

Bellerby Economics

**In partnership with:
Jean Hamilton Limited**



An Evaluation of the Offshore Wind Diversification Support Programme

Final Report

June 2015

Contents

Executive Summary	i
Introduction	i
Key Findings & Conclusions	i
Recommendations	iii
1. Introduction	1
1.1 Evaluation Objectives	1
1.2 Method	1
1.3 Report Structure	2
2. The Offshore Wind Diversification Support Programme	3
2.1 Introduction	3
2.2 The Programme	3
2.3 Strategic Appraisal	5
2.4 SMART Objectives	6
2.5 Targets & Performance	6
2.6 Referrals	8
2.7 Finances	8
2.8 Sector Overview	9
3. Consultations	12
3.1 Introduction	12
3.2 Project Managers	12
3.3 Account Managers	16
3.4 Expert Support Programme Contractors	19

4.	Business Survey Results	23
4.1	The Surveyed Companies	23
4.2	The Characteristics of Survey Participant Companies	23
4.3	Experience of the Programme	26
4.4	Taking Action Following the Programme	30
4.5	Activity in the Offshore Wind Sector	33
4.6	How the Programme Could be Improved	35
5.	Economic Impact Assessment	38
5.1	Introduction	38
5.2	Method	38
5.3	Economic Impact Measures	39
5.4	Gross to Net	40
5.5	Net Additionality	45
5.6	Summary	46
6.	Conclusions & Recommendations	47
6.1	Introduction	47
6.2	Conclusions	47
6.3	Recommendations	51
	Appendix 1: Consultees	I

Executive Summary

Introduction

Scottish Enterprise (SE) commissioned Bellerby Economics in partnership with Jean Hamilton Limited and Steve Westbrook, Economist to undertake an evaluation of the Offshore Wind Diversification Support (OWDS) Programme, which seeks to help companies to diversify into the Offshore Wind (OW) sector.

The objectives of the evaluation were to:

- assess the economic impacts and benefits to date and in the future;
- identify and assess qualitative benefits from the Programme;
- review the management and implementation of the Programme:
 - how the Programme is received by industry
 - assess the robustness of the Programme's process and management from both internal and external perspective
 - assess the effectiveness of the Expert Support Programme (ESP) delivery arrangements; and
- make recommendations for the future delivery of the Programme and/or other support to strengthen the supply chain for OW.

The key components of the method were as follows:

- **desk based review and analysis:** a review of approval and management papers, strategic and operational frameworks, sector reports to gain an insight into the rationale for the Programme, its operation and progress in meeting any targets set out in the approval papers, fit within a wider strategic context;
- **consultations:** with SE Programme Executives, Account Managers, and ESP contractors to provide a variety of perspectives on progress and impact of the Programme; and
- **fieldwork:** a telephone and online survey of companies that engaged with the Programme, to gain an insight into the short and longer impacts on business performance as a result of receiving support.

Key Findings & Conclusions

The Programme

The Programme's targets were reviewed and subsequently revised in April 2013 to take account of the industry developing at a far slower pace than originally envisaged which meant that there had been a high level of interest in activities surrounding general awareness and understanding how their company may fit within the sector, but few companies actually implementing their strategies.

The evaluation shows that the programme has made significant progress towards targets, and on current progress it is likely to achieve targets:

- companies participating in raising awareness events - 112% achieved;
- companies benefiting from Expert Support - 89% achieved;
- number of intelligence reports - 65% achieved.

In terms of providing supply chain intelligence to Scottish companies, aimed at raising their awareness of offshore wind opportunities, this target is only 52% achieved and represents a challenge to achieve target by the end of December 2015.

Management and Implementation of the Programme

How the Programme is Received by Industry

The introduction of the one to one meetings with the expert practitioners has been well used by the companies. Their reasons for participation were broadly aligned to SE's aims of providing greater awareness of the sector, improved information on the market and help to understand how individual businesses would fit within this market.

The Programme was generally rated useful to very useful by participating organisations in terms of its relevance, value to the organisation and the quality of the advisor, with only 10% of companies reporting these aspects as being not very useful or not useful to their company. The industry reports that the Programme has performed slightly less well in its ability to take the company closer to supplying the sector.

Overall therefore the industry had positive experiences from their engagement with the Programme.

Programme's Process and Management

The Programme is regarded as being effective, in terms of:

- the workshops and events providing companies with a useful grounding in the sector;
- the application form, when filled out well, gives the ESP contractors a good start as it outlines the background to the company;
- the matching process works well with most companies having been well matched to the expertise of the ESP contractors;
- the reporting requirements from the ESP contractors to SE is working well;
- providing an effective but high level introduction into offshore renewables;
- shifting the nature of the events programme away from general awareness events towards introducing new elements such as short one-to-one meetings with experts at events; and the development of Meet the Buyer events;
- its flexibility;
- (for SE account managed businesses) the Programme operates alongside a suite of business development support;

Economic Impact

Caution should be exercised when interpreting the economic impact results as the survey did not attract a high response rate - for this reason results have not been grossed up. It is also important to note that one company dominates both realised and forecast impacts.

Realised Impacts

Only **two** companies provided data of the value of the turnover and employment growth to date as a result of support received from the Programme. The net additional impacts, having taken account of deadweight, displacement, and multiplier effects are estimated to be:

- Employment - **4 FTEs**;
- GVA - **£33.5m**.

Forecast Impacts

Eight companies provided data on the value of forecast turnover increases as a result of support received from the Programme, and **seven** provided data on forecast job gains. The (PV) impacts, having taken account of deadweight, displacement, leakage, optimism bias and multiplier effects are estimated to be:

- Employment - **232 FTEs**;
- GVA - **£33.5m**.

Recommendations

It is recommended that the Programme is redesigned and repositioned to target support to those companies who have already decided that offshore wind is a sector they wish to supply and to support them to take effective action and take steps to convert these actions to sales and subsequently economic impact.

As such it is recommended that for those companies which have made a commitment to supply the sector and have greatest potential:

- (i) more in-depth specialist expert advice is available;
- (ii) the support for these companies continues to be integrated into the existing SE/HIE support programmes;
- (iii) there is an increased emphasis and resource to facilitate “Meet the Buyers” for individual companies;
- (iv) it will be paramount that internationalisation is embedded in every project and this is fully aligned to SDI supports such as exhibitions and missions and international manager for hire;
- (v) where Business Gateway supported companies make a commitment to exploiting the sector they should also have access to the more in-depth expert support, making a financial contribution to the support;
- (vi) The event programme should be continued to help identify other companies who have not yet considered supplying the sector.

The number of companies who may be interested in supplying the offshore wind sector but have not yet participated in the Programme is unclear. It is therefore recommended that:

- (vii) the management and administration of the programme is effective and no restructuring is required.
- (viii) the 2 day ESP support provided free to participating companies is continued;

- (ix) the 2 day ESP support should also be promoted more widely in the Highlands and Islands area, particularly in wave and tidal;
- (x) the short advisory sessions held at events should continue with a view to helping companies identify if the 2 day ESP support would be of value to them; and
- (xi) wave and tidal are emerging markets, and the Programme should be available to provide the initial ESP support to companies on this market.

1. Introduction

The Offshore Wind Diversification Support (OWDS) Programme seeks to help companies to diversify into the Offshore Wind (OW) sector through:

- building understanding of OW market opportunities amongst Scottish companies;
- communicating opportunities to potential supply chain companies; and
- assisting them to develop diversification strategies to enable them to supply the industry.

The Programme delivers this through fact sheets, publications, a series of events and seminars, and the Expert Support Programme (ESP) which provides 2 days of free consultancy advice from specialist contractors. The ESP provides customised advice on how companies can effectively diversify into this sector and generate new sales and economic benefit.

Scottish Enterprise (SE) commissioned Bellerby Economics in partnership with Jean Hamilton Limited to undertake an evaluation of the Programme, with Steve Westbrook, Economist, undertaking consultations in the Highlands.

1.1 Evaluation Objectives

The objectives of the evaluation were to:

- assess the economic impacts and benefits to date and in the future;
- identify and assess qualitative benefits from the Programme;
- review the management and implementation of the Programme:
 - how the Programme is received by industry
 - assess the robustness of the Programme's process and management from both internal and external perspectives
 - assess the effectiveness of the ESP delivery arrangements; and
- make recommendations for the future delivery of the Programme and/or other support to strengthen the supply chain for OW.

Recognising the nature of the Programme, the evaluation focuses on those companies who received the most intensive support through the ESP, and are expected to be able to quantify the benefits they have received.

1.2 Method

The key components of the method were as follows:

- **desk based review and analysis:**
 - **action:** a review of approval and management papers, strategic and operational frameworks, sector reports
 - **purpose:** to gain an insight into the rationale for the Programme, its operation and progress in meeting any targets set out in the approval papers, fit within a wider strategic context;

- **consultations:**
 - **action:** consultations with SE Programme Executives, Account Managers, and ESP contractors
 - **purpose:** to provide a variety of perspectives on progress and impact of the Programme; and
- **fieldwork:**
 - **action:** a telephone and online survey of companies that engaged with the Programme
 - **purpose:** to gain an insight into the short and longer impacts on business performance as a result of receiving support.

1.3 Report Structure

The rest of the report is structured as follows:

- **Chapter 2: The Offshore Wind Diversification Support Programme:**
 - describes the Programme in detail;
- **Chapter 3: Consultations:**
 - reports on the findings from the consultation programme with SE Programme Executives, Account Managers, and ESP contractors;
- **Chapter 4: Business Survey Results:**
 - reports the results from the company surveys;
- **Chapter 5: Economic Impact Assessment:**
 - presents an economic impact assessment of the Programme; and
- **Chapter 6: Conclusions & Recommendation:**
 - presents a set of conclusions based around the objectives of the study as detailed in the brief, and a set of recommendations aimed at taking the Programme forward.

2. The Offshore Wind Diversification Support Programme

2.1 Introduction

In this Chapter we present an overview of the Offshore Wind Diversification Support (OWDS) Programme focusing on:

- a description of the Programme;
- strategic rationale;
- objectives;
- performance to date; and
- finances.

We also include a short review of the overall sector and recent trends.

2.2 The Programme

The OWDS (Supply Chain) project began in 2011 and is expected to end in its current format in December 2015. It comprises a menu of activities that seek to:

- build an understanding amongst Scottish businesses of opportunities in the Offshore Wind market;
- communicate these opportunities to potential supply chain companies in Scotland; and
- assist companies who have an interest in the sector to develop diversification strategies enabling them to supply this new industry.

The project builds on the Interim Support project which was approved in May 2010 and its predecessor, the joint Department of Energy and Climate Change/Scottish Enterprise pilot project.

The key focus of the project is to help companies take a strategic approach to diversification into the offshore wind market and to assist in the development of new products and processes in order to secure business.

There are two elements to the project:

- awareness raising through publications and events; and
- delivery of technical and/or business support tailored to the needs of individual companies.

The development of the project was informed by:

- the Offshore Wind Supply Chain theme group that draws from all relevant parts of SE;
- lessons learned from predecessor projects including:
 - confirmation of the need for the bespoke Expert Help product
 - the benefits of partnership working
 - the need to maintain a flexible approach to delivery.

The actual activity mix delivered by this project has been shaped by:

- how the Offshore Wind market develops;
- the emergence of specific opportunities (e.g. the plans of individual developers); and;
- the needs of individual companies.

The project is expected to have a direct, positive impact on the uptake of innovation support, market development and business improvement products as well as manufacturing audits via the Scottish Manufacturing Advisory Service (SMAS). Companies in sectors such as Oil & Gas, Marine and Engineering, which already have a level of relevant, transferable capabilities, have been the key targets for this support.

