HERBATA DATA CENTRE, NAAS

EIAR
VOLUME I MAIN TEXT – CHAPTER 1 INTRODUCTION AND NEED FOR EIAR

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1 INTRODUCTION AND NEED FOR EIAR

1.1 The Project - Overview

The Environmental Impact Assessment Report (EIAR) is provided in support of the proposed Herbata Data Centre Campus which is subject of both a full planning application to Kildare County Council (KCC) and a Strategic Infrastructure Development (SID) application to An Bord Pleanála; the applicant for both applications is Herbata Limited.

The overall Data Centre development includes two main elements, namely:

(a) The Data Centre, comprising 6 no. two storey Data Centre buildings, an administration/management building, car parking, landscaping, energy infrastructure and other associated works. These elements are the subject of the planning application submitted to KCC, and that application is referred to hereafter as “the Data Centre Application”.

(b) The substation, comprising a grid substation and 110kV transmission connection. These elements are subject of the SID application to An Bord Pleanála, and that application is referred to hereafter as “the Substation Application”.

There is a separate statutory development consent process for each of these elements, with which Herbata must comply. The Data Centre element requires planning permission pursuant to section 34 of the Planning and Development Act 2000 (as amended) (the “2000 Act”), while the substation element is “Strategic Infrastructure Development” within the meaning of the 2000 Act and requires approval from An Bord Pleanála under section 182A of the 2000 Act (instead of a regular planning permission under section 34 of the 2000 Act). A copy of the An Bord Pleanála Section 182A Determination is included in Volume II, Appendix 1.1.

It is therefore necessary for Herbata Limited to make two distinct applications, one to Kildare County Council in respect of the Data Centre (i.e. the Data Centre Application) and one to the Board in respect of the substation (i.e. the Substation Application). This is not at all unusual and is in compliance with legislation.

The Data Centre Application and the Substation Application together constitute the “Project” for the purposes of Environmental Impact Assessment and Appropriate Assessment, and references to the “Project” in this EIAR should be read as references to those two applications taken together as one project. Figure 1.1 below illustrates the extent of both planning application boundaries and the relevant project layout as subject of assessment within the EIAR.

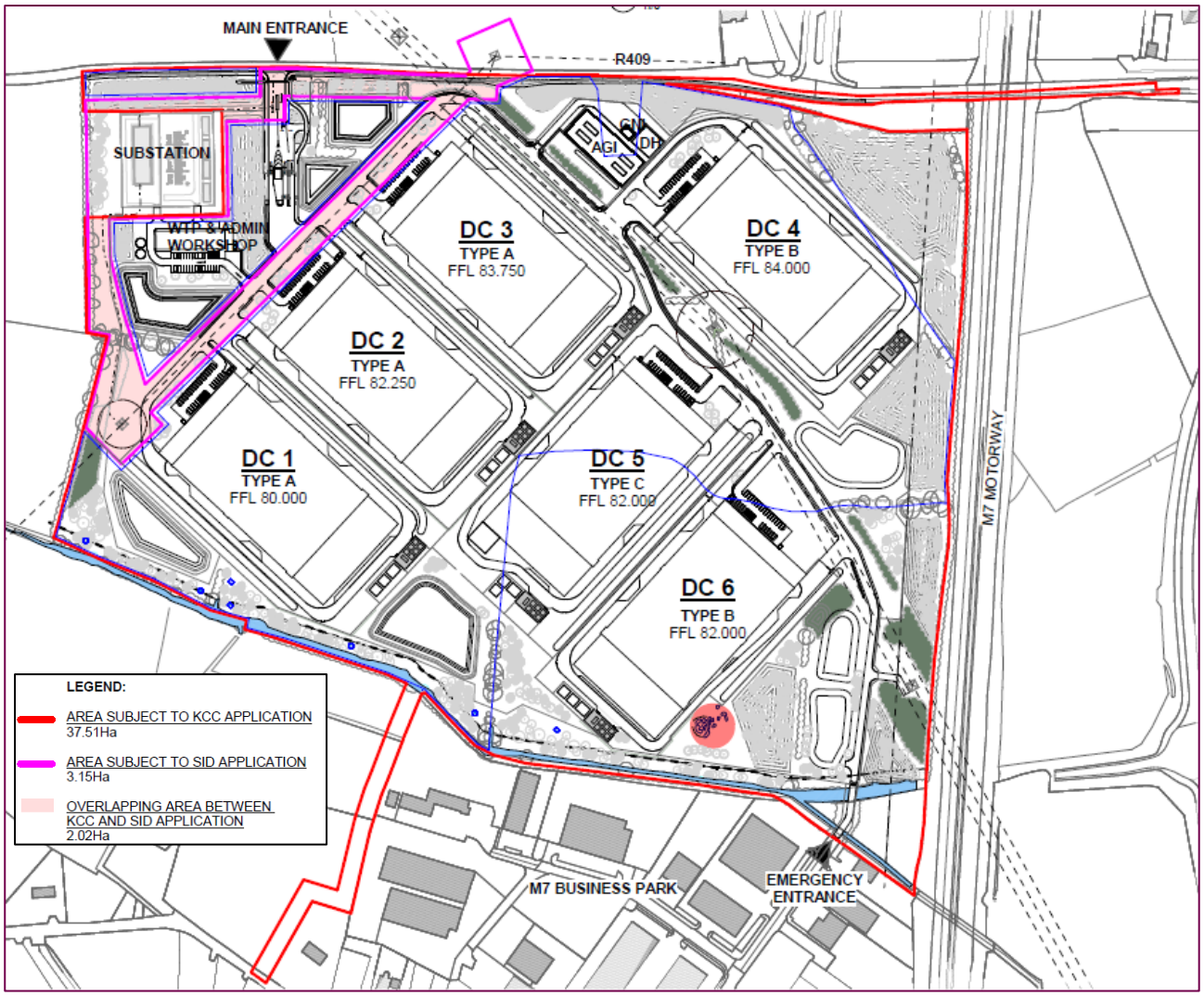

Figure 1.1: Proposed Site Context Plan Indicating both KCC (the Data Centre) Application and SID (the Substation) Application Planning Boundaries

For clarity, Figures 1.2 and 1.3 below illustrate the planning boundaries as they relate only to the KCC (the Data Centre) and SID (the Substation) applications respectively.

