

BERWICK BANK WIND FARM ONSHORE ENVIRONMENTAL IMPACT ASSESSMENT REPORT

Appendix 2.4: Cumulative Developments

Document Status

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1. CUMULATIVE DEVELOPMENTS

1.1. INTRODUCTION

1. This appendix sets out the full list of cumulative developments which have been identified for consideration within the Cumulative Effect Assessment (CEA) for the Proposed Development. This provides details on their respective locations, shown on Figure 2.4.1, and sets out the justification for screening in or out of detailed assessment within the CEA. The preliminary list was shared with East Lothian Council (ELC) in January 2022 for agreement. The list was finalised the end of September 2022, less than three months prior to submission.
2. The general approach to the CEA is set out within Volume 1, Chapter 2.

1.2. IDENTIFIED CUMULATIVE DEVELOPMENTS

1.2.1. TIER ONE

3. Tier One of the CEA considers the onshore and offshore infrastructure of the Project. Full details of the offshore infrastructure are provided within the Offshore EIA Report. The key offshore components will include:
 - up to 307 wind turbines (each comprising a tower section, nacelle and three rotor blades) and associated support structures and foundations;
 - up to ten Offshore Substation Platforms (OSPs)/Offshore converter station platforms and associated support structures and foundations to accommodate for a combined High Voltage Alternating Current (HVAC)/High Voltage Direct Current (HVDC) transmission system solution or a HVDC solution;
 - estimated scour protection of up to 10,984 m² per wind turbine and 11,146 m² per OSP/Offshore converter station platforms;
 - a network of inter-array cabling linking the individual wind turbines to each other and to the OSPs/Offshore converter station platforms plus inter-connections between OSPs/Offshore converter station platforms (approximately 1,225 km of inter-array cabling and 94 km of interconnector cabling); and,
 - up to eight offshore export cables connecting the OSPs/Offshore converter station platforms to landfall at Skateraw. Offshore export cable design includes both HVAC and HVDC solutions.
4. Offshore construction (site preparation and landfall activities) is expected to commence in Q1 2025, anticipated to conclude in Q1 2033.

1.2.2. TIER TWO

5. Tier Two of the CEA considers other onshore developments, the details of which are set out within Table 1.1. Based on professional judgement, publicly available information, and consideration of likely significant impacts, developments have been screened in or out of a detailed CEA.

Table 1.1 - Identified Cumulative Developments

Development Name	ELC Application Reference	Description	Site Address	Applicant	Planning Status	Screened In / Out	Justification
Aikengall Community Wind Farm	14/00001/SGC (19/00001/SBC)	Section 36 - Construction of 27 wind turbines, associated access tracks, crane hardstandings, one 90m meteorological mast, sub-station/control room buildings and compound, a temporary storage and construction compound and 5 borrow pits - Aikengall 11a (this application straddles the East Lothian/Scottish Borders Council area boundary - 8 of the turbines are within East Lothian with the remainder in Scottish Borders)	Aikengall Community Wind Farm U204 (01) From Thurston Mains (u202) To Aikengall Farm Innerwick East Lothian	Community Windpower	Approved but subject to undetermined variation (ELC ref 19/00001/SGC)	Out	Characteristics of potential cumulative impacts limited to trunk roads. Excluded on basis that: the A1 can accommodate day-to-day traffic movements associated with all these projects; and for abnormal loads, the Traffic Management Plan (TMP) would require liaison with Transport Scotland (TS) regarding scheduling, which would avoid conflict. Anticipated that this would be secured via a suitable worded planning condition.
Falsely Cottage	18/01080/P	Change of use of agricultural land and land for the keeping of horses to form domestic garden ground and extension to house	Falsely Cottage, Innerwick, Dunbar, East Lothian, EH42 1SQ	Mr Richard Carr	Approved 2018. Status of construction unknown	Out	Insufficient in scale to generate significant impact.
Viridor Leachate Treatment Plant	18/00431/PM	Renewal of planning permission 15/00022/PM - Construction and operation of a leachate treatment plant (LTP) comprising a series of storage and treatment tanks within a surfaced and bunded compound, together with lagoons, reed beds and ancillary plant and infrastructure.	Dunbar Landfill Site Innerwick Dunbar East Lothian EH42 1SW	Viridor Waste Management Ltd	Approved 2018. Status of construction unknown	Out	Understood to not be progressing, and that planning permission has lapsed.

