



Fife Energy Park: Phase One Evaluation

Report for Scottish Enterprise

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1. Introduction

In May 2009, EKOS Economic and Social Development was appointed by Scottish Enterprise (SE) to carry out an evaluation of the Fife Energy Park over the period 2006 to 2009. The timescale set for the evaluation were extremely tight – two weeks from inception to completion of the draft report. This report should therefore be considered a high level or outline evaluation rather than an in-depth review of Phase 1 activity.

The Energy Park occupies the former Kvaerner oil fabrication yard at Methil, which ceased operations in 2001. The site was acquired by SE in February 2005 for £950,000 with funding approved for emergency works in December 2005 (£1.73m) and Phase 1 infrastructure redevelopment in 2006 (£12.58M). Upon acquisition, the facilities on the site were outdated and had suffered from a lack of investment for many years.

In 2009, the site hosts a 133-acre Energy Park that offers companies the following facilities:

- an accessible industrial location on a major scale, close to the urban and industrial centres of Scotland, providing access to deep water port facilities;
- over 500,000 square feet of serviced industrial space, including fabrication and paint shops, quayside and office facilities;
- on-site services, including 24-hour site management, help with relocation packages and comprehensive business advice;
- a local, skilled workforce with engineering experience; and
- the chance to locate and create synergies, with other companies working in the same field.

The site has obtained strategic support at the national level from the Scottish Enterprise Energy Team and Renewables UK, and the previous Government's Energy Department also expressed support for the development of the Energy Park.

Fife Energy Park contributes to the aims of the Government Economic Strategy by helping to achieve maximum impact from the priority industries strategy in the areas of Energy and Advanced Engineering.

Following acquisition by SE in 2006, a programme of works was envisaged covering a number of investment phases. Phase 1, which approved £9.88 million investment in 2006, is now largely complete although some elements have had to be rescheduled into Phase 2 due to external factors affecting budget.

Appendix A gives a detailed breakdown of the activities and achievements to date from the Phase 1 infrastructure investment at FEP.

The Phase 1 investment adopted a phased development approach that recognised the need for future investment at FEP – SE is now seeking approval for Phase 2 investment. This review provides analysis of the impacts and benefits of Phase 1 and will therefore be a material consideration in the appraisal and approval process.

This report provides an outline review and evaluation of the Phase 1 investment project. The remainder of the report is structured as follows:

- Chapter 2: Project Background
- Chapter 3: Progress Towards Targets
- Chapter 4: Impact Appraisal
- Chapter 5: Conclusions and Recommendations

2. Background

2.1.1 Introduction

Fife Energy Park is located in Methil Fife, on the banks of the Forth of Firth, approximately 30 miles from Edinburgh and 60 miles from Glasgow. It was set up for companies working in the energy sector – both the emerging renewable sector and the more traditional energy sectors such as oil and gas. The Energy Park is based on the former Kvaerner oil fabrication yard at Methil, a site that historically produced drilling rigs for the offshore oil and gas industry and at its peak, employed over 2,000 people.

Development of the Energy Park emerged against the backdrop of:

- increasing global demand for energy;
- the former government’s aspirations expressed in energy policies and targets which placed increasing demands for the percentage of power generated from renewable sources to be increased;
- the opportunity related to Scotland’s outstanding natural power resources; and
- the leading role of Scottish companies, particularly in marine renewable which includes offshore wind and wave power generation.

As part of a range of initiatives across Scotland, the Energy Park complements other projects such as the Science and Energy Technology Park in Aberdeen, the European Marine Energy Centre in Orkney, and the Energy Technology Centre in Lanarkshire.

There are currently three tenants on site and they include:

- BiFab: focuses on the offshore energy sector and has considerable expertise in producing fabrications for the offshore oil and gas industry;
- Professional Testing Services Ltd (PTS): provides engineering quality control, inspection and non-destructive testing services; and
- Duncan Engineering: a one-stop modern and high quality sub-contract engineering service to a wide range of manufacturing facilities based on the site and in the local area.

A number of other tenants have occupied space on the site over the past three years including A4E (training provider), Ocean Power Delivery (developed the Pelamis technology) and JKF Group (construction company). Both companies occupied premises on a temporary basis, JKF (who has an established office in Methil) has recently relocated from the site to purpose built office accommodation at the adjacent Methil Dock site.

2.2 Project Description and Targets

2.2.1 Project Description

The site was historically occupied by a single user, had poor quality infrastructure and was not capable of multiple occupancy use. In order to maximise the potential of the site SE was required to improve access, infrastructure and utility provision, and consolidate the quayside and coastline.

The required programme of works identified by SE for Fife Energy Park to create a viable business location included:

- **infrastructure improvements:** new roads infrastructure and access improvements to comply with modern standards and to allow future subdivision of the site;
- **building upgrade and demolition:** refurbishment of some existing buildings to a 'fit for purpose' standard and selective demolition of others. A priority was the sub-division of two conjoined buildings to allow the properties to be occupied independently;
- **upgrade of utilities:** the site was served by an obsolete electricity substation. Investment was made in a new substation to deliver a standard of equipment which delivers an adoptable power network and relieves SE of any future maintenance obligations;
- **earthworks:** earthworks required to develop the additional 93 acres of brownfield land and also avoid further coastal erosion; and
- **facilities management:** including site security, signage, site management, maintenance and other revenue costs such as marketing.

2.2.2 Project Targets

Investment in the site infrastructure was intended to secure the provision of a specialist site for the Energy Sector in Scotland. The Phase 1 investment approval paper identifies the following project objectives:

- provide a specialist site for the fabrication, manufacture and assembly of power generation equipment and associated products;
- meet the future industry demand for land and buildings in an ideal coastal location;
- create new economic growth and employment at a Scottish level by providing solutions to meet the requirements of Energy Sector companies;
- provide opportunities for diversification to local companies by establishing a critical mass of activity on the site;
- support the wider environmental and sustainability agendas;
- provide opportunities for companies to explore new R&D and technology development; and
- provide 100 acres of redeveloped brownfield land for energy sector activities.

