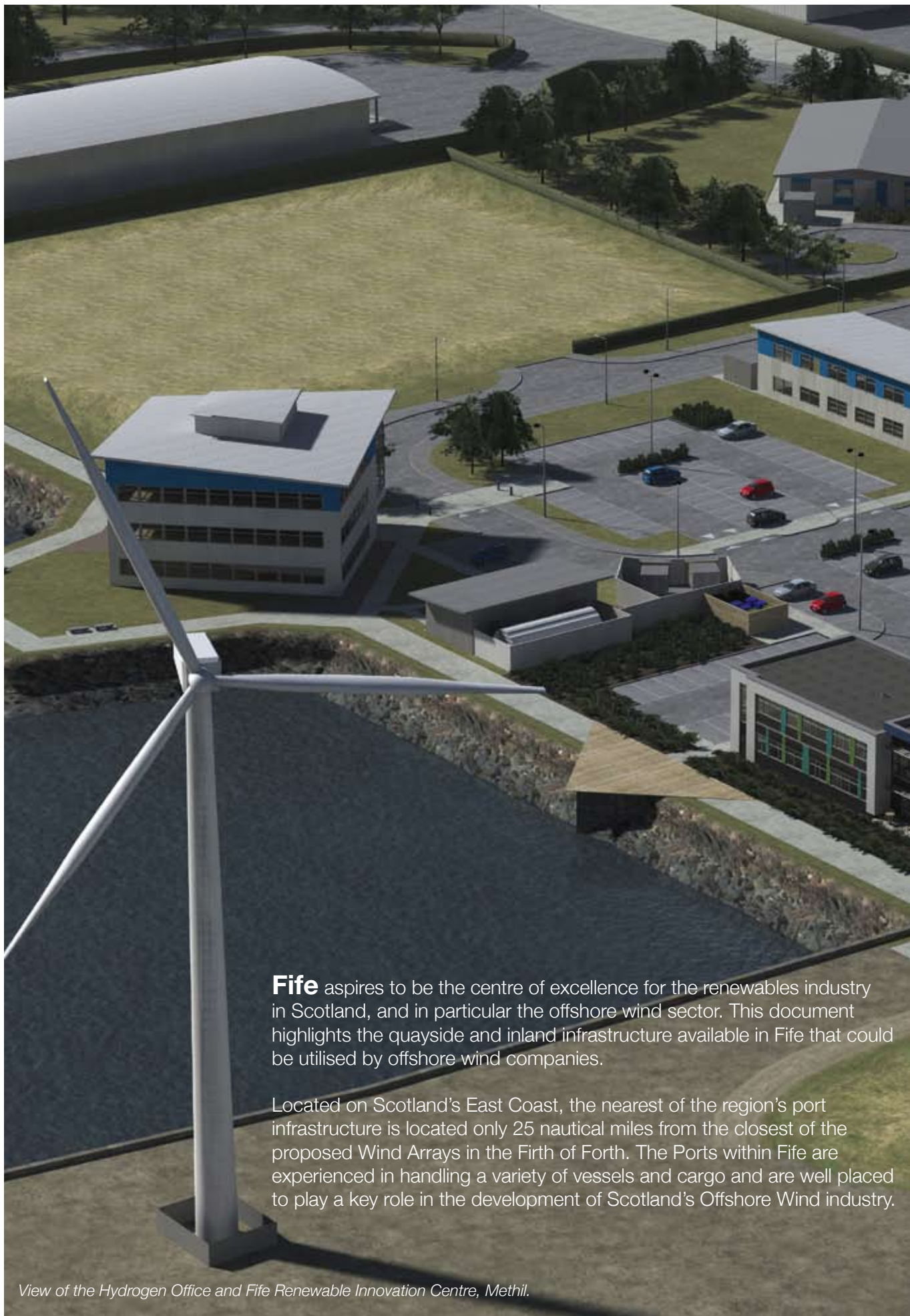


RENEWABLE ENERGY IN FIFE

Quayside Infrastructure





Fife aspires to be the centre of excellence for the renewables industry in Scotland, and in particular the offshore wind sector. This document highlights the quayside and inland infrastructure available in Fife that could be utilised by offshore wind companies.