2.2.1 The Programme's Management

The operation of the programme has evolved during its development and implementation and is currently:

- (1) **Generating Interest.** Attendance at events, referral from business advisors and general promotion through emails and web based information are all used to generate interest and applications to the programme. As part of this the programme management contact by telephone each attendee of the events to encourage them to apply.
- (2) **Application.** Irrespective of how the interest has been generated, each company applies for the support via an online application form found on SE's website.
- (3) **Start of Internal Monitoring.** At the stage of receipt of an application the company project is logged into a spreadsheet based system which monitors progress through the programme. This will keep all management information including the timing of key stages and contractual and financial management.
- (4) **Matching Company to Contractor.** An SE programme manager reviews the company application and identifies appropriate contractors. Where appropriate they will speak directly to the company to clarify their needs. The company is then provided with at least two potential contractors. The company then selects their preferred contractor, often on the basis of a telephone or face to face meeting.
- (5) **Contracting.** On the basis of the company's selection, SE then enters into a contract with the preferred expert advisor and manages the financial side of the contract.
- (6) **Completion of work and Reporting.** The Contractor then works with the company, undertakes the work and generates an end of project report. This report is provided to the company, SE programme manager and to the account manager or BG advisor for the company.
- (7) **Follow Up.** At the point of receiving the report, the account manager or BG advisor is encouraged to contact the company and support any follow up. In some circumstances such as providing follow up information, the SE Programme manager will do this directly. To prompt follow up, this is chased at least one to encourage action. In the past, additional executive time was spent in ensuring follow up for BG companies.

2.3 Strategic Appraisal

The Programme fits with and contributes towards the achievement of both Scottish Government and SE strategic frameworks:

- Scottish Government:
 - Scotland's Offshore Wind Route Map - Developing Scotland's Offshore Wind Industry To 2020¹; and
- Scottish Enterprise:
 - SE Business Plan²
 - Sector Delivery Plan³.

2.3.1 Scottish Government

The Scottish Government has highlighted that the Offshore Wind sector has the potential to provide significant opportunities for Scotland industry and the Scottish economy. However, to secure the maximum benefit from these opportunities; key issues need to be addressed:

- investment in infrastructure, supply chain and innovation;
- access to the grid;
- managing the marine environment; and
- developing relevant skills.

The OWDS Programme contributes to the Scottish Government's strategic framework through: helping Scottish businesses to understand the scale and nature of opportunities in the Offshore Wind market; and assisting companies who have an interest in the sector to develop diversification strategies enabling them to supply this new industry.

¹ Published in 2010 and available at <http://www.gov.scot/Resource/Doc/326105/0105071.pdf>. An update was published in 2013 - available at :<http://www.gov.scot/Topics/Business-Industry/Energy/RoutemapUpdate2013>

² <http://www.scottish-enterprise.com/about-us/what-we-do/business-plan>

³ Scottish Enterprise (2014) Energy and Low Carbon Technologies - Renewable Energy - Sector Plan 2014

2.3.2 Scottish Enterprise

The Scottish Enterprise Business Plan 2015-2018 sets out the organisation's approach to help deliver long term, inclusive economic growth for Scotland. The Plan highlights the contribution that Scottish Enterprise will make to Scotland's Economic Strategy, published by the Scottish Government in March 2015. It provides a framework for SE to assist in the creation of sustainable economic growth, whilst recognising the need for a more cohesive and resilient economy that ensures opportunities for all. Its focus continues to be on the critical role of boosting Scotland's international competitiveness to support long-term economic growth.

The Plan prioritises five main areas: a competitive economy, internationalisation; innovation; investment; and inclusive growth.

The previous Business Plan, in place when the Programme was developed and launched, stated that SE would "work alongside indigenous companies to establish a strong supply chain to meet the needs of the renewables sector in areas such as design, manufacturing, installation, operations and maintenance". The Sector Delivery Plan for renewables identifies "the development and expansion of the domestic supply chain in renewable related opportunities" as a key priority.

The OWDS programme contributes to the SE's strategic frameworks through helping companies to take a strategic approach to diversification into the offshore wind market and to assist in the development of new products and processes in order to secure business.

2.4 SMART Objectives

The project originally aimed to deliver:

- supply chain intelligence to 1,500 Scottish companies, aimed at raising their awareness of Offshore Wind opportunities;
- a 2 day Offshore Wind Expert Support product delivered to at least 100 companies per full year with follow-up support provided to at least 20 companies per full year;
- manufacturing Audits in conjunction with SMAS to at least 20 companies per full year;
- 83 companies introducing new products /services /processes aimed at the offshore renewables sector; and
- at least 10 referrals into Growth Pipeline/Account Management each full year.

2.5 Targets & Performance

Table 2.1 presents the original approved targets for the Programme.

Table 2.1: Objectives and Original Targets

Smart Objectives	Target at Approval 2011
Supply chain intelligence to Scottish companies, raising awareness of Offshore Wind opportunities	1,500
The 2 day Offshore Wind Expert Support product delivered to companies	100 per annum
Follow-up support provided to companies where appropriate	20 per annum
Manufacturing Audits in conjunction with SMAS to companies	20 per annum
Referrals into Growth Pipeline/Account Management	10 per annum
Companies Introducing new products /services /processes	83
Number of businesses participating in SE supported key industry events	3,708
Number of intelligence research or similar reports to develop the industry	20

These targets were reviewed and subsequently revised in April 2013 following a Stage 5a review in March 2013. The Stage 5a review noted significant optimism in the targets relating to the numbers of companies participating in Expert Support and those companies introducing new products and processes. The pace of development of the industry - which has developed at a far slower pace than originally envisaged - meant that there has been a high level of interest in general awareness activities, but few companies actually implementing their strategies.

Table 2.2 presents the revised targets and performance to March 2015.

Table 2.2: Revised Targets (to end 2015) and Achievements

Smart Objectives	Target Revised April 2013	Achieved to March 2015
Supply chain intelligence to Scottish companies, raising awareness of Offshore Wind opportunities through awareness raising events	1,500	782
The 2 day Offshore Wind Expert Support product delivered to companies with follow-up support provided to companies where appropriate	230 companies by the end of the project	204
Manufacturing Audits in conjunction with SMAS to companies	Measure removed	
Referrals into Growth Pipeline/Account Management	Measure Removed	
Companies Introducing new products /services /processes	Measure Removed	
Number of businesses participating in SE supported key industry events	2,000	2,241
Number of intelligence research or similar reports to develop the industry	20	13

A small number of companies received more than one instance of support- in total 186 companies have received the report since October 2011.

Table 2.2 shows that some activities have ceased to be a measure for the Programme, and others that have made significant progress towards targets, and on current progress are likely to achieve targets:

- companies participating in raising awareness events - 112% achieved;
- companies benefiting from Expert Support - 89% achieved;
- number of intelligence reports - 65% achieved.

In terms of providing supply chain intelligence to Scottish companies, aimed at raising their awareness of offshore wind opportunities, this target is only 52% achieved and represents a challenge to achieve target by the end of December 2015.

2.6 Referrals

Table 2.3 presents details of how supported companies were referred into the Programme. It shows that almost half of companies were referred to the Programme at or following an awareness raising event, with almost 20% being referred by a SE Executive/Account Manager or an Expert Support Programme contractor.

Table 2.3: Source of Referral

Source of Referral	%
Account Manager/SE Executive	18
Business Gateway	3
Programme Event	47
Expert Support Contractor	19
Web site	7
Unknown/Other	5

Source: SE Programme Management Information

2.7 Finances

The total cumulative approval for the Programme and the interim support is £1,649,500, including £585,000 of ERDF funding. **Table 2.4** below shows spend to date and forecast for the remainder of the approval period.

Table 2.4: Spend to Date and Forecasts

	Interim Support	2011/12	2012/13	2013/14	2014/15	2015/16	Total
	Actual	Actual	Actual	Actual	Forecast	Forecast	
Development Funding	£33,000	0	0	0	0	0	£33,000
Delivery	£161,500	£118,491	£420,303	£268,130	£248,195	£170,000	£1,234,119
Total	£194,500	£118,491	£420,303	£268,130	£248,195	£170,000	£1,267,119

Source: SE Programme Management Information

Overall spend to date has been lower than forecast in the original approval paper due to less one-to-one Expert Support activity than originally envisaged, reflecting the slower than anticipated development of the industry in Scotland. The balance of expenditure has been fairly split between all the elements of the Programme.

2.8 Sector Overview

2.8.1 Introduction

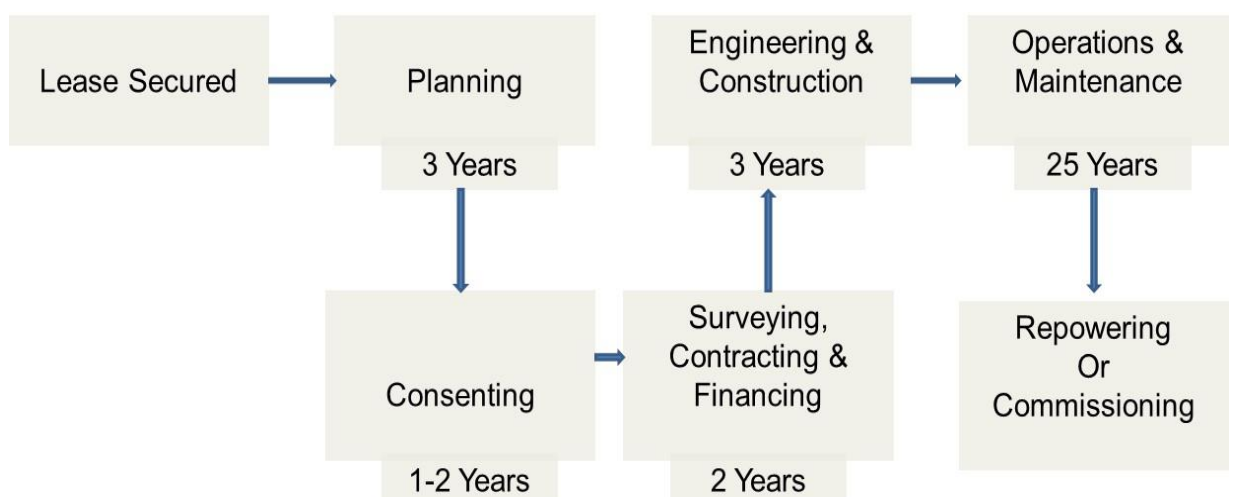
To set the evaluation in context and to aid the development of recommendations on how the Programme could be improved we present a brief review of the overall sector and its trends. The review focuses on:

- timescales;
- current activity; and
- the impact of the sector on the economy.

2.8.2 Timescales

Building an offshore wind farm takes a long time. Once a lease to build on the seabed has been secured developers enter a planning process which typically lasts for around three years. This process includes a series of environmental assessments, with developers applying for planning consent, with a decision currently taking between one and two years to be made. If successful, further surveying, contracting and financing can take a further two years, before around three years are spent on engineering and construction. A developer can be working on their project for a decade before it is built and ready to generate electricity. **Figure 2.1** illustrates the process.

Figure 2.1: Developing an Offshore Wind Farm



Source: Scottish Renewables - Offshore Wind - What you need to Know - 2014

The consultation programme with ESP contractors (reported in Chapter 3) highlighted that limited activity with the offshore wind sector was a key challenge facing companies seeking to enter the supply chain - the timeframe highlighted above from consent to engineering and construction and subsequent operation highlights one reason why supply chain opportunities have been slow to come to market.

There are further uncertainties about future allocations of CfDs (Contract for Differences). CfDs aim to reduce the risks faced by low carbon developers, by paying a variable top up between the market price and a fixed price level, known as the 'strike price'. The issue here is that the CfD system is creating a bottleneck in the offshore wind market as no project is currently feasible without Government subsidy. The previous subsidy was Renewable Obligation Certificates (ROCs) which require projects to be generating by the 31 March 2017 to qualify. Given most of the Round 3 UK sites and Scottish Territorial Water sites are not scheduled to come online until after this date they will have to participate in the CfD auction.