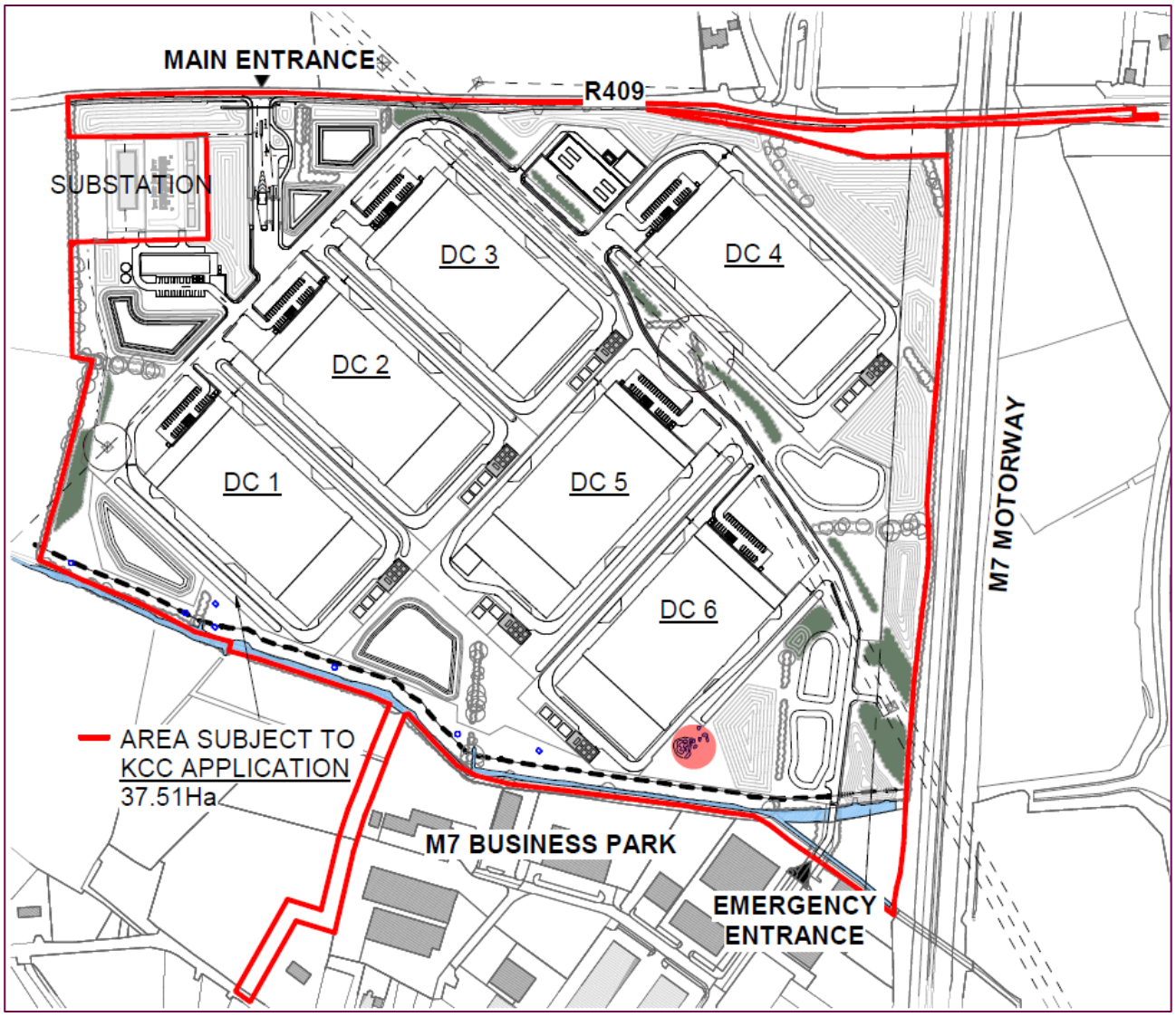

Figure 1.2: The Data Centre Application Planning Boundary

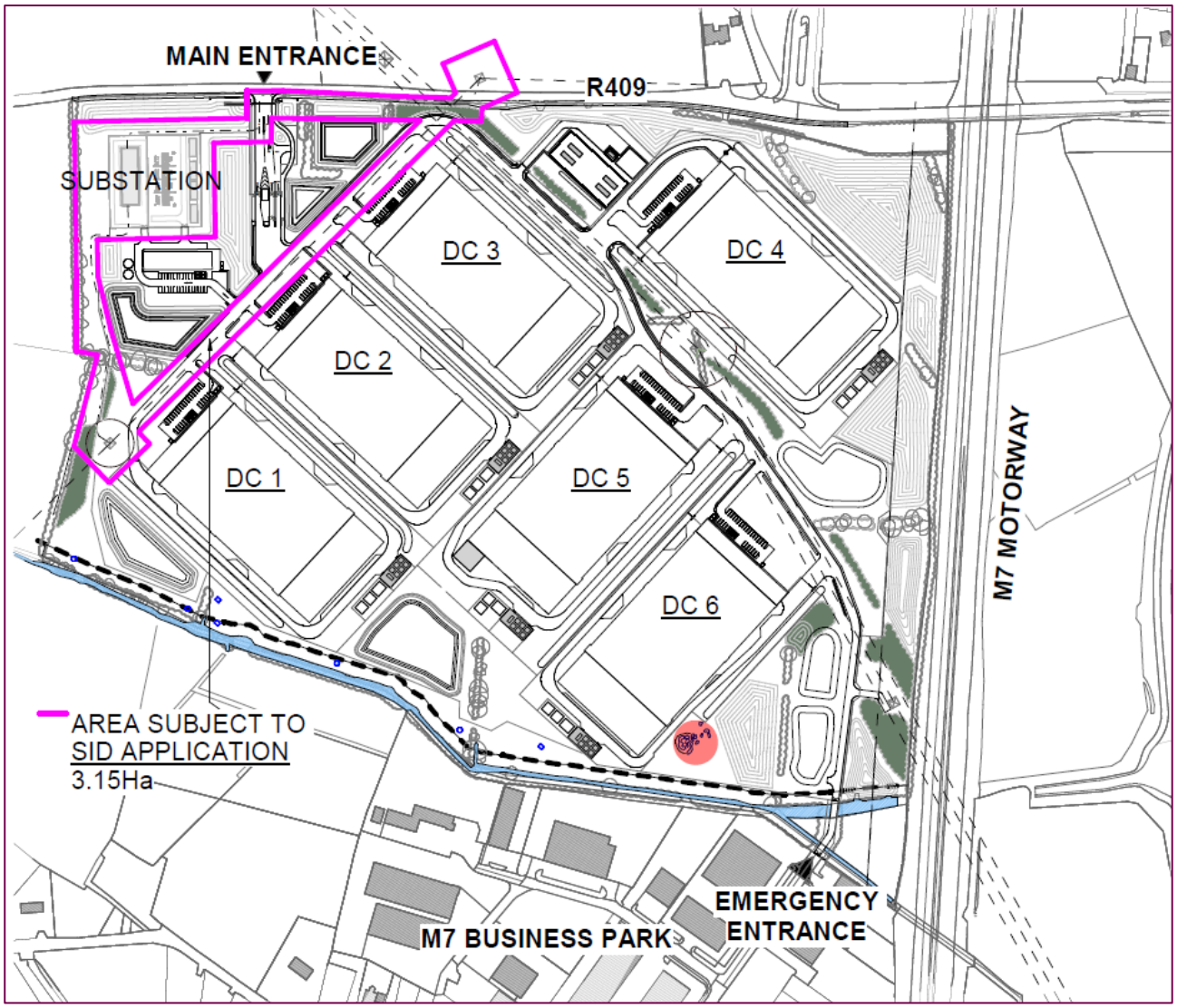

Figure 1.3: The Substation Application Planning Boundary

Figure 1.4 below illustrates the extent of the overlapping area (2.02ha) between the Data Centre and the SID applications.

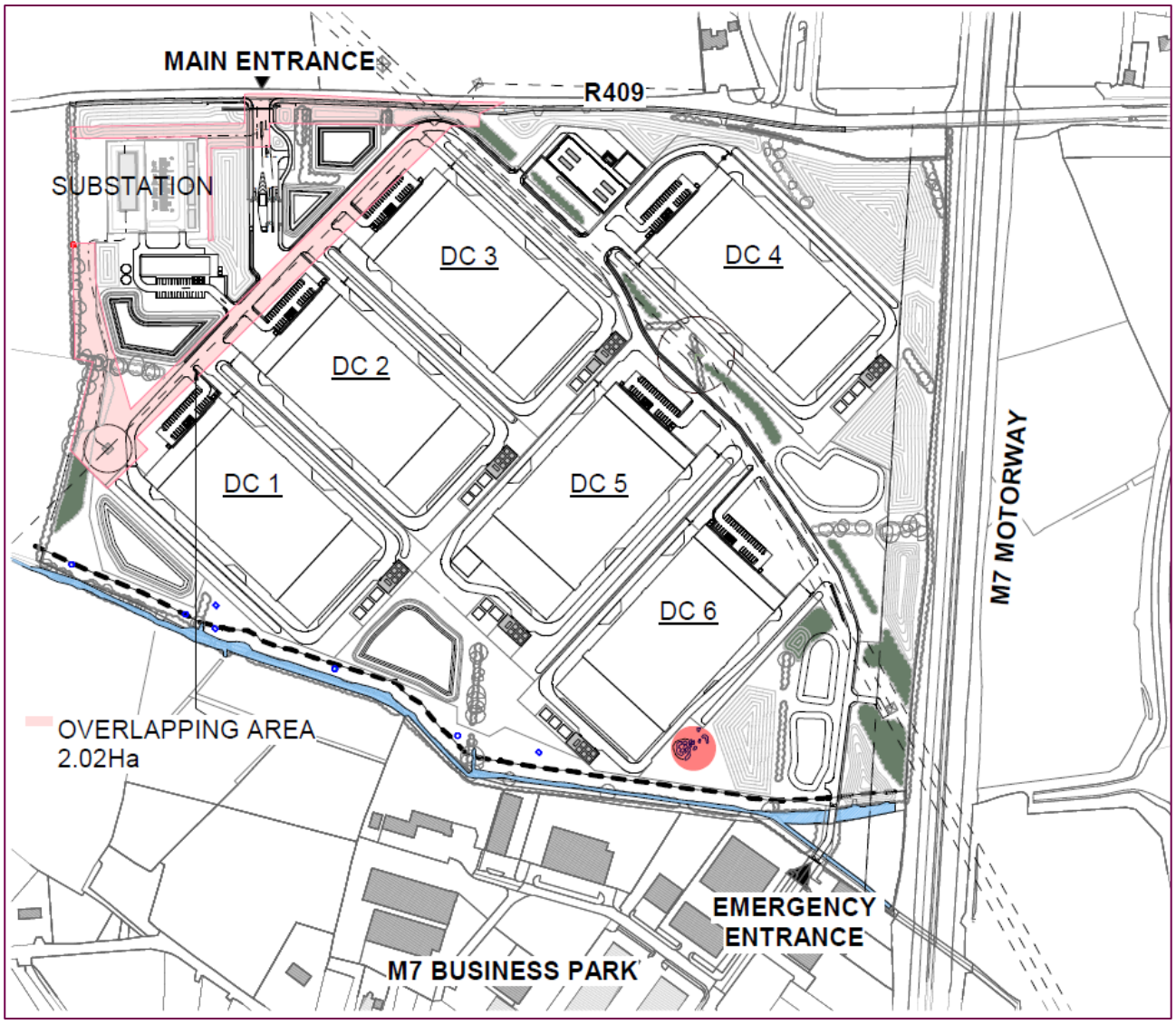

Figure 1.4: Overlapping Area Between KCC (the Data Centre) Application and SID (the Substation) Application Planning Boundaries

