|-------------------|-------------------|------------------|----------|--------------|------------------|-----------------|---------------|----------|----------|
| <b>NVQ4 and above</b>       | 51.2              | 30.3         | 29.7       | 36.5         | 34.7 | 34.8        | 39.9  | 37.4          | 49.1                   | 30.0    | 37.2              | 27.4              | 40.3             | 41.1     | 40.1         | 35.9             | 37.1            | 43.5          | 35.7     | 37.2     |
| <b>NVQ3 and above</b>       | 69.9              | 50.8         | 54.1       | 56.6         | 56.6 | 54.2        | 60.3  | 61.8          | 69.3                   | 50.5    | 57.6              | 49.5              | 55.1             | 60.4     | 56.4         | 59.3             | 56.2            | 63.4          | 59.6     | 57.6     |
| <b>NVQ2 and above</b>       | 80.9              | 69.7         | 70.1       | 74.6         | 71.8 | 69.4        | 74.1  | 75.9          | 82.8                   | 68.4    | 72.4              | 63.7              | 70.0             | 76.1     | 68.0         | 73.7             | 73.7            | 76.6          | 76.5     | 72.4     |
| <b>NVQ1 and above</b>       | 87.1              | 80.1         | 81.8       | 84.3         | 84.8 | 81.1        | 84.3  | 87.4          | 90.1                   | 80.7    | 82.3              | 74.3              | 77.2             | 83.3     | 76.3         | 83.3             | 83.9            | 84.1          | 88.1     | 82.3     |
| <b>Other qualifications</b> | 4.6               | 9.9          | 6.3        | 5.0          | 7.1  | 6.9         | 4.8   | 5.2           | 3.6                    | 7.0     | 6.2               | 5.7               | 7.1              | 5.4      | 7.0          | 6.8              | 4.3             | 7.5           | 5.6      | 6.2      |
| <b>No qualifications</b>    | 8.3               | 10.0         | 11.9       | 10.7         | 8.1  | 11.6        | 10.8  | 7.4           | 6.3                    | 12.3    | 11.6              | 20.0              | 15.7             | 11.3     | 16.6         | 9.9              | 11.8            | 8.4           | 6.3      | 11.6     |

Source: ONS annual population survey: Jan 2011- Dec 2011

## Earnings by Residence and Workplace

|   | City of Edinburgh | West Lothian | Midlothian | East Lothian | Fife  | Dundee City | Angus | Aberdeenshire | East Dunbartonshire | Falkirk | South Lanarkshire | North Lanarkshire | Clackmannanshire | Stirling | Glasgow City | Scottish Borders | Perth & Kinross | Aberdeen City | Highland | Scotland |
|---|-------------------|--------------|------------|--------------|-------|-------------|-------|---------------|---------------------|---------|-------------------|-------------------|------------------|----------|--------------|------------------|-----------------|---------------|----------|----------|
| <b>Earnings by Residence</b>                      |                   |              |            |              |       |             |       |               |                     |         |                   |                   |                  |          |              |                  |                 |               |          |          |
| <b>Gross weekly pay £</b>                         | 526.6             | 479.0        | 452.2      | 512.8        | 479.1 | 454.3       | 458.4 | 540.3         | 571.9               | 470.4   | 493.3             | 465.5             | 464.5            | 508.5    | 460.4        | 451.9            | 472.2           | 540.6         | 460.1    | 490.6    |
| <b>As % of Scotland</b>                           | 107%              | 98%          | 92%        | 105%         | 98%   | 93%         | 93%   | 110%          | 117%                | 96%     | 101%              | 95%               | 95%              | 104%     | 94%          | 92%              | 96%             | 110%          | 94%      | 100%     |
| <b>Earnings by Workplace</b>                      |                   |              |            |              |       |             |       |               |                     |         |                   |                   |                  |          |              |                  |                 |               |          |          |
| <b>Gross weekly pay £</b>                         | 529.9             | 466.4        | 490.1      | 462.3        | 442.9 | 472.0       | 417.7 | 481.1         | 491.0               | 488.2   | 480.8             | 480.0             | 497.9            | 512.4    | 489.1        | 397.7            | 457.9           | 587.9         | 451.9    | 488.8    |
| <b>As % of Scotland</b>                           | 108%              | 95%          | 100%       | 95%          | 91%   | 97%         | 85%   | 98%           | 100%                | 100%    | 98%               | 98%               | 102%             | 105%     | 100%         | 81%              | 94%             | 120%          | 92%      | 100%     |
| <b>Difference between residence and workplace</b> |                   |              |            |              |       |             |       |               |                     |         |                   |                   |                  |          |              |                  |                 |               |          |          |
|   | -0.6%             | 2.7%         | -7.7%      | 10.9%        | 8.2%  | -3.8%       | 9.7%  | 12.3%         | 16.5%               | -3.6%   | 2.6%              | -3.0%             | -6.7%            | -0.8%    | -5.9%        | 13.6%            | 3.1%            | -8.0%         | 1.8%     | 0.4%     |