The CfD auction is run on a yearly basis but the size of the available funding from year to year is unknown but likely to be only big enough for part of a large project or part of a large project and a small project or two small projects to go through at any given auction round. This has caused the sector to progress at a far slower rate than previously anticipated and has hindered companies diversifying into the sector as they do not have enough sight of future market demand to make capital investment decisions which are required for them to enter the sector.

2.8.3 Offshore Wind in Scotland

Table 2.5 details the status of the Scottish offshore wind sector in 2014.

Table 2.5: Offshore Wind Farm Status

Project	Project Capacity (MW)	Status
Beatrice Demonstration	10	operational
Robin Rigg	180	operational
Methil Offshore Wind Farm Demonstration Site	7	operational
Beatrice Offshore Windfarm Limited	664	consented
European Offshore Wind Deployment Centre	100	consented
Moray Offshore Renewables Limited	1,116	consented (phased)
Inch Cape	784	consented
Neart Na Gaoithe	450	consented
Seagreen (Alpha & Bravo)	1,050	consented

Source: Scottish Renewables - Offshore Wind - What you need to Know - 2014

Table 2.5 highlights that only three offshore wind developments are operational and only one of these is of commercial scale. The rest - two-thirds - have been consented, and reinforces the view of the ESP contractors that a key issue facing companies seeking to enter the supply chain is the limited construction and operational activity. This is further exacerbated by uncertainties around future funding/subsidies for operators which may act as a constraint on future developments, and therefore future opportunities.

2.8.4 Employment Impact

A recent report⁴ highlights that employment in Scotland's offshore wind sector in 2013 was some 1,842 FTEs, with a further 800 FTEs employed in tidal/wave sectors. Table 2.6 presents a regional distribution of employment.

Table 2.6: Scotland's Offshore Sector by Region (FTEs) - 2013

Region	Offshore Wind	Wave/Tidal	Total
North East Scotland	510	173	683
Glasgow	297	215	512
Lothian	297	185	482
Highlands & Islands	155	195	350
South Scotland	61	12	73
Central Scotland	61	6	67
Mid Scotland & Fife	34	10	44
West Scotland	0	0	0
No area specified	427	10	437
Total	1,842	806	2,648

Source: O'Herlihy & Co. Ltd - 2014

Table 2.6 shows that employment in the offshore wind sector is more concentrated in the North East Scotland - representing just under 30% of total employment. This reflects the area's strength in oil and gas where many of the skills are transferable to the offshore sectors.

When questioned as to their expectations of changes in their employment levels over half the companies surveyed expected employment to increase, with over 40% expecting no change in their employment levels. This information was not disaggregated by renewables sub-sector.

Barriers to growth of the renewables sector focused on: uncertainty over market reform and uncertainty over planning/consenting/licensing. As highlighted in Chapter 3, discussions with the ESP providers demonstrated that a key issue facing companies seeking to supply the sector is uncertainty around consents moving to construction and operational phases.

⁴ O'Herlihy & Co. Ltd - *Employment in Renewable Energy in Scotland* - January 2014. Report based on telephone survey responses from over 500 companies.

3. Consultations

3.1 Introduction

In Chapter 3 we present the findings from a short consultation programme with SE Project managers, the main Highlands & Islands Enterprise (HIE) staff involved in managing the programme in the Highlands and Islands, SE and HIE Account Managers, and Expert Support Programme (ESP) contractors⁵.

The consultations were undertaken through face-to-face meetings or in-depth telephone interview using a semi-structured approach with an agreed pro-forma. The outputs from each group are presented in aggregate form and reflect the general consensus of the consultees.

Not all interviewees were able to shed light on every issue, but each issue was adequately addressed overall.

3.2 Project Managers

Introduction

Discussions were held with seven SE Executives who were involved in various aspects of the design and operation of the Programme. Below is a report of the findings from these interviews, collated by topic. The HIE project management staff who were consulted generally had similar views on the Programme, and specific points that they made are highlighted below.

Overall Programme and its Effectiveness

Overall, the Programme was seen to be effective by all Project Managers. The ESP was considered to provide an effective, but high level, introduction into offshore renewables and to allow companies to secure a basic understanding of the market and how their company might fit into the market. At times this would lead to a participating company deciding against diversification into the sector, but this was seen as a positive outcome.

The Programme was seen to have developed and evolved during its implementation in part in response to the early stage of the offshore wind sector, and in part following the modifications made which were informed by the results of the previous review. These changes have included a reduction in the production of fact sheets and publications once these covered most aspects of the sector; a shift in the nature of the event programme away from general awareness events; the introduction of new elements such as short one-to-one meetings with experts at events; the development of Meet the Buyer events; and (recently) the extension of the Programme to marine renewables (wave & tidal).

The Programme was regarded as flexible as it could be used for account and non account managed companies and could be extended in terms of consultant days' input, with justification, in some cases.

⁵ A list of those interviewed is appended.

Wider Development of the Sector

The sector in Scotland has developed much more slowly than envisaged, with the opportunities predominantly in Germany, France and rest of the UK. Since the previous review of the Programme, the nature and needs of the sector have become clearer as the structure of developers and then tiers of suppliers became apparent as well as the nature of the products and services that the sector needs (or will need).

The companies who are (or might be) Tier⁶ 1 and 2 contractors can now be identified and the customers relevant to each supplying company can thus now be identified. There is also greater clarity on the procurement approach of the Tier 1 and 2 contractors, with some using formal tendering approaches, such as through pre qualification lists, and others more informal routes.

Some businesses keen to compete in the sector are concerned that those suppliers who already have a relationship with Tier 1 and 2 contractors in overseas developments will be particularly well placed to win contracts with these organisations in future developments off the Scottish coast.

The market in Scotland remains undeveloped, and there is a recognition that the short-term focus of diversification has to be overseas. The expertise of Scottish companies in Operations and Maintenance (O&M) is expected to be of particular value once developments in Scotland became operational.

The future development of the sector remains uncertain in relation to the allocation of licences, the relative cost of production relative to other renewables and oil, and uncertainties about the UK subsidy regime after 2020.

Programme Fit to Wider Supports

For SE and HIE account managed businesses, the programme operates alongside a suite of business development supports. Those that are most relevant for these companies are considered to be internationalisation supports such as one-to-one advice, Scottish stands and exhibitions, links to SDI and UKTI's overseas offices, research & innovation supports, and general discretionary account management support. The SE products are delivered through a series of frameworks, with consultants selected for their technical expertise in areas such as marketing, leadership and exporting. These consultants are not typically sector experts, however, and the ESP is seen to fit well with these, providing an expert specific to the offshore wind sector who would not otherwise be available.

This is one of a suite of supply chain programmes that SE or HIE is operating in the energy sector providing specific expertise. Others include oil and gas, nuclear and one currently being piloted in wave and tidal. Those interviewed felt, because of the early stage of the development of the sector and the lack of understanding of its structure and operations, that this sector specific treatment was justified.

⁶ Tier 1 contractors are those who directly supply the developers; Tier 2 contractors supply Tier 1 organisations and so on

The SE Renewable sector team are developing a range of programmes which could usefully be linked to the ESP. These include working with developers and Tier 1 contractors to identify potential Scottish suppliers in a “top down” approach and measures to attract direct investment from these organisations. To support this work, the sector team are in the final stages of completing a “mapping” of the sector to provide a more in-depth and accurate assessment of the capabilities of Scottish companies to supply the offshore wind sector. These programmes are under development or in their early stages, but present a major opportunity to complement the ESP, and will influence its future shape.

Two major R&D funds established by SE - Scottish Innovative Foundation Technologies (SIFT)⁷ and Prototyping for Offshore Wind Energy Renewables Scotland (POWERS⁸) - will have a longer term impact on the development of the sector, but have no immediate alignment with the ESP. Although not the subject of this study, it is understood that there has been low interest and a low number of awards in each of these programmes which has been attributed to the slow pace of industry development; the terms and conditions attached to the funds; and the lack of available test sites, particularly for SIFT.

Approach and Effectiveness of Programme Monitoring

An SE Project Manager gathers and monitors information on programme activity, including attendance at events and ESP participants. Through a basic spreadsheet system, the progress of companies through the support programme is mapped (e.g. application, contractor appointed, report completed, contractor paid etc).

At the conclusion of each project, feedback is sought from the participant companies - i.e. how useful the programme was; if they had taken action as a result; did they receive additional support; do they require any additional market information; and do they require any other support from SE/Business Gateway (BG).

This is secured through the account managers and BG advisors and recorded on the Customer Relationship Management (CRM) system. This information is not collated or summarised across the Programme, but this was not seen to be a major weakness.

Quality and Effectiveness of Contractors

The project managers expressed satisfaction with the contractors and the way they had been used. To some extent, this was shaped by the allocation to companies of contractors with the most relevant expertise.

Some complaints were received from companies that they had received only generic market information that was not specific enough to their company, but this was not seen as widespread, and was due, in part, to unrealistic expectations from companies of the standard 2 day ESP.

⁷ Scottish Enterprise, Highlands and Islands Enterprise and the Scottish Government have designed SIFT to support the development, installation and testing of innovative offshore wind foundations.

⁸ Financial assistance is available to manufacturers in Scotland for the prototyping of next generation offshore wind turbines.

Effectiveness of the Follow up Process

As part of the ESP, a report is provided to the company setting out agreed actions. This plan is provided to the company and an SE Project Manager and then forwarded to the SE account manager (through an internal system) or the BG contact as appropriate, who are asked to follow up on these actions. In some cases, simple actions such as securing copies of reports or referrals to other programmes in the renewables sector team are undertaken directly by the SE Project Manager.

The follow up to other recommended actions was seen as patchy and was the most commonly cited weakness of the Programme. This was of particular concern where the company was BG managed, although doubts were also raised about account manager follow up. In extreme cases, there was thought to be no follow up from the BG advisors. At one stage of the Programme, an SE Executive directly contacted BG advisors to prompt follow up from their advisors. Where this was not provided, the SE Executive undertook the follow up directly. Due to resource pressures this additional follow up support provided by SE, is no longer in place.

One of the key sources of follow up was the link to Scottish Development International (SDI) and their support. Most of the companies who were seeking to diversify into the sector were thought already to be operating on an international scale; however their contacts in overseas markets were within different activities such as oil and gas and they benefited from support to help them to make new contacts/promote themselves to the OSW sector.

How Could the Programme be Improved?

The Programme was seen as being largely effective, and it was universally agreed that there was a continuing need for a programme offering sector specific expertise in OSW (with support for the extension into wave and tidal expressed by some). There was a recognition that the programme had developed and evolved, and some thought that it should continue to evolve into or be replaced by a programme which:

- was more focused on those companies who had potential to generate substantial business and economic impacts from the sector;
- provided more in-depth advice to those selected companies:
 - that was complementary to other SE supports such as those in innovation and internationalisation, by focusing on sectoral specific expertise
 - that focussed on companies selected by SE rather than contractors (which would be largely Account Managed companies)
 - with a sector specific advisor working with these companies alongside the account manager during the diversification work
 - that should be fully integrated into a seamless development of the company, including innovation, internationalisation etc, with SE supports as appropriate;
- included fewer (or no) general awareness events, replacing these with subsector specific events (e.g. foundations, grid connections, blades, operations and maintenance, etc.);
- included continuation of short one-to-one meetings with expert advisors at events;

- incorporated Meet the Buyer events and initiatives, including securing Scottish company participation in Meet the Buyer events outwith Scotland; and
- was aligned more closely with the work of the sector team on top down supplier development, with developers and Tier 1 contractors and the sectoral mapping.