The preferred development option (phased investment approach) was expected to create 443 net additional jobs and 28 construction jobs by the end of Year 5, rising to 794 and 49 respectively by Year 10. GVA was estimated at £38 million cumulative over the first five years rising to £171 million over a 10 year period. In output terms, the Energy Park was expected to accommodate up to 300,000 sq ft rising to 500,000 sq ft of new development by the end of Year 5 and Year 10 respectively.

2.2.3 Project

Fife Energy Park has been delivered by a partnership agreement between Scottish Enterprise and Fife Council.

The redevelopment of the Kvaerner site in Methil to create the Energy Park as a new strategic industrial location to support the emerging renewable energy sector was approved in October 2006 by the SE Board with a project budget of £9.88 million, with £2.7m of levered public sector investment from Fife Council.

In addition, external investment has been levered in through both public (ERDF) and private (tenant companies) investment. The financial aspects of the project are considered in more detail at Section 3.1.2.

A legally binding Minute of Agreement was signed between SE and Fife Council covering the overall management and delivery of the project. This outlines activity, obligations, project management, investment, remediation/infrastructure works and costs, project accounting and financial arrangements.

The site is managed through SE's commercial property portfolio management contract. Colliers CRE therefore provide site management services and deal with day-to-day enquiries.

2.3 Strategic Fit and Contribution

This section of the evaluation reviews key policy documents and considers the rationale for continuing with the development of Fife Energy Park based on its fit with and contribution towards key policy aims of the Scottish Government and Scottish Enterprise.

2.3.1 Government Economic

The Government Economic Strategy (GES) was released in 2007 and is the main policy guidance for sustainable economic growth in Scotland. It sets out how the current Government will support businesses and individuals and how they can create a more successful country, through increasing sustainable economic growth.

One of the five Strategic Objectives of the Government is for a "Greener" Scotland – improve Scotland's natural and built environment and the sustainable use and enjoyment of it. The development of Fife Energy Park contributes to this strategic objective by providing a specialist site for the development of power generation equipment and associated products in the renewable energy sector that will lead to a more sustainable Scotland.

The project specifically increases Scotland's industrial activity in the emerging renewable energy markets. The GES identifies energy as one of the key sectors that will make a significant contribution to increasing Scotland's economic growth. This is an area of activity where Scotland has an established comparative advantage.

The Government seeks to support these key sectors and provide the necessary environment to ensure growth occurs. The development of Fife Energy Park supports this by providing location solutions that meet the requirements of energy sector companies (indigenous and foreign investors) looking to locate and develop in Scotland.

The Government places a high level of importance on ensuring the renewable energy sector in Scotland develops as world leader in driving forward environmental sustainability. The work so far, and the continued development of Fife Energy Park, contribute positively to this aim, providing 100 acres of redeveloped brownfield land specifically targeted at renewable energy sector activities.

2.3.2 Climate Change Bill

In December 2008 the Scottish Government published its Climate Change (Scotland) Bill in recognition that climate change will have far reaching effects on Scotland's economy, people and environment. The Bill introduces targets to reduce emissions by 80% by 2050 and seeks to drive the development of new technologies and solutions that will put Scotland at the forefront of building a sustainable low carbon economy.

The Bill seeks to:

- introduce a statutory target to reduce Scotland's greenhouse gas emissions by 80 per cent by 2050;
- establish an interim target of 50 per cent emissions reductions by 2030;
- establish a framework of annual targets; and
- include emissions from international aviation and international shipping.

If passed, the Bill will give Scotland the most ambitious climate change legislation in the world, putting Scotland at the forefront of global efforts to tackle climate change and establishing a legal framework for emissions reductions. A range of short, medium and long-term policy options will drive the changes needed to meet targets.

To achieve the targets, a range of new technology, structures and equipment will be required to generate energy from alternative and renewable sources. FEP is specifically targeted at attracting manufacturing and engineering companies that will meet this need.

The Phase 1 investment in the site has supported the growth and development of BiFab into the renewable energy sector, producing major structures for the offshore wind turbine sector.

2.3.3 Energy Sector, Key Sector Report May 2009

In February 2009 Scottish Ministers announced a set of pledges on energy policy that form a coherent approach to energy issues in Scotland and aim to shape the energy policy agenda for the remainder of the current term of Government. This policy is outlined in the Energy Sector, Key Sector Report.

The Government views energy, including renewables, as an area where Scotland has

- a strong competitive advantage;
- unique natural and geographic opportunities in wind and wave and tidal generation;
- established expertise; and
- world leading technology and skills developed through the oil, gas and power generation industries.

The Government will focus strategic work in conjunction with other public sector bodies on a number of priority energy policy areas to help drive sustainable economic growth. Development of energy parks, such as Fife Energy Park, will help deliver this aim.

The report outlines the current activity in the energy sector that will contribute to the reduction of emissions by 2050. The overall aim of the Government is to position Scotland as a leader in renewable and low carbon energy in the UK, Europe and further afield.

Fife Energy Park supports this reduction in emissions by providing a location solution to meet the requirements of energy sector companies. In turn these companies will contribute to reduced emissions in Scotland (and globally) through the promotion and use of renewable energy resources.

One of the key priorities that the report highlights is to ensure that Scotland capitalises on its skills, particularly in marine and offshore renewables, in clean coal technology, carbon capture and storage, and in power systems and grid technologies. Fife Energy Park provides a specialist site for the fabrication, manufacture and assembly of power generation equipment and associated products thus supporting this key priority.