As illustrated in Figure 1.4, the Data Centre and the Substation application boundaries, have a partial overlap – this is due primarily to the alignment of the proposed underground 110kV connection because the existing overhead 110kV line (to be removed and replaced with an underground connection) runs above part of the area the subject of the Data Centre Application, and the proposed underground 110kV connection is to be provided in the substratum beneath part of the area the subject of the Data Centre Application

Figures 1.1 – 1.4 are illustrated in Volume III of the EIAR, Drawing Number 22217-RKD-ZZ-ZZ-SK-A-0012 Proposed Site Context Plan - KCC and SID Boundary Comparison. Volume III of the EIAR comprises of further selected design drawings of the Project.

A detailed description of the Project is provided in Chapter 4 of the EIAR.

The EIAR should be read in conjunction with the planning application submission including all documentation, supporting materials and full drawing pack.

1.2 Need for Environmental Impact Assessment

The requirement for Environmental Impact Assess arises under Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (as amended by Directive 2014/52/EU) (the “EIA Directive”) with all Member States to bring the Directive into force by 16th May 2017.

The requirements of the EIA Directive, following its amendment in 2014, were transposed into Irish law with the enactment of a number of implementing legislative measures, including in particular the EU European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (SI 296 of 2018), which came into effect on the 1st September 2018 and gave effect to Directive 201 1/92/EU as amended by the EIA Amendment Directive.

Projects listed in Annex I of the EIA Directive as transposed in Part 1 of Schedule 5 to the Planning and Development Regulations 2001 (as amended) (the "2001 Regulations"), and projects listed in Annex II of the EIA Directive (as transposed in Part 2 of Schedule 5 to the 2001 Regulations) that equal or exceed the thresholds set out in Part 2 of Schedule 5 to the 2001 Regulations, require a mandatory EIA.

Projects listed in Annex II, that do not equal or exceed the thresholds set out in Part 2 of Schedule 5 to the 2001 Regulations, require screening to determine whether an EIA is required.

Data Centres are not in themselves identified as a standalone class of development in either Annex I or Annex II to the EIA Directive, or in Schedule 5 to the 2001 Regulations for the purposes of EIA. However, the Project constitutes "urban development" and therefore falls within Class 10 (b)(iv) of Part 2 of Schedule 5 to the 2001 Regulations, which is:

'Urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built up urban area and 20 hectares elsewhere.'

The relevant threshold for the purposes of the Project is 20 hectares. As the Project has a site area of 38.64 hectares, the relevant threshold set out in Part 2 of Schedule 5 to the 2001 Regulations is exceeded, and the Project requires a mandatory Environmental Impact Assessment as such the Project is considered to be EIA development.

1.3 Structure of the EIAR

1.3.1 Proposed Structure

This section sets out the proposed structure of the EIAR and the various environmental topics to be considered are set out in this section.

The EIAR is comprised of the following elements:

- Volume I Main Report;
- Volume II Technical Appendices;
- Volume III Design Drawings & Figures; and
- Non-Technical Summary (NTS).

Table 1.1 sets out the chapters contained within Volume I of the EIAR.

Table 1.1: EIAR Structure

Document	Heading/Description
EIAR Volume I – Main Report	
Chapter 1	Introduction and Need for EIAR
Chapter 2	Alternatives
Chapter 3	Project Scoping and Consultation
Chapter 4	Description of the Project and Project Need
Chapter 5	Biodiversity
Chapter 6	Lands and Soils
Chapter 7	Water and Hydrology
Chapter 8	Air Quality
Chapter 9	Noise and Vibration
Chapter 10	Cultural Heritage
Chapter 11	Landscape and Visual
Chapter 12	Traffic and Transportation

Chapter 13	Material Assets – Built Services
Chapter 14	Population
Chapter 15	Human Health
Chapter 16	Climate Change
Chapter 17	Cumulative Effects and Interactions
Chapter 18	Summary of Mitigation
EIAR Volume II – Technical Appendices	
Technical Appendices	Relevant technical appendices supporting the planning applications and EIAR are contained in Volume II.
EIAR Volume III –Design Drawings & Figures	
Drawings, graphics and figures	Contains selected design drawings and figures (which are not included in the body of the relevant EIAR chapters).
Non-Technical Summary	
Non-Technical Summary (NTS)	The NTS contains an overview of the Project and summarises the most salient points and findings of the EIAR in a non-technical language.

1.3.2 Annex IV EIA Directive and Schedule 6 Planning and Development Regulations Required Information

The EIAR includes information identified in Annex IV to the EIA Directive and in Schedule 6 of the Planning and Development Regulations 2001 (as amended), as follows.

1.3.2.1 Annex IV to the EIA Directive

1. Description of the project, including in particular:

(a) a description of the location of the project;

(b)a description of the physical characteristics of the whole project, including, where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases;

(c) a description of the main characteristics of the operational phase of the project (in particular any production process), for instance, energy demand and energy used, nature and quantity of the materials and natural resources (including water, land, soil and biodiversity) used;

(d) an estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation) and quantities and types of waste produced during the construction and operation phases.

2. A description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.

3. A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the project as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.

4. A description of the factors specified in Article 3(1) likely to be significantly affected by the project: population, human health, biodiversity (for example fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape.

5. A description of the likely significant effects of the project on the environment resulting from, inter alia:

(a) the construction and existence of the project, including, where relevant, demolition works;

(b) the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources;

(c) the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste;

(d) the risks to human health, cultural heritage or the environment (for example due to accidents or disasters);

(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;

(f) the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change;

(g) the technologies and the substances used.

The description of the likely significant effects on the factors specified in Article 3(1) 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 project. This description should take into account the environmental protection objectives established at Union or Member State level which are relevant to the project.

6. A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.

7. A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases.

8. A description of the expected significant adverse effects of the project on the environment deriving from the vulnerability of the project to risks of major accidents and/or disasters which are relevant to the project concerned. Relevant information available and obtained through risk assessments pursuant to Union legislation such as Directive 2012/18/EU of the European Parliament and of the Council (*) or Council Directive 2009/71/Euratom (**) or relevant assessments carried out pursuant to national legislation may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.

9. A non-technical summary of the information provided under points 1 to 8.

10. A reference list detailing the sources used for the descriptions and assessments included in the report.

1.3.2.2 Schedule 6 to the Planning and Development Regulations 2001 (as amended) - Information to be contained in an EIAR

1. (a) A description of the proposed development comprising information on the site, design and size of the proposed development.

(b) A description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects.

(c) The date required to identify and assess the main effects which the proposed development is likely to have on the environment.

(d) An outline of the main alternatives studied by the developer and an indication of the main reasons for his or her choice, taking into account the effects on the environment.

2. Further information, by way of explanation or amplification of the information referred to in paragraph 1, on the following matters:-

(a) (i) a description of the physical characteristics of the whole proposed development and the land-use requirements during the construction and operational phases;

(ii) a description of the main characteristics of the production processes, for instance, nature and quantity of the materials used;

(iii) an estimate, by type and quantity, of expected residues and emissions (including water, air and soil pollution, noise, vibration, light, heat and radiation) resulting from the operation of the proposed development;

(b) a description of the aspects of the environment likely to be significantly affected by the proposed development, including in particular:

- *human beings, fauna and flora,*
- *soil, water, air, climatic factors and the landscape,*
- *material assets, including the architectural and archaeological heritage, and the cultural heritage,*
- *the inter-relationship between the above factors;*

(c) a description of the likely significant effects (including direct, indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative) of the proposed development on the environment resulting from:

- *the existence of the proposed development,*
- *the use of natural resources,*
- *the emission of pollutants, the creation of nuisances and the elimination of waste,*

and a description of the forecasting methods used to assess the effects on the environment;

(d) an indication of any difficulties (technical deficiencies or lack of know-how) encountered by the developer in compiling the required information.