There were mixed views on whether the ESP as it stood with its 2 day support was still required, but most saw a value in keeping it going, with an expectation that it would be used less frequently. In the Highlands and Islands, the existing Programme could be promoted more prominently, with more potential supply chain interest with the extension into wave and tidal development.

There were mixed views on the financing of the Programme. Some felt that costs should be part paid by the company, while others felt that the extent of buy in and commitment from the company and the senior management team was more important than a cash contribution.

Overall, the Programme was considered well managed and straightforward, although improvements could be made through:

- more effective follow-up from BG advisors and some account managers. A suggestion to address this was to put additional resources into the Programme Management Team to carry this out directly;
- using the Enquiry, Fulfilment and Research Service (EFRS) team in SE to secure the feedback from companies;
- ongoing review of the contractors to ensure they match companies' needs. This would be particularly relevant to any more intensive support Programme; and
- a review of the staffing required to deliver the Programme in the context of complementary new programmes.

The Offshore Wind Industry Group needs to refocus on the realistic opportunities for Scottish suppliers, and the Programme should reflect any new strategy that is developed.

3.3 Account Managers

A total of 11 Account Managers of businesses that received expert support were interviewed. Their views were sought on: the Programme; the quality of advice provided by the consultants to the businesses; and the outcomes (to-date or anticipated) from the advice. The knowledge of the account managers was variable depending on their contacts with the businesses (with regard to this Programme and more generally), how long they have been the account managers for those businesses who had received ESP, and whether they are still the account managers to these businesses.

Overall, it is considered that the feedback from the account managers is likely to be representative of the experience of the 186 companies that have received support since the Programme began in October 2011. Some account managers were more systematic than others in monitoring the process and the outcomes with respect to individual companies - probably reflecting the way that they prioritise and analyse their work more generally. The feedback related to the experience of 19 businesses that received the expert support, at least four of which had inputs from more than one specialist consultancy.

Overall

- relative to the short time available from the consultants, and taking into account the need for them to familiarise themselves with the circumstances and ambitions of the businesses they are advising, the quality and comprehensiveness of the support were generally considered good;
- assisted businesses have been helped to gain a realistic appraisal of their competitiveness in what would be a new market for them, the product innovation required to compete successfully, and their scope to develop products that would be new for them (albeit usually closely related to their current activity);
- there were few examples of substantial action and benefits to the company achieved to date;
- the biggest constraint is the stage of the development of the sector in Scotland and there was a potential danger that the opportunities may have been “over hyped” which might subsequently put off companies from diversification;
- there were concerns that Scottish companies had not yet established their position with supply chains serving overseas developments and as a result the developers of future Scottish sites may use their existing, non-Scottish suppliers; and
- with many companies already serving the oil sector, the attractiveness of the OSW market will depend on the oil price and returns from supplying oil and gas as much as the scale of opportunity in OSW.

Quality of Advice and Contractors

- the contractors were broadly seen to be of good quality and relevant to the needs of the companies;
- the most important attribute was the specialist knowledge and experience of the consultants. This specialism was not available from contractors who are otherwise on the business support frameworks; and
- one strength of ESP is its flexibility where within a two day consultancy, advice can span adapting existing products and services, developing new services, and being given names of potential customers.

Follow Up and Fit to Wider SE and HIE Supports

- most account managers interviewed who were working with the companies at the time of the support were closely involved in the project at the time of determining follow up;

- where the expert advice led to the businesses deciding against diversifying into offshore wind, this was considered useful in saving them unproductive time and cost and in prioritising their new business aspirations;
- most saw the suite of existing business support programmes being appropriate to support follow up, particularly supports for internationalisation, market development, SMAS, innovation and general business strategy support;
- some account managers felt it was important to position follow up within the account management/business gateway structure, feeling that priority should remain on companies with the prospect of high growth. If companies who had participated in the Programme and as a result, or subsequently, became account managed they should then receive more intensive support; and
- in most cases where potential diversification was indicated, the slow speed of development of the sector in Scotland has meant that opportunities are still in the future. Meantime, some assisted companies have ceased trading or been taken over or the key individual in the company had left, preventing any follow up action.

Some of the More Effective Projects

- where ESP is given to small companies, including those not currently serving the energy sector. It was thought that often it was more difficult within the time available to make a difference for a larger company;
- HIE regarded the five day consultancy from DNV - GL (formerly GL Garrad Hassan) for SE and Global Energy Group (GEG) as a good example of the more intensive consultancy that can be required for larger companies. A workshop at Nigg was held to help GEG subsidiaries appreciate O&M opportunities from offshore wind, with very detailed and comprehensive slides produced by DNV-GL for the workshop and a 29 page report produced subsequently;
- where ESP contractors help companies reach the conclusion that the sector was not appropriate to prevent further inappropriate investment; and
- at least one technical feasibility report has been used extensively by the assisted businesses in seeking investment in their product.

How the Programme Could Be Improved

In the main, the Programme was seen to be effective and fit within other non sector/technical specific business supports. Suggestions for how it could improve included:

- although there have been examples of extended periods of advice, some account managers would like more discretion in approving assistance beyond the standard two days (e.g. up to six days);
- continued use of sector specific advisors rather than the more general advisors available in other support frameworks;
- rather than look to establish new programmes, it might be more appropriate to ensure that the sectoral/technical expertise for OSW is more embedded into existing supports;

- advice should be designed to provide more practical market information for companies such as identified potential customers and contact names within these. It is understood however that there are Data Protection issues which may prevent this;
- introduction of a short period of advice from the advisor to identify what advice, if any, they could usefully provide the company and then as a second step, a decision is then taken between the account manager and the company on whether further support is provided; and
- there should be clearer evidence where ESP and the OSW sector has generated real company benefits to encourage others to participate in the Programme and seek to diversify into the market.

Other Points

- some applications on which advice has been given are relevant to onshore as well as offshore wind;
- many companies had as much other work as they could cope with while the oil price was high, and some might benefit from refreshed advice when diversification could become of greater interest to them; and
- the opportunities for Scottish companies are expected to be largely restricted to Operations and Maintenance and Foundations.

3.4 Expert Support Programme Contractors

Introduction

The discussions with five ESP contractors revealed a consensus across all the issues discussed. We therefore provide a composite report.

Main Issues Facing Companies

The ESP contractors highlighted a number of key issues facing companies wishing to supply the offshore renewable energy sector. These are:

- the lack of activity in the Scottish offshore wind market. Currently there are no offshore wind projects moving into the development stage, so there is no construction or operations to which Scottish companies can supply. The uncertainty around consents moving to construction and operational phases is a barrier to companies being able to supply the sector;
- ignorance - companies have limited if any knowledge of the sector and its requirements;
- lack of a track record upon which to trade. Tier 1 projects have been serviced by German and Danish companies and therefore going forward Scottish companies would need to displace these companies who have a well established track record - developers tend not to consider Scottish and British companies as suppliers;
- a lack of understanding where they as a company fit within the market - how far down the supply chain they are, who to contact, when to contact, an appropriate procurement strategy and where to find opportunities; and

- a lack of understanding of how to market themselves to developers. They don't know how to approach a developer in a way that highlights how they can supply exactly what the company can offer.

Relevance of the Programme

The relevance of the Programme varied across companies:

- it is very helpful to companies who have so far done very little in terms of exploring the market. It provides them with very useful insights, and often leads them to deciding that the market is not for them - this is seen as much a positive outcome than if the company went ahead in seeking to supply the sector;
- it is less effective for companies who want to enter the market and are simply looking for the Programme to provide them with a list of contacts within the sector; and
- the two-day Programme can only provide a company with so much insight into the sector, and few SME's are able/willing to fund consultant rates beyond the two days and therefore receive no further support.

Actions Taken To Move to Supply the Sector and the Impact

The ESP contractors were able to highlight very little activity undertaken to supply the sector by the companies to whom they had provided support. The key factor here was the state of the market, with very limited activity. Commonly they suggested that there was little if any conversion from receiving support to actually supplying the sector. It is proving difficult to find where a company fits into the supply chain and then displace existing well established overseas companies.

One of the contractors was involved in the early pilot of the Programme some four or five years ago and some have had some more recent success in winning contracts, but the ESP contractor is unsure the extent to which this is directly linked to their involvement in the pilot. These well established companies are operating in: the subsea market; the provision of training services; and construction and manufacturing for the energy sector. The contractor, given the time lapse since providing the support and today has no details as to the scale and nature of any contracts, and the impacts on turnover or jobs.

Often contractors had worked with companies over the 2 days but had no subsequent contact with any of them. Once the report had been finalised and agreed with the company and SE there had been no follow up aimed at ascertaining whether the company had taken any further action aimed at becoming part of the sector's supply chain.

Some reports provided recommendations as to how the company needs to move forward, actions they need to take, who their competitors are, potential customers (these were typically European or English based companies) and the procurement portals they need to register with to access opportunities. The extent to which companies had acted upon the recommendation was largely unknown.

Additionality

The Programme was seen as being additional by the contractors in the following terms:

- time additionality:
 - the Programme saves companies a significant amount of time in terms of gathering the information that they require in order for them to make an informed decision as to whether or not the sector is one that they can supply. Some of the smaller companies would simply not have the resources - staff and financial - to gather all the information that they would need;
- quality additionality:
 - without the comprehensive information set provided by the Programme companies could reach sub-optimal decisions which could have important implications for company behaviour. For some companies the two-day support is sufficient to answer all their questions enabling them to reach the view that the offshore energy sector is not for them, thus helping to ensure that optimal business decisions are being made
 - ESP provides access to a wide range of experts which means that the quality of information, advice and guidance provided will be greater than that which the company could realistically gather themselves; and
- absolute additionality:
 - small companies can lack the resources - financial and human - to enable them to effectively research the OSW sector, and without the support available through the ESP they would be unlikely to pursue opportunities.

Programme Processes

ESP contractors viewed the Programmes processes as effective and efficient:

- the workshops and events are key to the success of the Programme as they provide companies with a useful grounding in the sector;
- the application form that companies have to complete is very comprehensive and if filled out well gives the contractors a good start as it tells the background to the company;
- most were well matched to the companies offered to them by SE. They were not sure how SE identified a match between a contractor and a company but this process works well most of the time. On occasions a company was not “right” for them and so declined to work with them; and
- the reporting requirements to SE work well. SE executives are approachable and highly competent, and the contactor meetings, at which SE were receptive to constructive feedback, are welcomed.

Appropriateness of the Support to the Needs of the Sector

The ESP contractors feel that the presentations, events and the two day support works well and provides companies with good insights into the market and whether the company will be able to enter the supply chain, if so what they need to do to be successful. Some contractors suggested that the events may have run their course as the same companies seem to attend, and there is little happening in the market, whilst some suggested that they may still have a place in the Programme but the focus should shift more towards offering support to companies who have something to offer the market.

However, the ESP contractors' view is that the two-day support can only provide a very general overview of the market and a company's place, or potential place within it. As the market progresses a more considered view needs to be taken as to where a potential Scottish supply chain can operate rather than providing a broad brush description of the sector. The recommendation is to not target all areas across the sector, but rather focus on where Scottish companies have an advantage - for example port related services, and on-going maintenance.

Meet the buyer events are often successful mechanisms for assisting companies into a supply chain relationship. However, crucial to their success, is timing and it is probably a little too early for SE to promote this type of activity.

Some suggested that there may be some scope in seeking to link Scottish companies to potential customers in overseas markets where the offshore wind sector is well established. Some work needs to be done to identify gaps in these supply chains and then develop initiatives aimed at filling these gaps.

However, the issue still remains the lack of development and construction activity and therefore a lack of orders - this is unlikely to change much before 2017.

