



Energy for
generations

A decorative graphic element consisting of a thick, wavy ribbon that starts from the left edge, curves upwards and to the right, and then loops back towards the left. The ribbon has a color gradient from light blue to yellow and green.

SUPPLY CHAIN DEVELOPMENT STATEMENT: OUTLOOK

ScotWind Leasing -
Sealtainn Offshore Wind
ESB Asset Development UK Limited



1 INITIAL SUPPLY CHAIN DEVELOPMENT STATEMENT (SCDS)

Table 1.1 and Table 1.2 outline the SCDS commitments and ambition for our 500MW floating offshore wind project located within the NE1 PO area off Shetland.

TABLE 1.1: SCDS COMMITMENTS BY PROJECT STAGE AND LOCATION				
Expenditure £m				
Stage	Scotland	rUK	Europe	Elsewhere
Development	76	39	25	-
Manufacturing & Fabrication	140	295	1,034	100
Installation	62	120	166	-
Operations	54	35	91	7
Total	332	488	1,316	107

TABLE 1.2: SCDS AMBITION BY PROJECT STAGE AND LOCATION				
Expenditure £m				
Stage	Scotland	rUK	Europe	Elsewhere
Development	106	19	15	-
Manufacturing & Fabrication	392	408	721	48
Installation	182	109	57	-
Operations	152	25	10	-
Total	832	561	803	48



2 OUTLOOK

ESB, Ireland's foremost energy company, is poised to deliver a breakthrough floating offshore wind project that will create maximum benefit for Scotland and the Shetland Islands.

ESB brings a track record of investment in the offshore wind sector in Scotland that includes the Neart na Gaoithe offshore wind farm, a joint venture with EDF which is currently under construction and Inch Cape offshore wind farm, a joint venture with Red Rock Power which is currently in advanced development.

This SCDS outlines our vision for delivering a landmark floating offshore wind project off the coast of Shetland that will **power the production of green hydrogen and transform Shetland into a renewable energy hub.**

Our ambition is to spend over £830m within the Scottish supply chain, with a firm commitment of over £330m. The following sections explain the level and distribution of expenditure at each stage of the project life cycle and have been prepared in consultation with industry specialists Offshore Wind Consultants Ltd. (OWC) and Lumen Energy & Environment Limited.



Neart na Gaoithe and Inch Cape

ESB's Offshore wind farms being developed in Scotland



Green Hydrogen Production

to transform Shetland into a renewable energy hub



£830m

spent within the Scottish supply chain according to ESB's Ambition Plan



2.1 DEVELOPMENT

Our ambition is to spend £106m (76%) within the Scottish supply chain at the Development stage, with a firm commitment of £76m (54%). Early engagement with the supply chain has confirmed existing project development capabilities in the renewable energy sector in Scotland and has also highlighted a number of areas where there is potential to grow expertise and capacity in emerging concepts such as floating wind technology. These findings are supported by ESB's experience of onshore and offshore wind development in Scotland.

At an early stage ESB will undertake more detailed supply chain engagement with regard to the specific services and work packages that will be required during the development phase. Through these engagements it is expected that ESB will ensure preparedness within the Scottish supply chain for future tenders and work packages. Engagement with providers of some specialist offshore services has already commenced in advance publishing of pre-qualification requests. These services include offshore geophysical surveys, wind resource and metocean measurement campaigns, geotechnical engineering and foundation design packages.



2.2 MANUFACTURING AND FABRICATION

Our ambition is to spend £392m (25%) within the Scottish supply chain at the Manufacturing and Fabrication stage, with a firm commitment of £140m (9%). Supply chain evaluations commissioned by ESB have identified specific opportunities to grow floating platform construction and fabrication in Scotland.

When assumptions on cost-competitiveness of Scottish yards and ports relative to other providers in Europe and elsewhere were introduced to the model, it indicated that, for the Commitments scenario, the majority of floating platform fabrication is likely to occur abroad, with specific works packages such as final assembly and commissioning of sub-structure components undertaken through a regional base such as Shetland or North East Scotland.

In the Ambition scenario, Scottish content increases to 25%. This scenario is based on the manufacture of reinforced concrete semi-submersible foundations which our studies indicate could increase Scottish content when compared to the use of steel foundations.

ESB shall take the following actions to ensure that Scottish content is maximised at the Manufacturing and Fabrication stage:

- 1 Early engagement with Scottish fabrication facilities, yards and floating platform designers to gauge capacity and capability, and to understand their existing supply chain commitments and projections. This process has begun, with engagements already underway with a number of possible suppliers, including Lerwick Port Authority (Greenhead Base & Dales Voe for platform fabrication / assembly) and Nigg Energy Park (for towers).
- 2 Clear communication of project timescales with the fabrication and manufacturing supply chain so that the project enables the coordination and optimisation of available supply chain capacity. Timelines for other floating wind projects and their likely impact on the supply chain will be factored into this approach.
- 3 Continuous engagement with the supply chain and offshore developers to support a collective effort within the sector to grow industry capability, including the potential to enhance key construction and assembly infrastructure such as port acreage.

Implementing solutions to the challenges that exist in the manufacturing and fabrication supply chain will require a collaborative approach across the sector and joint action by key stakeholders such as SOWEC, the ORE Catapult led Floating Offshore Wind Centre of Excellence, Scottish Enterprise, Highlands & Islands Enterprise and the Shetland Islands Council.



2.3 INSTALLATION

Our ambition is to spend £182m (52%) within the Scottish supply chain at the Installation stage, with a firm commitment of £62m (18%). The variance (34%) reflects the findings of ESB's studies that, while installation expertise is currently concentrated in continental Europe, the economic potential arising from the pipeline of ScotWind projects creates opportunities for the growth of Scottish expertise in this sector and opportunities for existing vessel providers to invest in Scotland. The existing infrastructure and expertise in the Moray and Cromarty Firths, Aberdeenshire and Shetland provides a strong base from which to grow this element of the supply chain and, in the Ambition scenario, it is assumed that the growth of contractor capacity and capability in this sector will enable Scottish providers to secure the majority of installation work.

2.4 OPERATIONS

Our ambition is to spend £152m (81%) within the Scottish supply chain at the Operations stage, with a firm commitment of £54m (29%). Scottish content during the Operations stage may be maximised by optimising the availability of vessel providers and the capacity of suppliers of maintenance equipment in a way that aligns with the needs of the project. In this regard, a detailed review of the options for the Operations stage of the project is already underway. Operation and maintenance (O&M) scenarios modelled by ESB include an O&M base in Lerwick, the use of crew transfer vessels (CTV) and the use of helicopter transfers. While further investigation will be required, studies and engagements undertaken to date demonstrate clearly that Shetland has adequate capacity and capability to support this phase of the project at present.