Source: ONS annual survey of hours and earnings - resident analysis ONS annual survey of hours and earnings - workplace analysis

**Business Health (2007)**

|                        | City of Edinburgh | West Lothian | Midlothian | East Lothian | Fife  | Dundee City | Angus | Aberdeenshire | East<br>Dunbartonshire | Falkirk | South Lanarkshire | North Lanarkshire | Clackmannanshire | Stirling | Glasgow City | Scottish Borders | Perth & Kinross | Aberdeen City | Highland | Scotland |
|------------------------|-------------------|--------------|------------|--------------|-------|-------------|-------|---------------|------------------------|---------|-------------------|-------------------|------------------|----------|--------------|------------------|-----------------|---------------|----------|----------|
| Registrations          | 11.7              | 12.9         | 8.8        | 7.8          | 10.1  | 10.6        | 9.5   | 10.5          | 12.1                   | 13.2    | 11.4              | 13.1              | 12.7             | 10.3     | 12.7         | 6.6              | 7.5             | 14.8          | 7.5      | 10.3     |
| Deregistrations        | 7.7               | 6.2          | 5.8        | 7.8          | 7.1   | 8.1         | 4.3   | 5             | 7.3                    | 6.9     | 6.7               | 7.4               | 6.9              | 6.4      | 9.3          | 5.6              | 6.4             | 6.2           | 6        | 6.8      |
| Stock (at end of year) | 13,760            | 3,630        | 1,820      | 2,385        | 7,500 | 2,585       | 3,280 | 11,465        | 2,270                  | 2,950   | 7,265             | 5,710             | 945              | 3,355    | 13,750       | 4,725            | 5,400           | 6,935         | 9,325    | 109,055  |

