

ARDERSIER PORT ENERGY TRANSITION FACILITY PORT EXTENSION



November 2025

Appendix 14.1 Assessment Methodology

Appendix 14.1 Assessment Methodology

Ardersier Energy Transition Facility (Extension)

Introduction

The methodology is based upon the guidance for Nationally Significant Infrastructure Projects (NSIP): Advice on Cumulative Effects Assessment.

The NSIP Advice on Cumulative Effects Assessment has been utilised as, whilst the proposed development is not an NSIP, the principles within the advice note can be applied to this project and there is no other industry recognised guidance for cumulative assessments.

The following sources of information have been used in this cumulative assessment:

- Information provided by The Highland Council including on development proposals to be considered as part of the cumulative assessment.

Study area

Intra-cumulative effects

Study areas for the different environmental topics in this EIAR (Chapters 6 to 13) are set out within their respective chapters. For the purposes of this assessment, these study areas have been used to identify where there is potential for numerous different impacts on a single receptor.

Inter-cumulative effects

The Zone of Influence (ZOI) for environmental topics has been established using the UK Government NSIP guidance. The ZOI is unique to each environmental factor and is the area within which significant cumulative effects may potentially occur. The ZOI for each environmental topic is detailed in Table 1 and based on the study areas identified in Chapters 6 to 13.

Table 1: Environmental Zone of Influences (Zoi)

Environmental topic	ZOI
Historic Environment	5km
Airborne Noise	600m
Landscape, Seascape and Visual	15km
Coastal Processes and Geomorphology	15km
Hydrology and Hydrogeology	15km
Marine Ecology	Please refer to EIAR Chapter 11 (Marine Mammals)
Terrestrial Ecology and Ornithology	15km

A ZOI of 15km was selected surrounding the proposed development as this distance is considered to be the maximum distance in which existing and/ or approved developments would need to be located to

potentially result in cumulative effects. The application of threshold criteria to scope in/ out existing and/ or approved developments within the ZOI is explained further under 'Technical Scope' below.

Temporal Scope

Temporal scope refers to the timescale in which the cumulative effects last. For the purposes of this assessment, the temporal scope is defined as both the construction and operation phases, for both the intra-cumulative and inter-cumulative assessments. The construction and operation programmes are outlined in Chapter 3 (Project Description).

Technical Scope

Intra-cumulative assessment

The assessment methodology for intra-cumulative effects involves the identification of impacts associated with the proposed development upon a receptor or group of receptors.

The significance of construction and operational phase environmental effects is brought forward from the preceding environmental factor assessment (Chapters 6 to 13) of the EIAR into matrices, providing an overview of the multiple potential effects on individual receptors. The assessment considers residual effects after mitigation has been taken into account. The assessment considers effects of moderate or major significance and above. Although minor/slight individual effects are not considered 'significant' in terms of EIA, it is possible that multiple minor/slight effects could result in a significant cumulative effect on a given receptor.

The significance of intra-cumulative effects upon each environmental receptor or group of receptors is then made based upon the balance of significance scores from the different effects, and from using professional judgement.

The assessment considers all receptors and relevant groups of receptors that are located within close proximity that could be affected by a variety of impacts, as identified in the preceding chapters.

Chapters 6 (Airborne Noise and Groundborne Vibration), Chapter 7 (Landscape, Seascape and Visual Effects), Chapter 9 (Hydrology and hydrogeology), Chapter 10 (Coastal processes and geomorphology), Chapter 11 (Marine Mammals), Chapter 12 (Terrestrial Ecology), Chapter 13 (Ornithology), did not identify any significant effects on human or ecological receptors as a result of the proposed development.

Inter-cumulative effects

The NSIP guidance sets out a staged approach for assessing potential inter-cumulative effects with "other existing and/ or approved development":

Stage 1: Establish the Long List

A long list of existing and/ or approved developments was initially based on a search of The Highland Council planning portal for relevant planning applications within 15km of the proposed development. The long list of other developments is detailed in Appendix 14.2.

As noted in Chapter 14 (Cumulative Effects), consultation was undertaken with The Highland Council on this list.

