Connah's Quay Low Carbon Power

Preliminary Environmental Information Report
Volume II, Chapter 24: Cumulative and Combined Effects

Uniper

The Planning Act 2008
The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017
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Prepared for:
Uniper UK Limited

Prepared by:
AECOM Limited

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24. Cumulative and Combined Effects

24.1 Overview

24.1.1 This chapter of the Preliminary Environmental Information Report (PEIR) provides a summary of the approach to the assessment of cumulative and combined effects which may occur as a result of the Proposed Development. Cumulative and combined effects are defined as follows:

- **inter-project cumulative effects**: these occur when the environmental impacts and effects of the Proposed Development interact with those associated with other planned projects and developments (hereafter referred to as 'proposed schemes') located within a realistic geographical scope where environmental impacts could act together to result a greater significance of effects on environmental resources and/or receptors; and
- **intra-project combined effects**: these are different environmental effects resulting from a single development i.e. the Proposed Development (such as noise, air quality, visual effects, etc.) on any one receptor that may, in combination, cause an effect of greater significance as compared to a single environmental effect on that receptor.

24.1.2 The cumulative effects assessment, to be presented in the Environmental Statement (ES), will consider the construction, operation (including maintenance) and decommissioning of the Proposed Development.

24.1.3 This chapter is supported by **Figure 24-1: Short List of Developments Identified at Stage 2 of the Cumulative Impact Assessment** (**PEIR Volume III**) which illustrates the Proposed Development Site (hereafter referred to as the 'Site' or 'Indicative Site Boundary') (Excluding the Temporary Abnormal Indivisible Load (AIL) Work Areas) location in relation to other proposed schemes that may be of relevance to the cumulative assessment.

24.2 Legislation, Planning Policy and Guidance

24.2.1 Due to the potential for cumulative effects to occur as a result of the construction and operation (including 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') (Ref 24-2) and the assessment requirements of the National Policy Statement (NPS) for Energy (EN-1) (Ref 24-3).

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 (Ref 24-4) 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*';

- Paragraph 5 of Schedule 4 to 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 4.1.5 of NPS EN-1 states that: '*In considering any proposed development, in particular when weighing its adverse impacts against its benefits, the Secretary of State should take into account:*
  - *its potential benefits including its contribution to meeting the need for energy infrastructure, job creation, reduction of geographical disparities, environmental enhancements, and any long-term or wider benefits; and*
  - *its potential adverse impacts, including on the environment, and including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce, mitigate or compensate for any adverse impacts following the mitigation hierarchy'*.

  and
- Paragraph 4.3.19 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*.'

24.2.3 Further detail of legislation policy and guidance relevant to each of the technical assessments presented in **Chapters 8** to **23** which is also of relevance to the cumulative effects assessment is presented in **Appendix 7-A: Legislative, Policy and Guidance Framework for Technical Topics** (**PEIR Volume IV**).

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 to be presented in the ES will be primarily based upon guidance contained within PINS 'Advice Note Seventeen: Cumulative effects assessment relevant to nationally significant infrastructure projects' (Ref 24-1), which provides advice on the identification and assessment of proposed schemes, and the EIA Scoping Opinion (see **Appendix 1-B: Scoping Opinion** (**PEIR Volume IV**).

24.3.3 With regard to cumulative effects, the ability to quantify the extent to which the environmental effects of other proposed schemes can interact with those

associated with the Proposed Development depends upon on the level of information available regarding such other proposed schemes. Where environmental assessment information regarding other proposed schemes is not available or is uncertain, the cumulative assessment will be necessarily qualitative and assessed using professional opinion. However, matrices and modelling will be used, where appropriate and where sufficient information is available.

24.3.4 Cumulative and combined effects will be assessed to be neutral, minor, moderate or major. Moderate or major effects are considered to be significant, using the methodologies outlined in each technical chapter (refer to **Chapters 8 to 23** of this PEIR).

Limitations or Difficulties

24.3.5 The cumulative effects assessment reported within the ES will be based on information available at the time of the assessment regarding the environmental effects of the other proposed schemes in the vicinity of the Site that have been scoped into the assessment.

24.3.6 Any limitations that are encountered during the individual assessments will be detailed within each of the Chapters referenced.

Inter-Project Cumulative Effects

24.3.7 Cumulative effects are those that accrue over time and space caused by the interaction of impacts associated with a number of proposed schemes. PINS Advice Note Seventeen 'Cumulative effects assessment relevant to nationally significant infrastructure projects' (PINS Advice Note 17) sets out a four-stage approach to 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.