1.3.3 Requirements of an EIAR

An EIAR document is produced as the key component of the environmental impact assessment (EIA) process. It provides a description of:

a) The baseline environment
b) Identification of the potential effects (if any - both positive and negative) that are predicted to be incurred as a result of the Project; and,
c) A description of any control and mitigation measures required to avoid, reduce or eliminate such potential effects.

The EIA Directive and its implementing Regulations requires that an environmental impact assessment must identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of a project on the following factors and the interaction between those factors:

- population and human health;
- biodiversity, and in particular species and habitats protected under Council Directives 92/43/EEC (the Habitats Directive) and 2009/147/EC (the Wild Birds Directive);
- land, soil, water, air and climate;
- material assets, cultural heritage and the landscape.

1.3.4 Methodology

The methodology employed in the EIAR provides for a staged approach, which can be summarised as follows:

- **Desktop analysis and consultation**: has been undertaken to compile relevant background data and identify issues and constraints.
- **Baseline surveys**: including walk-over visits, detailed specialist surveys and discussions with relevant statutory and other consultees to determine the nature and extent of the existing environment.
- **Identification of potential significant effects**: predicting the likely significant environmental effects of the development during construction and operation of the facility for the range of predicted uses as well as setting the scene for the identifying appropriate mitigation for the development.

- **Mitigation**: on-going development and description of mitigation proposals which will be incorporated into the project design as it evolves, including regular review and evaluation, to mitigate the potential environmental effects.
- **Monitoring**: if considered necessary, monitoring requirements may be identified for both the construction and operational phase of the development.
- **Residual and cumulative effects**: consideration of the residual effects remaining after mitigation.
- **Reporting**: preparation of the EIA Report, including NTS.

The assessment of the likely significant effects of the Project on the environment will be undertaken through a variety of methods:

- Professional judgement and experience based on published guidance criteria
- Assessment of both temporary and permanent effects
- Assessment of cumulative effects
- Assessment of duration, frequency and reversibility of effects
- Assessment against local, regional and national planning policy
- Consultation with statutory and non-statutory consultees

Significance criteria will be based on the type of potential consequences, the probability of the consequence occurring and the magnitude of the consequence. Individual chapters set out the scale that will be used to evaluate significance of effect, thus providing a consistent approach throughout the EIAR. Each topic chapter will identify significant effects relevant to each topic having regard to this scale.

Tables 1.2 and 1.3 below provide *example* descriptions for value (sensitivity) of receptors and descriptions for magnitude of impact.

Table 1.2: Environmental Sensitivity and Descriptions

Sensitivity of Receptor	Typical Description
Very High	*Very high importance and rarity, international scale and very limited potential for substitution.*
High	*High importance and rarity, national scale, and limited potential for substitution.*
Medium	*High or medium importance and rarity, regional scale, limited potential for substitution.*
Low	*Low or medium importance and rarity, local scale.*
Negligible	*Very low importance and rarity, local scale.*

Table 1.3: Magnitude of Impact and Typical Descriptions

Magnitude	Example Descriptor
High	*Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements (Adverse).* *Large scale or major improvement of resource quality; extensive restoration or enhancement; major improvement of attribute quality (Beneficial).*
Medium	*Loss of resource, but not adversely affecting the integrity; partial loss of/damage to key characteristics, features or elements (Adverse).* *Benefit to, or addition of, key characteristics, features or elements; improvement of attribute quality (Beneficial).*
Low	*Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements (Adverse).* *Minor benefit to, or addition of, one (maybe more) key characteristics, features or elements; some beneficial impact on attribute or a reduced risk of negative impact occurring (Beneficial).*

Negligible	*Very minor loss or detrimental alteration to one or more characteristics, features or elements (Adverse).* *Very minor benefit to or positive addition of one or more characteristics, features or elements (Beneficial).*
No change	*No loss or alteration of characteristics, features or elements; no observable impact in either direction.*

There are seven generalised degrees of effect significance that are commonly used in EIA: *Imperceptible, Not Significant, Slight, Moderate, Significant, Very Significant and Profound.* The approach to deriving effects of significance from receptor value and magnitude of impacts is based on the Figure 1.5 below.

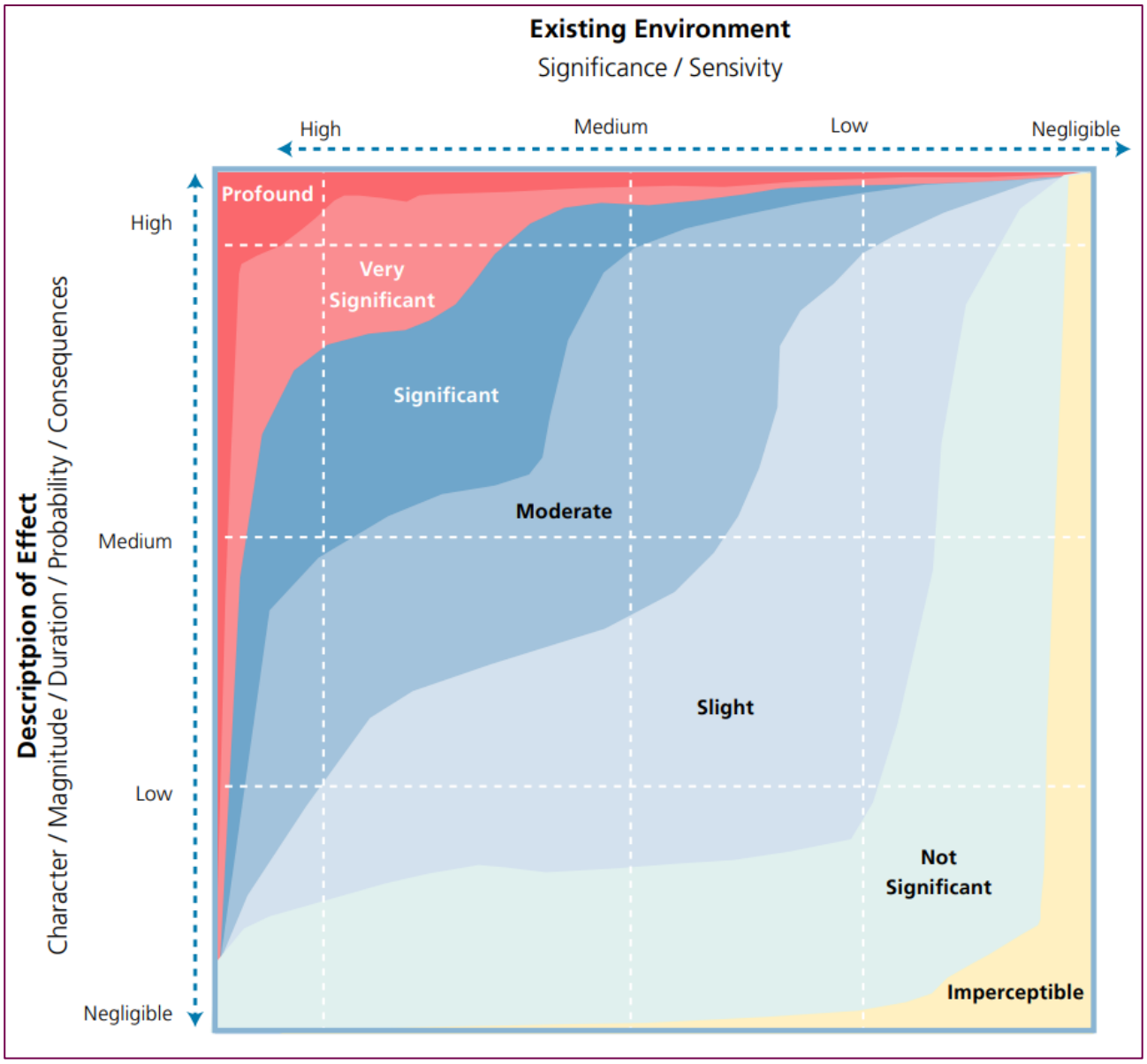

Figure 1.5: Chart Showing Typical Classifications of the Significance of Effects (G*uidelines on the information to be contained in Environmental Impact Assessment Reports*, EPA, 2022)

1.4 Cumulative Effects

1.4.1 Definition of Cumulative Effects

This EIAR considers and assesses the potential for cumulative effects arising from the Project in association with other developments as detailed below in Table 1.4.