The existing port is considered to be part of the 'baseline' scenario for the purposes of this EIA for all environmental topics as discussed in Chapter 1 (Introduction) and was therefore not added to the long and short list (Stage 2) because it was already incorporated into the future baseline assessment for the proposed development.

Stage 2: Establishing the Short List

A short list was established detailing which existing and/ or approved developments from the long list are scoped into the cumulative assessment. The short list is detailed in EIAR Chapter 14 Table 14.2. The cumulative scoping exercise follows the approach detailed in the NSIP guidance. Scoped in developments included in the short list include those that meet the following criteria:

- Within the 15km ZOI;
- Those that meet the 'threshold criteria' established by the environmental specialists in their respective Chapters 6-13
- Existing and/ or approved developments are also assigned 'Tiers', determined by the level of information available as explained in Appendix 14.2.

Each of the environmental specialists has reviewed the long list of developments and the short list reflects the totality of projects that were identified as relevant across all of the environmental topics.

Professional judgement was also used in cases where an 'other development' did not fulfil the criteria but was likely to give rise to significant cumulative effects. This could be due to its proximity to the proposed development, its scale or its nature. This is in accordance with the recommendations made in the UK Government NSIP guidance.

Stage 3: Information Gathering

The NSIP guidance notes that Stage 3 requires the gathering of detailed information to inform the Stage 4 assessment, such as:

- Proposed design and location information;
- Proposed programme of construction, operation and decommissioning; and
- Environmental assessments that set out baseline data and effects arising from the existing development and/ or approved developments.

Stage 4: Assessment

In accordance with the EIA Regulations, where significant effects are identified, the cumulative effects EIAR chapter describes proportionate measures to avoid, prevent, reduce or, if required and possible, offset adverse effects. The resulting residual effects are then reported.

Significance Criteria

The significance criteria for cumulative effects (intra or inter) are detailed in Table 2.

Table 2: Significance criteria in the assessment of cumulative effects

Significance		Definition
Significant adverse or beneficial	Very Large (adverse or beneficial)	Where the cumulative intra or inter-project effects of the proposed development in association with other existing or more than likely / near certain future major development upon an individual or collection of environmental receptors would be highly significant.
	Large (adverse or beneficial)	Where the cumulative intra or inter-project effects of the proposed development in association with other existing or more than likely / near certain major 'other' developments upon an individual or collection of environmental receptors would be significant.

Significance		Definition
	Moderate (adverse or beneficial)	Where the cumulative intra or inter-project effects of the proposed development in association with other existing or more than likely / near certain major development upon an individual or collection of environmental receptors would be noteworthy but not significant.
Not significant adverse or beneficial	Slight (adverse or beneficial)	Where the cumulative intra or inter-project effects of the proposed development in association with other existing or more than likely / near certain future major developments upon an individual or collection of environmental receptors would be slight.
Neutral	Neutral	Where the cumulative intra or inter-project effects of the proposed development in association with other existing or more than likely / near certain future major developments would balance.

Assumptions and Limitations

Limitations to the assessment and uncertainty are in relation to the uncertainty of other developments where only limited information is publicly available. This limitation has been addressed as far as possible through consultation with The Highland Council, adopting a worst-case approach. This assumes that when the construction start and finish dates are not available for the other developments, then either part or all of the construction phase will fall within the same period as the proposed development construction activities. In addition, the use of professional judgement based upon experience of similar assessments has been applied.

The cumulative effects is based on the existing and/ or approved developments that were agreed with The Highland Council in July 2025, therefore this date has been applied as the assessment 'cut-off' for collating the existing and/ or approved developments for assessment.

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Appendix 14.2 Other Developments

Appendix 14.2 Other Developments

Ardersier Energy Transition Facility (Extension)

Introduction

This appendix presents the matrix used for the 'long list' (Stage 1) and 'short list' (Stage 2) of other developments.

To assess the cumulative effect of the proposed development in-combination with other future developments, information from the following sources was obtained:

- The Highland Council.

The long list which was discussed and agreed with The Highland Council on 24 July 2025.