Development Name	ELC Application Reference	Description	Site Address	Applicant	Planning Status	Screened In / Out	Justification
Crystal Rig IV Wind Farm	18/00004/SGC	Application for consent under section 36 of the electricity act 1989 and deemed planning permission under section 57(2) of the Town and Country Planning (Scotland) act 1997 for the construction and operation of crystal rig wind farm (phase iv) in the Scottish Borders Council and East Lothian Council area Crystal Rig IV	Crystal Rig IV	Fred Olsen Renewables	Approved 2021 following public inquiry	In	Yes, dependent on construction timeframe, assumed to overlap.
Neart na Goithe (NnG)	12/00922/PM - original planning permission for cable route and substation (includes original ES) 15/00634/PM - S42 re construction phasing 19/00285/PM - further S42 re enabling works and phasing 19/00757/P, 19/00774/P, 19/00387/P - sections of cabling outside original planning boundary	Various NnG applications	Land Between Thorntonloch And Crystal Rig Wind Farm Dunbar East Lothian	Neart na Gaoithe Offshore Wind Ltd	Approved. Onshore construction expected to complete end-2023	Out	Construction phase does not overlap. No onshore overlap in permanent above ground infrastructure.

Development Name	ELC Application Reference	Description	Site Address	Applicant	Planning Status	Screened In / Out	Justification
	19/00985/P, 19/01275/P, 19/01286/P - permissions for road widening and temporary passing places						
Ferneylea Turbines	18/00823/P	Erection of 2 wind turbines and associated works	The Granary Ferneylea Oldhamstocks Innerwick East Lothian TD13 5YN	Mr John McGregor	Approved. Construction status unclear	Out	Construction periods unlikely to overlap, insufficient in scale to generate significant impact.
Skateraw Pulverised Fuel Ash Extraction	19/00828/P	Winning and working of pulverised fuel ash together with the restoration of the waste mineral site	Skateraw Farm Dunbar East Lothian EH42 1QR	FRM & DM Partnership	Withdrawn.	Out	Application has been withdrawn.
Crowhill Housing	21/01308/P	Renewal of planning permission 06/01098/FUL - Conversion of agricultural steading to form 25 houses, domestic studios/workshops and associated works	Crowhill Farm Steading Innerwick Dunbar East Lothian EH42 1QT	A Taylor & Son	Undetermined. Anticipated January 2023 determination date	Out	Unlikely to be sufficient scale to have cumulative interaction with Proposed Development.
Viridor Plastic Recycling Facility	20/00001/PAN	Construction of Plastics Recycling Facility	Dunbar Landfill Site Oxwellmains Dunbar East Lothian EH42 1SW	Viridor Waste Management Limited	Proposal of Application Notice (PAN) No planning application to date - understand not being progressed	Out	Understood not to be progressing.

Development Name	ELC Application Reference	Description	Site Address	Applicant	Planning Status	Screened In / Out	Justification
Hallhill Mixed Use Development	20/00003/PAN	Planning Permission in Principle for a Major Mixed-use Development comprising Business Park (Class IV, V and VI), Retail & Leisure (Class I, III & VII, Key Workers and Elderly Amenity Housing and Nursery Class (VIII, IX and XI), Visitor Centre and Renewable Energy Centre)	Dunbar Park Spott Road/Kellie Road Dunbar East Lothian	Hallhill Developments Ltd	PAN No planning application to date.	Out	No application submitted to date, significantly distant from site that no cumulative impacts anticipated.
Viridor Polymer Recycling Facility	20/00005/PAN	Construction of a Polymers Recycling Facility	Dunbar Landfill Site Oxwellmains Dunbar East Lothian EH42 1SW	Viridor Waste Management Limited	PAN No planning application to date - understand not being progressed.	Out	Understood not to be progressing
Blindwells Residential Development	20/00008/PAN, 20/00009/PAN, 21/00449/PM	Various Blindwells applications. Note: other major strategic residential developments in far west of county, but Blindwells is largest and nearest.	Blindwells, East Lothian	Hargreaves Services	Various applications	Out	Characteristics of potential cumulative impacts limited to trunk roads. Excluded on basis that: the A1 can accommodate day-to-day traffic movements associated with all these projects; and for abnormal loads, the TMP would require liaison with TS regarding scheduling, which would avoid conflict. Anticipated that this would be secured via a suitable worded planning condition.
SPEN Eastern Link Project – Branxton Grid Substation	21/00004/PAN	New 400kV Electricity Substation and associated works	Fields To The South Of Thornton Bridge Sealing End Compound Branxton Dunbar East Lothian	SP Energy Networks	PAN Planning application reference 21/01569 subsequently	In	Part of the Eastern Link Project - Branxton Grid Substation. Potential for cumulative impacts.