The cumulative effects of a development refer to the way in which an environmental resource may be subject to a particular type of impact from more than one Project. The impacts from multiple projects may overlap or act in combination at a particular location or upon a particular resource, thereby leading to more significant environmental impacts than if the impacts were considered in isolation.

The EIA Directive 2014/52/EU specifies at Annex III that:

"the likely significant effects of projects on the environment must be considered […] taking into account [inter alia] the cumulation of the impact with the impact of other existing and/or approved projects"; and at Annex IV that "a description of the likely significant effects of the project on the environment resulting from, inter alia […] 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" is required.

1.4.2 Cumulative and In-Combination Impacts

Cumulative effects are assessed in each chapter in respect of impacts resulting from the accumulation of impacts generated by the Project on the same receptors and the impacts potentially arising from adjacent or nearby developments together with those predicted for the Project.

The following guidelines and publications were considered when determining the other projects to be considered for their potential to generate cumulative effects with the Project:

- European Commission (EC) Guidelines for the Assessment of Indirect and Cumulative Impacts (1999).

The first step in determining cumulative effects comprised the identification of a list of other projects which may have the potential to overlap with the Project based on available information.

Other projects for which a development consent application has been submitted or consent granted were included. Potential future projects which have not submitted an application for consent were not included.

Those other projects whose impacts could foreseeably overlap with the construction or operation of the Project or where construction impacts may be consecutive but cumulative, were considered. The cut-off date for sourcing information on the other projects considered was June 2024.

Cumulative effects are changes to the environment that are caused by an action in combination with other actions. They can arise from a number of sources, where relevant, including:

- the interaction between all of the different projects in the same area; and
- the interaction between the various impacts within a single project.

The cumulative effects of the Project, in conjunction with other proposed projects, are considered within each topic chapter. Relevant developments considered within the cumulative assessments include those which are:

- under construction;
- permitted, but not yet implemented;
- submitted, but not yet determined.

Each topic chapter further considers whether there are significant cumulative effects which are likely to arise as a result of interaction between effects as part of the same project, so as to identify potential secondary, cumulative or synergistic effects.

1.4.3 Planning History

A planning history search was carried out to establish the most recent planning applications within and immediately adjacent to the site boundary, for the purposes of cumulative assessment. Whilst no pertinent permissions were identified on the subject site, a number of relevant applications were identified in the wider locale of the subject site.

Table 1.4 identifies all those projects which have been assessment with regards to cumulative impacts.

Table 1.4: Projects to be Assessed for Cumulative Impacts

Planning Reference	Address	Description	Status	Determination Date
201418	Kerdiffstown and Monread North,Naas,Co. Kildare	A proposed solar farm on an area of approximately 10.8 hectares, comprising photovoltaic panels on ground mounted frames, 4 no. single storey inverter/transformer stations, 1 No. onsite terminal station, storage containers and temporary site compound, security fencing, new and upgraded internal access tracks, CCTV and all associated ancillary development works. Elgin Energy Services Limited are applying for the proposed solar farm to have planning permission that is	Granted	05/05/2021

		effective for 10 years (and an operational period of 40 years)		
PL09.305953	Townlands of Drehid, Mulgeeth,Ballynamullagh, Mucklon, Kilmurray (Carbury By),Killyon and Timahoe East, Co. Kildare	A ten-year planning permission to develop a renewable energy development. The proposed renewable energy development will comprise of (a) the construction and operation of 2 areas of solar photovoltaic arrays mounted on metal frames over an area of approximately 200ha, and having a maximum overall height of 3 metres over ground level; (b) Internal solar farm underground cabling; (c) 2 no. temporary construction compounds; (d) recreation and amenity works, including looped walk (upgrade of existing tracks and provision of new tracks, car parking and vehicular access); (e) 1 no. Battery Storage compound; (f) upgrade of existing tracks and provision of new site access roads; (g) site drainage; (h) forestry felling and replanting; (i) permanent signage; and (j) all associated site development and ancillary works. The proposed renewable energy development will have an operational life of 35 years from the date of commissioning. The overall renewable energy project also includes the provision of a 110kV substation with associated electrical plant, welfare facilities, waste water holding tank, security fencing, upgrade of existing tracks and provision of new site access roads, 110kV overhead line grid connection cabling with associated angle lattice masts and supporting polesets and all ancillary works	Granted with conditions	29/07/2020
181328 & PL09.303577	Townlands of Guidenstown South and Rahilla Glebe,Co. Kildare	The development consist / consists of a ground mounted solar photovoltaic (PV) farm within a site area of 26 hectares consisting of solar photovoltaic panels covering an area of up to 185,000m2 on ground mounted steel frames, 1 no; on-site substation / control room and palisade fencing, up to 5 no. inverter / transformer stations, underground cables and ducts, boundary security fence, use of existing entrance to public road at Dunmurry Springs Golf Club, upgrade to parts of existing track from the public road to the proposed solar farm, new and upgraded internal tracks, CCTV cameras, two temporary site compounds and all associated site services and works located within townlands. Permission is sought for 10 years.	Refused	23/05/2019
18969	Brownstown and Carnalaway,Kilcullen,Co. Kildare	A solar farm to be installed over restored landfill with an export capacity of approximately 3MW comprising photovoltaic panels on ground mounted frames, connection to existing single-storey ESB Sub- Station / switch room building, installation of 3 No. transformers, ducting and underground electrical cabling and all associated ancillary works and services. Revised by significant further information consisting of; construction management plan detailing construction techniques	Granted	21/08/2019
18250	Killeenlea, Ardrass Lower & Killadoon,Celbridge,Co.Kildare	A 10 year permission (to construct development) for a solar farm comprising: the installation of photovoltaic panels on ground mounted frames in rows on a site of C.47.44 hectares, a single storey onsite 38kV substation with compound, with 2 no single storey storage containers, 25 no. invertor stations , ducting & underground electrical cabling, perimeter fencing, 23.no mounted CCTV Cameras, provision of a new access from the L5066/Killadoon Road, provision of internal access	Granted	11/01/2019

		tracks, and all associated site development and landscaping works		
12577	Bord na Mona,Main Street,Newbridge ,Co. Kildare.	Construction of a new I.T. data centre building, concrete slab to facilitate a 550 Kva back-up generator and a concrete fuel storage bund to hold a 3000L fuel tank	Granted	03/09/2012
18247	Porterstown and Kilteel Lower,Kill,Co. Kildare	Development of a grid system services facility within a total site area of up to 1.95 hectares, to include 1no. TSO compound including 1no. single storey TSO electrical substation building and 1no. single storey customer substation, 1no. customer switchgear, electrical inverter /transformer station modules, containerised battery storage modules on concrete support structures, heating, ventilation and air conditioning units (HVAC units), access tracks and upgraded site entrance, associated electrical cabling and ducting, security gates, perimeter security fencing, CCTV security monitoring system, culverts and landscaping works and all associated ancillary infrastructure	Granted	11/06/2018
20745	Porterstown,Kill, Co. Kildare.	The development of a new electrical substation and additional equipment in the existing ESB Kilteel 110kV Substation to facilitate the connection of the Porterstown Battery Storage Facility (Planning Ref 18/247) The total site area is 1.2 hectares. The new electrical substation will include 1 control building (GRP Containerised Substation), a 110kV transformer, surge arresters, instrument transformers, a 110kV busbar connecting to the ESB substation, a lightning mast and other electrical equipment to be installed on concrete support structures. Additional features will include palisade fencing, security gates, access tracks, external lighting, drainage, associated electrical cabling and ducting, CCTV security monitoring system, landscaping and all associated ancillary infrastructure. The additional equipment to be installed in the ESB substation to facilitate the connection of the new substation will include a 110kV busbar extension, a 110kV transformer bay, a 110kV coupler bay, a 110kV busbar connecting to the new substation, an interface kiosk, palisade fencing, a lightning mast and all associated ancillary infrastructure required for the connection	Granted	05/10/2020
PL09.310841	Dunnstown, Co. Kildare	A 10 year planning permission for the construction of: 1. An enclosed battery energy storage system compound on c. 4.089 ha with 76 no. battery storage units (each with associated containerised step-up transformer), 1 no. containerised control room and 1 no. containerised switch room, 1 no. containerised switchgear unit and CCTV cameras; 2. new site entrance off the L6044 and site access road; 3. site access road extension to a proposed substation site (proposed substation currently subject of a Strategic Infrastructure Development Pre-Application Consultation with An Bord Pleanála); and 4. all associated ancillary development works. The operational lifespan of the battery energy storage system will be 35 years.	Granted with Conditions after Appeal	30/09/2022
221203	Coolcarrigan,Timahoe West,Co. Kildare.	for a 10-year permission, for the construction and operation of a renewable energy development within a site boundary of c. 114 ha. The proposed development will consist of a development area of circa 71.7 ha including solar on fixed on ground mounted frames with a maximum height of 3 metres, 1 No. battery storage compound, 1 No. customer switchgear container, 1 No. 110kv grid	Grant	15/05/2023