2.3.4 Scottish Enterprise Business Plan 2009/12

Scottish Enterprise (SE) aims to tackle Scotland's lagging productivity performance as well as providing an important and valuable contribution to the Government's priorities. Their primary objective is *"to deliver high quality, practical support to businesses in Scotland that will enable them to maximise their contribution to economic growth."*

The 2009/12 Business Plan outlines how SE plans to tackle the challenges being faced during the economic downturn. There is a 12 point action plan to support the Government's economic recovery plan and the challenges facing businesses. One of these is to accelerate major projects, one of which is Fife Energy Park.

The Business Plan pledges to invest in physical infrastructure to support the development of the key sectors. The Plan states that SE is committed to accelerating £35 million of capital spend. Fife Energy Park is one of the projects that are included in plans for the next three years.

The Business Plan also outlines how SE will contribute to sustainability. One of its targets for sustainability is the promotion of a "low-carbon economy" through support for resource efficiency, the development and use of cleaner technologies in key sectors, and an approach to business infrastructure investment that helps to mitigate climate change. Continuing support for Fife Energy Park, as SE has pledged to do, will contribute towards sustainability and the promotion of a "low-carbon economy" by developing and promoting the renewable energy sector in Scotland and supporting the manufacture of structures that will produce renewable energy.

Scottish Enterprise will deliver its Business Plan based on three principles:

- helping key industry sectors identify what needs to be done to grasp competitive opportunities and help shape the response;
- the needs of the customers; and
- meaningful and effective partnerships that maximise investment in wealth creating projects.

The GES outlines key sectors within Scotland that have the potential to raise Scotland's rate of sustainable economic growth – we have identified above that energy is one of these sectors. The SE Business Plan reports the industry goals and how Scottish Enterprise will help support these goals. The development of Fife Energy Park contributes towards these aims and supports the development of the renewable energy sector in Scotland.

2.3.5 Fife Council Plan 2007 to 2011

The Fife Council Plan sets out the aims and objectives to be achieved by 2011 in Fife and how progress will be reported against indicators such as housing, education and safety. The Plan outlines eight key priorities for the Council, one of which is improving local conditions for economic development.

The report points to the establishing of Fife Energy Park and improvement to the infrastructure, access and utilities as well as providing jobs for more than 200 employees on the site. This is a key project contributing to the continued economic development of Fife. Further development will support more economic development in the key energy growth sector.

2.4 Demand Analysis

Since SE acquired the FEP site in 2006, the following has been achieved:

- BiFab has continued and extended its occupation of the site and now leases the majority of the site's buildings, including the two major Fabrication Shops increasing employment from 80 in 2006 to 250 in 2009;
- Duncan Engineering has relocated within the site to refurbished modern workshop space in the former Maintenance Building;
- PTS has continued its use of the Radiographic Bunker and is seeking long-term security of tenure;
- JKF Group occupied office space on a temporary basis to allow business expansion whilst purpose building premises were developed at the adjacent Methil Dock site. The company is currently seeking lease of yard space at FEP; and
- a number of other companies have occupied space on a short-term basis over the past three years including A4E, an industrial training provider.

Fife Council supplied EKOS with data on the number of enquiries they have received from companies in the energy sector over the last year. In total there has been contact from 59 companies. Of those, 36 submitted an initial enquiry only, but 23 submitted an enquiry and have required follow-up assistance.

The data indicates that 30 enquiries are still “live” 10 are “closed” and 19 have a “watching brief”¹. Fife Council records interest in an enquiries database, identifying whether the enquiry has been for a major project. The data suggests that of the 59 total enquiries, 19 have been for major projects. Of the 30 live enquiries, 13 are for major projects.

Further analysis of the enquiries identified that 30 were specifically related to Fife Energy Park. Of these, 20 submitted an enquiry and 10 submitted an enquiry and have received subsequent follow-up assistance.

Of the specific enquiries to the Energy Park, the data indicates that 16 are “live”, 5 are “closed” and 8 are “watching brief.” Of these enquiries, 12 are identified as major projects. Of the 16 live enquiries, 8 are listed as major projects.

Ironside Farrar has provided consultancy services to SE for Fife Energy Park and they report that enquiries at the park are quite active. They have received requests from a number of organisations to prepare Masterplans for the site. Fife Council also reported a high level of interest in the site with visits to the site occurring on average once a week.

In terms of competing or similar facilities, the NIGG Yard near Inverness has been identified as the primary alternative site for major manufacturing/production of large-scale fabrication for the oil, gas and energy sector. NIGG is a 96 hectare facility in Ross-shire combining extensive fabrication/warehouse buildings, yards, craneage, dry dock, and quayside. We understand, however, that there are current issues with regard to ownership and therefore questions as to the availability of the site for lease at the present time.

Another possible location is the Arnish Yard in Stornoway (Western Isles). BiFab has recently concluded a lease with Highlands & Islands Enterprise at Arnish for the manufacture of structures for the offshore wind sector and also for the traditional oil and gas sector, employing up to 60 people.

Fife Council indicated that one of the main competitors for the Energy Park is the Dundee Port site which has 175 hectares of development land targeted at the renewable energy manufacturing sector. The site is owned by Forth Ports and is currently being marketed for lease.

¹ The company made an initial enquiry about a project but has since put it on hold for the time being.

The NIGG, Arnish and Dundee Port sites are considered as alternative possible locations to the Fife Energy Park with suitable facilities for the manufacture and fabrication of major structures. They are, however, in less accessible locations than Fife Energy Park, particularly Arnish (Stornoway in the Western Isles) and NIGG (Ross-shire near Inverness).

FEP is therefore identified as the only viable location within the SE area with capacity to develop a major business location serving the established oil and gas, and emerging renewable energy sectors with access to deep port facilities.