24.3.8 There is no established EIA methodology for assessing and quantifying effect interactions that lead to combined effects on sensitive receptors; however, the European Commission (EC) has produced guidance for assessing effect interactions "*which are not intended to be formal or prescriptive, but are designed to assist EIA practitioners in developing an approach which is appropriate to a project…*" (Ref 24-11).

24.3.9 An approach has been developed in line with these guidelines which considers the residual effects of the Proposed Development identified across the different environmental topics to determine the potential for effect interactions that lead to combined effects.

24.3.10 In general, where the effect of the Proposed Development on a receptor is assessed as negligible, it is not considered that the Proposed Development would significantly contribute to a cumulative effect with other developments. This is because, by virtue of their definition, negligible effects are considered

to be imperceptible changes to an environmental / socio-economic resource or receptor. Therefore, the cumulative effects assessment presented within this chapter has focused on effects of the Proposed Development that are minor, moderate, and major.

24.3.11 The traffic and transport assessment presented in **Chapter 10: Traffic and Transport** and the traffic-related construction air quality and noise impacts and effects reported in **Chapter 8: Air Quality** and **Chapter 9: Noise and Vibration** are based on traffic data which includes projected traffic levels from other committed developments and are therefore inherently cumulative. As such, these are not included in the cumulative assessment to avoid duplication.

Stage 1: Establishing the long list of 'other existing development and/or approved development'

24.3.12 Cumulative effects are generally unlikely to arise unless other proposed schemes are in close proximity to the Site, recognising that actual distance varies with the nature of the potential effect and the nature of the impact on a particular receptor (e.g. cumulative air quality effects could occur for developments a greater distance apart than noise effects).

24.3.13 The Zone of Influence (ZoI) of the Proposed Development, within which any potential effects of the Proposed Development many combine with the effects arising from other proposed schemes, has been determined on the basis of the maximum study areas of the technical assessments considered within this PEIR.

24.3.14 **Table 24-1** presents the largest ZoI identified within each environmental topic assessment. Each ZoI is indicative and will be subject to further review as the individual assessments progress. A summary of the final ZoIs will be presented in the ES.

24.3.15 It is considered that a study area of 15 km from the Site encompasses the maximum range of any potential likely significant cumulative effects. Environmental topics such as Socio-Economics, Recreation and Tourism, Climate Change and Materials and Waste have ZoIs larger than 15 km. However, it is considered disproportionate to collect data on proposed schemes at a scale larger than 15 km, particularly as some topic ZoIs extend to a national level.

Table 24-1: Summary of Indicative Zones of Influence

Environmental Topic	Zone of Influence (Main Site)	Zone of Influence (remaining Indicative Site Boundary areas including Temporary Abnormal Indivisible Loads (AIL) Work Areas)
Air Quality	**Construction:** Up to 250 m ZoI from the Site Boundary, 50 m from access roads and 250 m from the Site entrance for potential impacts to human health and amenity. Up to 50 m ZoI from the Site Boundary, 50 m from access roads and 250 m from the Site entrance for potential impacts on relevant ecological receptors. Up to 200 m ZoI from the centreline of all road links in the affected road network for potential impacts on sensitive receptors from changes in pollutant concentrations. **Operation:** Up to 15 km ZoI for ecological receptors from the Main Site (where operational emissions will arise) for ecological receptors (Special Protection Areas (SPA), Special Areas of Conservation (SAC), Ramsar sites (protected wetlands) and Sites of Special Scientific Interest (SSSIs)) and up to 2 km for non-statutory designated ecological receptors (ancient woodlands, local wildlife sites (LWS) and national and local nature reserves (LNR)). Impacts on human health receptors are likely to be negligible beyond 2 km of the stack(s). Up to 200 m ZoI from the centreline of all road links in the affected road network for potential impacts on sensitive receptors from changes in pollutant concentrations. Refer to **Chapter 8: Air Quality** for more information.	
Noise and Vibration	**Construction:** Up to 1 km ZoI from the Main Site for construction noise. Noise Sensitive Receptors (NSR) within 100 m from the closest construction activity for construction vibration. The ZoI for construction traffic is based on the spatial extent of traffic links in the transport model (as discussed in **Chapter 10: Traffic and Transport**). **Operation:** Noise Sensitive Receptors (NSR) located within 1 km of the Main Site. Refer to **Chapter 9**: **Noise and Vibration** for more information.	**Construction:** Up to 300 m ZoI from the connection corridors and Construction and Indicative Enhancement Area for construction noise (if these areas extend beyond 1km from the Main Site). Noise Sensitive Receptors (NSR) within 100 m from the closest construction activity for construction vibration. The ZoI for construction traffic is based on the spatial extent of traffic links in the transport model (as discussed in **Chapter 10: Traffic and Transport**). Refer to **Chapter 9**: **Noise and Vibration** for more information.
Traffic and Transport	**Construction and Operation:** The ZoI is comprised of the main highway links as set out in **Chapter 10: Traffic and Transport** and the public transport, cycle and walking provision within the immediate vicinity of these of these links.	