Source: 2007 BERR vat registrations/de-registrations by industry



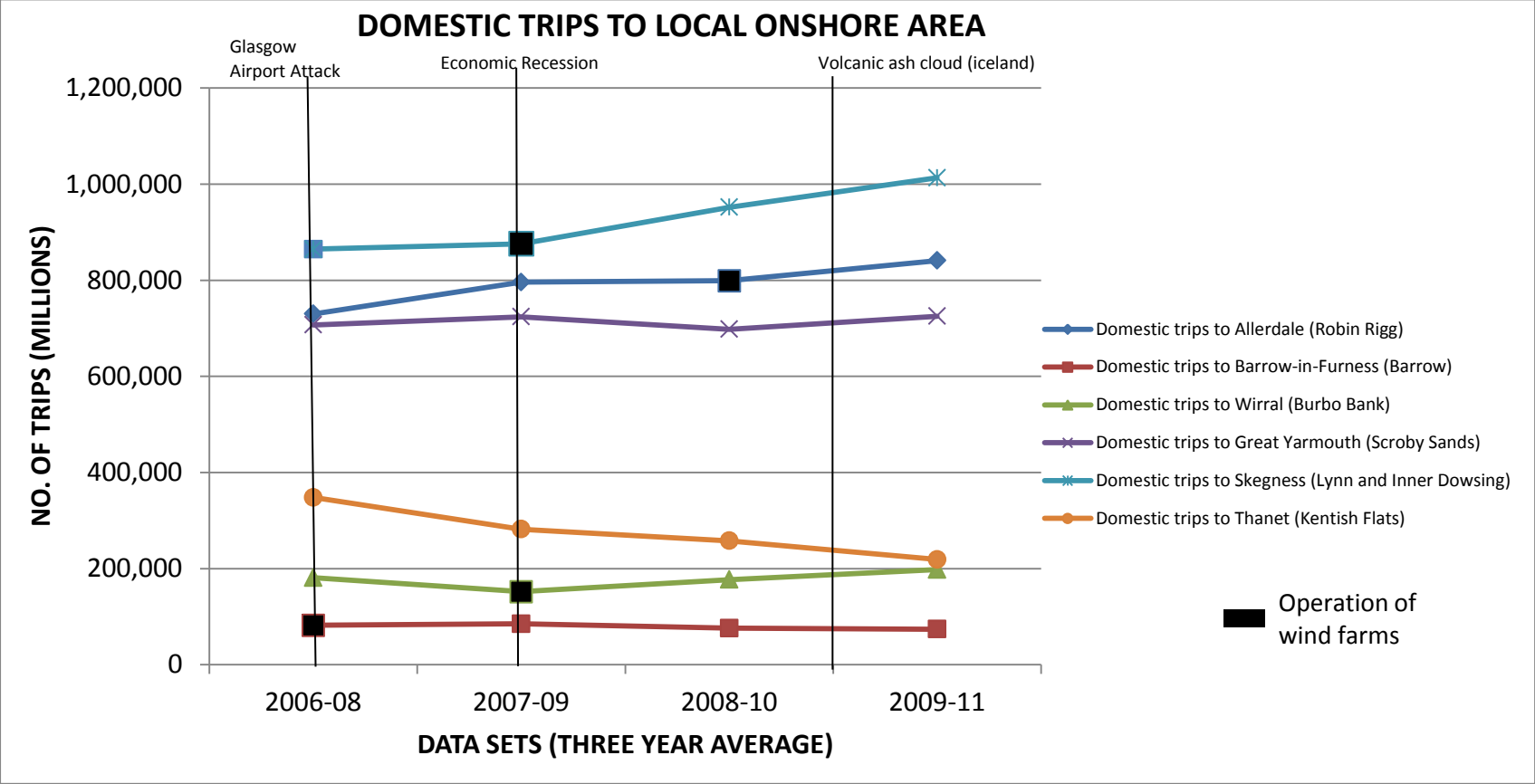
## GVA by Sector

| £ million /<br>Per Cent | City of Edinburgh | West Lothian   | Midlothian   | East Lothian | Fife           | Dundee City    | Angus        | Aberdeenshire  | East Dunbartonshire | Falkirk         | South Lanarkshire | North Lanarkshire | Clackmannanshire | Stirling       | Glasgow City    | Scottish Borders | Perth & Kinross | Aberdeen City    | Highland       | Scotland |
|-------------------------|-------------------|----------------|--------------|--------------|----------------|----------------|--------------|----------------|---------------------|-----------------|-------------------|-------------------|------------------|----------------|-----------------|------------------|-----------------|------------------|----------------|----------|
| Primary Industries      | £419<br>2.0%      | £90<br>0.4%    | £19<br>0.1%  | *            | £367<br>1.6%   | £35<br>0.2%    | £31<br>0.1%  | £1,582<br>6.8% | £47<br>0.2%         | £70<br>0.3%     | £232<br>1.0%      | £370<br>1.6%      | £12<br>0.1%      | £41<br>0.2%    | £619<br>2.7%    | £58.10<br>0.3%   | *               | £17,344<br>75.0% | £270<br>1.0%   | £23,127  |