The Stage 2 columns in Table 1 have been amended from Matrix 1 of the UK Government NSIP guidance¹. The methodology used to determine whether other developments should be included in the short list is provided in Appendix 14.1.

Developments are also assigned 'Tiers', determined by the level of information available for that development. Tier 1 developments have a higher level of information available such as a submitted planning application (including an EIAR or relevant environmental information), or the development is under construction. Tier 2 developments have an EIA Scoping Report submitted to the local authority, and Tier 3 developments are allocated in the Local Plan but do not have a EIA Scoping Report or planning application submitted to the local authority.

Figure 14.1 at the end of this appendix shows the locations of other developments included in Table 1.

¹ UK Government Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment - <https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-advice-on-cumulative-effects-assessment>

Table 1: Other Developments (Long List)

Other developments details						Stage 1		Stage 2		
Ref	Planning Application Reference	Development name and brief description	Approximate distance to site boundary (km)	Status	Tier	Within Zol?	Progress to Stage 2?	Overlap in construction in period?	Scale and Nature of development likely to have a significant impact?	Progress to Stage 3/4?
1a	09/00038/OUTIN	New Town Comprising up to 4,960 houses, Community Facilities, Retail, Business, General Industry, Storage and Distribution, Hotels, Residential Institution, Leisure, Petrol Stations and associated Landscaping, Open Space, Infrastructure and Services	6.7 km	Part constructed	1	Yes	Yes	Potential	No	No
1b	08/00080/OUTNA	Mixed use development of 300 houses; tourism and heritage, equestrian and ecological centres; hotel and conference facilities; championship golf course, clubhouse and golf academy; community woodland and country park with associated infrastructure	5.73 km	Development commenced	1	Yes	Yes	Potential	Potential (Chapter 6 Airborne Noise and Groundborne Vibration; Chapter 7 LSVIA; Chapter 9 hydrology and hydrogeology; Chapter 12 Terrestrial Ecology and	Yes

Other developments details						Stage 1		Stage 2		
Ref	Planning Application Reference	Development name and brief description	Approximate distance to site boundary (km)	Status	Tier	Within Zol?	Progress to Stage 2?	Overlap in construction in period?	Scale and Nature of development likely to have a significant impact?	Progress to Stage 3/4?
									Chapter 13 Ornithology)	
1c	18/03073/FUL	Erection of 117 houses & associated works	4.16 km	Development completed	1	Yes	Yes	No	No	No
1d	15/03033/FUL	Erection of 50 residential units including access road, associated parking areas and amenity space	7.15 km	Development completed	1	Yes	Yes	No	No	No
1e	17/02509/FUL	Erection of 100 houses (including 25 affordable houses), retail unit and cafe	8.62 km	Development completed	1	Yes	Yes	No	No	No
1f	21/04763/SCRE	Residential-led, mixed use development of circa 520 dwellings, associated small scale employment-commercial and community uses, landscaping, public open space and associated infrastructure to include access and transport improvements and railway bridge for pedestrians and cyclists.	7.81 km	No further procedures progressed	1	Yes	Yes	No	No	No
1g	21/04895/PIP	Residential development comprising up to 400 residential units and associated infrastructure	14.74 km	Awaiting decision	1	Yes	Yes	Potential	No	No

Other developments details						Stage 1		Stage 2		
Ref	Planning Application Reference	Development name and brief description	Approximate distance to site boundary (km)	Status	Tier	Within Zol?	Progress to Stage 2?	Overlap in construction in period?	Scale and Nature of development likely to have a significant impact?	Progress to Stage 3/4?
1h	21/03683/PIP	Erection of 93 residential units, access roads, landscaping and ancillary infrastructure	14.78 km	Phase 1 implemented, Phase 2 consented, and Phase 3 under consideration	1	Yes	Yes	Potential	No	No
2a	08/00215/OUTIN	Business park upon 200 hectares adjacent to the west and south side of Inverness Airport to be developed in four sequential phases comprising business uses (Class 4), general industry uses (Class 5) and storage / distribution uses (Class 6), a hotel and conferencing unit and other supporting uses, associated services and facilities	7.83 km	PIP remains valid Various industrial and commercial schemes progressed from this overarching consent.	1	Yes	Yes	Potential	No	No