Environmental Topic	Zone of Influence (Main Site)	Zone of Influence (remaining Indicative Site Boundary areas including Temporary Abnormal Indivisible Loads (AIL) Work Areas)
	Refer to **Chapter 10: Traffic and Transport** for more information.	
Terrestrial and Aquatic Ecology	**Construction and Operation:** Up to 15 km ZoI for the Proposed Development. Up to 15 km study area around the Main Site for statutory Habitat Sites (formerly known as International Sites), SSSIs and National Nature Reserves (NNR) to be considered in terms of the potential for impacts and effects (including for the purposes of Habitat Regulations Assessment (HRA)), including those supporting mobile species such as birds or marine mammals. Up to 2 km for local non-statutory nature conservation sites. Refer to **Chapter 11: Terrestrial and Aquatic Ecology** PEIR for more information.	
Marine Ecology	**Construction and Operation:** Up to 10 km ZoI from the Site for designated sites. This is with the exception of marine mammals, which extends to the Celtic Sea with a particular focus on the Dee Estuary. Refer to **Chapter 12: Marine Ecology** for more information.	
Water Environment and Flood Risk	**Construction and Operation:** Up to 1 km ZoI from the Proposed Development boundary. Where relevant, the assessment considers a wider ZoI to include impacts which may propagate downstream and flood risk impacts upstream and downstream. Refer to **Chapter 13**: **Water Environment and Flood Risk** for more information.	
Geology and Ground Conditions	**Construction and Operation:** Up to 250 m ZoI from the Site boundary, extended up to 1 km ZoI for hydrogeology. Refer to **Chapter 14: Geology and Ground Conditions** for more information.	
Landscape and Visual Amenity	**Construction and Operation:** • to the north approximately 5 to 13 km from the Main Site; • to the south approximately 4 to 6 km from the Main Site; • to the east approximately 10 km from the Main Site; and • to the west approximately 11 km from the Main Site. Refer to **Chapter 15**: **Landscape and Visual Amenity** for more information.	The Temporary AIL Work Areas currently lie outside of the LVIA study area as it is anticipated that the temporary works required will not have an impact on landscape and visual amenity. Refer to **Chapter 15**: **Landscape and Visual Amenity** for more information.

Environmental Topic	Zone of Influence (Main Site)	Zone of Influence (remaining Indicative Site Boundary areas including Temporary Abnormal Indivisible Loads (AIL) Work Areas)
Physical Processes	**Construction and Operation:** Up to 15 km ZoI from the Proposed Development. Refer to **Chapter 16**: **Physical Processes** for more information.	
Terrestrial Heritage	**Construction and Operation:** Up to 3 km from the Indicative Site Boundary (excluding Temporary AIL Work Area). The settings of designated assets of the highest value (i.e., World Heritage Sites, scheduled monuments, Grade I and II* listed buildings, Registered Parks and Gardens and Conservation Areas containing a number of assets of the highest value) outside of the 3 km study area have been considered, up to 5km from the Indicative Site Boundary (excluding the Temporary AIL Work Area) Refer to **Chapter 17: Terrestrial Heritage** for more information.	
Marine Heritage	**Construction and Operation:** The Water Connection Corridor plus a 1 km buffer. Refer to **Chapter 18: Marine Heritage** for more information.	
Socio-Economics, Recreation and Tourism	**Construction and Operation:** The maximum potential ZoI for impacts on the local economy and temporary worker accommodation has been based on a 60-minute drive area from the Site The ZoI for impacts on skills and training is the Flintshire County Council (FCC) Local Authority Area. The ZoI for effects on local amenity (residential properties and business premises) is considered to be 500m, extending to 2km for community facilities and visitor attractions. Refer to **Chapter 19: Socio-Economics Recreation and Tourism** for more information.	
Climate Change	**Construction and Operation:** The ZoIs for the Greenhouse Gas (GHG) assessment during construction, operation and decommissioning comprise the UK and Wales, where the UK and Wales have separate carbon budgets. The ZoI for the Climate Change Risk Assessment (CCRA) will be the area of temporary and completed works within the Site and surrounding areas that may impact the Site (e.g. River Dee). The ZoI for effects on agriculture and soils and development land are the Indicative Site Boundary and up to 500 m from the Indicative Site Boundary respectively.	

