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24. Cumulative and Combined Effects

24.1 Introduction

24.1.1 This chapter of the Preliminary Environmental Information (PEI) Report provides an assessment of the potential for cumulative and combined effects to occur as a result of the Proposed Development. Cumulative and combined effects are defined as follows:

- **cumulative effects:** these occur when the environmental impacts and effects of the Proposed Development interact with those associated with other planned projects and developments located within a realistic geographical scope where environmental impacts could act together to result a greater significance of effect on environmental resources and/or receptors; and
- **combined effects:** these are effects resulting from a single development i.e. o the Proposed Development on any one receptor that may collectively cause and effect /effects of greater significance, on environmental resources and/or receptors.

24.1.2 The assessment presented in this chapter draws on the assessment of impacts provided in chapters 8 to 21 (PEI Report, Volume I), and information in the public domain relating to other known developments within the Study Area, or Zone of Influence (Zoi).

24.1.3 The cumulative impact assessment does not consider other developments that are already constructed and operating, as such existing developments are already accounted for in the baseline conditions established for the main assessments within chapters 8 to 21 (PEI Report, Volume I).

24.1.4 This chapter is supported by Figure 24-1: Zones of Influence, and Figure 24-2: Long List of Other Developments (PEI Report, Volume II).

24.2 Legislation and Planning Policy Context

24.2.1 Due to the potential for cumulative effects to occur as a result of the construction, operation and maintenance of the Proposed Development, a cumulative assessment is being undertaken as part of the Environmental Impact Assessment (EIA) in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ('the EIA Regulations') and the assessment requirements of the National Policy Statement (NPS) for Energy (EN-1) (DECC, 2011).

24.2.2 The requirement for cumulative and combined impact assessments is stated in the relevant European Directive and domestic legislation, as detailed below:

- European Directive 2014/52/EU on the assessments of effects of certain public and private projects on the environment requires an assessment of "*the direct effects and any indirect, secondary, cumulative,*



transboundary, short-term, medium term and long-term, permanent and temporary, positive and negative effects of the project”;

- Schedule 4 Part 5 of the EIA Regulations requires: “A description of the likely significant effects of the development on the environment resulting from, *inter alia* [...] (e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources”. The EIA Regulations state that this description of likely significant effects “*should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development*”;
- Paragraph 4.1.3 of the Overarching National Policy Statement (NPS) for Energy (EN-1) (DECC, 2011) states that:

“In considering any proposed development, and in particular when weighing its adverse impacts against its benefits, the Infrastructure Planning Commission [now the Planning Inspectorate] should take into account:

 - *its potential benefits including its contribution to meeting the need for energy infrastructure, job creation and any long-term or wider benefits; and*
 - *its potential adverse impacts, including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts”.*
- Paragraph 4.2.5 of NPS EN-1 goes on to state that when considering cumulative effects, “*the Environmental Statement (ES) should provide information on how the effects of the applicant’s proposal would combine and interact with the effects of other development (including projects for which consent has been sought or granted, as well as those already in existence). The IPC may also have other evidence before it, for example from appraisals of sustainability of relevant NPSs or development plans, on such effects and potential interactions. [...]*”; and
- Paragraph 4.2.6 of NPS EN-1 states that consideration should be given to “*how the accumulation of, and interrelationship between, effects might affect the environment, economy or community as a whole, even though they may be acceptable when considered on an individual basis with mitigation measures in place.*”.

24.3 Assessment Methodology

Impact Assessment and Significance Criteria

- 24.3.1 A combination of professional judgement and established guidance have been used to confirm the scope of the cumulative effects assessment, and to aid the identification and (where necessary) mitigation of likely significant effects.



24.3.2 The cumulative effects assessment has been primarily based upon guidance contained within the Planning Inspectorate’s (PINs) ‘*Cumulative Effects Assessment – Advice note seventeen: Cumulative effects assessment relevant to nationally significant infrastructure projects*’ (PINs, 2019a), which provides advice on the identification and assessment of other planned developments.

24.3.3 The significance criteria below build upon the policy and guidance documents outlined above, and the general EIA approach methods presented in Chapter 2: Assessment Methodology (PEI Report, Volume I).

Table 24-1: Combined and Cumulative Effects Significance Criteria

Significance category	Typical descriptors of effect
Very large (typically adverse only)	Where the combined impacts of the Proposed Development or cumulative impacts of the Proposed Development in association with other development upon an individual or collection of environmental receptors would be very highly significant (positive or negative). Effects would be permanent for receptors of very high value.
Large (adverse or beneficial)	Where the combined impacts of the Proposed Development or cumulative impacts of the Proposed Development in association with other development upon an individual or collection of environmental receptors would be highly significant (positive or negative). Effects would be: <ul style="list-style-type: none"> – widespread/large scale for a receptor of high value¹; – permanent for a receptor or receptors of high value; – localised for a receptor or receptors of very high value; or – temporary for a receptor or receptors of very high value.
Moderate (adverse or beneficial)	Where the combined impacts of the Proposed Development or cumulative impacts of the Proposed Development in association with other development upon an individual or collection of environmental receptors would be significant (positive or negative). Effects would be: <ul style="list-style-type: none"> – permanent for a receptor or receptors of medium value; – localised for a receptor or receptors of high value; or – temporary for a receptor or receptors of high value.
Slight (adverse or beneficial)	Where the combined impacts of the Proposed Development or cumulative impacts of the Proposed Development in association with other development upon an individual or collection of environmental receptors would be noteworthy but not significant (positive or negative). Effects would be: <ul style="list-style-type: none"> – permanent for receptors of low value; – localised for a receptor or receptors of medium value; or – temporary for a receptor or receptors of medium value.
Neutral	Where the combined impacts of the Proposed Development or cumulative impacts of the Proposed Development in association with other development upon an individual or collection of environmental receptors would be negligible and not significant (positive or negative).