Other developments details						Stage 1		Stage 2		
Ref	Planning Application Reference	Development name and brief description	Approximate distance to site boundary (km)	Status	Tier	Within Zol?	Progress to Stage 2?	Overlap in construction in period?	Scale and Nature of development likely to have a significant impact?	Progress to Stage 3/4?
2b	21/05588/FUL	Recycling of construction and demolition waste, temporary storage of construction equipment	5.09 km	Permission Implemented and Operational	1	Yes	Yes	No	No	No
2c	10/02007/FUL	Construction of a new wastewater treatment works & associated works	3.38 km	Permission Implemented and Operational	1	Yes	Yes	No	No	No
2d	25/00154/FUL	Construction of a 49.9MW battery energy storage facility, battery storage units, ancillary buildings and equipment, access road and associated work	11.1 km	Unknown	2	Yes	No	N/A	N/A	N/A
2e	20/01116/S37	New span of 11kV overhead line to link existing spurs to reinforce network for new waste water treatment works	2.22 km	Permission Implemented and Operational	1	Yes	Yes	No	Potential (Chapter 8 Historic Environment)	Yes

Other developments details						Stage 1		Stage 2		
Ref	Planning Application Reference	Development name and brief description	Approximate distance to site boundary (km)	Status	Tier	Within Zol?	Progress to Stage 2?	Overlap in construction in period?	Scale and Nature of development likely to have a significant impact?	Progress to Stage 3/4?
2f	22/03638/FUL	Construction and operation of a battery energy storage facility consisting of up to 50 containerised battery storage units, ancillary transformers and inverters, connection building, site office and store, fencing and landscaping.	9.04 km	Development not commenced	1	Yes	Yes	Potential	No	No
2g	24/05019/FUL	Installation of a Grid Battery Energy Storage Facility (up to 30MW) with associated development	9.88 km	Unknown	2	Yes	No	N/A	N/A	N/A
2h	24/05253/FUL	Construction of a rail sidings yard including new rail sidings and connection to the main line, associated gantry crane (and/or reach-stackers), areas of hard standing, access road, vehicle parking, fencing, drainage, landscaping and associated infrastructure works and facilities	9.33 km	Unknown	2	Yes	No	N/A	N/A	N/A
2i	23/04662/FUL	Erect High Voltage Cable Manufacturing Plant	11.52 km	Under construction	1	Yes	Yes	Unlikely	No	No