Located on Scotland's East Coast, the nearest of the region's port infrastructure is located only 25 nautical miles from the closest of the proposed Wind Arrays in the Firth of Forth. The Ports within Fife are experienced in handling a variety of vessels and cargo and are well placed to play a key role in the development of Scotland's Offshore Wind industry.

View of the Hydrogen Office and Fife Renewable Innovation Centre, Methil.

The Offshore Wind Opportunity

The Offshore Wind market within UK waters is predicted to grow to over 5,000 turbines by 2020. This will require massive investment in the full process including turbine manufacture, installation and operations & maintenance. This presents an opportunity to businesses across the UK and Europe.

There are plans for seven offshore wind farms in the waters around Scotland. Of those seven, three are just off the coast of Fife and they will account for 52% of the total capacity in Scotland, 4,765MW. In order to reach that level of capacity nearly 1,000 5MW turbines will be required.

Once installed, these turbines will need to be carefully operated and maintained over their lifetime. Operations and facilities located near to wind farms will benefit from reduced time and costs of travelling to the sites. This presents a range of opportunities for companies based close to wind farm sites to carry out scheduled and unscheduled maintenance.

Ideal location

Fife is an attractive location for renewable energy development for a number of reasons including the

close proximity of Edinburgh and its international airport. Fife's excellent transport infrastructure allows the movement of people and goods by road, rail and air. The region is also a great place to live with some of Scotland's most popular tourist destinations including St Andrews.

Established supply chain

Fife is home to a wealth of companies with expertise across the offshore wind supply chain. These include offshore engineering and installation experts Briggs Marine in Burntisland, marine environmental consultants SMRU Ltd in St Andrews and rapidly growing world-leading fabricators of subsea jackets Burntisland Fabrications (BiFab), based at the Energy Park Fife.

Skilled local workforce

With more than 150 engineering companies Fife has one of Scotland's largest engineering clusters. As a result of years of experience there is a pool of highly skilled workers in companies with expertise gained in the oil and gas and defence markets and many of these companies are now applying this to the renewable energy sector.



Rosyth

Rosyth is located 10 miles from Edinburgh Airport and sits within the Forth estuary. It benefits from excellent road links to the main road network (M90) and a rail link to the main east coast rail line. The Port of Rosyth and the wider Rosyth Waterfront occupies approximately 635 acres. The Waterfront area falls under 3 key land ownerships – Babcock Group, Forth Ports PLC and Scarborough Muir.

Babcock operates the former naval base which covers 119Ha. They have extensive marine engineering experience and are currently assembling two aircraft carriers for the Ministry of Defence. Due to their involvement in various naval projects the facility is fitted out to a high specification and the dock is now home to a Goliath crane which is the largest in the UK.