Environmental Topic	Zone of Influence (Main Site)	Zone of Influence (remaining Indicative Site Boundary areas including Temporary Abnormal Indivisible Loads (AIL) Work Areas)
	The In Combination Climate Change Impact (ICCI) Assessment will be based on data obtained from the closest meteorological station to the Proposed Development Site (Hawarden Airport weather station, situated approximately 6.9 km away). Refer to **Chapter 20: Climate Change** for more information.	
Human Health	**Construction and Operation:** It is determined that human health impacts are likely to occur in the following four wards which therefore comprise the ZoI: • Connah's Quay: Golftyn; • Flint: Castle; • Flint: Coleshill and Trelawny; and • Flint: Oakenholt. Refer to **Chapter 21**: **Human Health** for more information.	
Major Accidents and Disasters	**Construction and Operation:** Up to 5 km ZoI from the Proposed Development Site. This has been selected on the basis that the Major Accident Hazard (MAH) sites greater than 5 km from the Proposed Development Site are unlikely to be directly affected. Refer to **Chapter 22: Major Accidents and Disasters** for more information.	
Materials and Waste	**Construction and Operation:** The ZoI for the Proposed Development study area comprises the Site. For the expansive study area this extends up to a national ZoI. Refer to **Chapter 23**: **Materials and Waste** for more information.	

24.3.16 The following data sources were used to identify proposed schemes:

- National Infrastructure Planning website (Ref 24-5);
- FCC (planning portal/register) (Ref 24-6);
- Wirral Council (planning portal/register) (Ref 24-7);
- Cheshire West and Chester Council (planning portal/register) (Ref 24-8);
- Welsh Development of National Significance register (Ref 24-9); and
- Marine Management Organisation (MMO) Marine Case Management System (Ref 24-10).

24.3.17 The following criteria was used to compile the initial long list, as provided in **Appendix 24-A** (**PEIR Volume IV**), and to screen out proposed schemes of insufficient scale or of a type that would not result in cumulative effects with the Proposed Development:

- any planning applications older than five years at the commencement date of study (July 2024);
- construction of small-scale agricultural buildings;
- house extensions or cosmetic changes to buildings;
- work to trees;
- micro-generation wind turbines;
- roof mounted solar PV panels (or ground mounted less than 50kW output);
- renewal of planning permission for retention of existing operational use;
- variation to planning permission for retention of existing operational use;
- variation to planning permissions, including reserved matters applications (where the original application would not have been considered within the assessment); and
- small-scale residential uses (specifically, less than 20 dwellings) or changes of buildings' use (unless it could itself result in a cumulative effect, such as a conversion of several barns into a holiday village).

Each proposed scheme on the long list was reviewed to determine its status at the time of undertaking the assessment and was assigned a status and tier, as described in **Table 24-2** informed by the guidance and levels presented within PINS Advice Note 17.

Table 24-2 Level of certainty for each tier

Tier	Degree of Certainty	Decreasing level of detail likely to be available
Tier 1	• Under construction;* • Permitted application(s), whether under the Planning Act 2008 or other regimes, but not yet implemented; and • Submitted application(s) whether under the Planning Act 2008 or other regimes but not yet determined.	↓
Tier 2	• Projects on the Planning Inspectorate's Programme of Projects where a scoping report has been submitted.	
Tier 3	• Projects on the Planning Inspectorate's Programme of Projects where a scoping report has not been submitted; • Identified in the relevant Development Plan (and emerging Development Plans - with appropriate weight being given as they move closer to adoption) recognising that there will be limited information on any relevant proposals; and • Identified in other plans and programmes (as appropriate) which set the framework for future development consents/approvals, where such development is reasonably likely to come forward.	