4. Business Survey Results

4.1 The Surveyed Companies

Companies who participated in the Expert Support element of the Offshore Wind Diversification Support programme were surveyed. For those who were expected to have experienced more impact this was undertaken by telephone with the remainder being invited to participate in an on line survey.

Table 4.1 sets out the survey targets and response rates. The sample who were invited to participate in the survey was 132 companies, rather than the 204 who had received ESP support. Two factors were at play here: first, some companies were no longer operating; and SE's policy of allowing companies to be contacted no more than once every six months excluded others from the survey.

Following an introductory email by Scottish Enterprise to participating companies and 10 attempts by phone to complete the telephone survey and 3 attempts by email invitation for the on line survey, a total of 25 responses were secured. This represents a response rate of 19% overall, with the telephone survey achieving a 41% response rate. The confidence interval for the survey is therefore +/-17.71% - caution should therefore be exercised when interpreting the results.

Table 4.1: Survey Responses

Sector	Total Targeted	Actual	Response Rate
Telephone	29	12	41%
On Line	103	13	13%
Total	132	25	19%

Those who were contacted by telephone and who refused to take part in the survey did so for the following reasons:

- lack of time (2);
- contact has left the company and no one else could help (4);
- contact was outside consultant who could not give the requested information (1);
- contact was unaware of the Programme (1); and
- company had not yet taken up offer of support (1).

It was not possible to speak to the remaining contacts.

4.2 The Characteristics of Survey Participant Companies

The characteristics of the respondent companies surveyed are set out in the following tables.

Sector

The companies are in a range of sectors, but most commonly in the manufacturing and oil and gas sector with 3 already regarding themselves as operating mainly in renewables.

Business Performance Indicators

After excluding 2 outliers, responding companies are experiencing modest expansion in terms of Scottish employment with a 10% increase in FTEs in 2014. See **Table 4.2**.

Table 4.2: Employment in Scotland by Year (FTEs)

Year	Average	Total	Response Count
2012	68.43	1,574	23
2013	71.04	1,634	23
2014	77.52	1,782	23

Source: Company Survey (Telephone and On Line) All Respondents

When questioned as to changes in turnover in the period 2012 to 2014 not all companies provided data, and not all provided data for each year. **Table 4.3** presents the details.

Table 4.3: Turnover in Scotland by Year

Year	Average	Total	Response Count
2012	£4.1m	£90.1m	22
2013	£5.2m	£120.5m	23
2014	£5.6m	£133.8m	24

Business Strategy

Table 4.4 sets out the business strategies of the surveyed companies. These growth patterns are reinforced by the business strategies adopted where 68% are seeking to diversify into other markets; 60% to grow in existing markets with only 4% planning contraction. Compared to the review in 2013, there is an increase in those with a diversification strategy (from 46% to 68%) and smaller increases in the number of companies seeking to grow in existing markets (from 57% to 60%) and export in new markets with existing products (from 24% to 32%) and exporting to new geographical markets (from 24% to 28%).

Table 4.4: What is your overall business strategy? (multiple answers allowed)

N=25	% Responses	Number Responses
Diversify into other markets	68%	17
Growth in existing market	60%	15
Continue existing operations, broadly as is	44%	11
Export in new markets with existing products / services	32%	8
Export to new geographical markets	28%	7
New product / process development	28%	7
Contraction	4%	1
Other (please specify)	8%	2

Source: Company Survey (Telephone and On Line) All Respondents

Supply Chain

On average, respondents reported that 57% of supplies were purchased from Scottish suppliers. Table 4.5 sets out these results.

Table 4.5: Approximately what percentage of your supplies (in terms of value) come from Scottish-based suppliers?

N=24	Average Scottish suppliers	% Respondents	Number Responses
0-25%		25%	6
26-50%		20%	5
51-75%		17%	4
76-100%		38%	9
Average Scottish suppliers for all companies	57%		

Source: Company Survey (Telephone and On Line) All Respondents

Involvement with SE & HIE

Almost half reported that they were account managed by either SE or HIE with 63% reporting that they had received some form of support from Scottish Enterprise; 45% reporting that they had received support from Business Gateway and 18% reporting that they had received support from SDI. Table 4.6 to 4.8 illustrates this support was in a range of areas.

Table 4.6: Is your company an account managed company by Scottish Enterprise or Highlands and Islands Enterprise?

	Yes	No	Don't Know	Response Count
Scottish Enterprise	10	11	3	24
Highlands and Islands Enterprise	1	19	2	22

Source: Company Survey (Telephone and On Line): All respondents

Table 4.7: Has your organisation received any financial or other support for business development activities?

	Yes	% Yes	No	Don't Know	Response Count
Scottish Enterprise	15	63%	8	1	24
Highlands & Islands Enterprise	1	4.5%	19	2	22
Business Gateway	10	45%	9	3	22
Scottish Development International	4	18%	16	2	22

Source: Company Survey (Telephone and On Line): All respondents

Table 4.8: Can you provide details of this support? (multiple answers allowed)

	SE	HIE	BG	SDI	Response Count
General business advice	9	1	9	1	14
Export / Internationalisation	1	0	0	3	4
Market	4	0	4	2	7
Management and leadership development	0	0	2	0	2
New product development	6	0	1	0	6
Loans / Grants	9	0	1	1	9
IT / ICT	0	0	2	0	2
Other	1	0	0	0	1

Source: Company Survey (Telephone and On Line): All respondents Other: Company directory support

4.3 Experience of the Programme

First Heard about the Programme

The workshops were the most common route to find out about the programme with word of mouth and email also important. There seems more limited referral from business advisors. Table 4.9 sets out these results.

Table 4.9: How did you find out about the programme? Tick all that apply

N=25	% Responses	Number Responses
Attended a workshop / seminar	52%	13
Word of mouth	24%	6
E-mail	20%	5
A business advisor	12%	3
Don't remember	12%	3
A business advisor (all Scottish Enterprise)	12%	3
Website	4%	1

Source: Company Survey (Telephone and On Line). All respondents

The introduction of the one-to-one meetings with the expert practitioners has been well used by the companies. Only 20% did not attend a workshop/seminar and 16% report NOT participating in ESP element, perhaps (as the survey was only sent to companies who participated in ESP) indicating situations where there has been changes in personnel within the participating companies.

Support Received

Table 4.10 to 4.11 reports the supports received by the respondents and the reasons they sought this support. For those who reported using Expert Support (21), the reasons for participation were broadly aligned to SE's aims of providing greater awareness of the sector, improved information on the market and help to understand how individual businesses would fit within this market.

Table 4.10: Which elements of the support did you receive? (Multiple answers allowed)

N=25	% Responses	Number Responses
Expert Support (2 days of free advice from an expert)	84%	21
Attended seminars / workshops	80%	20
Attended one to one meeting with expert practitioners	68%	17
Used fact sheets and publications	36%	9

Source: Company Survey (Telephone and On Line). All respondents

Table 4.11: Why did you seek Expert Support? (Multiple answers allowed)

N=21	% Responses	Number Responses
To gain a greater understanding of how my organisation might supply the sector	71%	15
To gain a greater information on market conditions	71%	15
To secure advice on how my organisation might grow to take advantage of opportunities	67%	14
To take advantage of any free advice	43%	9

Source: Company Survey (Telephone and On Line): Those who used Expert Support Programme

Table 4.12 reports that the programme was rated useful to very useful in terms of its relevance, value to the organisation and the quality of the advisor, with only 10% of companies reporting these aspects as being not very useful or not useful at all to their company.

The programme has performed slightly less well in its ability to take the company closer to supplying the sector.

Table 4.12: Considering the Expert Support you received, how would you rate it for:

N=21	Very Useful	Useful	Neither /Nor	Not very useful	Not useful at all	Average Score
Relevance to your organisation	57%	33%	0%	5%	5%	1.33
Value to your organisation	52%	19%	19%	5%	5%	1.10
Quality of advisor	57%	29%	5%	5%	5%	1.29
Ability to take you closer to supplying the Offshore renewables sector	38%	19%	19%	19%	5%	0.67
Clearer “next steps” to develop your organisation	43%	19%	14%	19%	5%	0.76
Its management and administration	33%	19%	33%	10%	5%	0.67

Source: Company Survey (Telephone and On Line): Those who used Expert Support Programme. Average Score where Very Useful = 2; Useful = 1; Neither/Nor = 0; Not Very useful = -1; Not useful at all = -2

As set out in **Table 4.13**, compared to the results from the 2013 review of a smaller sample of 9 participants, the programme performs substantially better in all aspects, particularly in providing clearer next steps to develop their organisation.

Table 4.13: Rating of Expert Support Programme as useful or very useful comparing 2013 Review and 2015 Evaluation.

	2013 Review	2015 Evaluation
Relevance to your organisation	77%	90%
Value to your organisation	55%	71%
Quality of advisor	63%	86%
Ability to take you closer to supplying the Offshore renewables sector	33%	57%
Clearer “next steps” to develop your organisation	22%	62%
Its management and administration	n/a	52%
Total	9	21

Source: Company Survey (Telephone and On Line) and 2013 Review.

The companies were also asked in an open question if they had any other comments on the programme. Of the six comments received, these were: Needs better follow up (3); a complete waste of time (1); would be more relevant to larger companies (1); only received 3 hours support to suit advisor (1).

The programme was seen to provide useful insights to the market by just under half of respondents and 24% stated that they also received contacts in the sector, which was not an original aim of the programme. See **Table 4.14**.

Table 4.14: Overall, what benefits were achieved by securing support?

N=24	% Responses	Number Responses
Useful Insights into the Market	48%	12
Contacts	24%	6
None	12%	3
No Reply	16%	3

Source: Company Survey (Telephone and On Line): Those who used Expert Support Only. Analysis of responses to open ended question.

For information, **Table 4.15** reports which expert advisor the responding company received support from.

Table 4.15: From which expert advisor did you receive support?

Advisor	% Responses	Number Responses
BVG Associates	38%	8
DNV-GL (formerly GL Garrad Hassan)	14%	3
NAREC	0%	0
Optimat	19%	4
PMSS	5%	1
SgurrEnergy	19%	4
Xodus Group	5%	1

N=21. Source: Company Survey (Telephone and On Line): Those who used Expert Support Programme

Only 63% of companies reported receiving follow up from the programme, although when received this was seen by 62% of companies to be of some value. See **Table 4.16 and 4.17**.

Table 4.16: Did you receive any follow up after the 2 day Expert Support?

N=21	% Responses	Number Responses
Yes	62%	13
No	38%	8

Source: Company Survey (Telephone and On Line): Those who used Expert Support Programme

Table 4.17: How would you rate the follow up support you received?

N=13	% Responses	Number Responses
Very Useful	31%	4
Useful	31%	4
Neither / Nor	31%	4
Not Very Useful	0%	0
Not At All Useful	8%	1
Average Score		0.77

Source: Company Survey (Telephone and On Line): Those who report receiving follow up. Average Score where Very Useful = 2; Useful = 1; Neither/Nor = 0; Not Very useful = -1; Not useful at all = -2

4.4 Taking Action Following the Programme

The number of companies who reported taking action after the Expert Support programme is broadly half with slightly more (52%) reporting taking action than not (48%). See **Table 4.18**.

Table 4.18: Following Expert Support have you taken any actions to move to supply the offshore renewables sector?

N=21	% Responses	Number Responses
Yes	52%	11
No	48%	10

Source: Company Survey (Telephone and On Line): Those who received Expert Support

As set out in **Table 4.19**, the most common reasons for not taking action to diversify into the sector were reported as the lack of opportunities in Scotland (50%) and elsewhere (40%) and a feeling that the sector no longer fit with their business.