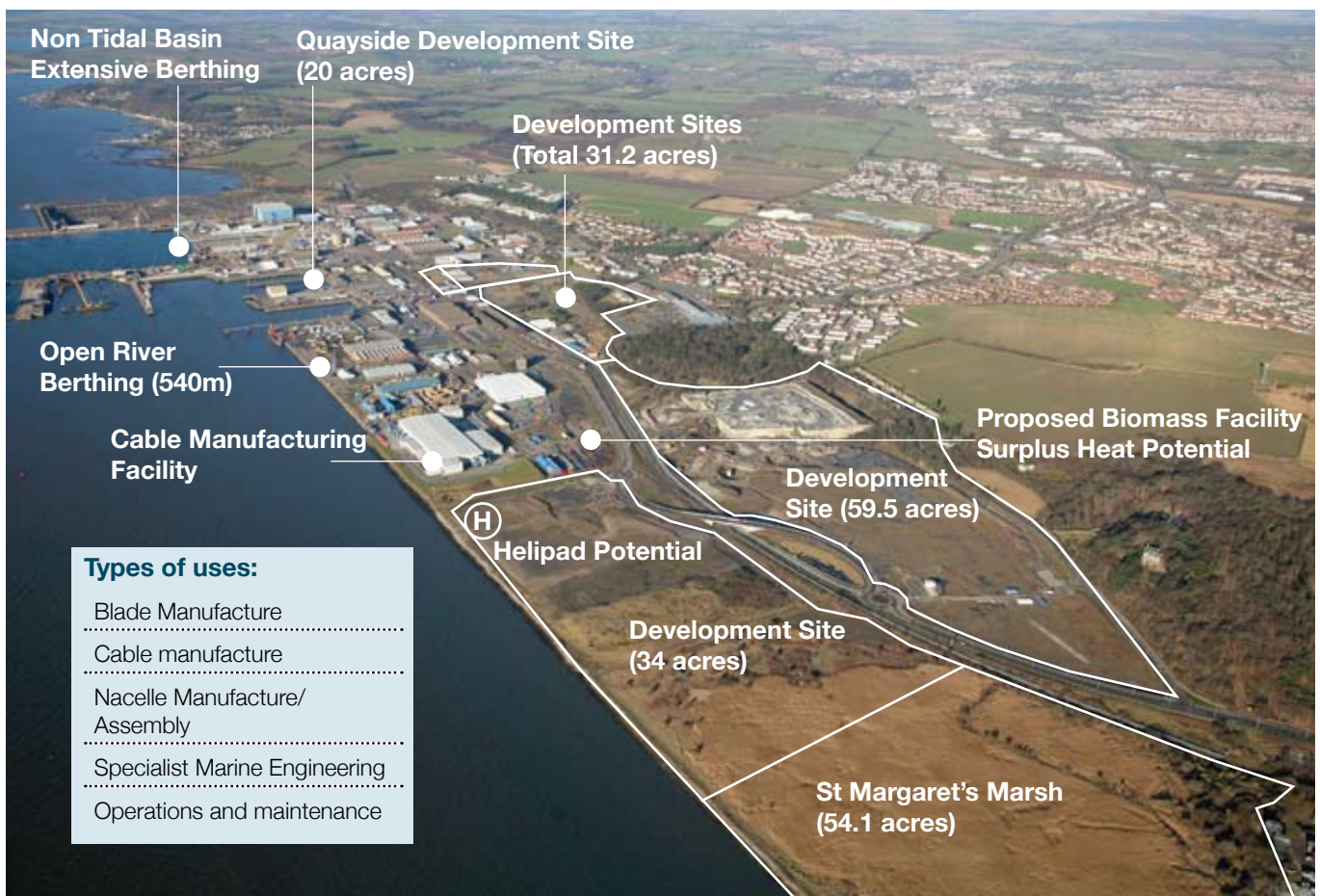
The Port of Rosyth is operated by Forth Ports and covers over 43Ha. The port is used by a range of freight companies for shipping goods to Europe

and is Scotland's only roll on, roll off freight link to Europe. Cable manufacturers Oceaneering Umbilical Solutions are based within the port and supply cables to the oil & gas and renewable energy market directly over the quayside.

To the east of the port is 61Ha of land owned by Scarborough Muir. Facilities on the site can access the quayside within the port or a new quayside could be established by extending the North Wall.

Located 2 miles to the north of the Rosyth Waterfront is the Shepherd Offshore site which at 150 acres offers considerable opportunities for supporting supply chain activities

There is a 44m air draft restriction due to the Forth bridges.