**Where proposed schemes are expected to be completed before construction of the proposed NSIP 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. Adapted from Table 2 in PINS Advice Note 17.*

24.3.18 The long list is presented in **Appendix 24-A: Initial Long List of Proposed Schemes (PEIR Volume IV)**

Stage 2: Establishing a shortlist of 'other existing development and/or approved development'

24.3.19 To provide a proportionate cumulative effects assessment, a short list has been established from the long list (Stage 1) of proposed schemes. To create the short list (Stage 2), the following criteria was used:

- listed on the National Infrastructure Planning Programme of Projects within 15 km of the Site Boundary;
- applications for EIA development within 3 km of the Site Boundary;
- other major applications that are not EIA development within 1 km of the Site Boundary; and
- other proposed schemes that do not meet the above criteria but which the Applicant wishes to include, or that a statutory stakeholder specifically requests is included. (This may include development allocations identified in the relevant Development Plan (and emerging Development Plans), for example, which are aspirational but have not yet reached pre-application stage).

24.3.20 In determining which of the proposed schemes should be short listed, a minimum level of information is necessary. Only those developments with at least a Screening Report, Scoping Report or ES (if EIA Development) or a planning application supported by relevant technical appendices (e.g. a Transport Assessment) available were considered for short listing. However, a few exceptions to this general principle were made, where it was considered that there was potential for significant cumulative effects to occur based upon professional judgement, (for example due to close proximity to the Proposed Development).

24.3.21 Land allocations were considered, but as there is no certainty that developers will come forward with projects within the timescale for the delivery of these sites and the nature for such projects and their associated environmental effects are currently unknown, these were not short listed.

24.3.22 Developments that are already in existence i.e. those which are completed and operational, are considered to form part of the environmental baseline conditions within which the Proposed Development will be implemented. They have therefore been accounted for through establishment of the current or future baseline within each technical assessment presented in **Chapters 8 to 23** and were therefore not considered for short listing.

24.3.23 Similarly, where proposed schemes are expected to be completed prior to Proposed Development construction, and where the effects of those projects are fully determined, these have also been considered within the future environmental baseline adopted in the PEIR.

24.3.24 The indicative short list of proposed schemes identified for the inter-project cumulative effect assessment is provided in **Table 24-3**. **Figure 24-1** (**PEIR Volume III**) shows the location of the proposed schemes in relation to the Proposed Development. The short list of proposed schemes will be fixed, following consultation with the relevant local planning authorities, approximately three months prior to ES submission to allow sufficient time for the technical assessments to consider the cumulative schemes.

24.3.25 The HyNet CO_2 Pipeline Project is expected to be constructed and operational prior to construction of the Proposed Development and intersect the Proposed CO_2 Connection Corridor. In order to assess a worst-case scenario, it has been considered that the construction works for this separate application may be delayed and coincide with those of the Proposed Development. Hence, the HyNet CO_2 Pipeline Project has been included in the short list of proposed schemes.

Stage 3: Information Gathering

24.3.26 The process of gathering information of those short listed proposed schemes and considering the potential interaction with the Proposed Development is ongoing.

24.3.27 In order to assess the potential for cumulative effects, there is a need to understand the environmental effects of proposed schemes. For each scheme on the short list the following information will be reviewed (as relevant) to inform the cumulative effects assessment:

- EIA Screening Letters / Requests;
- EIA Scoping Reports;
- Environmental reporting (included standalone reports, PEIRs and ESs);
- Other reporting submitted with the relevant application, such as Design and Access Statements, Planning Statements and CEMPs (or similar); and
- Details available on project website, such as consultation material.

24.3.28 Key details of the information gathered will be presented in the ES.

Stage 4: Assessment

24.3.29 Consideration will be given within the ES, as relevant, to those short listed proposed schemes, which may result in cumulative effects, together with the Proposed Development from the perspective of each relevant technical assessment.

24.3.30 The cumulative assessment has been undertaken on a topic-by-topic basis rather than scheme-by-scheme as recommended in Appendix 2 to PINS Advice Note 17 (Ref 24-1). This has been done so that a cumulative assessment of the Proposed Development with all identified cumulative developments could be provided. Information recommended to be provided in Appendix 2 to PINS Advice Note 17 (Ref 24-1) has still been presented. Intra-Project Combined Effects

24.3.31 Mitigation of combined effects is best achieved through management and control measures to prevent the individual impacts in the first instance or reduce the impacts themselves and therefore reduce the likelihood of such interactions occurring, in accordance with the mitigation hierarchy.