		connected single storey substation, 1 No. single storey customer substation and all associated electrical plant, inverter units, electrical transformers, battery units, cooling equipment, underground cabling and ducting, boundary fencing, security entrance gates, CCTV, upgrading of existing access road and new internal access roads and all associated ancillary activities. The proposed development will have a 35-year operational life from the date of commissioning. Revised by significant further information which consists of Provision of quantum of energy export (of up to 80MW) in the proposed development and storage capacity of proposed battery compound (of up to 80MWh). Clarification of energy export (of up to 15MW, no battery storage) of adjacent permitted development 15/1172 (extension of duration under 20/1052); Submission of details of adjacent permitted development 15/1172 (extension of duration under 20/1052); Provision of details of minor works to site entrance, construction traffic warning signage to public roadway, at proposed site entrance and also within internal haul routes; Clarification of extent of private roadway (haul roads) within the site; Provision of a fire risk assessment of hazards for on or near the solar array and battery storage compound; Provision of programme/schedule of works for proposed development and adjacent permitted development 15/1172 (extension of duration under 20/1052; Provision of amended Archaeological Impact Assessment. Provision of draft Construction Traffic Management Plan; Provision of Independent Road Safety Audit Stage 1/2; Provision of amended preliminary Construction and Environment Management Plan; Provision of Preliminary Public Liaison Engagement Plan		
2360047 & PL09.318151	Kildare Innovation Campus (KIC), Barnhall Meadows,Leixlip, Co. Kildare	Will consist of Demolition of existing Buildings No's 7, 8 and 9 (total gfa c. 84,838sqm). - Existing Buildings No's 1 – 6 will be retained for deep tech and innovation related uses (total gfa c.42,862sqm) - Construction of 2 no. new deep tech buildings and 4 no. new data centre buildings, all including ancillary office spaces. The deep tech buildings will have an overall maximum height of c.16m and vary in size from30,945sqm – 41,190sqm with a combined total gfa of c. 72,135 sqm. The data centres will be c.15 m in height to parapet and c.16.5m in height to top of roof plant screening. The data centres will vary in size from 13,225 sqm – 21,000 sqm with a combined total gfa of c. 76,225sqm. All buildings will be provided with Solar PV panels at roof level and green walls along selected elevations. - The new deep tech buildings (A1 & A2) will be provided with service yard areas, loading docks, car parking, access roads, security fencing/gates and landscaping. The deep tech buildings will include rainwater harvesting tanks and green roofs over office areas. - Each data centre (B1, C1, C2 & C3) will include data halls, admin blocks (comprising offices, breakroom, loading dock, storage, and ancillary areas) and a variety of mechanical and electrical plant areas/structures including battery storage rooms and mechanical rooms. Car parking, access roads, security fencing/gates, gate houses and landscaping will also be provided. - B1 will include	Granted on 07/09/2023 but has been appealed	An Bord Pleanala decision due by 14/02/2024

		14 no. fuel oil generators, MV rooms and associated mechanical flues. C1 – C3 will each include 22 no. fuel oil generators, MV rooms and associated mechanical flues (each c.18.6m high). Car parking, access roads, security fencing/gates, gate houses and landscaping will also be provided. - 2 no. district heating pump house areas and inground piping for district heating system. - Construction of a Replacement 110kV Gas Insulated Switchgear (GIS) Substation adjacent to the existing 110kV Rinawade Substation. The current Air Insulated Switchgear (AIS) substation known as the Rinawade 110kV sub is fed by 2 x 110kV Overhead lines. The new substation will connect to these overhead lines via short runs of underground cable. The replacement 110kV substation will include 6 No. transformers, with client control building and a 2 storey GIS substation building within a 2.4m high fenced compound. - Decommissioning and removal of the existing 110kV Rinawade substation. - Construction of an on-site energy centre to provide to the national electrical grid. The Energy Centre will include 9 no. gas powered combustion turbine generators (CTG's) and 9 no. Flues with a maximum height of c.15 metres. The turbines will be enclosed by a screen wall 14m in height. The energy compound will include all required infrastructure including 2 no. back-up fuel oil (HVO) tanks, an administration building, pump house, fire water tank, access roads, 14 no. parking bays, security fencing etc. Provision of a Gas Networks Ireland (GNI) gas skid surrounded by a 2.4m high fence and access from Celbridge Road (R404). The GNI skid will replace the existing gas skid along Celbridge Road. Provision of a GNI AGI (Above Ground Installation) including 1 no. kiosk building, c.32m high surrounded by a 2.4m high fence. Closure of the existing main entrance to the campus on Celbridge Road and reinstatement of the boundary. Construction of a new signalised entrance/exit on Celbridge Road c.80meters north of the existing main entrance. Use of the existing secondary entrance/exit off Barnhall Road Roundabout in the south-east as a principal entry/exit. Construction of internal access roads, footpaths and cycle paths including a publicly accessible link road between Celbridge Road (R404) to the east and Barnhall Road (R449) to the west. Construction of a new pedestrian and cycle overpass across the M4 motorway and pedestrian/cycle path adjacent to lands known as the Wonderful Barn Allotments; the overpass will link the new publicly accessible link road within Kildare Innovation Campus to the entrance of Barnhall Meadows estate. Undergrounding and diversion of the existing overhead 10Kv/20kv overhead line adjacent to the M4 Motorway. The pedestrian and cycle route within the Kildare Innovation Campus will provide a link from the new public link road, along the protected view corridor (between Castletown Estate & Wonderful Barn) to the north-eastern boundary of Castletown Estate. The provision of a net increase of 678 new car spaces, resulting in a total of 2291 car spaces across the site (including a total of 244 EV car spaces). The provision of a new private EV Bus		

		charging hub with parking for 10 no. electric buses. The provision of a net increase of 310 new bicycle spaces, resulting in a total of 350 bicycle spaces across the site. The diversion of the c.500 m stretch of an existing 1.5m culvert, located to the north of the site along the existing loop road, southwest by c.60m; the diverted culvert will be located along the proposed link. All associated site development works, drainage and services provision, landscaping, boundary treatments (including security fencing), and associated works. An Environmental Impact Assessment Report has been prepared in respect of and will be submitted with the planning application. The application relates to a development for the purposes of an activity requiring an industrial emissions licence		
23567	Brannockstown, Brownstown, Carnalway, Coghlanstown West,Corbally, Delamain, Dunnstown, Gaganstown, Greenhills,Harristown, Hillsborough, Moorhill & Rochestown,Co. Kildare	10 Year Planning Permission for a solar farm with a total area of circa 246 hectares in the townlands of Brannockstown, Brownstown, Carnalway, Coghlanstown West, Corbally, Delamain, Dunnstown, Gaganstown, Greenhills, Harristown, Hillsborough, Moorhill and Rochestown in County Kildare. The solar farm will consist of solar photovoltaic panels with a surface area of 1,130,000m2 on ground mounted frames, 40 no. single storey electrical inverter/transformer stations,4 no. single storey spare parts containers, 19 no. Ring Main Units, 9 no. weather stations underground electrical ducting and cabling within the development site, private lands and within the L6063, L2032, L6071, R448, L6072, R412, L6074, L6047 and R413 public roads to connect solar farm field parcels, security fencing, CCTV, access tracks, 5 no. stream and drain deck crossings, temporary construction compounds, landscaping and all associated ancillary development and drainage works. Construction and operational access will be via entrances from the R412, R413, L6044, L6047 and L6063. The solar farm will have a maximum export capacity of circa 210 megawatts. The operational lifespan of the solar farm will be 40 years and planning permission is requested for this duration. Part of the proposed development is situated within the demesne land of Harristown House which contains Protected Structures, but no works are proposed to these Protected Structures. Revised by significant Further Information consisting of revised site layout plans to reduce panelled areas in Parcels 1 and 2, relocation meterological mast in parcel 1 and all associated landscaping and ancillary works	Granted	28/11/2023

1.4.4 Gas Networks Ireland Gas Connection

The Project will use highly efficient on-site gas turbines to generate the majority of electrical energy required to operate the Data Centres. Whilst the Project includes an on-site Above Ground Installation (AGI) to regulate the supply to the turbines, a physical connection to the Gas Networks Ireland (GNI) gas network is required to provide the supply to the gas turbines.