Area for storage	>6ha
Dedicated Access Road	YES
Quay Length North Wall	540m
Quay Length O, P & Q Berths	450m
Quay Length RoPax Berth	220m
Quay Length Naval Dockyard	1500m
Draft North Wall	8.3m
Draft O, P & Q Berths	3.5m
Draft RoPax Berth	7.2m
Draft Naval Dockyard	10.7m
Naval Dockyard Gate Width	42m
Naval Dockyard Dry Dock	33m x 260m
Air Draft Restriction	44m
Warehouse Facilities	YES
24/7 365 Access	YES
Abnormal Load Access	BY ROAD & BY SEA
Potential Heliport Licence	YES
Sailing Distance to Nearest Array	41Na/ 76km (Near na Gaoithe)
Sailing Distance to Furthest Array	76Na/ 140km (Firth of Forth)
Forth Ports plc Area	43.6 ha (107.7 acres)
Babcock Area	119.2 ha (294.5 acres)
Scarborough Muir Area	61.9 ha (153.1 acres)
Total Remaining Development Area	41.6 ha (103 acres)



Ocean engineering facility, Port of Rosyth



Siemens blades at Rosyth for SSE's Griffin development

Inverkeithing

Inverkeithing has a range of development opportunities surrounding the Inverkeithing Bay area. There are a number of landowners in the bay area many of whom are keen on bringing forward sites supporting the renewables sector.

Located only one mile from the Forth Road Bridge Inverkeithing has excellent links to the Scottish motorway system. A tidal jetty with loading for cranes of c.100 tonnes giving direct access to and from the main shipping channel has recently been constructed. The Bay also has 1.4Ha of well-maintained, secure lay down area for future storage - this facility is currently being used by RM Supplies. The site also has a further 6.8Ha of development area to the north of the bay.

Area for storage	1.4ha
Dedicated Access Road	YES
Quay Length	110m
Draft	0.5m
Air Draft Restriction	NONE
Warehouse Facilities	YES
24/7 365 Access	NO
Abnormal Load Access	BY ROAD & BY SEA
Potential Heliport Licence	YES
Sailing Distance to Nearest Array	39Na/ 73km (Near na Gaoithe)
Sailing Distance to Furthest Array	74Na/ 137km (Firth of Forth)
Total Remaining Development Area	6.8 ha (17 acres)