Table 4.19: Why haven't you progressed the exploitation of offshore renewables? (Multiple answers allowed)

N=10	% Responses	Number Responses
No realistic opportunities for my business in Scotland	50%	5
No realistic opportunities for my business elsewhere	40%	4
Lack of existing contracts / opportunities currently	40%	4
After advice, no longer feel the sector is relevant to my business	30%	3
Doesn't fit with our current business strategy	30%	3
We have wrong products / skills to exploit the sector	10%	1
Low margins	10%	1
Requires too great an investment for my business	10%	1
Lack of time	10%	1
Other (please specify)	20%	2

Source: Company Survey (Telephone and On Line): Those who received Expert Support but didn't take action following this (10). Other: Already working in sector without this support (1); market conditions changed (1)

Table 4.20 reports that just over half the surveyed businesses took some action with almost all of these making contact with contractors and forming collaborations/partnerships within the sector. In addition nine companies (82%) of companies had already submitted 19 tenders and seven companies (64%) of companies have been awarded a total of 7 contracts. This highlights that although just over half of the surveyed businesses took some action, when they did, they were responsible for a large number of actions.

Table 4.20: What actions and approximately how many of these actions have you taken?

Actions	Average Actions per company	Total Actions	Number Responses
Made contact with contractors	4.6	46	10
Developed new products / services to serve the sector	2.78	25	9
Submitted a tender	2.11	19	9
Formed a collaboration / partnership to supply the sector	1	10	10
Been awarded a contract	1	7	7
Other	2.00	6	3

N=11. Source: Company Survey (Telephone and On Line): Those who took action. Others: Attended exhibitions (1); Contacted existing clients (1); collaborations with others seeking to serve the sector (1)

Table 4.21 sets out the geographical location of these actions. They were predominantly in Scotland implying that these were focused on supplying lower tier contractors who were subsequently selling outside Scotland.

Table 4.21: Where have these actions been?

N=11	Scotland	Rest of UK	Other North Sea Countries	Rest of Europe	Rest of World	Number Respondents
Made contact with contractors	9	8	3	3	1	11
Developed new products / services to serve the sector	4	1	2	1	0	5
Formed a collaboration / partnership to supply the sector	7	3	2	1	1	7
Submitted a tender	7	4	2	1	1	7
Been awarded a contract	4	1	1	1	0	4
Other	2	2	0	1	0	3

Source: Company Survey (Telephone and On Line): Those who took action

Table 4.22: Which subsectors are you targeting? (Multiple answers allowed)

N=11	% Responses	Number Responses
Offshore wind	91%	10
Tidal	46%	5
Wave	18%	2
Other (please specify)	9%	1

Source: Company Survey (Telephone and On Line): Those who took action. Other: Marine Support and Supply.

Table 4.22 shows that respondent companies are predominantly targeting offshore wind, but almost half also targeting tidal and Table 4.23 reports that the predominant technical area being targeted is Operations and Maintenance (64%) and professional services (37%), perhaps reflecting Scotland's existing expertise in offshore activities.

Table 4.23: Which broad technical areas are you targeting? Please tick all that apply

N=11	% Responses	Number Responses
Operations and maintenance	63.6%	7
Professional services	36.4%	4
Turbine / blade manufacture	18.2%	2
Foundation	9.1%	1
Electrical / connections to the grid	9.1%	1
Other (please specify)	27.3%	3

Source: Company Survey (Telephone and On Line): Those who took action. Other: Manufacturing (1); Marine Support and Supply (1); Product and infrastructure support (1).

4.5 Activity in the Offshore Wind Sector

Just under half the companies who have taken action are already supplying the sector and most of the others are expecting to supply the sector in the near future. While this represents a strong conversion of those who have taken action following participation in the programme to the generation of sales, this represents only 4.5% of the business of these companies. See Table 4.24 below.

Table 4.24: Are you currently or expecting to supply the offshore renewables sector and if so, what % of your business is in the sector?

N=11	% Responses	Number Responses
Currently supplying	45.5%	5
Expect to start supplying in near future	45.5%	5
Don't expect to supply in the near future	9.1%	1
Approximately what % of your business is currently in the sector?	4.5%	4

Source: Company Survey (Telephone and On Line): Those who took action.

Four companies provided data on the value of contracts won in the offshore wind sector - the values varied from £3m to £35,000, at an average of £820,000.

Although a very small sample, the companies who are currently supplying the sector report that most of this is to Scotland (55%) with only 22.5% sold outwith the UK. See Table 4.25.

Table 4.25: Roughly, what percentage of sales are in the following area?

Location	Response Average	Response Count
Scotland	55%	4
Rest of UK	22.50%	3
Other North Sea countries (e.g. Denmark, Netherlands)	10%	2
Rest of world	7.50%	1

N=4. Source: Company Survey (Telephone and On Line): Those who are currently or expecting to supply in the near future. (5 with 1 not responding)

Benefits to Businesses

Tables 4.26 to 4.29 set out the benefits to the respondent businesses. Of the 5 companies who are currently supplying the sector, 3 (60%) reported an increase in turnover and 2 (40%) an increase in employment. Of the companies reporting an increase in employment, this totalled 4 FTEs.

Table 4.26: As a result of the support has your organisation already increased its turnover/employment?

N=5	Yes	No	Response Count
Turnover	60%	40%	5
Employment	40%	60%	5

Source: Company Survey (Telephone and On Line): Those who currently supplying.

Only two companies provided data on the value of contracts won to date as a direct result of participating in the Programme - for one company this was £35m, for the other the value was a more modest £100,000.

A small number of companies were able to forecast turnover increases as a result of participating in the Programme. Table 4.27 presents the details.

Table 4.27: Forecast Turnover Increases 2015 - 2017

	Response Average	Response Total	Response Count
2015	£1.55m	£12.42m	8
2016	£1.55m	£12.43m	8
2017	£1.38m	£12.46m	9

A modest increase in employment is forecast by the companies who are currently and expect to supply the sector in the near future growing to 6.11 FTEs per company in 2017.

Table 4.28: Over the next 3 years, by how much do you think your employment will increase as a result of receiving the support in FTEs?

	Response Average	Response Total	Response Count
Additional FTE Jobs 2015	5.38	43	8
Additional FTE Jobs 2016	5.88	47	8
Additional FTE Jobs 2017	6.11	55	9

Source: Company Survey (Telephone and On Line): Those who currently supplying.

An average of 1.33 FTEs (22%) of FTEs created by the programme are expected to live outside Scotland.

Table 4.29: Of the jobs that will be / have been created or safeguarded as a result of participating in the Offshore Renewables Diversification Support, what number have been or are expected to live OUTSIDE Scotland.

N=9	Response Average	Response Total	Response Count
Have been created	0	0	7
Will be created in the future	1.33	12	9

Source: Company Survey (Telephone and On Line): Those who are currently or expecting to supply in the near future.

4.6 How the Programme Could be Improved

The survey asked the companies how they felt the programme could be improved. The most common support sought is help in making contacts in the sector (88%) followed by Meet the Buyer events (64%) and sector specific events (48%) with a smaller proportion seeking exporting/trade support (28%). See **Table 4.30**.

Table 4.30: What other support, if any, would help you to exploit the offshore renewables market further? (multiple answers allowed)

N=25	Response Average	Response Count
Help making contacts in the sector	88%	22
Meet the buyer events with tier 0, 1 and 2 level contractors	64%	16
Sub-sector specific events e.g. operations and maintenance, foundations etc.	60%	15
Short, free 1 hour session of advice from expert practitioners	48%	12
General financial support	44%	11
Export / trade support and advice to target overseas opportunities	28%	7
Nothing	8%	2
Other (please specify)	4%	1

Source: Company Survey (Telephone and On Line): All respondents. Other: help making contacts to MDs of potential clients.

Companies were explicitly asked if more indepth expert help would be of value. 76% of companies saw this of value. Of this group, 47% were willing to contribute part or all of the costs of the advice.

Table 4.31: Would more in depth expert support be of value?

N=25	Response Average	Response Count	% of those wanting in depth support
Yes, but only if it was fully paid by the public sector	40%	10	53%
Yes, but only if the public sector contributed to the full costs	24%	6	31%
Yes, and happy to meet all costs	12%	3	16%
No	24%	6	

Source: Company Survey (Telephone and On Line): All respondents

Finally, as reported in **Table 4.31**, companies were asked in an open question if they had any suggestions on how the programme could be improved. Improvements suggested were:

- improved follow up (4): with advisor, or follow up seminar with participants;
- better marketing/introduction (2): to raise profile; understanding of what it involves and better understanding of benefits;

- longer support (1);
- meet the buyer events (1);
- adjust to needs of smaller companies (1); and
- stop the expert support (as seen to be waste of money) (1).

5. Economic Impact Assessment

5.1 Introduction

This Chapter reports the economic impacts associated with companies receiving support from the OWDS Programme. It is derived from information and data obtained from the company surveys.

The survey questionnaire asked questions aimed at establishing whether, as a result of the receiving support from the Programme, companies had achieved turnover or employment growth:

- as a result of participating in the OWDS Programme has your company **already** increased its turnover/employment; and
- what do you **forecast** the turnover/employment of your business activities in Scotland will be over the next 5 years, and what would it be had you not participated in the OWDS Programme.

In addition information was collected to provide insights into deadweight, displacement, leakage, and multiplier effects, the answers to which were used to calculate the economic impact - or additionality - of participating in the OWDS Programme.

The economic impact assessment has been calculated at the Scotland level.

5.2 Method

The method adopted in estimating the economic impact - or additionality - of the OWDS Programme is consistent with SE guidance⁹. The guidance recognises that most SE interventions will have both positive and negative effects. In appraising or evaluating the effects of an intervention it is important that all of these are taken into account in order to assess the additional benefit or additionality of the intervention - in other words, the net changes that are brought about over and above what would take place anyway.

The additional benefit of an intervention is the difference between the reference case position (what would happen anyway) and the position if/when the intervention (intervention option) is implemented. An initial assessment of the reference case to deduct deadweight from the intervention option leads to the identification of the **gross direct effects**. Following identification of the gross direct benefits, account is then taken of factors such as:

- displacement:
 - displacement is the proportion of intervention benefits accounted for by reduced benefits elsewhere in the target area. Displacement arises where the intervention takes market share (called product market displacement) or labour, land or capital (referred to as factor market displacement) from other existing local firms or organisations;
- substitution:
 - substitution arises where a firm substitutes one activity for a similar one to take advantage of public sector assistance;

⁹ <http://www.evaluationsonline.org.uk/evaluations/help/guidance.htm>

- leakage:
 - leakage is the proportion of outputs that benefits those outside the programme or target area;
- optimism bias:
 - optimism bias is the tendency for those involved in projects, as funders, managers or beneficiaries, to be too optimistic in terms of forecasting project costs, scale, timing and benefits. Optimism bias adjustment often reduces the forecast benefits over the expected duration of the project; and
- multipliers:
 - economic benefits of an intervention are multiplied because of knock-on effects within the economy.

When these factors have been applied to the gross direct effects we are left with **net additional** economic impact. For brevity only the businesses that reported turnover and/or employment growth as a result of participating in the OWDS Programme have been included in the analysis.

5.3 Economic Impact Measures

5.3.1 Introduction

This section details the impacts in terms of:

- gross turnover and GVA;
- gross employment;
- deadweight;
- leakage;
- displacement;
- substitution;
- optimism bias;
- multiplier effects;
- net additional turnover;
- net additional jobs; and
- GVA.

As highlighted at the beginning of Chapter 4 the response rates provide a relatively high confidence interval of +/-17.71% and therefore these results need to be interpreted with caution. For this reason we do not attempt to gross up the results to the population of supported businesses as a whole.