| Manufacturing           | £532<br>4.0%      | £437<br>3.5%   | £78<br>0.6%  | £60<br>0.5%  | £997<br>8.1%   | £279<br>2.3%   | £292<br>2.4% | £615<br>5.0%   | £61<br>0.5%         | £1,455<br>11.8% | £586<br>4.7%      | £789<br>6.4%      | £138<br>1.1%     | £126<br>1.0%   | £1,186<br>9.6%  | £183<br>1.5%     | £154<br>1.2%    | £727<br>5.9%     | £399<br>3.2%   | £12,355  |
| Construction            | £554<br>9.0%      | £48<br>0.8%    | £108<br>1.8% | £79<br>1.3%  | £292<br>4.9%   | £128<br>2.1%   | £93<br>1.6%  | £467<br>7.8%   | £72<br>1.2%         | £128<br>2.1%    | £379<br>6.4%      | £554<br>9.3%      | £31<br>0.5%      | £147<br>2.5%   | £890<br>14.9%   | £116<br>1.9%     | £170<br>2.9%    | £386<br>6.5%     | £395<br>6.6%   | £5,963   |
| Services                | £15,903<br>29.0%  | £1,461<br>2.7% | £371<br>0.7% | £222<br>0.4% | £1,446<br>2.6% | £947<br>1.7%   | £492<br>0.9% | £2,418<br>4.4% | £330<br>0.6%        | £482<br>0.9%    | £1,523<br>2.8%    | £1,854<br>3.4%    | £228<br>0.4%     | £5,340<br>9.7% | £7,299<br>13.3% | £551<br>1.0%     | £648<br>1.2%    | £5,493<br>10.0%  | £1,144<br>2.1% | £54,809  |
| TOTAL                   | £17,408<br>18.0%  | £1,941<br>2.0% | £577<br>0.6% | £361<br>0.4% | £3,102<br>3.2% | £1,389<br>1.4% | £908<br>0.9% | £5,083<br>5.3% | £510<br>0.5%        | £2,135<br>2.2%  | £2,720<br>2.8%    | £3,567<br>3.7%    | £409<br>0.4%     | £5,654<br>5.9% | £9,995<br>10.4% | £907<br>0.9%     | £1,978<br>2.1%  | £23,950<br>24.9% | £2,207<br>2.3% | £96,253  |