3. Progress toward Targets

This report presents an evaluation of Fife Energy Park from its inception in 2006 to completion of Phase 1 in 2008.

This section presents a review of the quantitative and qualitative impacts that have been generated as a result of that activity and measures the extent to which the project has achieved its original targets.

3.1 Quantitative Impacts

As outlined in **Section 2.2.1**, the development of Fife Energy Park required a variety of works to transform it from its former use. The total project cost (including resource costs) was £12.58m and was mainly funded through SE (£9.88m) and Fife Council (£2.7m). Contributions were also made by ERDF (0.50m) and Kvaerner (£0.70m), which we assume have been included in SE and Fife Council funding packages.

3.1.1 Physical Benefits

When purchased by SE in 2006 the site had had limited investment and required considerable physical upgrade to create an attractive location suitable for modern business users. In particular, the physical infrastructure (access, buildings, utilities, quayside, etc) required major investment.

The project delivered a number of physical benefits, as outlined in the original approval paper:

- **infrastructure improvements:**
 - a new access roundabout and 550 metres of new spine road have been completed, with a second stage outstanding (Phase 2 proposal)
 - emergency repairs were undertaken at the quayside and safety railing installed
 - a Coastal Defence Strategy has been **developed** for the coast and quayside
 - the external goliath crane was overhauled and brought back into productive use;

- **building upgrade and demolition:**
 - Fabrication Shop 1 has been re-clad, with new doors, new concrete floor, reconditioned cranes, new electric system, new offices and full height partitioning, making the building independent from the neighbouring unit
 - Fabrication Shop 2 is now an independent building with new alarm systems, emergency lighting, roof cladding, reconfigured high and low voltage electrical systems and partitioning, and new covered fire escape
 - former canteen and temporary office buildings demolished
 - the former drawing office has been made safe and secure
 - unsafe structures including two lighting towers have been dismantled and cleared from site
 - redundant buildings including the former pithead building has been demolished
 - former Maintenance Sheds fully refurbished to modern standards to create 20,000 sq ft of modern industrial space;
- **upgrade of utilities:**
 - new utility services have been introduced to the site for connection in Spring 2010 (medium pressure gas, 7.5MW electricity supply, new water mains and telecom ducting)
 - the site's electrical systems have been overhauled and reconfigured to modern and safe standards pending adoption by a Network Distributor;
- **earthworks:**
 - emergency earthworks were undertaken to reduce the erosion of land into the Firth of Forth
 - earthworks were undertaken to create bunds round the site perimeter to the west and north to define the Park boundary
 - earthworks to create defined development platforms; and
- **facilities management:**
 - landscaping and seeding have been undertaken at the new access, along the new road and on the boundary bunds
 - boundary fencing has been renewed to improve site security – this contract is due to complete over the next month.

Despite this investment in these physical outcomes, there are a number of major outstanding issues that need to be addressed at FEP. Coastal defence risks have been assessed and repair works identified as priority for Quaysides 1 and 2 which need to be renewed and upgraded to ensure the long-term viability of the site as an Energy Park.

3.1.2 Economic Benefits

The analysis of economic benefits generated through Phase 1 investment at FEP was undertaken using SE's physical infrastructure additionality calculator. The detailed assessment model is provided under separate cover to SE, with key extracts included at Appendix A.

FEP Impacts 2006 – 2009

As well as the clear physical outputs that the Park will produce, the Phase 1 approval paper identifies a range of economic targets set for the development of Fife Enterprise Park. These are outlined below together with a review of progress after three years:

- 443 net additional jobs after 5 years (794 after 10 years):
 - *230 net additional jobs secured at FEP at 2009;*
- 28 construction jobs after 5 years (49 after 10 years):
 - *115 construction MYEs² generated at 2009 (11 FTEs);*
- cumulative GVA of £38m after 5 years (£171m after 10 years):
 - *£11.5m net additional GVA generated at 2009; and*
- 300,000 sq ft of new development after 5 years (500,000 sq ft after 10 years):
 - *it is unclear if this relates to new property developed or existing property refurbished. No new development secured to date but major upgrade of three buildings completed – Fabrication Shop 1, Fabrication Shop 2 and the former Maintenance Shed, extending to 118,837 sq ft in total.*

² Man Year Equivalent – See Section 4 for explanation.

Table 3.1 Summary of Expected and Actual Benefits

	Expected Yr 5 Benefits	Actual Benefits (Scottish level)	Progress at Year 3
Net Additional Jobs	443	230	52%
Construction Jobs	28	11	39%
Cumulative GVA after 5 years	£38M	£16.6m ³	44%
New/Refurb Development	300,000 sq ft	118,837 sq ft	40%

Table 3.1 identifies the cumulative net additional economic benefits achieved to date over the past years of SE ownership and investment. It is difficult to predict future economic impacts as the main tenant, BiFab, confirmed that their long-term presence on the site is dependent on the Phase 2 investment and in particular the repair/upgrade of the quay walls. These are essential to the operational activities of BiFab who dispatch and deliver major structures, equipment and goods by sea and require deep water port facilities that have a good long-term lifespan.

The Phase 2 works were identified by almost all of the consultees that we spoke to over the course of the study as essential to protect the existing BiFab investment and ensure access to a structurally stable quayside.

We have therefore presented a number of scenarios and considered the economic impact of past investment against these. Each of these scenarios is dependent on the continued presence (or otherwise) of BiFab as they are identified by the other two current tenants as the main driver for their continued presence at FEP.

Scenario 1: Long Term Occupation by BiFab

This scenario assumes that the Phase 2 investment in the quay walls is taken forward and that BiFab continues its current operation at the site in the long-term. It does not include any element of growth in BiFab’s activities – these would properly be accounted for through the economic impacts of Phase 2 investment, but is based on safeguarding the current impacts achieved through the Phase 1 investment.