¹ Note that the term ‘value’ refers here to both intrinsic value and sensitivity.



- 24.3.4 Combined and cumulative effects that are of moderate, large or very large significance will be considered significant effects in relation to the EIA Regulations.
- 24.3.5 Once further information has been gathered about the construction effects and programmes of the developments for inclusion in the cumulative effects assessment, a worst case year of construction will be defined by determining when there is the greatest overlap of construction with the Proposed Development.
- 24.3.6 The cumulative operational assessment will consider the total effects of the Proposed Development and the other identified developments operating concurrently.
- 24.3.7 As the Proposed Development has an estimated design life of 25 years, cumulative effects during decommissioning are not considered as it is not possible to predict the developments which would be in progress at that point in time.

Assessment of Combined Effects

- 24.3.8 The assessment of combined effects considers whether an individual environmental receptor or resource will be affected by more than one type of impact as a result of the Proposed Development. For example, a residential occupant could be exposed to temporary increases in both noise and dust during construction of the Proposed Development.
- 24.3.9 The assessment method for combined effects involves the identification of impact interactions associated with the Proposed Development upon separate environmental receptors and resources, the objective being to understand the overall environmental effect of the Proposed Development.
- 24.3.10 The potential interactions between individual effects will be identified within the latter stages of the EIA by reviewing the final conclusions of the assessments within the topics presented in Chapters 8 to 21 (PEI Report, Volume I).
- 24.3.11 The significance of combined effects upon environmental receptors and resources will then be determined using professional judgement, assisted by the views and opinions of the competent experts responsible for undertaking the topic assessments.

Assessment of Cumulative Effects

- 24.3.12 The assessment of cumulative effects considers the effects on environmental resources and receptors that will likely occur from the changes arising from the Proposed Development in conjunction with those associated with other planned developments.
- 24.3.13 The four-stage approach in advice note seventeen (PINs, 2019a) will be adopted for the assessment of cumulative effects:
- Stage 1: Establishing the long list of 'other existing development and/or approved development';



- Stage 2: Establishing a shortlist of ‘other existing development and/or approved development’;
- Stage 3: Information Gathering; and
- Stage 4: Assessment.

24.3.14 The first stage of the assessment of cumulative effects has commenced as part of the EIA and is being guided by the following principles:

- understanding the limits of the effects associated with the Proposed Development and those of other planned developments;
- the sensitivity, value or importance of environmental resources or receptors, and their susceptibility to effects;
- whether different types of effect will occur and interact in a way that alters their significance;
- whether effects will be temporary or permanent in duration, what their timescales will be, and whether such effects will be intermittent or constant; and
- the degree of certainty and confidence relating to the effects.

24.3.15 Stages 2-4 of assessment are currently ongoing and will be completed for the ES.

Stage 1: Establishing the Long List of Other Developments

24.3.16 The cumulative effects assessment of the Proposed Development is currently at Stage 1.

24.3.17 Given the scope and scale of the proposed works associated with the Proposed Development, the Stage 1 activities are focusing on establishing the Proposed Development’s likely Zol associated with each of the environmental topic areas being assessed within the EIA.

24.3.18 Table 24-2 presents the largest Zol identified within each environmental topic. Each Zol is indicative and will be subject to further review as the individual assessments progress.

Table 24-2: Summary of Indicative Zones of Influence

Environmental Zone of Influence Topic

Air Quality	<p>Construction: 50 m Zol from construction activities for effects relating to construction dust and emissions.</p> <p>Operation: 15 km from the Power, Capture and Compression site (PCC).</p> <p>Traffic air quality: 200 m from affected roads².</p> <p>Refer to Chapter 8: Air Quality (PEI Report, Volume I) for more information.</p>
Noise and Vibration	<p>Construction: The construction Zol is defined by the proximity of identified receptors to the construction works, the location and type of which are yet to be confirmed.</p> <p>Operation: 2 km Zol from the PCC for operational effects on receptors. An 800 m Zol from the proposed Site boundary for receptors outside the 2 km Zol.</p> <p>Traffic noise: 600 m Zol from the links within the transport assessment Study Area below.</p> <p>Refer to Chapter 11: Noise and Vibration (PEI Report, Volume I) for more information.</p>
Traffic and Transport	<p>The links within the transport assessment Study Area are detailed below:</p> <ul style="list-style-type: none"> – A1085 Trunk Road (east of Site entrance); – A1085 Trunk Road (west of Site entrance); – A1042 Kirkleatham Lane; – A1085 Trunk Road (south of British Steel Lackenby entrance); – A1085 Broadway; – A66 (west of A1053); – A1053 Greystone Road; – B1380 High Street; – A174 (west of Greystones roundabout); – A1046 Port Clarence Road to the Natural Gas Connection Corridor and CO₂ Gathering Network Corridor; – A178 Seaton Carew Road to the Natural Gas Connection Corridor and CO₂ Gathering Network Corridor; and – Unnamed Road serving Seal Sands to the Natural Gas Connection Corridor and CO₂ Gathering Network Corridor. <p>Refer to Chapter 16: Traffic and Transportation (PEI Report, Volume I) for more information.</p>
Terrestrial Ecology and Nature Conservation	<p>Construction and Operation: 10 km Zol from the proposed Site boundary for international and national nature conservation designations.</p> <p>Construction and Operation: 2 km Zol from the proposed Site Boundary for all other terrestrial ecology effects.</p> <p>Refer to Chapter 12: Terrestrial Ecology and Nature Conservation (PEI Report, Volume I) for more information.</p>

² Affected roads are roads which are predicted by the traffic model to exceed threshold increases in traffic flows—as set by the Guidelines for the Environmental Assessment of Road Traffic (IEMA, 2003)—and where receptors have been identified that would be affected by the increases. Full details can be found in paragraphs 16.3.7 and 16.3.10 of Chapter 16: Traffic and Transport (PEI Report, Volume II).