Development Name	ELC Application Reference	Description	Site Address	Applicant	Planning Status	Screened In / Out	Justification
Seagreen 1A Onshore Works	21/00290/PPM	Planning permission in principle for onshore substation, underground electricity cables and associated temporary and permanent infrastructure to export electricity from the Seagreen Offshore Wind Farm into the national electricity transmission network	Edinburgh Road, Cockenzie, East Lothian	Seagreen 1A Ltd	Approved. submitted (see below).	Out	Characteristics of potential cumulative impacts limited to trunk roads. Excluded on basis that: the A1 can accommodate day-to-day traffic movements associated with all these projects; and for abnormal loads, the TMP would require liaison with TS regarding scheduling, which would avoid conflict. Anticipated that this would be secured via a suitable worded planning condition.
Inch Cape Onshore Works	18/00189/PPM, 21/01474/PM	Planning permission in principle for proposed onshore transmission works associated with the Inch Cape Offshore Wind Farm comprising the construction, operation and decommissioning of an onshore substation, electricity cables and associated infrastructure required to export electricity from the Inch Cape Offshore Wind Farm to the National Electricity Transmission System	Former Cockenzie Power Station Site, Prestonpans, East Lothian	Inch Cape Offshore Ltd	Approved. Subsequent applications submitted to extend timescales.	Out	Characteristics of potential cumulative impacts limited to trunk roads. Excluded on basis that: the A1 can accommodate day-to-day traffic movements associated with all these projects; and for abnormal loads, the TMP would require liaison with TS regarding scheduling, which would avoid conflict. Anticipated that this would be secured via a suitable worded planning condition.
SPEN Eastern Link Project – Branxton Grid Substation	21/01569/PM	Construction of a 400 kilovolt (kV) gas insulated switchgear (GIS) substation and associated works	Fields To The South Of Thornton Bridge Sealing End Compound Branxton	SP Energy Networks	Application. (Currently withdrawn but understood to be planned to be resubmitted).	In	Part of the Eastern Link Project - Branxton Grid Substation. Potential for cumulative impacts.

Development Name	ELC Application Reference	Description	Site Address	Applicant	Planning Status	Screened In / Out	Justification
					Planning application pursuant to above-mentioned PAN		
SPEN Eastern Link Project – Converter Station & Cable Route	22/00852/PPM	Planning permission in principle for a converter station and associated development including a landfall at Thorntonloch and connecting buried cabling, all in association with the Scottish Power Eastern Link 1 project, for a new subsea High Voltage Direct Current (HVDC) link	Land Adjacent To Dunbar Landfill Site Oxwell Mains Dunbar East Lothian EH42 1SW	SP Energy Networks	Application.	In	Part of the Eastern Link project. Potential for cumulative impacts.
Torness Storage	22/00766/HSC	Storage of hazardous substances	Torness Power Station Torness Dunbar East Lothian EH42 1QS	EDF Energy	Application	Out	Potential cumulative impacts limited due to the nature of the proposal being for storage on site which is accessed from the A1 which can accommodate day-to-day traffic movements associated with all these projects
Forthwind Demonstrator	22/00001/SGC	S36 application for Forthwind Demonstrator	Forthwind Demonstration Project Firth Of Forth 1.5km From Methill	Forthwind Ltd	Application	Out	Unlikely to be cumulative effects with onshore due to distance given the proposals location being near Fife.
SPEN Eastern Link Project – Overhead Line	22/00002/SGC	S37 application to Install and Keep Installed a new 265m Section of 400kV Overhead Line	Torness Area East Lothian	SPEN	Application	In	Part of Eastern Link project. Potential for cumulative impacts.