³ This is made up of £5.6m construction GVA and £11.0m operational GVA – the original approval paper does not provide a breakdown of GVA; we have therefore assumed that it includes both construction and operational.

We have therefore assumed that current activity will continue at a stable level for the next 20 years. Under this scenario, the Phase 1 investment at FEP will generate future economic benefits of:

- total discounted GVA at the end of year 1 = £11.7m
- total discounted GVA at the end of year 5 = £54.7m
- total discounted GVA at the end of year 10 = £100.8m
- total discounted GVA at the end of year 20 = £172.3m

These impacts are based on existing on-site jobs remaining stable at FEP for a period of 20 years, with average GVA per employee taken from the appropriate industry sector⁴ for 2004/2005/2006. The average of these is inflated from 2006 to 2009 (RPI) and then discounted at 3.5% per annum to give an estimate in 2009 prices.

Our review of project activity and consultations suggest that it is highly unlikely that this scenario could be achieved without further investment in the quay walls through the Phase 2 proposed works. This scenario could therefore be considered as an 'opportunity cost' of not taking forward the Phase 2 investment.

Scenario 2: Medium Term Occupation by BiFab

This scenario assumes temporary repair to the quay walls over the next few years that will allow BiFab to continue current operations for the medium term.

We have therefore assumed that current activity will continue at a stable level for the next 5 years but will thereafter decline in steps of 20% per annum (from the base level) over the next 5 years. Under this scenario, the Phase 1 investment at FEP will generate future economic benefits of:

- total discounted GVA at the end of year 1 = £11.7m
- total discounted GVA at the end of year 5 = £54.7m
- total discounted GVA at the end of year 10 = £73.8m
- total discounted GVA at the end of year 20 = £73.8m

These impacts are calculated using the same method as that outlined under Scenario above.

⁴ Manufacture of machinery and equipment not classified elsewhere

Scenario 3: Short Term Occupation by BiFab

This scenario assumes no repair to the quay walls and therefore decline in BiFab activity at FEP over the next 5 years.

We have therefore assumed that current activity will decline immediately in steps of 20% per annum (from the base level) over the next 5 years. Under this scenario, the Phase 1 investment at FEP will generate future economic benefits of:

- total discounted GVA at the end of year 1 = £11.7m
- total discounted GVA at the end of year 5 = £33.6m
- total discounted GVA at the end of year 10 = £33.6m
- total discounted GVA at the end of year 20 = £33.6m

These impacts are calculated using the same method as that outlined under Scenario above.

3.2 Qualitative Impacts

In addition to these quantifiable targets, the project will also deliver a range of qualitative benefits, supporting the wider regeneration of the area and improving perceptions of economic viability.

The regeneration of the site has remediated 100 acres of waterfront land that would otherwise be likely to be derelict. The investment in the site has created a viable economic use that has improved the profile of the local area as a viable business location, with a focus on the emerging renewable energy sector.

The investment by BiFab has created new employment that has generated 230 net additional jobs at the Scottish level. While we do not have data on the geographic residence of employees, tenant companies confirmed that almost all are based in the East of Scotland, with most in the Fife area. The wages and salary impacts of these new jobs will have impacted on the local business and service sector, helping to sustain the economic viability of local communities.

Energy is a key growth sector for Scotland and a priority industry for Scottish Enterprise. The development of a formally designated Energy Park, with a leading industrial operator (at EU level) gives Scotland a major presence in this growing sector, and a good base upon which to take advantage of future growth, with supply chain impacts and benefits.

The development of renewable energy technology will also create long-term environmental benefits for Scotland. BiFab is a leading industry operator in the manufacture of off-shore wind/wave turbines. This gives Scotland a leading presence in the renewable energy field and a strong base on which to set Government objectives for a 'Greener Scotland'.

4. Conclusions and Recommendations

This chapter pulls together the study analysis and presents our final study conclusions and identifies key recommendations for the project in moving forward for delivery of the proposed Phase Two infrastructure works.

4.1 Final Study Conclusions

This section of the report presents our final conclusions, set against the objectives as outlined in the study brief.

4.1.1 Economic Impact Assessment

The first objective of the study is to complete an **economic impact assessment** to identify net additional impact of SE investment in FEP.

The study review and analysis is complete and has identified that the net additional impacts generated to date include:

- 230 net additional jobs and £11.3m total GVA generated by the end of Year 3
- 115 net additional construction MYEs created with total net additional GVA of £5.2m through Phase 1 investment;

Section 3.1.2 of this report presents three scenarios against which future economic impacts might be achieved. These are based on the continuation (or otherwise) of BiFab as an occupier at FEP and range from:

- total net additional GVA generated at the **end of year 1** of £11.7m (under all three scenarios)
- total net additional GVA generated at the **end of year 5** ranging from £33.6 to £54.7m
- total net additional GVA generated at the **end of year 10** ranging from £33.6 to £100.8m
- total net additional GVA generated at the **end of year 20** ranging from £33.6 to £172.3m

The long-term impact of the Phase 1 investment is dependent on securing the Phase 2 investment in the upgrade and repair of the sea walls as this will safeguard BiFab's presence on the site.

Whilst we have not included any increase in economic activity as a result of future investment it is clear that the impacts of Phase 1 are closely bound to the Phase 2 investment activity.

4.1.2 Performance of FEP

The second study objective is to examine the **performance of FEP** against targets and assess the benefits (objectives and outputs) achieved.

Section 3.1.1 and 3.1.2 present the physical and economic impacts and benefits secured through SE investment in Phase 1 at FEP.