Environmental Zone of Influence Topic

<p>Aquatic Ecology and Nature Conservation</p>	<p>Construction and Operation: 10 km Zol from the proposed Site boundary for international and national nature conservation designations.</p> <p>Construction and Operation: 2 km Zol from the proposed Site boundary for all other terrestrial ecology effects.</p> <p>Refer to Chapter 13: Aquatic Ecology and Nature Conservation (PEI Report, Volume I) for more information.</p>
<p>Marine Ecology and Nature Conservation</p>	<p>Construction and Operation:</p> <p>A Zol based upon the subtidal and intertidal Study Areas, as shown on Figure 14.1: Benthic Survey Study Area and Sampling Locations (PEI Report, Volume II).</p> <p>A Zol of 15 km from the PCC has been applied to the assessment of impacts from emissions to air on statutory designated sites.</p> <p>Refer to Chapter 14: Marine Ecology and Nature Conservation (PEI Report, Volume I) for more information.</p>
<p>Landscape and Visual Amenity</p>	<p>Construction and Operation: A Zol of 10 km from the PCC.</p> <p>Construction and Operation: A Zol of 2 km from the Natural Gas and Electrical Connection Corridors has been identified.</p> <p>Refer to Chapter 17: Landscape and Visual Amenity (PEI Report, Volume I) for more information.</p>
<p>Geology and Hydrogeology</p>	<p>Construction and Operation: 500 m Zol for both construction and operational effects on geology and soils.</p> <p>Refer to Chapter 10: Geology and Hydrogeology (PEI Report, Volume I) for more information.</p>
<p>Archaeology and Cultural Heritage</p>	<p>Construction and Operation (designated assets): 5 km Zol from the proposed Site boundary.</p> <p>Construction and Operation (non-designated assets): 1 km Zol from the proposed Site boundary.</p> <p>Refer to Chapter 18: Archaeology and Cultural Heritage (PEI Report, Volume I) for more information.</p>
<p>Hydrology and Water Resources</p>	<p>Construction and Operation: 1 km Zol from the proposed Site boundary. This is subject to extension where significant effects are predicted and hydrological connectivity is determined.</p> <p>Refer to Chapter 9: Surface Water, Flood Risk and Water Resources (PEI Report, Volume I) for more information.</p>
<p>Marine Heritage</p>	<p>Construction and Operation: 1 km Zol from the DCO Boundary.</p> <p>Refer to Chapter 19: Marine Heritage (PEI Report, Volume I) for more information.</p>
<p>Climate Change</p>	<p>The greenhouse gas (GHG) Zol includes all GHG emissions from within the DCO Boundary arising during all stages of the construction and operation of the Proposed Development. It will also include emissions arising from offsite activities which are directly related to the onsite activities, such as transport, and treatment of materials and waste disposal.</p> <p>Refer to Chapter 21: Climate Change (PEI Report, Volume I) for more information.</p>

Search Area for Long List of Other Developments

24.3.19 In accordance with advice note seventeen (PINs, 2019a), the search area for the long list of developments has been set at 15 km, consistent with the largest Zol of the individual disciplines.

Local Authority and Major Infrastructure Developments

24.3.20 For planned developments within the search area, the following search criteria has been applied during Stage 1:

- Local authority planning applications that represent ‘major developments’, the definitions and thresholds for which are set out in The Town and Country Planning (Development Management Procedure) (England) Order 2015;
- Development Consent Order (DCO) applications for Nationally Significant Infrastructure Projects (NSIPs) in England, contained in the Register of Applications on the National Infrastructure Planning website (PINs, 2019b);
- Any major development projects being progressed through other statutory procedures;
- Allocations identified in the adopted and emerging development plans of the local planning authorities; and
- Other relevant development plans and projects.

24.3.21 In determining the possible significance of cumulative effects, the location and timing of the identified other developments and their associated impacts/ effects have been taken into account wherever possible.

24.3.22 The cumulative effects assessment only considers those receptors that would experience a residual effect associated with the Proposed Development. For receptors where the Proposed Development’s residual effects are deemed to be neutral/ negligible as reported in this PEI Report, it is considered that such receptors could not experience cumulative effects.

Initial List of Developments

24.3.23 A long list of other developments in the vicinity of the Proposed Development was identified following a search of the relevant planning databases (PINs, Middlesbrough Council (MC), Redcar and Cleveland Borough Council (RCBC), Hartlepool Borough Council (HBC) and Stockton-on-Tees Borough Council (SBC).

24.3.24 This initial search has focused on developments either within the search area which meet the criteria outlined above, the findings are presented in Table 24-4: Planned Developments and Development Allocations within the Search Area. This search is preliminary, based on information available from local authority online planning portals, and will be extended as further work is carried out during Stage 1 to capture other developments within the adopted areas of search, and to ensure the most up to date information is used to inform the EIA.


24.3.25 Based on a review of these developments, it is considered that potential exists for some of these to generate cumulative impacts with the Proposed

Development based on their location, scale and/or their likely construction and operational timescales.

24.3.26 During the completion of the ES, the long list of other developments will continue to be updated with additional developments or information that emerges. Each development within the long list will then be reviewed to determine its status at the time of undertaking the assessment and will be assigned a final status (or tier, see

24.3.27 Table 24-3), informed by the guidance and levels presented within Advice note seventeen (PINs, 2019a). This will be informed by feedback from the relevant local authorities to establish the level of certainty and detail available for each development. Current tiers have been added to the list of planned developments and development allocations within Table 24-4.