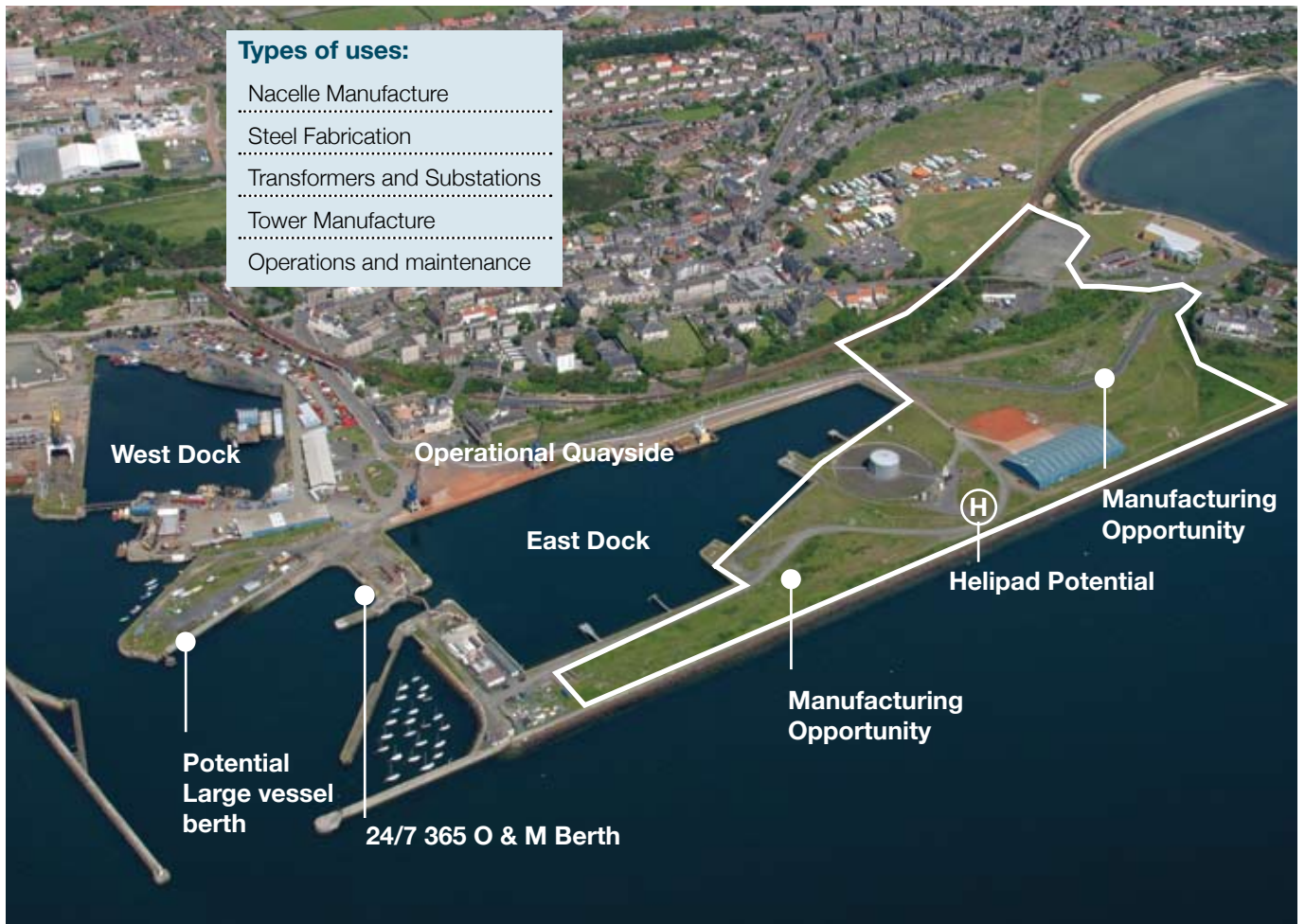
Burntisland

The port is owned and operated by Forth Ports. The port is already home to Burntisland Fabrications Ltd (Bifab) and Briggs Marine.

Burntisland Fabrications Ltd, located on the west of the port area, employs 400 people fabricating structures primarily for the oil & gas and renewables sectors. The port is also home to Briggs Marine, who are located on the northern edge. Briggs are vastly experienced in the marine environment. They are already servicing the renewables industry and are well placed to supply support services to all phases of projects with a

particular focus on operations and maintenance (subsea cable maintenance and repair, vessel supply and storage facilities).

With deep water access offered by the port both Bifab and Briggs Marine are keen to exploit opportunities offered by the renewables sector. There is over 7Ha of land available for development within the dock that would have access to the East dock. This presents a significant opportunity for companies seeking to develop a facility to service nearby offshore wind sites.



Area for storage	>6ha
Dedicated Access Road	YES
Quay Length West Dock	152m
Quay Length East Dock	443m
Draft West Dock	4.3m
Draft East Dock	8.6m
Dock Gate Width	18.2m
Air Draft Restrictions	NONE
Warehouse Facilities	YES
24/7 365 Access	YES
Abnormal Load Access	BY SEA
Potential Heliport Licence	YES
Sailing Distance to Nearest Array	35Na/ 65km (Near na Gaoithe)
Sailing Distance to Furthest Array	70Na/ 130km (Firth of Forth)
Forth Ports Total Area	36.1 ha (89.3 acres)
Railtrack Total Area	1.5 ha (3.75 acres)
Fife Council Total Area	0.8 ha (2 acres)
Total Remaining Development Area	7.2 ha (18 acres)



Briggs Marine, Burntisland



Briggs Marine, Burntisland

Energy Park Fife

Energy Park Fife is located on the Methil Waterfront. The Park is a joint venture between Scottish Enterprise Fife and Fife Council and is identified within the recently published National Renewable Infrastructure Plan (N-RIP) as being ideally placed to take advantage of the Scottish Government's commitment to the sector. The site also benefits from having a ready association with the offshore wind industry as it is home to Burntisland Fabrications (Bifab), who are a leading renewables company actively involved in the manufacturing and assembly of wind turbine jackets.