GNI will be responsible for providing the required infrastructure works, to construct a new high-pressure gas distribution pipeline, to the Project site boundary (on the R409), from the existing GNI AGI at Glebe West, Co. Kildare.

The final, detailed design, consenting and construction of the required infrastructure works will be the responsibility of GNI in the exercise of their own statutory functions, and therefore Herbata Ltd is not seeking planning consent to carry out these works as part of the Project.

Notwithstanding the fact that Herbata Ltd is not seeking planning consent to carry out these works as part of the Project, given the functional interdependence that exists between the Project and the GNI Gas Connection, the cumulative impacts of the Project with the GNI Gas Connection have been considered and assessed in this EIAR, and their in-combination effects are considered and assessed in the related Appropriate Assessment Screening Report. This is consistent with the approach endorsed by the High Court on a number of occasions in the context of Environmental Impact Assessment of, for example, proposed wind farm developments and their associated grid connections (see, for example, the decisions of the High Court in Ó Gríanna & Ors v An Bord Pleanála & Ors [2014] IEHC 632 and [2017] IEHC 7, and the line of case law following those decisions).

In order to inform this consideration and assessment of the cumulative impacts of the Project with the GNI Gas Connection, a report identifying the most likely route for the new high-pressure gas distribution pipeline and a description of the works required to provide same has been prepared.

The GNI Infrastructure Upgrade Outline Report has been prepared following a review of the existing GNI network, to determine the most likely source of the connection and the most likely route. The location of the existing GNI above ground installations (AGIs) at Glebe West and Naas Town and the associated existing high-pressure transmission line between, has been used to inform the most likely connection point and route for the new high-pressure gas distribution pipeline.

From the existing Naas Town AGI, the most likely route for the new high-pressure gas distribution pipeline is considered to follow a combination of the existing road network (along the Southern Link Road, Naas) and the route of existing utilities (foul drainage network wayleave). From this point, the most likely route is considered to cross the M7 (east of the Project site) before following the route of the R409 to the Project site; ducts with capacity to facilitate the pipeline crossing of the M7 are known to be present.

The likely specification of the new high-pressure gas distribution pipeline, pressure levels, construction methodology and timelines, as set out with the GNI Infrastructure Upgrade Outline Report have been informed by experience and knowledge of comparable infrastructure developments. The GNI Infrastructure Upgrade Outline Report is included in Volume II, Appendix 1.2 and provides sufficient detail and information to allow a robust cumulative impacts assessment to be conducted. A summary of the most likely route and a description of the works required is also provided in Chapter 4 of the EIAR, section 4.2.4.2.

The cumulative impacts of the Project with the GNI Gas Connection have been considered and assessed under each environmental discipline in the relevant chapters of this EIAR and in Chapter 17 Cumulative Effects and Interactions.

1.4.5 Off Site Renewable Energy

Corporate Power Purchase Agreements (CPPAs) will be used to procure sustainable energy from wind / solar farms. In addition to providing energy for the Project, CPPAs will fund the construction of wind and solar farms. The Applicant has had discussions with various solar and wind renewable energy suppliers with a view to supplying energy through CPPAs.

The process and technical aspects of CPPAs are considered more fully in the Herbata Data Centre Sources of Energy report (provided in Volume II, Appendix 1.3). CPPAs will be finalised following a grant of permission (along with a connection agreement with Eirgrid). As demonstrated within the aforementioned report and accompanying letter from BOS Energy Limited, there is sufficient capacity available from suppliers to meet the 30% operational renewable energy target set out in the Kildare County Development Plan 2023-2029.

In implementing the CPPA arrangements as outlined, the Project will operate on the basis of a minimum of 30% energy from off site renewables, in line Kildare County Council's policy requirements as follows:

The Kildare County Development Plan 2023-2029 (KCDP):

> *RE O72 Require Data Centres to consider the use of sustainable renewable sources of energy to fuel their operations in whole in the first instance or in part (minimum of 30%) where this is not possible and where it has been satisfactorily demonstrated not to be possible, subject to all relevant and cumulative environmental assessments and planning conditions."*

The proposed Project energy strategy is further set out within The *Energy Efficiency and Climate Change Adaptation Design Statement* and *Energy Policy Compliance Report*, Volume II, Appendices 4.2 K and 4.9 respectively.

1.4.6 Planning Policy

Planning reports are submitted in support of both the Data Centre and Substation applications and should be read in conjunction with the EIAR. The concluding points of the reports are as follows:

- The Data Centre Application aligns with national, regional and local policy supporting the ICT sector and Data Centres as a key component of this sector. At construction and operation phases the Data Centre Application will generate significant direct, indirect and induced employment.
- The innovative approach to energy generation and storage means the Data Centre Application does not require energy from the national electricity network. Indeed, the Data Centre Application will add resilience to national energy production and storage capacity. The onsite gas turbines and gas engines will be capable of exporting excess electricity to the wider network.
- The proposed gas turbines and engines will be fuelled from GNI's gas network ultimately, comprising of biomethane, abated natural gas and the use of hydrogen for the turbines in line with GNI objectives to ensure that there is a zero dependency on gas from fossil fuels at the subject Data Centre when GNI objectives are met.
- The energy storage component shall enable more efficient use to be made of renewable energy now being produced. Such an approach is considered to align fully with national policies and commitments and specifically the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy.
- The proposed Data Centre use at this site accords with the local land use zoning objective set out in the Naas LAP which has explicitly identified this location as being appropriate for a Data Centre.
- It is considered that the Data Centre Application accords with sustainable development objectives and adopts an exemplary approach to Data Centre development within the State.

1.5 EIAR Project Team

The production of the EIAR has been co-ordinated by RPS. The EIAR structure, responsibility and qualified input for each chapter are detailed in Table 1.5 below. The EIAR has also been informed by design and technical input provided by the wider project team (the applicant, technical and design team and planning consultants).

Table 1.5: EIAR Project Team

EIAR Chapter	EIAR Topic	Lead Author / Company Consultant	
EIAR Project Lead	-	Raymond Holbeach	RPS
Chapter 1	Introduction and Need for EIAR	Alastair McKinley	RPS (+ input from wider project team)
Chapter 2	Alternatives	Alastair McKinley	RPS (+ input from wider project team)
Chapter 3	Project Scoping and Consultation	Alastair McKinley	RPS (+ input from wider project team)
Chapter 4	Description of the Project and Project Need	Alastair McKinley	RPS (+ input from wider project team)
Chapter 5	Biodiversity	Samuel O'Hara James McCrory	RPS
Chapter 6	Lands and Soils	Richard Kiernan	Donnachadh O'Brien & Associates Consulting Engineers Ltd.
Chapter 7	Water and Hydrology	Mark Magee	RPS
Chapter 8	Air Quality	Stephen McAfee	RPS
Chapter 9	Noise and Vibration	Lisa Payne	RPS
Chapter 10	Cultural Heritage	Martin McGonigle	John Cronin Associates

		Camilla Brännström	
Chapter 11	Landscape and Visual	Raymond Holbeach	RPS
Chapter 12	Traffic and Transportation	Conor O'Hara	RPS
Chapter 13	Material Assets – Built Services	Richard Kiernan	Donnachadh O'Brien & Associates Consulting Engineers Ltd.
Chapter 14	Population	Sarah Little	RPS
Chapter 15	Human Health	Eva Policarpo	RPS
Chapter 16	Climate Change	Alice Paynter	RPS
Chapter 17	Cumulative Effects and Interactions	Multiple	Multiple
Chapter 18	Summary of Mitigation	Multiple	Multiple

1.5.1 Project Team Experience

Raymond Holbeach – BSc, MLA, CMLI, ILI

Raymond is an RPS Director, a Chartered Landscape Architect with both the UK Landscape Institute and the Irish Landscape Institute and a member of IEMA and has over 30 years' experience in LVIA, urban and rural design, and planning. Raymond has significant experience in Landscape & Visual Impact Assessment and acting as expert witness. Raymond has project managed numerous Masterplans, Environmental Impact Assessments and LVISA for Energy Infrastructure, Offshore Energy and Ports and Harbour Infrastructure Developments, as well as industrial, leisure and residential developments throughout the UK and Ireland.

Alastair McKinley – BSc, PG Dip, MRPTI

Alastair is a Senior Associate with over 19 years of experience working with RPS, primarily working on electrical infrastructure projects including but not limited to renewable grid connections and substations. He has also project managed numerous grid enforcement projects advising on planning and environmental assessment and discharge of conditions. Alastair has worked on numerous EIAs on a range of developments, including ports and harbours, energy infrastructure, sports stadia, waste management and mineral extraction.