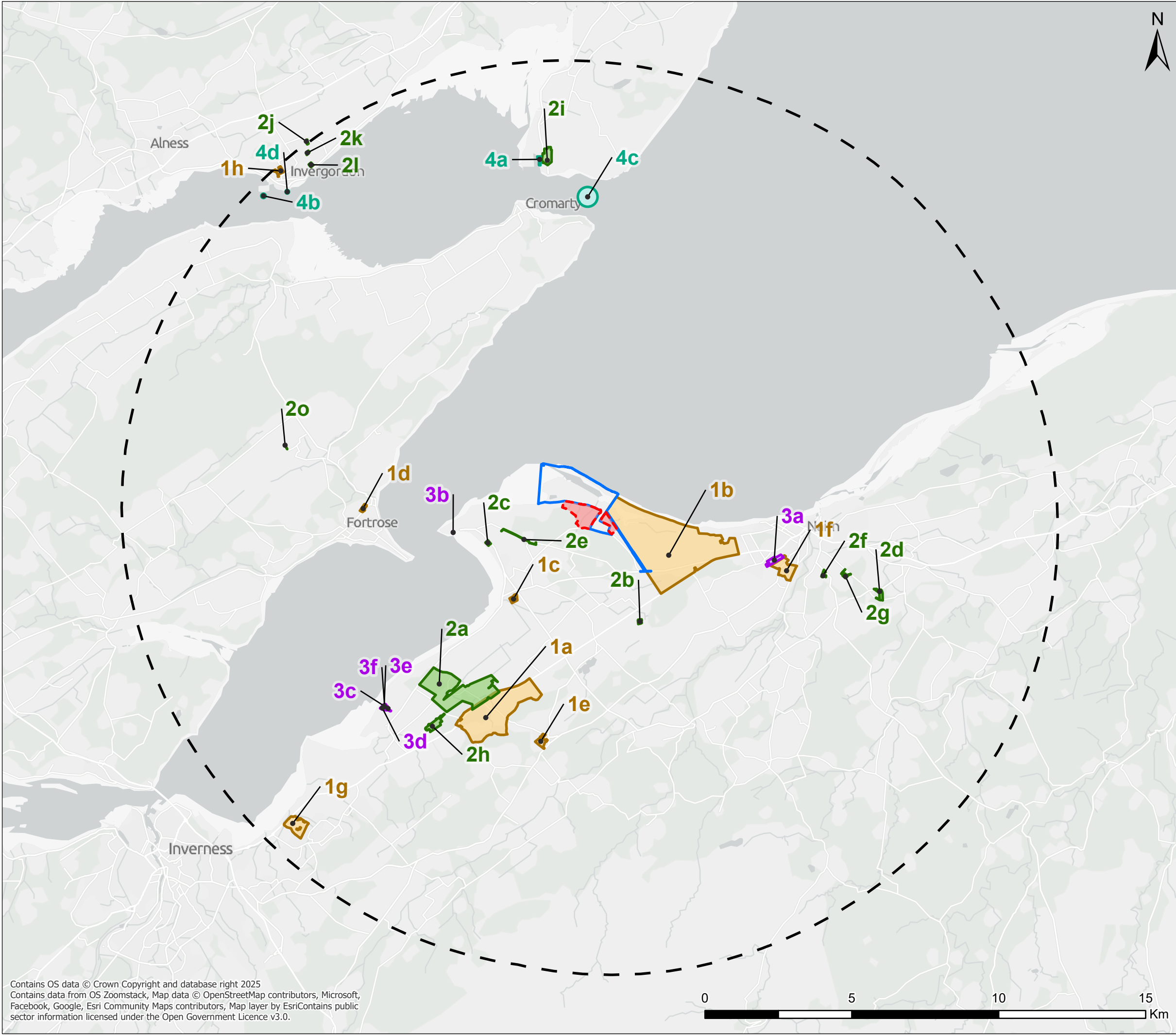
Other developments details						Stage 1		Stage 2		
Ref	Planning Application Reference	Development name and brief description	Approximate distance to site boundary (km)	Status	Tier	Within Zol?	Progress to Stage 2?	Overlap in construction in period?	Scale and Nature of development likely to have a significant impact?	Progress to Stage 3/4?
2j	21/04937/FUL	Construction and operation of an Anaerobic Digestion Facility and Energy Centre with ancillary infrastructure	14.95 km	Development Not Commenced Pre-commencement conditions discharged	1	Yes	Yes	Potential	No	No
2k	23/05336/FUL	Demolition of store & tanker loading bay, service diversions, construction of tank farm with pumphouse, ancillary buildings and associated pipe bridges and trestles, tanker loading bay and below ground spillage tank and associated infrastructure	14.61 km	Development Not Commenced Pre-commencement conditions discharged in April 2025	1	Yes	Yes	Potential	No	No
2l	23/05398/FUL	Erection of malt distillery building	14.22 km	Unknown	2	Yes	No	N/A	N/A	N/A