Operational Employment Impacts

Our review shows that gross jobs at FEP have grown from 100 to 310 (2006 to 2009). It is difficult to assess employment change in the absence of SE investment in the site as the major tenant, BiFab, has been in occupation since 2001. Considering market conditions and feedback provided by BiFab it is unlikely that much of the economic activity on-site in 2006 would have remained in the absence of SE's Phase 1 investment. It is therefore appropriate to claim a major proportion (90%) of the 2006 employment as safeguarded, plus all of the employment growth since 2006. This equates to **300 gross jobs** (90 safeguarded plus 210 new).

Our economic impact analysis reports that net additional employment at FEP has increased from 75 in 2006 to 230 in 2009. Using the same rationale as that outlined for gross employment, we would estimate that SE investment in Phase 1 has generated **230 net additional jobs** (safeguarded and new).

There has, however, been fluctuation in on-site jobs over the past three years, with considerable growth in the past 12 months at BiFab. BiFab confirmed that without Phase 2 investment they will be unlikely to remain at FEP as they require repair/upgrade of the quay walls to operate from the site long-term.

We have outlined on the previous page a number of scenarios to identify the economic impacts that could be generated in the future as a result of Phase 1 investment, dependent on the future Phase 2 investment in the site.

Operational GVA Impacts

Net GVA at FEP has increased from £3.9m in 2006 to £11.7m in 2006 – an actual change of +£7.8m. Using the same rationale as that for jobs i.e. SE investment has sustained 90% of existing safeguarded jobs and supported 100% of new jobs, gives increased net additional GVA of £11.3m generated through SE Phase 1 investment.

Considering actual net additional GVA generated on an annual basis, the site has generated total net additional GVA over the past three years of £12.2m, based on the on-site employment profile. Using the same rationale (90% of existing plus 100% of new activity), SE Phase 1 investment has generated a total of **£11.0m total net additional GVA** between 2006 and 2009 (safeguarded and new).

Section 4.1.1 above presents a range of scenarios against which future GVA might be generated at FEP.

Construction Impacts

Based on total project spend of £11.7m, MYE construction jobs are estimated at 100 gross and 110 net. MYE is an annual equivalent measure and equates to one job for a period of one year, so **110 net MYEs** equates to **11 FTEs**.

Over the period of construction activity (2006 – 2009), total net GVA generated equates to £5.2m. Discounting this to 2009 prices (inflating up rather than discounting down) equates to **£5.6m total net discounted GVA**. These are one-off construction employment impacts and do not continue in the future.

Summary GVA Impacts

Taking the operational and construction GVA impacts outlined above, our review estimates that the SE investment in Phase 1 activity at FEP has generated a total of **£16.6m net additional GVA** at the national level over the 2006 to 2009 period.

This economic return is greater than the total public sector investment at FEP - £10m SE and £12.6m total. This should be considered a good outcome, particularly given the project's operating environment i.e. the poor physical infrastructure and environment when SE acquired the site. This investment in 'sunk costs' ensures that future benefits will be less costly as a result of the Phase 1 infrastructure investment.

Phase 1 investment was major infrastructure works that are expensive but don't yield direct economic returns e.g. roads, earthworks, utilities, etc. These activities improve the long-term viability of development at FEP and will encourage future investment in activities that will generate direct impacts e.g. new property development to accommodate business activity.

4.1.3 Future Lessons

The third objective of the study is to review past activity (management and delivery) and identify lessons for future project activity.

Overall, our review finds that management and delivery of the Phase 1 investment at FEP was robust, with no major issues raised by any of the consultees, or through our outline review. We did, however, identify a small number of issues and learning points that should be considered:

- SE has adopted a long-term phased development approach to FEP that delivered Phase 1 infrastructure works within the context of an identified need for future site investment. The Phase 1 paper recognises the need for future investment but does not explicitly quantify the extent of this – the Phase 2 approval paper seeks additional investment of £11.2m. The Phase 1 paper should have given an indication of the total requirement for investment at FEP;
- in hindsight the Phase 1 project appraisal appears to have considerable optimism bias in terms of the cost of the investment (greater than anticipated) and the economic benefits that would be generated through the initial investment (lower than anticipated), although there is an issue with time-lag as additional economic impacts could be generated in the future through attraction of new activity to the serviced plots created from the Phase 1 investment.

To an extent the potential for significantly greater costs should have been expected, based on the acquisition and redevelopment of a major brownfield site that had very outdated infrastructure and required major investment to create a modern business location;

- Whilst a risk register was developed for Phase 1 it is not clear whether this has been maintained and updated over the project development period. The risk register does not classify any 'red' or 'tombstone' risks that would have required rigorous monitoring – in particular the potential for financial constraints (overall risk score of 10 out of a maximum of 25) merited a higher score for probability (score of 2 out of a maximum score of 5).

Feedback from the client identifies that the risk register was updated by exception rather than by the rule i.e. only when major issues or events arose, rather than on a regular basis. Risk registers require active ownership and interrogation to generate best value – this is a key lesson for future project delivery;

- the need for investment in the quay walls should have been identified and prioritised through the Phase 1 investment activity as it is clearly a requirement to sustain the long-term use of the site as an Energy Park. The risk appraisal includes a ‘sea defence requirements’ item which relates to quay walls but this has an overall risk score of 4 (out of a maximum of 25), which in hindsight considerably understates the risk.