Table 24-3: Assigning Certainty to 'Other Existing Development and/or Approved Development'

Tier 1	<ul style="list-style-type: none"> • Under construction³ 	Decreasing level of information likely to be available. 
	<ul style="list-style-type: none"> • Permitted application(s), whether under the Planning Act 2008 or other regimes, but not yet implemented; 	
Tier 2	<ul style="list-style-type: none"> • Submitted application(s) whether under the Planning Act 2008 or other regimes but not yet determined; 	
Tier 3	<ul style="list-style-type: none"> • Projects in the Planning Inspectorate's Programme of Projects where a scoping report has been submitted; 	
	<ul style="list-style-type: none"> • Identified in the relevant development plan (and emerging Development Plans—with appropriate weight being given as they move closer to adoption) recognising that they will be limited information on the relevant proposals; 	
	<ul style="list-style-type: none"> • Identified in other plans and programmes (as appropriate) which set the framework for future developments consents/approvals, where such a development is likely to come forward. 	

³ Where other projects are expected to be completed before construction of the Proposed Development and the effects of those projects are fully determined, effects arising from them should be considered as part of the baseline and may be considered as part of both the construction and operational assessment. The ES should clearly distinguish between projects forming part of the dynamic baseline and those in the cumulative effects assessment.

Table 24-4: Planned Developments and Development Allocations within the Search Area

ID	Application reference	Local planning authority	Applicant for 'other development' and brief description	Distance from PCC	Status	Tier
1	Net Zero Teesside – future offshore elements	Not yet submitted	<p>The following parts of the Net Zero Teesside project will be located offshore below mean high water springs and consented under a separate Marine Licence, supported by a separate EIA:</p> <ul style="list-style-type: none"> • installation of the continuation of the CO₂ Export Pipeline from below mean low water springs to the geological storage facility, located beneath the North Sea approximately 150 km to the east south-east of Teesside; and • the geological store and associated facilities will require the construction of either a sub-sea injection system or an un-manned platform for the injection of exported CO₂ using a well or wells drilled into the underground storage reservoir over 1,000 m below sea level. The injection wells will be drilled and completed using a jack-up drilling rig. 	Adjacent	Not yet submitted.	Tier 3
2	<u>York Potash Harbour Facilities Order</u>	Planning Inspectorate	York Potash Limited - The installation of wharf/jetty facilities with two ship loaders capable of loading bulk dry material at a rate of 12m tons per annum (dry weight). Associated dredging operations to create berth. Associated storage building with conveyor to wharf/jetty. Including a materials handling facility (if not located at Wilton) served by a pipeline (the subject of a separate application) and conveyor to storage building and jetty.	Adjacent	Decided	Tier 1
3	<u>Tees CCGP</u>	Planning Inspectorate	Sembcorp Utilities (UK) Limited – Tees CCP, a gas fired combined cycle gas turbine (CCGT) power station with a maximum generating capacity of up to 1,700 MWe (assuming carbon capture and storage requirements are met). The project will utilise existing Gas and National Grid connections.	3.9 km	Decided	Tier 1
4	<u>Dogger Bank Teesside A / Sofia Offshore Wind Farm</u>	Planning Inspectorate	Forewind Ltd. (formerly Dogger Bank Teesside B) - Project previously known as Dogger Bank Teesside A&B. Dogger Bank Teesside A & B is the second stage of Forewind's offshore wind energy development of the Dogger Bank Zone (Zone 3, Round 3). Dogger Bank Teesside A & B will comprise up to two wind farms, each with an installed capacity of up to 1.2GW, which are expected to connect to the National Grid at the existing National Grid substation at Lackenby, near Eston. It follows that Dogger Bank Teesside A & B could have a total installed capacity of up to 2.4GW Dogger Bank Teesside A & B is located within The Dogger Bank Zone which comprises an area of 8660 square kilometres (km ²) located in the North Sea between 125 kilometres (km) and 290km off the UK North East coast. Note: the start of the offshore element has been labelled on Figure 24-1, the onshore elements are not labelled.	4.1 km	Decided	Tier 1

ID	Application reference	Local planning authority	Applicant for 'other development' and brief description	Distance from PCC	Status	Tier
5	R/2015/0393/RSM	Redcar & Cleveland	Bellway Homes Ltd, residential development (188 dwellings) with associated vehicular and pedestrian accesses including landscaping (resubmission), land at Stokesley Road – Guisborough.	9.3 km	Approved 16/11/2015	Tier 1
6	R/2019/0485/RMM	Redcar & Cleveland	Galliford Try Partnerships, reserved matters application (appearance, landscaping, layout and scale) following approval of outline planning permission r/2016/0663/OOM for up to 550 residential units with associated access, landscaping and open space, land north of Kirkleatham business park and west of Kirkleatham Lane - Redcar	2.3 km	Approved 31/10/2019	Tier 1
7	R/2019/0443/RMM	Redcar & Cleveland	Theakston Estates Ltd, reserved matters application following outline planning permission r/2016/0326/OOM for means of appearance, landscaping, layout and scale for 400 dwelling houses (granted on appeal reference app/v0728/w16/3158336), land north of Woodcock Wood and west of Flatts Lane, Normanby.	7.7 km	Approved 03/10/2019	Tier 1
8	R/2015/0540/RMM	Redcar & Cleveland	Bellway Homes NE, reserved matters application following outline planning permission r/2014/0455/OOM for means of appearance, landscaping, layout and scale for 126 dwelling houses, former Redcar & Cleveland college site - Redcar Lane, Redcar.	4.3 km	Approved 27/11/2015	Tier 1
9	R/2019/0403/FFM	Redcar & Cleveland	Beyond Housing, demolition of 19 dwelling houses; hybrid application for full planning permission for refurbishment of 289 dwelling houses and alterations to existing road infrastructure to allow for new parking and open spaces; outline application for future residential development for 32 dwelling houses, dwellings and land at Caernarvon Close, Somerset Road, Cheddar Close, Avondale Close, Monmouth Road, Aberdare Road, Bridgend Close, Grangetown.	4.9 km	Approved 21/01/2020	Tier 1
10	R/2019/0150/FFM	Redcar & Cleveland	Priority space, erection of 17 industrial units ranging in size from 116 sq.m. up to 210 sq.m. with new vehicular access and associated parking, land next to Kirkleatham Business Park, off Troisdorf Way, Kirkleatham.	3.5 km	Approved 12/07/2019	Tier 1