Alastair completed a degree in Town and Regional Planning (2002) and a post graduate diploma in European Urban Conservation (2003) at the University of Dundee. Alastair has been a full Member of the Royal Town Planning Institute since 2007.

Samuel O'Hara – BSc, CIEEM

Samuel O'Hara, is an Associate Ecologist with RPS and holds a BSc (Hons) in Ecology and has over nine years of experience in the field of ecology consultancy. Samuel has extensive experience of ecological field survey including habitat, mammal and bird survey and is a protected species license holder. Samuel is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

James McCrory – BA Hons, MSc, CEcol, CBiol, CIEEM

James McCrory, is a Senior Associate of Ecology within RPS and holds a BA (Hons) in Natural Sciences (Mod) Botany and a MSc in Habitat Creation and Management. James is a Chartered Environmentalist (CEnv), a Chartered Ecologist (CEcol) and a Chartered Biologist (CBiol). James is part of the CIEEM Policy Review Group in Ireland and is a member of the CIEEM technical committee updating the seminal Guidelines for Ecological Impact Assessment in the United Kingdom.

Richard Kiernan – BA Hons, Ceng MIEI

Richard is an Associate and Senior Chartered Engineer with over 15 years of experience in the Civil and Structural Engineering sector, having graduated from DIT Bolton Street in 2008 with an Honours Degree in Structural Engineering. Richard has extensive experience in the design and delivery of major public and private projects and has acted as lead engineer on a number of large Educational, Residential, Commercial and Healthcare Projects. Richard also has extensive experience in the delivery of specialist Pipe Stress Analysis engineering services for Pharmaceutical and Data Centre applications. Richard is a registered Chartered Engineer with Engineers Ireland (CEng MIEI) since 2013 and a Registered Professional Consulting Engineer with ACEI (RConsEI) since 2018.

Richard has worked on numerous EIAs on a range of developments including Mixed Use Commercial/Residential and Healthcare projects.

Mark Magee – BA, MSc, CIWEM

Mark is a chartered environmentalist, chartered scientist and chartered water and environmental manager with 24 years' experience in aquatic ecology, catchment management and river basin planning, environmental assessment, appropriate assessment, environmental appraisal of infrastructure projects, hydrology, hydraulic modelling and water quality assessment. Mark manages a team of environmental scientists and engineers involved in provision of the full range of professional services. He has undertaken numerous environmental impact assessments and prepared numerous appropriate assessment screening statements and Natura Impact Assessment or Habitat Regulation Assessments for water dependent SAC/SPAs.

Mark completed a degree (BA Mod) in Natural Sciences at Trinity College Dublin in 1998 and a Master (MSc) in Environmental Engineering at Queens University Belfast in 1999. Mark has been a full member of the Charter Institute of Water and Environmental Management (CIWEM) since 2007.

Stephen McAfee – BSc, MSc, MIEMA, MIAQM, MEncSc, CSci

Stephen is a chartered scientist with over 19 years' experience in environmental assessment, environmental management plans, appraisal of port and harbour developments, computer modelling, air quality, climate, dust and odour assessment. He has a BSc (Hons) in Geography from Queens University Belfast and a Masters in Environmental Engineering from Queens University Belfast. He also has acted as an Expert Witness and environmental expert at various public inquires/oral hearings. Stephen has a wealth of experience working on major infrastructure, port, energy, waste and brownfield/greenfield development projects in the UK and Ireland. He has undertaken surveying and assessment of both large and small scale development proposals. This experience has provided him with an ability to manage and coordinate interdisciplinary and multi-jurisdictional issues which may arise as a professional EIA practitioner.

Stephen has a BSc (Hons) Geography, Queens University Belfast and a MSc Environmental Engineering, Queens University Belfast. He is also a member of the following institutes; Associate Environmentalist with the Institute of Environmental Management & Assessment (MIEMA); Full Member of the Institute of Air Quality Management (MIAQM); Full Member (MIEnvSc) & Chartered Member of the Institute of Environmental Sciences (CSci).

Lisa Payne – BSc MSc, MIOA

Lisa is an Associate Noise Consultant at RPS, with extensive experience in acoustics in general and environmental acoustics in particular. Lisa has a BSc (Hons) in Music Technology from Queen's University, Belfast and in 2008 obtained an MSc in Engineering Acoustics from the Institute of Sound and Vibration Research (ISVR), University of Southampton.

Lisa has experience working in environmental acoustics within UK, Ireland and the Middle East. She has worked across various sectors including energy (oil and gas and renewables), infrastructure, agriculture, schools, hospitals and residential. Lisa has expertise in acoustic modelling of construction and operational noise, with the capability to build complex noise models for projects which have included port developments and oil refineries amongst others. In addition, Lisa has experience of industrial noise control and working with clients to identify solutions to environmental and workplace noise issues. Lisa is a full member of the Institute of Acoustics (MIAO).

Martin McGonigle – BA, MSc, MIAI

Mr McGonigle graduated with a BA in Heritage Studies from G.M.I.T in 2001, followed by an MSc in Maritime Archaeology at the University of Ulster, Coleraine in 2002. Mr McGonigle is a Senior Archaeologist with John Cronin & Associates (JC&A) and has been a full-time professional archaeologist since 2002, a Licensed Archaeologist in RoI since 2008 & NI since 2009 and is a full member of Institute of Archaeologists of Ireland (MIAI). Since joining JC&A in 2008 Mr McGonigle has worked as Senior Archaeologist on numerous archaeological schemes and heritage projects, including cultural heritage assessments for environmental impact assessments, archaeological works on large infrastructure projects, etc. Mr McGonigle has also published nationally and internationally on a wide range of cultural heritage and archaeological subjects. In 2021 Mr McGonigle graduated with an MSc in Applied Landscape Archaeology from the University of Oxford, passing with distinction.

Camilla Brännström – MA, MIAI

Ms Brännström graduated with a Master of Arts with a major in Archaeology from the Dept. of Archaeology, Umeå University, Sweden (2000-2004). Ms Brännström has been a Licensed Archaeologist in NI since 2015 and in the RoI since 2019. Since joining JC&A in 2018, Ms Brännström has been involved with numerous archaeological excavations as well as the production of pre-development archaeological desktop assessments

and EIARs for small and large scale projects throughout Ireland. Ms Brännström is a full member of Institute of Archaeologists of Ireland (MIAI).

Conor O'Hara – BSc Hons, CMILT, MCIHT

Conor O'Hara is a Technical Director within the RPS Highways and Transportation section and has over 20 years' experience within Transport Planning, Conor holds a BSc (hons) in Transportation. Conor is a Chartered Member of the Institute of Logistics and Transportation (CMILT) and a Member of the Chartered Institution of Highways and Transportation (MCIHT).

Sarah Little – BA Hons

Sarah Little graduated with a B.A. Hons in Geography from Queens University, Belfast followed by a M.A. in Environmental Impact Assessment and Management from The University of Manchester. Sarah has over 12 years' experience working within the Environmental and Planning sector of large-scale infrastructure projects across the UK and ROI, including work on numerous EIAs on a range of developments.

Eva Policarpo – BSc, MSc, IEMA

Eva is a Senior Consultant (Health and Social Impact) at RPS. Eva has over seven years' experience in undertaking and coordinating environmental and social impact assessments (ESIA) both in the ROI, EU and worldwide. She is a Senior Project Scientist at RPS, where she primarily works in Environmental Impact Assessment (EIA) and Health Impact Assessment (HIA). Eva has a BSc (Hons) in Environmental Science and MSc (Marine Environmental Protection). Eva has extensive experience in the delivery of Health Impact Assessment, including human health scoping, human health EIAR chapters and bespoke Health Impact Assessments for a range of projects, including commercial and housing developments and onshore and offshore renewable energy developments. Eva is a Practitioner member of the Institute of Environmental Management and Assessment (PIEMA).

Alice Paynter - BSc

Alice is a Senior Consultant in EIA and Sustainability with over 8 years experience and is experienced in the assessment of carbon and climate change, and the implementation of sustainable principles within corporate reporting. Alices role includes the delivery of carbon footprint analysis and public disclosure documents that align with benchmark indices, such as TCFD and GRESB. Alongside this, Alice works to deliver climate change assessments for Environmental Impact Assessment, involving the quantification of lifetime emissions arising from an array of developments.

Alice studied geography at University, with a particular interest in climate science and glaciology. Since graduating, and before joining RPS, she worked as an Environmental Consultant, managing environmental assessments for planning applications of residential, industrial and energy infrastructure projects (largely solar farms) in addition to delivering climate change and sustainability assessments.