Given the importance of the quay walls to the deep water port access for the site to create/safeguard economic activity, this item should have featured prominently in the review/appraisal work at Phase 1 and investment here should have been prioritised ahead of some of the other areas of activity (site bunding/platforming). This is, however, based on actual experience – at the outset the condition of the sea walls was not fully explored or understood and the opportunity to create development platforms to attract new investment was deemed essential. Without this investment the site was not considered to be attractive to potential occupiers;

- project management procedures in relation to external funding applications (ERDF) need to be indisputable. There was an issue with Phase 1 where one company (Alsherra) was identified as the match funder for an ERDF application (refurbishment of the former Maintenance Shed) but the actual eligible spend came from another (Doe Sports). Whilst these two companies are related, an internal SE Audit review identified that there may be a need to repay the ERDF grant – this is currently being reviewed by SE Legal. In the future all external funding arrangements need to be consistent and robust;
- there is a need to complete the outstanding lease arrangements with PTS and BiFab who both confirmed that they are in occupation of SE owned premises but have not concluded formal lease arrangements. Discussion with Colliers CRE (as managing agents) confirms that they are operating on the basis of ‘de facto’⁵ lease arrangements and that tenants are paying rent.

⁵ De facto lease arrangements i.e. established through the process of time, use and payment. Under Scots law leases continue after the formal date of expiry on a month-to-month basis until notice is given by either party to extinguish.

Ideally, these arrangements would be formalised but it is recognised that there are (different) issues for both tenants and it may be more advantageous for SE to continue with the current arrangements in the short-term. This should, however, be formalised in terms of SE accountability with a clear explanation of the rationale included in the project file notes;

- there is some desire for greater consultation and discussion with site tenants regarding future investment to identify the activities that could add greatest economic value – particularly with BiFab as the major site operator. In the past there has been little formal discussion between SE and the tenants – this was previously undertaken by the site manager. Since the site manager has left this has led to some uncertainty amongst tenants who are not sure what activity is happening or the rationale for the profiling of site investment; and
- on a wider (non-FEP specific) note, a key lesson for SE relates to the failure to secure leases with the tenant companies in advance of its purchase of the site. Whilst the established leases with tenants have continued (as outlined above) there is no security of rental income for SE – a key issue considering the dominance of BiFab as the main occupier, but also as driver of other operational site activity.

4.1.4 Strategic Fit and Contribution

The fourth study objective is to assess the strategic fit and contribution of FEP toward key strategy/policy guidance, in particular SE’s Business Plan and the Government Economic Strategy.

Chapter 2 presents an outline review of relevant strategy documents and considers where FEP fits with and contributes towards the aims and objectives of each. Overall, the project has a **strong strategic rationale** – it has a good fit against policy guidance and potential to make a significant contribution toward identified objectives.

In particular the potential for the site to support further development and growth of the renewable energy sector in Scotland, is of major importance. Energy is a key industrial sector in supporting the economic growth of Scotland – this is expressed in three key documents: Scottish Government’s GES, Scottish Enterprise’s Business Plan and Fife Council’s Plan.

4.1.5 Strategic Rationale and Market Failure

The fifth objective is to review strategic rationale and market failure and consider if these remain applicable for future investment. As a major industrial location the site has suffered from years of neglect and decline. As a result the quality of infrastructure was extremely poor when SE acquired the site in 2006. The need for major and long-term investment was identified within the Phase 1 FEP approval paper (October 2006).

The rationale for SE investment in Phase 1 at FEP (as expressed in the October 2006 Phase 1 investment approval paper) was made on three separate grounds:

- “previous ownership and lease arrangements – the relationship between the previous site owner (Wemyss Estate) and the tenant (Kvaerner) was based on a wasting lease and precluded any investment in the site by prospective tenants;
- the perception of environmental and remediation liability – as a former colliery site, there was a perception of significant contamination, particularly associated with the on-site spoil tip. SE [Fife] has undertaken a rigorous Site Investigation and only two minor areas of heavy metals have been identified and will be treated at minimum cost; and
- the scale of capital expenditure required to deal with coastal defence, building dilapidations, utility upgrade and the new roads infrastructure – SE [Fife] engaged in discussions with several private sector companies prior to committing to purchase. At that stage however, no commercial company was willing to become involved, due to the limited financial returns and the perceived uncertainty in the renewables sector.”

To a large extent these market failures persist at FEP. It is clear from our review of the project and in particular discussions with the key tenant, BiFab that there is a need for further major investment in the site in restoring and upgrading infrastructure before any further private sector development investment is likely.

In particular, BiFab has confirmed that its ability to continue trading from FEP is dependent upon the restoration of the quay walls. The current quay walls are identified as having a lifespan of around four years. These are key operating requirement for BiFab who dispatch and deliver major structures by boat.

Without the Phase 2 investment it is almost certain that BiFab will relocate from the site – there are few suitable alternatives to meet their operational needs in Scotland.

Our review confirms that there is a rationale for further public sector investment in Phase 2 that will not only sustain the economic activity generated through Phase 1 investment, but also has the potential to generate additional economic activity through new investment and activity by BiFab. This will generate direct investment, but will also support further development of the supply chain for this growing industry sector.

The cost of further infrastructure remediation is estimated at £13.65m (Phase 2 investment by SE and Fife Council). This level of investment requires to be made by the site owner who will benefit from the investment through disposal of development plots. It is unrealistic to expect a private sector investor to undertake this work as the returns generated will not cover the cost of infrastructure remediation. This is also a new and emerging industry sector and it would be difficult to attract a private investor for a site that is focused on this emerging market sector.

Investment by Scottish Enterprise can, however, be justified on the grounds of the additional economic benefits that will be generated through disposal of development plots that attract new business investment and economic activity – it is outwith the remit of this study to assess the economic benefits that could be generated through Phase 2 investment, but we would expect it to yield long-term substantial returns to the Scottish economy.

The overall objective for FEP is to put Scotland at the forefront of the renewable energy sector. There is an emerging opportunity to secure new additional economic activity in this sector which is forecast to achieve significant economic growth.

4.1.6 Equity and Equalities

The final study objective is to consider the contribution of FEP toward the equity and equalities agenda.