24.3.32 The approach outlined will be used to assess potential combined effects in the ES, where more than one technical assessment chapter identifies a residual effect of minor significance or greater on an individual or group of common receptors.

Table 24-3: Updated short list of projects within the 15 km ZoI identified at Stage 2 of the cumulative effects assessment

ID No. (from long list)	Name of Development	Application Reference	Local Planning Authority	Brief description of development	Approximate distance from Main Site	Status
47	HyNet Carbon Dioxide Pipeline(HyNet CO_2 Pipeline Project)	EN070007; CML2350	N/A – Nationally Significant Infrastructure Project; Marine and Coastal Access Act 2009	A CO_2 pipeline that will transport CO_2 produced and captured by future hydrogen producing facilities and existing industrial premises in North West England and North Wales for offshore storage. The CO_2 pipeline will comprise both newbuild and existing pipelines (and newbuild and existing above-ground installations (AGI) to allow operation and maintenance works in relation to the pipeline, including the newbuild Proposed Liverpool Bay CCS Ltd's Flint AGI) that will be covered under the DCO (of the HyNet CO_2 Pipeline Project). When complete it will run from the Ince AGI in Cheshire to Talacre Beach in North Wales. Includes a Marine License for a Pipeline crossing of the River Dee using trenchless crossing technique, either micro-tunnelling or Horizontal Directional Drilling (HDD).	1.4 km	Development Consent Granted 20/03/2024. Construction start date planned 2024, for 16 months. Expected to be constructed and operational prior to construction of the Proposed Development – however included to assess a worst case scenario of the project being delayed.
102	Padeswood Carbon Capture & Storage	DNS CAS-02009-W1R1Z7	N/A – Development of National Significance	Integrating Hanson UK's Padeswood Cement Works into the HyNet North West network through the capture of carbon dioxide (CO_2) for transportation and subsequent storage in Eni's Liverpool Bay Storage facilities. The proposed project will capture approximately 7,200,000 tonnes of CO_2 per year from cement Kiln located at Padeswood. The individual components of the development can be summarised as follows: Access roadways, construction and laydown compound areas, A Combined Heat and Power (CHP) plant with 12MW electricity (minimum) and 83MW	7.63 km	Scoping Report submitted 11/11/2022. Application submission planned July 2024.

ID No. (from long list)	Name of Development	Application Reference	Local Planning Authority	Brief description of development	Approximate distance from Main Site	Status
				thermal of installed capacity, to produce electricity and heat to power the carbon capture equipment, a post Combustion Carbon Capture and Compression (PCCC) plant, to extract CO_2 from waste gases and compress it for transport and storage, An underground CO_2 transport pipeline, to transport capture CO_2 from Padeswood Cement Works to Northop Hall AGI (above ground installation) forming part of the HyNet CO_2 pipeline approximately 10 km in length, The demolition of existing structures comprising a workshop, a block of residential garages, small office building and redundant slurry basins.		
54	Land adjacent to Cornist Lane, Flint, Pentre Halkyn & Babell	FUL/000633/23	Flintshire County Council	Construction and operation of the three Block Valve Stations (BVS) at Cornist Lane near Flint, Pentre Halkyn and land off Racecourse Lane, Babell, Flintshire in connection with the with HyNet Carbon Dioxide Pipeline proposal.	2.92 km	Approved 18/01/2024. Construction planned to finish in Q4 2027.
75	Land at Ffordd Dewi, Flint, Flintshire, CH6 5WB	FUL/000776/22	Flintshire County Council	New, two storey 240 FTE Place Welsh Medium Primary School building and 30 Place PTE Nursery. New, partial two storey wrap around childcare, Welsh Immersion and Community building. Project associated external works, inclusive of boundary treatments, new pedestrian access points, new car parking arrangements and extended vehicular access off Ffordd Dewi.	0.41 km	Approved 24/04/2023 Construction to begin within 5 years of permission being granted (2028)
38	Parc Adfer Ltd, Zone 4, Deeside Industrial Park, Weighbridge Road, Sealand, Deeside, CH5 2LL	SCO/000970/23	Flintshire County Council	EIA Scoping Opinion Request for the construction and operation of carbon capture technology.	2.59 km	Scoping Report submitted 27/10/2023.