5.3.2 Gross Sales, GVA and Employment

Turnover and GVA

Details of the gross turnover, and estimates of GVA, are reported in **Table 5.1**¹⁰. Not every respondent was willing or able to provide turnover data.

Table 5.1: Turnover 2014 and Estimates of GVA

Responses	Total		Average		Range	
	Turnover	GVA	Turnover	GVA	Turnover	GVA
24	£133.8m	£67.4m	£5.6m	£2.81m	£0.02m - £33m	£0.01m - £13.6m

There is a significant variation in the turnover of OWDS Programme companies:

- six companies had a turnover of less than £250,000;
- seven companies had turnover between £250,000 and £1m;
- six companies had turnover of between £1m and £10m;
- four companies had turnover of between £10m and £30m; and
- one company had turnover in excess of £30m.

Employment

Details of the employment levels in 2014 are reported in **Table 5.2**.

Table 5.2: Employment (FTEs) 2014

Responses	Total	Average	Range
25	5,052	202.1	2 - 3,265

There is a significant variation in employment levels within supported companies:

- eight companies had less than 10 employees;
- nine companies employed between 10 and 50 people;
- three companies employed between 51 and 99 people;
- three companies employed between 100 and 500 people;
- one company employed between 501 and 1,000 employees; and
- one company employed more than 3,000 employees.

5.4 Gross to Net

In order to progress from gross impacts it is necessary to take account of the factors discussed above that can detract from or enhance economic impact.

¹⁰ Gross GVA has been estimated using a turnover:GVA ratio from the latest (2012) Scottish Annual Business Statistics - available at <http://www.gov.scot/Topics/Statistics/Browse/Business/SABS/SABS-PDF>. The ratios were calculated for individual sectors of companies included in the survey.

5.4.1 Realised Impacts

Deadweight

Respondents were asked whether, as a result of participating in the Programme, they had achieved turnover or employment growth.

Only 3 companies reported that as a result of participating in the Programme they had already increased turnover, although only two provided data of the value, as reported in Table 5.3. Table 5.3 also includes estimates of the gross GVA associated with this turnover increase - the ratios used have been calculated for the specific sector of the companies involved.

Table 5.3: Turnover Growth (and estimated GVA) Attributed to the Programme

Responses	Total		Average		Range	
	Turnover	GVA	Turnover	GVA	Turnover	GVA
2	£35.1m	£20.7m	£17.6m	£10.3m	£0.1m - £35m	£0.04m-£20.7m

Both these companies had turnover in 2014 in excess of £20m.

Only 2 companies reported that as a result of participating in the Programme they had already increased employment, as reported in Table 5.4.

Table 5.4: Employment Growth Attributed to the Programme

Responses	Total	Average	Range
2	4	2	2

We therefore apply the following deadweight factors:

- 0% - 2 companies; and
- 100% - 23 companies.

A direct link between turnover growth and employment growth is not evident from these data i.e. a £35m increase in turnover should, intuitively, result in employment growth well in excess of the reported numbers. A number, or combination, of factors may be at work here which given the nature of the survey we were unable to investigate:

- time lags -the order may have been secured and contracts signed but employment levels required to fulfil the contract have yet to be recruited;
- sub-contracted labour - the reported employment growth relates to full time permanent recruits with the bulk of the contract being serviced by sub-contracted labour, which has not been included in the reported job growth figures; or
- the bulk of the contract is being delivered overseas using overseas staff - however the data would not support this explanation as low levels of leakage was reported.

For brevity the businesses did not attribute turnover or employment to the Programme have been excluded from subsequent analysis.

Leakage

Leakage is the proportion of outputs that benefits those outside the programme or target area. The survey questionnaire asked whether any of the jobs created as a result of participating in the Programme have been taken by employees who live outside Scotland¹¹. None of the employees were reported to live outside Scotland.

Leakage is therefore assessed at 0%.

Displacement

Our investigation of displacement considered those factors that would dilute the gross impact of any increases in business activity as a result of their involvement in the programme. It included collecting information on the geographic location of major competitors.

One company reported that 10% of its competitors were located in Scotland, and one company that all its competitors were located in Scotland.

Table 5.5 reports the displacement factors for two companies reporting turnover or employment growth as a result of the OWDS Programme.

Table 5.5: Displacement

Level of Displacement	N° of Companies
10%	1
100%	1

As a result of one company saying that all its competitors are Scotland based results in the reported impacts will be based on one company

Substitution

Substitution arises where a firm substitutes one activity for a similar one to take advantage of public sector assistance. There was no likelihood of a substitution effect as a result of participating in the Programme and therefore for all companies substitution has been assessed as 0%.

Optimism Bias

This is not relevant as the impacts have already been realised - optimism bias focuses on forecast outputs and outcomes.

Multipliers

The increase in economic activity as a result of a company participating in the Programme will have two types of wider impact on the economy:

- **supplier effect:** an increase in sales in a business will require it to purchase more supplies than it would have otherwise. A proportion of this ‘knock-on’ effect will benefit suppliers in the Scottish economy; and
- **income effect:** an increase in sales in a business will usually lead to either an increase in employment or an increase in incomes for those already

¹¹ Leakage can also occur when the operating profit created by the beneficiary goes to shareholders or others who live outwith Scotland. Given the difficulties in assessing this type of leakage we have made no attempt to calculate it.

employed. A proportion of these increased incomes will be re-spent in the in the Scottish economy.

We have applied Scottish level Type II multipliers that are relevant to the main business activity of each of the companies - employment multipliers for the jobs impact and GVA multipliers for the estimated GVA impacts¹². Table 5.6 presents the details.

Table 5.6: Type II Multiplier Values (latest year - 2011)

Sector	GVA	Employment
Public Sector	1.8	1.7
Renewable Energy	1.8	2.3

5.4.2 Forecast Impacts

Deadweight

Respondents were asked whether, as a result of participating in the Programme, over the next 3 years, their turnover or employment will be greater as a result of receiving support from the OWDS Programme.

Of the eight companies providing turnover forecasts 6 expected growth in 2015, 2016, and 2017, with one company expecting growth in 2015 and one growth in 2017. The total additional turnover resulting from participating in the OWDS Programme is forecast to be £38.69m - when this is then discounted (at 3.5% per annum) to present value (PV) the aggregate additional turnover is £37.4m. It should be noted that one company accounts for £30m of the forecast turnover growth.

Applying turnover:GVA ratios for each relevant business sector, gives an estimated forecast GVA (PV) of £21.3m.

We therefore apply the following deadweight factors for forecast gross GVA growth:

- 0% - 8 companies; and
- 100% - 17 companies.

Of the seven companies providing employment forecasts four expected growth in 2015, 2016, and 2017, with one company expecting growth in 2015 and two growth in 2016 and 2017. The total additional employment resulting from participating in the OWDS Programme is forecast to be 145 FTEs. It should be noted that one company accounts for 90 of the forecast employment growth.

We therefore apply the following deadweight factors for forecast employment growth:

- 0% - 7 companies; and
- 100% - 18 companies.

For brevity, the businesses that did not attribute forecast turnover or employment to support received through the Programme have been excluded from subsequent analysis.

¹² <http://www.gov.scot/Topics/Statistics/Browse/Economy/Input-Output>. We have used extraction of Oil and Gas multipliers as a proxy for renewable energy - the input/output tables do not identify renewable energy

Leakage

Leakage is the proportion of outputs that benefits those outside the programme or target area. The survey questionnaire asked whether any of the employees who would take up the forecast jobs as a result of participating in the Programme will be based outside Scotland. Some of the respondents identified that some employees will be based outside Scotland. Table 5.7 identifies the levels of leakage that were applied for individual companies.

Table 5.7: Leakage

Level of Leakage - % forecast employees outwith Scotland	N° of Companies
0%	4
4%	1
20%	2

Displacement

Table 5.8 reports the displacement factors for the companies forecasting turnover or employment growth as a result of the OWDS Programme.

Table 5.8: Displacement

Level of Displacement	N° of Companies
0%	3
10%	2
20%	1
25%	1
50%	1
100%	1

Optimism Bias

The data on forecast turnover and employment growth as a result of Programme support was collected via a mix of telephone and online surveys. It was not possible therefore to question businesses as to the rationale for their forecasts.

We have examined the forecast turnover/estimated GVA in relation to actual turnover in 2014. For two companies the forecast turnover in each of the years 2015-2017 is modest compared to 2014 results - around 2% turnover in 2014. For these companies we would suggest there is no optimism bias.

This is not the case for the other 7 companies. In some years forecast turnover growth can be as high as 400% above turnover realised in 2014, and typically it exceeds 100% of 2014 turnover. We have therefore applied optimism bias assumptions, as per SE guidance, of 20% and 40%, to the gross GVA (PV) estimates.

This reduces estimated forecast GVA (PV) to £17m (20% optimism bias assumption)) and £12.8m (40% optimism bias assumption).

In contrast, employment growth resulting from support from the Programme is very modest - as discussed above in 5.4.1 there does not appear to be a direct link between turnover growth and employment growth. We have therefore not applied any optimism bias factor to employment growth forecasts.

Substitution

Substitution has been assessed as 0%.

Multipliers

We have again applied Scottish level Type II multipliers that are relevant to the main business activity of each of the companies - employment multipliers for the jobs impact and GVA multipliers for the estimated GVA sectoral impacts. Table 5.9 presents the details.

Table 5.9: Type II Multiplier Values (latest year - 2011)

Sector	Employment	GVA
Manufacturing	1.8	2.0
Public Sector	1.7	1.8
Renewable Energy	2.3	1.8
Oil and Gas	2.3	1.8
Water Transport	4.0	2.3
R&D	1.8	2.0

5.5 Net Additionality

5.5.1 Realised Impacts

GVA

Applying deadweight, leakage, displacement, substitution and multiplier effects to the gross additional GVA identified in Table 5.3, the estimates of net direct, indirect and induced additional GVA obtained is **£33.5m**.

Employment

Applying deadweight, leakage, displacement, substitution and multiplier effects to the gross additional employment identified in Table 5.4, the estimates of net direct, indirect and induced additional employment obtained are **4 FTEs**.

5.5.2 Forecast Impacts

Turnover

Applying deadweight, leakage, displacement, substitution, optimism bias factors and multiplier effects to the gross forecast GVA (PV) identified in Section 5.4.2, the estimates of net direct, indirect and induced additional GVA (PV) obtained varies from **£21.1m to £28.1m** - the range is as a result of the optimism bias scenarios discussed above.

Employment

Applying deadweight, leakage, displacement, substitution and multiplier effects to the gross forecast employment identified in Section 5.4.2, the estimates of direct, indirect and induced additional employment obtained are **232 FTEs**.

5.6 Summary

Table 5.10 presents a summary of the economic impacts associated with the OWDS Programme. Given the small sample sizes and the fact that both turnover and employment growth is dominated by one large company caution should be exercised when interpreting the results.

Table 5.10: Summary of Economic Impacts¹³

Economic Impact Measures: Realised	
GVA growth	£33.5m
Employment growth	4 FTEs
Economic Impact Measures: Forecasts by 2017	
GVA (PV) growth ¹⁴	£21.1m - £28.1m
Employment growth	232 FTEs
Total Economic Impact (Realised + Forecast)	
GVA (PV) growth	£54.6m - £61.6m
Employment Growth	236 FTEs

¹³ Realised impacts are based on data from two companies. Forecast GVA growth is based on 8 companies, and forecast employment is based on data from seven companies.

¹⁴ GVA, calculated from turnover/GVA ratios for each individual company, has been discounted to give its Present Value.

6. Conclusions & Recommendations

6.1 Introduction

This chapter draws on the various elements of the work programme to present a set of conclusions organised around the detailed evaluation objectives of the study as articulated in the brief.