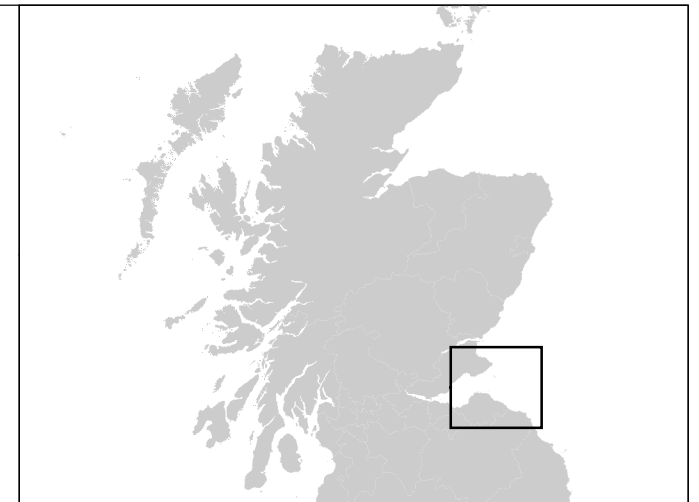
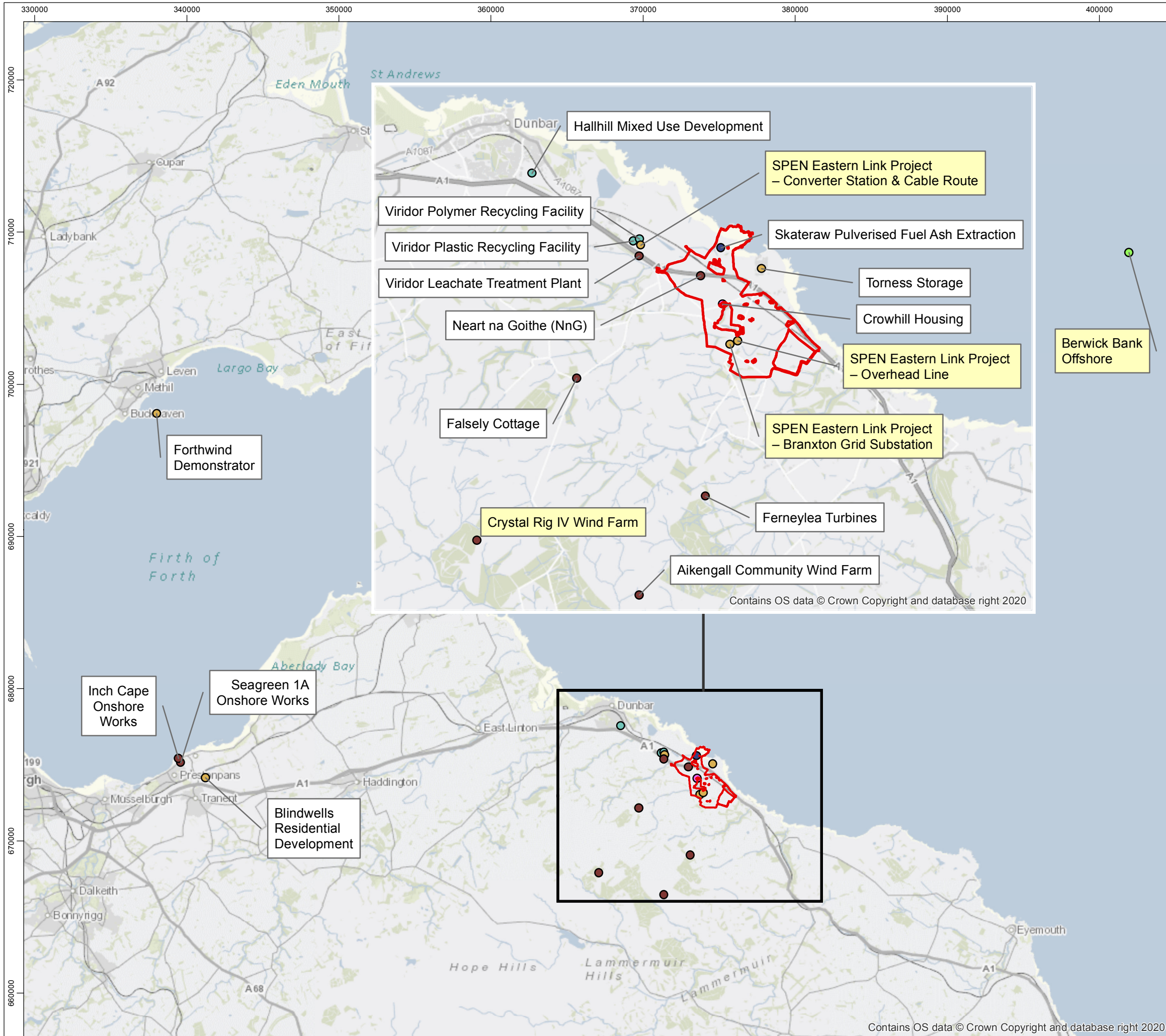
1.3. CONCLUSION