ID	Application reference	Local planning authority	Applicant for 'other development' and brief description	Distance from PCC	Status	Tier
11	R/2019/0045/FFM	Redcar & Cleveland	SK Chilled Foods Ltd, proposed storage and distribution warehouse, with associated vehicle access and manoeuvring area, land adjacent to SK Chilled Foods Ltd, Nelson Street, South Bank.	4.9 km	Approved 12/06/2019	Tier 1
12	R/2017/0876/FFM	Redcar & Cleveland	Peak Resources Limited, construction and operation of a mineral processing and refining facility including ancillary development, car parking and landscaping, land at Wilton International Complex Redcar.	3.7 km	Approved 10/05/2018	Tier 1
13	R/2016/0484/FFM	Redcar & Cleveland	CBRE, proposed anaerobic biogas production facility and combined heat and power plant, former Croda Site Wilton International Redcar.	2.5 km	Approved 13/10/2016	Tier 1
14	R/2016/0201/FFM	Redcar & Cleveland	Gleeson Developments Ltd, 51 residential units including new vehicular and pedestrian accesses and associated landscaping, land at Fabian Road, Eston.	5.6 km	Approved 22/06/2016	Tier 1
15	R/2016/0142/FFM	Redcar & Cleveland	Bellway Homes NE, reserved matters application following outline planning permission r/2014/0455/OOM for means of appearance, landscaping, layout and scale for 126 dwelling houses, former Redcar & Cleveland college site, Redcar Lane, Redcar.	9.1 km	Approved 28/11/2016	
16	R/2019/0767/OOM	Redcar & Cleveland	Director of regeneration & neighbourhoods, Hartlep, outline application for the construction of an energy recovery facility (ERF) and associated development, Grangetown Prairie Land east of John Boyle Road and west of Tees Dock Road, Grangetown.	3.9 km	Approved 06/01/2020	
17	R/2016/0663/OOM	Redcar & Cleveland	Homes and Communities Agency (HCA), outline planning application for up to 550 residential units with associated access, landscaping and open space, land north of Kirkleatham Business Park and west of Kirkleatham Lane, Redcar.	2.8 km	Approved 26/05/2017	Tier 1
18	R/2016/0326/OOM	Redcar & Cleveland	Theakston Estates (Investments) Limited, outline application for residential development including new vehicular and pedestrian accesses, infrastructure, open space and landscaping (all matters reserved except for access), land north of Woodcock Wood and west of Flatts Lane Normanby.	7.7 km	Allowed on appeal 13/06/2017	Tier 1

ID	Application reference	Local planning authority	Applicant for 'other development' and brief description	Distance from PCC	Status	Tier
19	R/2018/0098/FF	Redcar & Cleveland	Rydberg Development Company Limited, construction and operation of a 12 MWe peaking power generation plant, ancillary equipment, parking and access (amended design and layout), land bound by A66 and Tees Dock Road, Grangetown.	4 km	Approved 10/05/2018	Tier 1
20	R/2017/0564/FF	Redcar & Cleveland	EDF energy renewables, installation of an energy storage facility (up to 49.9 MW), new access track and associated ancillary equipment and components, land at Crow Lane adjacent to old Hall Farm and (A1053) Greystones Road Old Lackenby, Eston.	5.1 km	Approved 10/11/2017	Tier 1
21	R/2017/0329/FF	Redcar & Cleveland	Rydberg Development Company Limited, construction and operation of a 12 MWe peaking power generation plant, ancillary equipment, parking and access (amended design and layout), land bound by A66 and Tees Dock Road Grangetown.	4 km	Approved 20/07/2017	Tier 1
22	R/2019/0183/OOM	Redcar & Cleveland	Mr R Roberts, demolition of existing outbuildings to allow outline planning permission (with some matters reserved) for residential development (52 dwellings), land south of Spencerbeck Farm Normanby Road, Ormesby.	7.3 km	Ongoing	Tier 1
23	Not yet submitted	Not available	STDC – South Tees Regeneration Master Plan covering 4,500 acres of land (South Tees Development Corporation, 2020). Please note: due to this plan covering a large area it has not been included on Figure 24-2.	Adjacent	Not yet submitted.	Tier 3
24	R/2017/0815/FF	Redcar & Cleveland	Coast and country housing, extension to existing car park (14 additional spaces) including fencing (1.8m high), land at coast & country housing office corner of Kingsley Road & Shakespeare Avenue, Grangetown, TS6 7PW.	4.8 km	Approved 12/01/2018	Tier 1
25	R/2019/0031/FFM	Redcar & Cleveland	Tourian Renewables Ltd, construction and operation of a plastic conversion facility including office and welfare buildings, workshops, weighbridges and associated infrastructure, former Croda Site Wilton International, Redcar.	3.2 km	Approved 09/04/2019	Tier 1
26	R/2018/0587/FFM	Redcar & Cleveland	ICL Tees Dock, refurbishment of redundant 'coal rail pit' for handling polysulphate products, potash conveyor, Tees Dock Terminal, Teesport.	1.9 km	Approved 06/03/2019	Tier 1