The evaluation objectives were to provide Scottish Enterprise with an understanding of:

- the economic impacts and benefits to date and in the future;
- the qualitative benefits from the Programme; and
- the management and implementation of the Programme:
 - how the Programme is received by industry
 - the robustness of the Programme's process and management from both internal and external perspective
 - the effectiveness of the ESP delivery arrangements.

In addition we offer a number of recommendations for the future delivery of the Programme.

6.2 Conclusions

6.2.1 Performance Against Targets

The Programme's targets were reviewed and subsequently revised in April 2013 following a Stage 5a review in March 2013, which noted significant optimism in the targets relating to the numbers of companies participating in Expert Support and those companies introducing new products and processes. The industry has developed at a far slower pace than originally envisaged which meant that there has been a high level of interest in general awareness activities, but few companies actually implementing their strategies.

Table 2.2 (Revised Targets and Achievements) shows that some activities have ceased to be a measure for the Programme, and others that have made significant progress towards targets, and on current progress are likely to achieve targets:

- companies participating in raising awareness events - 112% achieved;
- companies benefiting from Expert Support - 89% achieved;
- number of intelligence reports - 65% achieved.

In terms of providing supply chain intelligence to Scottish companies, aimed at raising their awareness of offshore wind opportunities, this target is only 52% achieved and represents a challenge to achieve target by the end of December 2015.

6.2.2 Economic Impacts

Given the small number of companies that have realised economic benefits from participating in the Programme and that expect to do so over the next three years we did not gross up the result to the population of companies supported by the OWDS Programme. Caution should be exercised when interpreting these results, particularly as one or two companies are responsible for much of the impact. It is also important to note that one company dominates both realised and forecast impacts.

Realised Impacts

Only **two** companies provided data of the value of the turnover increases to date as a result of support received from the Programme, and **two** provided data on job gains. The net additional impacts, having taken account of deadweight, displacement, and multiplier effects are estimated to be:

- Employment - **4 FTEs**;
- GVA - **£33.5m**.

Forecast Impacts

Eight companies provided data on the value of forecast turnover increases as a result of support received from the Programme, and **seven** provided data on forecast job gains. The impacts, having taken account of deadweight, displacement, leakage, optimism bias and multiplier effects are estimated to be:

- Employment - **232 FTEs**;
- GVA (PV) - **£33.5m**.

Table 6.2 presents a summary of the economic impacts based on responses from two companies reporting realised impacts, eight forecasting GVA growth and seven employment growth.

Table 6.2: Summary of Economic Impacts

Economic Impact Measures: Realised	
GVA growth	£33.5m
Employment growth	4 FTEs
Economic Impact Measures: Forecasts by 2017	
GVA growth (PV) ¹⁵	£21.1m - £28.1m
Employment growth	232 FTEs
Total Economic Impact	
Total Economic Impact (Realised + Forecast)	
GVA (PV) growth	£54.6m - £61.6m
Employment Growth	236 FTEs

6.2.3 Qualitative Benefits

The Programme provides participating companies with a number of qualitative benefits:

- provision of supply chain intelligence to Scottish companies, raising awareness of Offshore Wind opportunities allows companies to secure a basic understanding of the market and how their company might fit into the market;
- where appropriate allowed an informed decision to not diversify into the sector;
- company specific plans for how they may take action to progress to supply the market;
- facilitated contact with contractors;
- formation of collaborations / partnerships to supply the sector; and
- for non account managed companies the access to more in depth advice than would otherwise be available

6.2.4 Management and Implementation of the Programme

How the Programme is Received by Industry

The survey of supported businesses attracted a response rate of 19% and a confidence interval of 17.71%, and therefore caution needs to be exercised when extrapolating the results.

¹⁵ GVA, calculated from turnover/GVA ratios for each individual company, has been discounted to give its Present Value.

The introduction of the one to one meetings with the expert practitioners has been well used by the companies. Their reasons for participation were broadly aligned to SE's aims of providing greater awareness of the sector, improved information on the market and help to understand how individual businesses would fit within this market.

The Programme was generally rated useful to very useful by the industry in terms of its relevance, value to the organisation and the quality of the advisor, with only 10% of companies reporting these aspects as being not very useful or not useful at all to their company. The industry reports that the Programme has performed slightly less well in its ability to take the company closer to supplying the sector.

Compared to the results from the 2013 review of a smaller sample of 9 participants, the industry views the Programme as performing significantly better in all aspects, particularly in providing clearer next steps to develop their organisation.

The survey also asked, in an open question, if companies had any other comments on the Programme. Of the six comments received, these were: Needs better follow up (3); a complete waste of time (1); would be more relevant to larger companies (1); only received 3 hours support to suit advisor (1)

The Programme was seen to provide useful insights to the market by just under half of respondents and 24% stated that they also received contacts in the sector, which was not an original aim of the programme.

Only 63% of companies reported receiving follow up from the programme, although when received this was seen by 62% of companies to be of some value.

Overall therefore the industry had positive experiences from their engagement with the Programme.

Programme's Process and Management

The Programme is regarded as being effective, in terms of:

- the workshops and events providing companies with a useful grounding in the sector;
- the application form that companies have to complete being very comprehensive and if filled out well gives the ESP contractors a good start as tells the background to the company;
- the matching process - company to ESP contractor - in general works well with most companies well matched to the expertise of the ESP contractors.
- the reporting requirements from the ESP contractors to SE working well. SE executives are approachable and highly competent, and the contractor meetings, at which SE were receptive to constructive feedback, are welcomed;
- providing an effective but high level introduction into offshore renewables and allow companies to secure a basic understanding of the market and how their company might fit into the market;
- shifting the nature of the event programme away from general awareness events towards introducing new elements such as short one-to-one meetings with experts at events; and the development of Meet the Buyer events;

- its flexibility, as it can be used for account and non-account managed companies and could be extended, with justification, in some projects;
- (for SE account managed businesses) the Programme operates alongside a suite of business development support;
- this is the only programme currently providing sector specific expertise (with a Wave and Tidal programme in development) by Scottish Enterprise, which is justified on the grounds of the early stage of the development of the sector and the lack of understanding amongst businesses of its structure and operations; and
- programme monitoring - SE gathers and monitors information on Programme activity, with a basic spreadsheet system mapping the progress of companies through the support programme.

6.3 Recommendations

The Programme is well regarded by companies, Project Managers and Account Managers and has led to informed decisions on whether the sector is appropriate to participating companies and how they can access this. This is due to a large extent to the specialist nature of the advice provided which is not available through any other SE/HIE support programmes.

There remains a desire for such specialist advice from companies who have already participated in the Programme and a confirmation from account managers that some companies would benefit from this.

The 2 day ESP is regarded as effective in providing a basic introduction to the sector and allows a company to understand where they fit within the market and the value of their participation in it. This has been successful in stimulating around half of participants to take action to supply the sector but, as indicated by the economic impact assessment, has been less successful at generating business and economic impact.

It is therefore recommended that the Programme is redesigned and repositioned to target support to those companies who have already decided that offshore wind is a sector they wish to supply and to support them to take effective action and take steps to convert these actions to sales and subsequently economic impact.

As such it is recommended that for those companies which have made a commitment to supply the sector and have greatest potential:

- more in-depth specialist expert advice is available. Given the nature of the sector, this should continue to be provided by sectoral/technical specialists. As a demonstration of commitment from the participating companies, some degree of financial contribution should be secured from the company;
- The support for these companies continues to be integrated into the existing SE/HIE support programmes, particularly those supporting internationalisation and market development; innovation and investment;

- there is an increased emphasis and resource to facilitate “Meet the Buyers” for individual companies. This should include:
 - Meet the Buyer Events both in Scotland and feeding in initiatives in rest of UK and overseas
 - working with individual developers and Tier 1 contractors to help them build supply networks including Scottish contractors by linking to other work of the sector team
 - one to one advice from SE staff and expert advisors to identify and facilitate appropriate contacts in customers and potential collaborators/partners;
- the importance of coupling exploiting the offshore wind sector and achieving this on an international level cannot be over-emphasised. Currently all opportunities are outwith Scotland and it is increasingly likely that suppliers to the Scottish markets will be those who already have experience in the sector in other geographies. It will be paramount that internationalisation is embedded in every project and this is fully aligned to SDI supports such as exhibitions and missions and international manager for hire;
- the follow up for Business Gateway supported companies is seen as weak, largely due to the lack of engagement of the BG advisors. Where these companies make a commitment to exploiting the sector they would be expected to forecast a substantial increase in turnover and are likely to become growth pipeline companies. On this basis, these companies should also have access to the more in-depth expert support, making a financial contribution to the support;
- The event programme should be continued to help identify other companies who have not yet considered supplying the sector as well as providing an ongoing mechanism to stimulate partnerships and collaborations within the sector. As the understanding of the sector has developed, these should now be focused on the specific subsectors such as foundations, operations and maintenance etc.

The number of companies who may be interested in supplying the offshore wind sector but have not yet participated in the Programme is unclear however with the fall in oil price it is expected that such companies may emerge. It is therefore recommended that:

- the 2 day ESP support provided free to participating companies is continued, although the level of demand for the Programme is expected to decline;
- the 2 day ESP support should also be promoted more widely in the Highlands and Islands area, particularly in wave and tidal;
- the short advisory sessions held at events should continue with a view to helping companies identify if the 2 day ESP support would be of value to them. This would be expected to ensure that ESP support is provided only to those companies who are more likely to take action following the support;

- wave and tidal are emerging markets, and the Programme should be available to provide the initial ESP support to companies on this market. Where there is a clear opportunity and commitment to exploiting the sector, the company should also be able to access the more intensive support above; and
- the management and administration of the programme is effective and no restructuring is required.

Transferability of Lessons to Other Supply Chain Programmes

Although not the subject of this evaluation, it is possible to outline some more general lessons which would be relevant to other supply chain development programmes.

The programme has evolved since its start in 2011, particularly in its balance between general awareness and information; assessment of individual companies relevance and fit to the sector; encouragement for companies to take action to supply the sector through follow up; and the establishment of more intensive measures to match potential subcontractors and customers.

This has broadly reflected the stage of the development of the sector and the interest in companies in supplying the sector. Programmes in other sectors should consider the appropriate balance of any programme to their sector. It is clear however that securing action from companies is essential to generate any current or future impact from the programme and a priority should be to move participating companies as quickly as possible to this stage.

Throughout the need for this to be delivered from a sector and technical specific perspective has been paramount and this should be adopted in any supply chain support.

As with offshore wind, the majority of supply chain opportunities in every sector would be expected to be based outside Scotland and a more explicit integration of supply chain and internationalisation supports throughout any programme would deliver greater impact.

Appendix 1: Consultees

Project Manager

Paul Foley	Scottish Enterprise
Jacqui Cosgrove	Scottish Enterprise
Linda Gosden	Scottish Enterprise
Fiona Soutar	Scottish Enterprise
Jamie McLeod	Scottish Enterprise
Simon Wallace,	SDI
Douglas Hyslop	Scottish Enterprise

Account Managers

Jim Mennie	Scottish Enterprise
Lynn Davie	Scottish Enterprise
Mike Paterson	Scottish Enterprise
Gavin Halliday	Scottish Enterprise
Raey Currie	Scottish Enterprise
Ewan Sinclair	Scottish Enterprise
Graeme Clark	Scottish Enterprise
Cameron Ritchie	Scottish Enterprise
Richard Hamill	Scottish Enterprise
William Hughes	Scottish Enterprise
Katryna McKinnon	HIE
Martin Johnston	HIE
Lucinda Gray	HIE

ESP Contractors

Christine Sams

Xodus Group

Alan Duncan

BVG Associates

Paul Gardner

GL Garrad Hassan

Steve McDonald

SgurrEnergy

John Bambrough

Optimat Ltd