Our review has identified little evidence to suggest that the FEP project has made any significant contribution toward the equity and equalities agenda but it is important to note that this was not included as a major objective of the project at the outset.

FEP is unlikely to have made any significant contribution toward equalities in terms of gender or ethnic mix, but it will have contributed toward the Government's equity objective. The GES aims to create a fairer Scotland with:

- sustainable economic growth
- balanced economic growth across Scotland
- economic growth alongside environmental quality and responsibility

It is clear that FEP has contributed toward each of these equity objectives, and has the potential to continue to do so in the future.

4.2 Key Recommendations for Stage Two

Based on our review of the Phase 1 infrastructure project we would make a number of recommendations for future investment at FEP:

- investment in the quay walls should be prioritised as it is essential to safeguard the economic impacts generated through the Phase 1 investment and also to secure new impacts in the future. The existing quay walls are identified as having a lifespan of only three to four years, but they are the key distinguishing feature of the site and essential to the operation of a major manufacturing and fabrication facility for the renewable energy sector;
- the on-site security arrangements should be reviewed following completion of the site security fencing contract. This may allow reduction in the use of permanent on-site security guards – there are currently two guards on duty 24 hours a day, creating significant costs to SE;
- there is a need to review SE policy regarding accounting procedures – to identify the true cost to SE of owning/operating FEP. At present the cost of capital investment is accounted for but the facilities management cost is included in SE's overall budget for its property portfolio management. This is a wider issue than simply the Phase 2 investment at FEP but best practice would be for SE to adopt a consistent approach across all projects that includes the revenue costs of operating properties/sites as part of the total project expenditure. This would allow consideration of both capital and revenue costs when conducting value for money assessments in future project evaluations;

- the de facto lease arrangements with the on-site tenants (BiFab and PTS), as identified at Section 4.1.3, should be either completed or acknowledged as incomplete (in terms of formal file note) as a matter of urgency to formalise the position of SE. Ideally leases would be completed to create security of tenure for tenants and income for SE, but it is recognised that there are outstanding, but different, issues for both tenants that create difficulties in reaching agreement. If the decision is made not to complete formal lease arrangements a file note, outlining the rationale, should be included and signed and authorised by the project's Senior Responsible Officer; and
- there is a perception amongst some of the consultees for this study that the Scottish Government does not fully understand the potential impacts and benefits of the renewable energy sector to the future growth of the Scottish economy. The Energy Industry Team at SE should continue discussions with the Scottish Government to promote this sector further, raise awareness of the significant growth opportunity and secure increased financial resource to attract new investment activity to Scotland. This could use FEP as a good practice example of the need for investment to create significant levels of additional economic outcome.

There is significant potential for FEP to become a very important site due to its proximity to future offshore sites (released at Round 3) on the eastern coast of the UK. With an industrial legacy in engineering, Fife is ideally placed to take advantage of this industry growth through an appropriately skilled workforce and well developed supply chain. Further significant investment in site infrastructure is, however, required to achieve this potential. Due to market failure and risk aversion the private sector is unlikely to undertake this investment, demonstrating the need for further public sector investment at FEP through the proposed Phase 2 activity.

Appendix A: Review of Phase 1 Investment

To inform this evaluation study, SE provided a review of project activity 2006-2009 'Energy Park Fife, Review of Phase 1 Investment, 14 May 2009'. This is based on a detailed review of internal SE project files and identifies the project achievements since October 2006 – SE Phase 1 Investment approval.

Physical achievements:

- Fabrication Shop 1 – re-clad, new doors, new concrete floor, reconditioned cranes, reconfigured high and low voltage electrical systems, new offices and full height partitioning to make the building independent from the neighbouring unit;
- Fabrication Shop 2 – new alarm, new emergency lighting, new roof cladding, reconfigured electrical systems, partitioning and new covered fire escape;
- new utility services introduced to site for connection in Spring 2010 – electricity, water and telecoms;
- new access roundabout and 550m of new spine road;
- repairs to quayside and safety railing installed;
- Coastal Defence Strategy developed;
- electrical systems overhauled and reconfigured pending adoption by a Network Distribution;
- former canteen and temporary office buildings demolished;
- former drawing office made safe and secure;
- unsafe structures dismantled and cleared;
- redundant buildings demolished;
- external goliath crane overhauled and brought back into productive use;
- former Maintenance Sheds fully refurbished to create 20,000 sq m of modern industrial space;
- emergency earthworks to reduce erosion of land into Firth of Forth;
- earthworks to create bounds round the site perimeter to west and north to define the Park's boundary;

- earthworks to create defined development platforms;
- landscaping and seeding at the new access, along the new road and on the boundary bunds; and
- boundary fencing renewed to improve site security.

In addition a range of other achievements are identified:

- feasibility and monitoring work undertaken to support future wind turbine proposals for the site;
- detailed planning consent obtained for a new 12,000 sq m fabrication shop;
- on-the-job training using LOAN and FILM (Fife Intermediary Labour Market) funding has been delivered to around 14 (tbc) previously unemployed young people through various contracts;
- land assembly from Crown Estates and Forth Ports;
- investment and on-site infrastructure works delivered through a Development Agreement with Fife Council, which has helped facilitate progress with various Council services;
- BiFab successfully secured new orders to manufacture and supply sub-sea structures serving the Ormonde and Alpha Ventus Fields, which has helped secure employment for around 250 skilled and semiskilled workers for at least the next two years;
- Duncan Engineering (BiFab supply chain company) relocated from old dilapidated premises into modern industrial workshop;
- PTS (BiFab supply chain company) continues to operate a non-destructive testing facility near the quayside, and continue to seek long-term occupation of suitable premises at FEP;
- JKF Group occupied office space (now relocated to Methil Dock) and requested lease to occupy yard space at FEP; and
- Levels of interest from prospective tenants remain high.