ID	Application reference	Local planning authority	Applicant for 'other development' and brief description	Distance from PCC	Status	Tier
27	R/2017/0906/OOM	Redcar & Cleveland	Sirius Minerals Plc, outline planning application for an overhead conveyor and associated storage facilities in connection with the York potash project, land between Wilton International and Bran Sands, Redcar.	Adjacent	Approved 30/04/2018	Tier 1
28	R/2017/0730/FFM	Redcar & Cleveland	Tourian Renewables Ltd, construction and operation of a plastic conversion facility including office and welfare buildings, workshops, weighbridges and associated infrastructure, former Croda Site Wilton International, Redcar	3.1 km	Approved 12/01/2018	Tier 1
29	R/2016/0563/FE	Redcar & Cleveland	Rydberg Development Company Limited, construction and operation of a 12MWe peaking power generation plant including ancillary equipment and new vehicular access off trunk Road, land bounded by Trunk Road and Tees Dock Road Grangetown.	3.6 km	Approved 03/11/2016	Tier 1
30	R/2016/0502/FFM	Redcar & Cleveland	Procomm Site Services Ltd, erection of workshop, Wilton International Wilton Redcar.	3.3 km	Approved 21/10/2016	Tier 1
31	R/2015/0678/OOM	Redcar & Cleveland	Forewind, outline application (all matters reserved) for installation of two underground sections of high voltage electrical cables and fibre-optic cable associated with Dogger bank Teesside A & B offshore wind farms, land at Wilton International, Redcar. Note: this is split into two parts and is labelled as ID 31 Area 1 and ID 31 Area 2 on Figure 24-2.	0.1 km	Approved 29/04/2016	Tier 1
32	R/2015/0466/FE	Redcar & Cleveland	Cofely UK - Energy Services, proposed energy centre to include steel framed building; chimney stack (45.3m high); cooling towers; plant and equipment to generate heat and power from natural gas and hydrogen and a water treatment plant, land at Huntsman Polyurethanes Wilton Site, Lazenby.	2.2 km	Approved 06/10/2015	Tier 1
33	R/2014/0820/FFM	Redcar & Cleveland	Mr K Rutherford, erection of 24 industrial units with associated infrastructure and perimeter fencing 2.0m in height, land at Tod Point Road, Redcar.	0.8 km	Approved 12/08/2015	Tier 1
34	18/0634/FUL	Middlesbrough	Ms Kelly Lemon, Construction of 89 Dwellings, comprising 32 Bungalows and 57 Houses and associated highways and external works, Land at Roworth Road, Middlesbrough.	7.3 km	Approved 21/03/2019	Tier 1

ID	Application reference	Local planning authority	Applicant for 'other development' and brief description	Distance from PCC	Status	Tier
35	17/0347/FUL	Middlesbrough	Gleeson Regeneration Ltd, erection of 106no dwellings with associated works Land To The South Of College Road, Middlesbrough, TS3 9EN.	6.9 km	Approved 11/10/2018	Tier 1
36	H/2019/0275	Hartlepool	Graythorp Energy Ltd, energy recovery (energy from waste) facility and associated infrastructure, land to the south of Tofts Road, West Graythorp, Hartlepool.	5.4 km	Pending	Tier 1
37	H/2014/0428	Hartlepool	Tunstall Homes Ltd, Outline application with all matters reserved for residential development comprising up to 1,200 dwellings of up to two and a half storeys in height and including a new distributor road, local centre, primary school, amenity open space and structure planting., land south of Elwick Road, High Tunstall, Hartlepool, TS26 0LQ.	10 km	Approved 14/03/2019	Tier 1
38	19/2161/FUL	Stockton-on-Tees	Lianhetech, Erection of new plant, new buildings and extensions to existing buildings. Works to include Warehouse D Extension, Boiler House Structure, Amenities & Workshop Building, Drum Storage Workshop Extension, Amenities extension, 2 no. Warehouse buildings, Contractors cabins, Gate House and Weighbridge, Receivers, Driers, Extension to existing Tank Farm, Tanker Offloading stations, Process and control buildings, Installation of new and replacement cooling towers and industrial apparatus, Pipe Bridge, Swale and the demolition of old plant and buildings, Lianhetech, Seal Sands, Seal Sands Road, TS2 1UB.	3.4 km	Ongoing	Tier 1
39	15/2187/FUL	Stockton-on-Tees	Air Products Renewable Energy Limited, Proposed installation of a Gaseous Oxygen (GOX) Pipeline associated with Tees Valley 2 (TV2) Renewable Energy Facility (REF), Air Products Plc Huntsman Drive, Seal Sands, Middlesbrough, TS2 1TT.	2.6 km	Approved 29/10/2015	Tier 1
40	15/2181/FUL	Stockton-on-Tees	SABIC UK Petrochemicals Limited, Erection of new plants for supply of steam and compressed air including 3 boilers, 3 compressors, a water purification plant, storage bunds for chemicals. New pipelines to provide potable water and instrument air to the new plant, as well as to export steam and compressed air to the tank farm distribution system, North Tees Site Sabic UK Petrochemicals Seaton Carew Road, Port Clarence, Stockton-On-Tees, TS2 1TT.	3.3 km	Approved 18/11/2015	Tier 1

ID	Application reference	Local planning authority	Applicant for 'other development' and brief description	Distance from PCC	Status	Tier
41	15/2799/FUL	Stockton-on-Tees	Green North East Trading Bidco Limited, Construct and operate an extension to the existing Materials Recovery Facility (MRF) building to process material produced by the existing MRF operation, Impetus Waste Management, Huntsman Drive, Seal Sands, Stockton-on-Tees, TS2 1TT.	5.2 km	Approved 08/01/2016	Tier 1
42	16/0195/VARY	Stockton-on-Tees	Mr Charles Everson, Section 73 application to vary condition no.4 (Environmental Impact Statement) of planning approval 13/2892/EIS - Development of materials recycling facility and production of energy from waste, including demolition of the existing offices and erection of new buildings, tanks and silos with access taken from the existing access at New Road, Billingham. The main building will be portal frame, profiled steel clad with stacks at a maximum height of 80m and 28m. (Residual wastes will be processed through an advance thermal treatment process, gasification, to produce renewable heat and power), Eutech Road, 100 Haverton Hill Road, Billingham, TS23 1PY.	9.5 km	Approved 11/03/2016	Tier 1
43	H3.1 Low Grange Farm Strategic Site	Redcar & Cleveland	Local Plan 2018, Up to 1,250 houses.	4.8 km	Adopted	Tier 3
44	H3.2 Swan's Corner	Redcar & Cleveland	Local Plan 2018, Up to 128 houses.	9.3 km	Adopted	Tier 3
45	H3.5 Longbank Farm	Redcar & Cleveland	Local Plan 2018, Up to 320 houses.	8.2 km	Adopted	Tier 3
46	H3.6 Spencerbeck Farm	Redcar & Cleveland	Local Plan 2018, Up to 61 houses.	7.4 km	Adopted	Tier 3
47	H3.8 Normanby High Farm	Redcar & Cleveland	Local Plan 2018, Up to 150 houses.	6.5 km	Adopted	Tier 3