Source: ONS Regional GVA

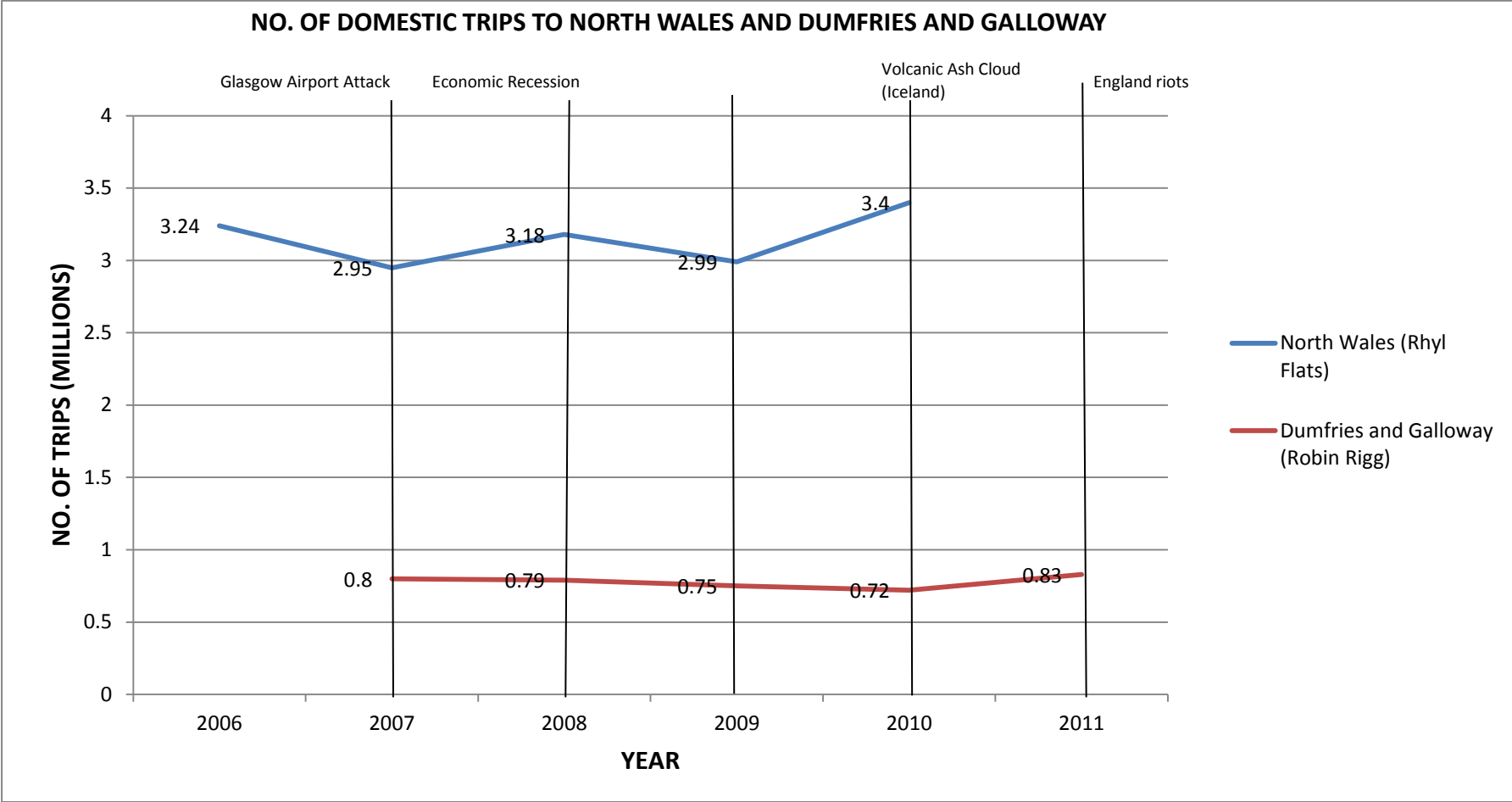
22A.8 Ex-Post Tourism Data

Figure 22A.25 Domestic Trips To Local Onshore Area



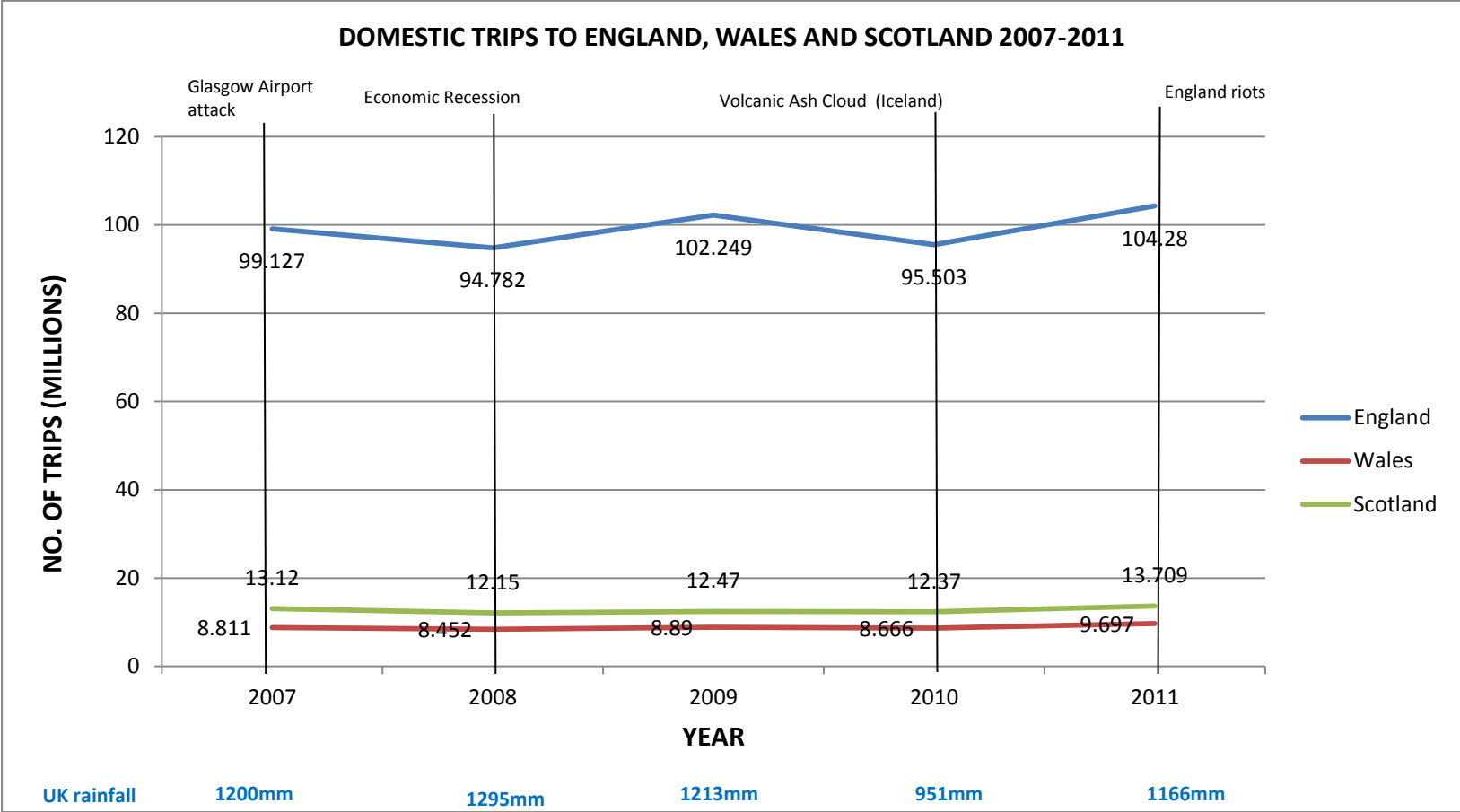
Source: Visit England

Figure 22A.26 Domestic Trips to North Wales and Dumfries and Galloway



Source: Visit Scotland, United Kingdom Tourism Survey

Figure 22A.27 Domestic Trips England, Wales and Scotland 2007–2011 and UK Rainfall Figures



Source: Met Office, United Kingdom Tourism Survey 2007-2011

## References

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Her Majesty's Government (2009a). *The UK Low Carbon Transition Plan: National Strategy for climate and Energy*. Available at:

[http://www.decc.gov.uk/assets/decc/white%20papers/uk%20low%20carbon%20transition%20plan%20wp09/1\\_20090724153238\\_e\\_@@\\_lowcarbontransitionplan.pdf](http://www.decc.gov.uk/assets/decc/white%20papers/uk%20low%20carbon%20transition%20plan%20wp09/1_20090724153238_e_@@_lowcarbontransitionplan.pdf)

Her Majesty's Government (2009b). *The UK Renewable Energy Strategy 2009*. Available at:

[http://www.decc.gov.uk/assets/decc/what%20we%20do/uk%20energy%20supply/energy%20mix/renewable%20energy/renewable%20energy%20strategy/1\\_20090717120647\\_e\\_@@\\_theukrenewableenergystrategy2009.pdf](http://www.decc.gov.uk/assets/decc/what%20we%20do/uk%20energy%20supply/energy%20mix/renewable%20energy/renewable%20energy%20strategy/1_20090717120647_e_@@_theukrenewableenergystrategy2009.pdf)

Marine Scotland (2011). *Blue Seas, Green Energy – A Sectoral Marine Plan for Offshore Wind Energy in Scottish Territorial Waters*. Available at: <http://www.scotland.gov.uk/Resource/Doc/346375/0115264.pdf>

Renewable UK (2011). *Working for a Green Britain*. Available at:

[www.bwea.com/pdf/publications/Working\\_for\\_Green\\_Britain.pdf](http://www.bwea.com/pdf/publications/Working_for_Green_Britain.pdf)

RTP (2006). *Scotland/Northern Ireland Interconnector ex post tourism impact assessment*.

Scottish Enterprise (2010). *National Renewables Infrastructure Plan*. Available at: <http://www.scottish-enterprise.com/~media/SE/Resources/Documents/Sectors/Energy/energy-renewables-reports/National-renewables-infrastructure-plan.ashx>

Scottish Enterprise (2012a). *National Renewables Infrastructure Fund*. Available at: <http://www.scottish-enterprise.com/your-sector/energy/energy-how-we-can-help/energy-funding/renewables-fund.aspx>

Scottish Enterprise (2012b). *Port of Leith Stage 1 Master Plan Scoping Study – Offshore Wind Market Assessment*.

Scottish Enterprise (2012c). "Expert Support move for offshore wind supply firms" (31/01/12). Available at: <http://www.bbc.co.uk/news/uk-scotland-scotland-business-16790198>

Scottish Government (2008). *The Economic Impacts of Wind Farms on Scottish Tourism*. Available at: <http://www.scotland.gov.uk/Publications/2008/03/07113554/0>

Scottish Government (2009a). *Climate Change (Scotland) Act 2009*. Available at:

<http://www.legislation.gov.uk/asp/2009/12/contents>

Scottish Government (2009b). *Economic Impact of Recreational Sea Angling in Scotland*. Available at:

<http://www.scotland.gov.uk/Resource/Doc/280648/0084568.pdf>

Scottish Government (2010). *Scotland's offshore wind route map. Developing Scotland's offshore wind industry to 2020*. Available at: <http://www.scotland.gov.uk/Resource/Doc/326105/0105071.pdf>

Scottish Government (2011a). *Government Economic Strategy 2011*. Available at:

<http://www.scotland.gov.uk/Resource/Doc/357756/0120893.pdf>

Scottish Government (2011b). *2020 Renewable Energy Routemap*. Available at:  
<http://www.scotland.gov.uk/Publications/2011/08/04110353/0>

Scottish Government (2011c). *Scotland's Marine Atlas: Information for the National Marine Plan*. Available at: <http://www.scotland.gov.uk/Resource/Doc/345830/0115125.pdf>

Scottish Government (2012). *Four Enterprise Areas for Scotland*. Available at:  
<http://www.scotland.gov.uk/News/Releases/2012/01/Employment17012012>

The Crown Estate (2012). Offshore Wind Farms Location map[Online]. Accessed at:  
<http://www.thecrownestate.co.uk/estates-map/map?lat=54.4&long=-3&zoom=8&isScotland=false>

Tourism Partnership North Wales (2009). *Strategy North Wales 2010-2015*. Available at:  
<http://www.tpnw.org/docs/strategies/STRATEGYenglish.pdf>

UK Coastal Atlas (2008). *Recreational Cruising Routes, Sailing and Racing Areas around the UK Coast*. Second Edition.