Other developments details						Stage 1		Stage 2		
Ref	Planning Application Reference	Development name and brief description	Approximate distance to site boundary (km)	Status	Tier	Within Zol?	Progress to Stage 2?	Overlap in construction in period?	Scale and Nature of development likely to have a significant impact?	Progress to Stage 3/4?
2o	23/05176/FUL	Installation of a 151.2kw Ground Mount Solar PV System	9.95km	Development not commenced	1	Yes	Yes	Potential	No	No
3a	23/05756/FUL	Erection of replacement secondary school, car parking, sports pitches; demolition of existing school	14.84 km	Development commenced	1	Yes	Yes	Potential	No	No
3b	18/00514/FUL	The installation of a MUGA (Multi Use Games Area) with 3m high fencing (5m at goal ends) to include paths and ground drainage	4.26km	Development Completed - operational	1	Yes	Yes	No	Potential (Chapter 8 Historic Environment)	Yes
3c	24/05080/FUL	Erection of cart barn and maintenance facility	9.66km	Development not commenced	1	Yes	Yes	Potential	No	No
3d	24/05079/FUL	Erection of extension to clubhouse including store (amended)	9.62km	Development not commenced	1	Yes	Yes	Potential	No	No

Other developments details						Stage 1		Stage 2		
Ref	Planning Application Reference	Development name and brief description	Approximate distance to site boundary (km)	Status	Tier	Within Zol?	Progress to Stage 2?	Overlap in construction in period?	Scale and Nature of development likely to have a significant impact?	Progress to Stage 3/4?
3e	24/04577/FUL	Erection of 5 lodges (amended design 23/05215/FUL)	9.6 km	Development not commenced	1	Yes	Yes	Potential	No	No
3f	23/05215/FUL	Erection of 16 lodges (total of 38 apartments)	9.65 km	Development not commenced	1	Yes	Yes	Potential	No	No
4a	24/02674/FUL	Proposed Engineering works to form a new berthing quay on the east side of the Inner Dock at the Port of Nigg	11.35km	Development not commenced	1	Yes	Yes	Potential	Potential (Chapter 9 Hydrology and hydrogeology; Chapter 11 Marine Mammals)	Yes
4b	No reference available	Invergordon Service Base Phase 5 Development Marine Licence – Construction – Invergordon Service Base Phase 5 Development – 00011084	14.3 km	Unknown	3	Yes	Yes	Potential	Potential (Chapter 7 LSVIA; Chapter 11 Marine Mammals)	Yes

Other developments details						Stage 1		Stage 2		
Ref	Planning Application Reference	Development name and brief description	Approximate distance to site boundary (km)	Status	Tier	Within Zol?	Progress to Stage 2?	Overlap in construction in period?	Scale and Nature of development likely to have a significant impact?	Progress to Stage 3/4?
		Marine Licence – Capital Dredging and Sea Deposit – Invergordon Service Base Phase 5 Development – 00011085								
4c	10122	Maintenance Dredging and Sea Disposal - Port of Nigg, Cromarty Firth - 00010122	11.77 km	Unknown	3	Yes	Yes	Potential	Potential (Chapter 9 Hydrology and hydrogeology; Chapter 11 Marine Mammals)	Yes
4d	9232	Marine Licence - Maintenance Dredging - Port of Cromarty Firth - 00009232	14.3 km	Unknown	3	Yes	Yes	Potential	Potential (Chapter 9 Hydrology and hydrogeology; Chapter 11 Marine Mammals)	Yes

Other developments details						Stage 1		Stage 2		
Ref	Planning Application Reference	Development name and brief description	Approximate distance to site boundary (km)	Status	Tier	Within Zol?	Progress to Stage 2?	Overlap in construction in period?	Scale and Nature of development likely to have a significant impact?	Progress to Stage 3/4?
4e	No reference available	Section 36 Consent - Green Volt Offshore Windfarm - East of Aberdeenshire Coast	Not available	Development not commenced	3	No	No	N/A	N/A	N/A



N

Proposed Development

Ardersier Port Consented Site Boundary

15km Study Area

Other Developments

Residential

Infrastructure / Onshore Energy

Wider Port / Offshore Energy Infrastructure

Other

Leòdhas agus na Hearadh

Skye

Inverness

Aberdeen

Alba / Scotland

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Client

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ARDERSIER PORT EXTENSION - EIA

Drawing Title

FIGURE 14.1: LOCATION OF OTHER DEVELOPMENTS IDENTIFIED WITHIN A ZOI OF 15KM

Project Stage

EIAR

Status	FOR INFORMATION			
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