ID	Application reference	Local planning authority	Applicant for 'other development' and brief description	Distance from PCC	Status	Tier
48	H3.9 Land at Former Eston Park School	Redcar & Cleveland	Local Plan 2018, Up to 100 houses.	5.7 km	Adopted	Tier 3
49	H3.10 Corporation Road	Redcar & Cleveland	Local Plan 2018, Up to 86 houses.	2.5 km	Adopted	Tier 3
50	H3.14 Land at Mickley Dales	Redcar & Cleveland	Local Plan 2018, Up to 100 houses.	5.2 km	Adopted	Tier 3
51	H3.15 West of Kirkleatham Lane	Redcar & Cleveland	Local Plan 2018, Up to 550 houses.	2.3 km	Adopted	Tier 3
52	MWP8 South Tees Eco-Park	Redcar & Cleveland	Tees Valley Joint Minerals and Waste Development Plan Documents, A site of approximately 27 hectares is allocated for the development of the South Tees Eco-Park.	3.4 km	Adopted	Tier 3
53	MWC9 Sewage Treatment	Redcar & Cleveland	Tees Valley Joint Minerals and Waste Development Plan Documents, Development involving the extension or upgrade of existing sewage treatment facilities, including at the Bran Sands Regional Sludge Treatment Centre (Redcar and Cleveland) will be supported.	0.6 km	Adopted	Tier 3
54	MWC8 General Locations for Waste Management Sites	Redcar & Cleveland	Tees Valley Joint Minerals and Waste Development Plan Documents, Sustainable waste management will be delivered through a combination of large sites, which include clusters of waste management and processing facilities, and small sites for individual waste facilities. Please note: due to this plan covering a large area it has not been included on Figure 24-2.	Adjacent	Adopted	Tier 3
55	Policy H31 Housing Allocations	Middlesbrough	Middlesbrough Housing Local Plan, 130 dwellings, Roworth Road.	7.4 km	Adopted	Tier 3

ID	Application reference	Local planning authority	Applicant for 'other development' and brief description	Distance from PCC	Status	Tier
56	Policy H31 Housing Allocations	Middlesbrough	Middlesbrough Housing Local Plan, 180 dwellings, Land adjacent to MTLIC.	7.4 km	Adopted	Tier 3
57	Policy H31 Housing Allocations	Middlesbrough	Middlesbrough Housing Local Plan, 83 dwellings, Beresford Crescent.	6.7 km	Adopted	Tier 3
58	Policy H31 Housing Allocations	Middlesbrough	Middlesbrough Housing Local Plan, 100 dwellings, Former Erimus Training Centre	6.8 km	Adopted	Tier 3
59	Policy EG2 Employment Locations	Middlesbrough	Middlesbrough Publication New Local Plan, 4.45 hectares industrial land.	6.5 km	Emerging	Tier 3
60	Policy H3 - Housing Allocations	Middlesbrough	Middlesbrough Publication New Local Plan, 80 dwellings, Roworth Road.	7.4 km	Emerging	Tier 3
61	Policy H3 - Housing Allocations	Middlesbrough	Middlesbrough Publication New Local Plan, 106 dwellings, Former Erimus Training Centre.	6.8 km	Emerging	Tier 3
62	Policy SD4 - Economic Growth Strategy	Stockton-on-Tees	Stockton-on-Tees Local Plan, Main growth location for hazardous installations including liquid and gas processing, bio-fuels and bio-refineries, chemical processing, resource recovery, and waste treatment, energy generation, carbon capture and storage and other activities, Seal Sands.	2 km	Adopted	Tier 3
63	Policy EMP3 - General Employment Land	Hartlepool	Hartlepool Local Plan, 8.2 hectares general employment uses, Tofts Farm West.	5.2 km	Adopted	Tier 3

ID	Application reference	Local planning authority	Applicant for 'other development' and brief description	Distance from PCC	Status	Tier
64	Policy EMP4 - Specialist Industries	Hartlepool	Hartlepool Local Plan, 44 hectares reserved for potential expansion of existing occupier, West of Seaton Channel. Please note, as this policy area includes a range of developments which have not yet submitted planning applications.	4.8 km	Adopted	Tier 3
65	Policy EMP4 - Specialist Industries	Hartlepool	Hartlepool Local Plan, 4.1 hectares available for development as a waste management and recycling facility, Graythorp Waste Management	5.3 km	Adopted	Tier 3

Stage 2: Establishing a Shortlist of Other Developments

- 24.3.28 This stage will involve a review of the long list of planned developments, to identify those to be taken forward (shortlisted) into the cumulative assessment.
- 24.3.29 In determining which of the developments should be shortlisted, a minimum level of information will be necessary. Only those developments with at least a Scoping Report, Environmental Assessment Report or Environmental Statement (ES) available shall be considered for shortlisting.
- 24.3.30 Developments and projects that are already in existence i.e. those which are completed and operational, shall be considered to form part of the environmental baseline conditions within which the Proposed Development will be implemented (and will be treated as such within the EIA). Similarly, where other developments are expected to be completed prior to Proposed Development construction, and where the effects of those projects are fully determined, these will also be considered within the environmental baseline adopted in the EIA.
- 24.3.31 The shortlisting process will involve the application of inclusion/exclusion criteria and will be informed by engagement with the relevant local authorities and the professional judgement of the environmental specialists undertaking the EIA.