6. Following the screening exercise above, the projects within Table 1.2 have been taken forward for consideration within the CEA as relevant.

Table 1.2 - Screened in Cumulative Developments

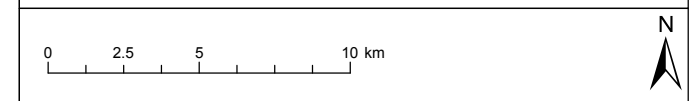
Project Name	Application Ref	Description	Status	Location	Construction Timescale
Tier 1					
Berwick Bank Offshore Infrastructure	N/A	Offshore infrastructure and associated works of the Berwick Bank Project	Application	Offshore	2025-2033
Tier 2					
SPEN Eastern Link Project – Converter Station & Cable Route	22/00852/PPM	Planning permission in principle for a converter station and associated development including a landfall at Thorntonloch and connecting buried cabling, all in association with the Scottish Power Eastern Link 1 project, for a new subsea High Voltage Direct Current (HVDC) link	Application	Land Adjacent To Dunbar Landfill Site Oxwell Mains Dunbar East Lothian EH42 1SW	2024-2027
SPEN Eastern Link Project – Overhead Line	22/00002/SGC	S37 application to install and keep a new 265m section of 400 kV overhead line east of the proposed Branxton Grid substation	Application	Torness area, East Lothian	2024-2027
SPEN Eastern Link Project - Branxton Grid Substation	21/01569/PM	Construction of a 400 kilovolt (kV) gas insulated switchgear (GIS) substation and associated works	Application (Application Withdrawn but expected to be submitted again in near future)	Fields To The South Of Thornton Bridge Sealing End Compound Branxton	2023-2026
Crystal Rig IV Wind Farm	18/00004/SGC	Construction and operation of crystal rig wind farm (phase iv) – 11 turbines	Consented	4.5 km north of Cranshaw village	Unknown. Assumed to be overlapping.

FIGURE 2.4.1 - IDENTIFIED CUMULATIVE DEVELOPMENTS



- Legend**
- Site Boundary
- Cumulative Developments (Status)**
- Application
 - Approved
 - N/A
 - Proposal of Application Notice
 - Undetermined
 - Withdrawn

*Yellow labels denotes those which are screened in for detailed consideration within the CEA.



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Project Name
BERWICK BANK WIND FARM

Drawing Title
Cumulative Developments

Rev	Date	Details	Status	Drwn	Rqst	Chkd	Appd
R1	26/01/22	First Issue	-	ST	-	-	-
R2	-	-	-	-	-	-	-
R3	-	-	-	-	-	-	-
R4	-	-	-	-	-	-	-

Drawing Number
Figure 2.4.1

Scale	Plot Size	Datum	Projection
1:250,000	A3	OSGB36	BNG