ID No. (from long list)	Name of Development	Application Reference	Local Planning Authority	Brief description of development	Approximate distance from Main Site	Status
						Scoping Opinion issued 28/02/2024. Construction likely to commence from mid-2026, 2 to 3 years in duration
159	Bretton Hall Solar Farm	DNS/3251545	N/A – Development of National Significance	A proposed solar farm and grid connection, supporting energy infrastructure including battery storage and associated site works incorporating partial widening of an existing access, maintenance tracks, perimeter and stock fencing, CCTV cameras and the provision of a customer cabin, outdoor classroom, and parking.	10 km	Approved with Conditions 19/12/2023. Construction start date planned Q4 2024
55	Shotton Paper Mill (Combined Heat & Power Facility)	DNS/3279559	N/A – Development of National Significance	Combined Heat and Power (CHP) Facility relating to redevelopment and expansion of Shotton Paper Mill. The generation capacity of the CHP Facility will be 69MWe.	1.16 km	Application submitted 21/02/2024. Decision pending
114	Shotton Paper Mill, Weighbridge Road, Deeside (Redevelopment)	FUL/000011/22	Flintshire County Council	Redevelopment and expansion of former UPM Shotton Paper Mill site comprising 82 hectares of new paper factory buildings and processing plant and associated landscaping, offices, access and parking.	1.71 km	Shotton Paper Mill, Weighbridge Road, Deeside (Redevelopment)
3	Shotton Paper Mill, Weighbridge Road, Deeside (Tissue Machine Facility)	FUL/000353/24	Flintshire County Council	Full application for a new tissue machine facility and associated structures at Shotton Paper Mill	1.73 km	Application submitted 17/06/2024. Decision Pending

ID No. (from long list)	Name of Development	Application Reference	Local Planning Authority	Brief description of development	Approximate distance from Main Site	Status
141	The Airfields (Airfields Delta) Welsh Road Sealand Deeside	63721	Flintshire County Council	Erection of a Paper Processing Mill to produce and manufacture tissue paper (B2, B8 use class) with ancillary B1a office space; associated servicing and infrastructure including car parking, HGV parking and vehicle and pedestrian circulation; noise mitigation features; earthworks to create development platforms; creation of drainage features including a new outfall to the River Dee; water treatment plant; and landscaping.	3.05 km	Application submitted 04/11/2024. Decision Pending Planned construction programme of 13 years (2022-2035)
16	The Mostyn Energy Park Extension Project	CML2283	N/A - Marine and Coastal Access Act 2009	Works comprising the construction of 360 m length of new quay, involving a reclamation (approximately 3.5 ha) to provide a continuous berthing frontage for the construction and O&M requirements of the offshore wind sector; Capital dredging to create a new berth pocket alongside the new quay wall, dredge the berths along the existing quay and the main navigation channel; Reuse a selected proportion of the suitable capital dredge arisings as engineering fill material for the reclamation and dispose of the remainder at the existing Mostyn Deep disposal site (IS102); Potential relocation of four existing dolphins (piles) to create a berth for Service Operation Vessels (SOVs) to provide O&M requirements of the offshore wind sector; Potential construction of a Ro-Ro pontoon linkspan; Maintenance dredging for the new berth, existing berths, navigational channel and harbour area; Disposal of maintenance dredge material at the existing marine disposal sites at Mostyn Deep (IS102) and Mostyn Breakwater (IS103) and/or reused as is currently permitted under the existing maintenance dredge and disposal marine licences; Use of reclaimed area as a storage/laydown area; and Providing environmental enhancements15 to support natural mudflat restoration.	14.06 km	Application submitted 20/05/2024. Decision Pending Planned construction programme of approximately 2 years.

ID No. (from long list)	Name of Development	Application Reference	Local Planning Authority	Brief description of development	Approximate distance from Main Site	Status
9	Land at Quarry Farm and Leadbrook Drive, Oakenholt, Flint	FUL/000372/24	Flintshire County Council	Construction of 130 affordable homes. new vehicular and pedestrian accesses off Ffordd Pedrog including public open space, landscaping, highways works, foul and surface water drainage infrastructure and associated ancillary works.	0.1 km	Application submitted 13/05/2024. Decision Pending

References

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Ref 24-10 Marine Management Organisation, Marine Case Management System [online]. Available at: https://marinelicensing.marinemanagement.org.uk/mmofox5/fox/live/MMO_LOGIN/login (Accessed 04/04/2024)

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