Stage 3: Gathering Information

- 24.3.32 This stage will involve reviewing the available information relating to the shortlisted developments to establish the details of their likely environmental effects.
- 24.3.33 This will consider factors including: the Zol of environmental topics assessed; the planned timescales for construction, operation and (where relevant) decommissioning; and details of their potential or likely significant effects.

Stage 4: Assessment

- 24.3.34 Those developments which meet the criteria set out in the above stages shall be incorporated into the cumulative assessment. This will involve identifying where effects are likely to occur and assessing the significance of those effects on environmental receptors and resources, taking into account any mitigation measures.

Consultation

- 24.3.35 The Secretary of State has provided comments on the scope of the cumulative assessment through the EIA Scoping process with PINs. Through the scoping process further developments were identified and have been included within this assessment where appropriate.
- 24.3.36 Table 24-5 below provides a summary of recent consultation regarding cumulative and combined effects, and how this has been addressed by the Applicant.

Table 24-5: Consultation Summary

Consultee/ DATE	Summary	Addressed
Inspectorate (Scoping Opinion)	<p>The Scoping Report does not explain the approach relating to the assessment of cumulative effects. The ES should consider the approach set out in the Inspectorate’s Advice Note 17 with regards to the assessment of cumulative effects. The ES should identify other developments with the potential to impact on sensitive receptors (including, where appropriate, the offshore works of the Teesside Cluster Carbon Capture & Usage Project [now the Net Zero Teesside project]) together with the Proposed Development. Any likely significant cumulative effects should be assessed. The Inspectorate also notes that RCBC is developing highways proposals in the vicinity although these have not yet been adopted as Council policy. The Inspectorate recommends to monitor the progress of these proposals and include them in the assessment of the cumulative effects, where significant effects are likely. The Scoping Report states that cumulative effects from other projects or activities located within a ‘realistic geographical scope’ would be considered. The ES should set out and justify what is the ‘realistic geographical scope’. The Inspectorate advises that this is based on the zone of influence of potential impacts from the Proposed Development and the other activities or projects under consideration, as advocated in the Inspectorate’s Advice Note Seventeen: Cumulative Effects Assessment.</p>	<p>The approach to the assessment of cumulative effects set out in PINs Advice Note Seventeen (PINs, 2019a) has been adopted, and the list of other developments, including the offshore element of the Net Zero Teesside project and allocations from local planning authority plans, has been provided in Table 24-4 above. Consultation with RCBC is ongoing and, where significant effects are considered likely, any emerging developments (such as the highways proposals) will be included in the final cumulative effects assessment. At this stage of the assessment, the reasonable geographical scope has been set at 15 km using the methodology advocated in Advice Note Seventeen (see paragraph 24.3.18 and Table 24-2).</p>
Natural England (Scoping Opinion)	<p>The assessment should also include the cumulative effect of the development with other relevant existing or proposed developments in the area. In this context Natural England advises that the cumulative impact assessment should include other proposals currently at Scoping stage. Due to the overlapping timescale of their progress through the planning system, cumulative impact of the proposed development with those proposals currently at Scoping stage would be likely to be a material consideration at the time of determination of the planning application. The assessment should refer to the relevant National Character Areas which can be found on the Natural England website. Links for Landscape Character Assessment at a local level are also available on the same page.</p>	<p>As set out in Section 24.3 Assessment Methodology of this document, the cumulative effects assessment will consider cumulative and in combination effects with other relevant existing or proposed developments in the vicinity of the Site, including: proposals at Scoping stage, existing completed projects (in the future baseline scenarios), approved but uncompleted projects and allocations in local plans. National Character Areas and Landscape character assessments will be considered in the landscape and visual impacts assessment and the cumulative effects assessment.</p>

A full consideration of the implications of the whole Proposed Development should be included in the ES. All supporting infrastructure should be included within the assessment. The ES should include an impact assessment to identify, describe and evaluate the effects that are likely to result from the project in combination with other projects and activities that are being, have been or will be carried out. The following types of projects should be included in such an assessment, (subject to available information):

- existing completed projects;
- approved but uncompleted projects;
- ongoing activities;
- plans or projects for which an application has been made and which are under consideration by the consenting authorities; and
- plans and projects which are reasonably foreseeable, i.e. projects for which an application has not yet been submitted, but which are likely to progress before completion of the development and for which sufficient information is available to assess the likelihood of cumulative and in-combination effects.

Public Health
England
(Scoping
Opinion)

Identify cumulative and incremental impacts (i.e. assess cumulative impacts from multiple sources), including those arising from associated development, other existing and proposed development in the local area, and new vehicle movements associated with the proposed development; associated transport emissions should include:

- consideration of non-road impacts (i.e. rail, sea, and air).

Whilst screening of impacts using qualitative methodologies is common practice (e.g. for impacts arising from fugitive emissions such as dust), where it is possible to undertake a quantitative assessment of impacts then this should be undertaken.

As set out in Section 24.3 Assessment Methodology of this document, the cumulative effects assessment will consider cumulative and in combination effects with other relevant existing or proposed developments in the vicinity of the Site, including: proposals at scoping stage, existing completed projects (in the future baseline scenarios), approved but uncompleted projects and allocations in local plans.

Where relevant, and where significant effects are expected to occur, non-road impacts will be considered. Quantitative assessments will be used in favour of qualitative approaches wherever possible.

24.4 References

DECC (2011). Department of Energy and Climate Change. *Overarching National Policy Statement for Energy (EN-1)*. London: The Stationery Office.

'Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment' (2014). *Official Journal* L124 p. 1.

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<https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/12/Advice-note-17V4.pdf>

Planning Inspectorate (PINS) (2019b). *Register of Applications* [Online]. Available at:

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<http://www.legislation.gov.uk/uksi/2017/572/contents/made>

The Town and Country Planning (Development Management Procedure) (England) Order 2015 (SI 2015/595). London: The Stationery Office.

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