The project is being expanded to include Methil Docks Business Park, Methil Power Station and the dock area. Scottish Enterprise, Fife Council and Forth Ports are developing a masterplan for the waterfront with a focus on opportunities and locations for renewable energy activity. These include manufacturing, operations & maintenance, demonstration and supporting supply chain activities. The site is also adjacent to the proposed 2-B Energy near shore and offshore demonstration sites.

Dedicated Access Road	YES
Energy Park Quay 1 Length	160m
Energy Park Quay 2 Length	184m
Energy Park Quays 1 & 2 Draft	6.1m
Air Draft Restrictions	NONE
Warehouse Facilities	YES
24/7 365 Access	OPTIONS
Abnormal Load Access	BY SEA
Potential Heliport Licence	YES
Sailing Distance to Nearest Array	25Na/ 46km (Near na Gaoithe)
Sailing Distance to Furthest Array	60Na/ 111km (Firth of Forth)
Scottish Enterprise Area	54.6 ha (135 acres)
Forth Ports Area	22.1 ha (54.7 acres)
Business Park Area	6.9 ha (17.1 acres)
Total Remaining Development Area	26 ha (65 acres)



Energy Park Fife – Methil Docks Business Park

Extending to some 17 acres, Methil Docks Business Park already has two considerable renewables projects under development, the Hydrogen Office and the Fife Renewables Innovation Centre.

The Hydrogen Office was established to support the accelerated development of the renewable, hydrogen, fuel cell and energy storage industries in Scotland, by improving access to and understanding of the technology, facilitating research and development and enhancing educational opportunities.

Fife Renewables Innovation Centre, a £3m development proposed at the Park which will create high quality work/innovation space in a low carbon facility. The building, extending to approximately 1,400sqm over 2 floors, will be designed to

enable technology and knowledge transfer, with a combination of individual incubation units and shared research facilities, and will be developed as a low carbon construction.



The Hydrogen Office, Methil



Fife Renewables Innovation Centre

Energy Park – Methil Docks

The Port of Methil has two docks able to take vessels up to 3,000 dwt. The Port, which is owned and operated by Forth Ports Ltd., currently specialises as a woodpulp and timber distribution centre.



Area for storage	>6ha
Dedicated Access Road	YES
Methil No. 1 Dock Quay Length	340m
Methil No. 2 Dock Quay Length	500m
Methil No. 1 Dock Quay Draft	6.7m
Methil No. 2 Dock Quay Draft	8.2m
Maximum Beam	14.4m
Air Draft Restrictions	NONE
Warehouse Facilities	YES
24/7 365 Access	OPTIONS
Abnormal Load Access	BY SEA
Potential Heliport Licence	YES
Sailing Distance to Nearest Array	25Na/ 46km (Nearth na Gaoithe)
Sailing Distance to Furthest Array	60Na/ 111km (Firth of Forth)
Scottish Enterprise Area	54.6 ha (135 acres)
Forth Ports Area	22.1 ha (54.7 acres)
Total Remaining Development Area	26 ha (65 acres)



The Invest in Fife team offer a free and confidential bespoke service. Whatever your requirement, we have the skills and experience to make your move to Fife as easy as possible.

We can help you with:

- Property selection and development
 - Land for business development
- Detailed local information such as demographics, local workforce, public transportation
 - Familiarisation trips
 - Advice on financial assistance
- Co-ordination with Fife Council departments and other regulatory bodies
- Provide contacts within external organisations
 - Help with local engagement

Invest in Fife has a proven track record of helping potential investors make their projects happen. We have also assisted a number of Fife-based companies with their local expansion plans.

Contact:

Ross Mackenzie

Lead Officer – Investment
Tel: 08451 55 55 55 ext 492178
Email: ross.mackenzie@fife.gov.uk

Barbara Whiting

Lead Officer – Renewables
Tel: 08451 55 55 55 ext 492184
Email: barbara.whiting@fife.gov.uk