

2. SCOPE OF ENVIRONMENTAL STATEMENT

2.1 Introduction

2.1.1 This chapter outlines the regulatory requirements and general approach followed for the EIA assessment and preparation of this Environmental Statement (ES). The specific requirements and details methods of each of the technical assessments are provided in the respective chapters.

2.2 Requirements of the EIA Regulations

2.2.1 The EIA has been conducted in accordance with the EIA Regulations. The EIA Regulations (Schedule 4) sets out the information to be included within an ES. Table 2.1 details the requirements of Schedule 4 and identifies the location within this EIA where the requirement is addressed.

Table 2.1: Content of the ES with respect to Schedule 4 of The EIA Regulations

Schedule 4 requirement (abridged)	Location within ES*
1. A description of the development	Chapter 5: Development Description
2. A description of the reasonable alternatives and the main reasons for selecting the chosen option	Chapter 5: Development Description Chapter 6: Needs and Alternatives
3. A description of the relevant aspects of the current state of the environment (the “baseline scenario”) and an outline of the likely evolution thereof without implementation of the development	Chapter 2: Approach to ES Chapter 3: Site and Setting Technical Chapters 7 to 15 sections 4 and 5
4. A description of the factors specified in the baseline scenario likely to be significantly affected by the development	Chapter 2: Approach to ES Chapter 3: Site and Setting Chapter 5: Development Description Technical Chapters 7 to 14 sections 5 and 6.
5. A description of the likely significant effects of the development on the environment including 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.	Chapter 2: Approach to ES Chapter 3: Site and Setting Chapter 5: Development Description Technical Chapters 7 to 14 sections 6, 7 and 8 Chapter 15 Summary and Conclusions

<p>6. A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment</p>	<p>Chapter 2: Approach to ES Chapter 3: Site and Setting Chapter 5: Development Description Technical Chapters 7 to 14 section 4</p>
<p>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).</p>	<p>Chapter 2: Approach to ES Chapter 3: Site and Setting Chapter 5: Development Description Technical Chapters 7 to 14 section 8 Chapter 15: Summary & Conclusions</p>
<p>8. A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned.</p>	<p>Technical Chapters 7 to 14 sections 8 and 9. Chapter 15: Summary & Conclusions</p>
<p>9. A non-technical summary of the information.</p>	<p>Non-Technical Summary accompanies this ES</p>
<p>10. A reference list detailing the sources used for the descriptions and assessments included in</p>	<p>Located at the end of each chapter</p>

**please note that section references are indicators only and that the ES in its entirety should be considered against the regulations.*

2.2.2 As identified in table 2.1, this Environmental Statement includes all information required under the EIA Regulations. The interaction between identified impacts and indirect effects of the proposals is discussed as part of each chapter within this ES.

2.2.3 Together, the information supplied within the ES is considered to provide a clear understanding of the significant effects of the development upon its environment and the mitigation measures proposed to avoid or ameliorate those effects.

2.2.4 The information and knowledge required to undertake the EIA has been acquired from a number of sources to ensure that all impacts, whether explicit from the outset or coming to light during the project’s development, were assessed. These sources include:

-)] Formal scoping opinion from Durham County Council;
-)] discussions with statutory consultees;

-) review of public files;
-) historical and recent site investigations;
-) specialist studies;
-) public consultation;
-) expert knowledge from the consultant consortium.

2.2.5 The scope and organisation of the ES are discussed below.

2.3 Scope of the Environmental Statement

Pre-Planning Enquiry

2.3.1 In order to inform the development proposals and scope of assessment work, various pre-application discussions were held with Durham County Council at an early stage in the project's development to assist in gaining an understanding of key issues. These included discussions in May 2017 and subsequently in January 2020.

Formal Scoping Exercise

2.3.2 The EIA Regulations and associated guidance need to be capable of being applied to all forms of development. Each development proposal, by virtue of its particular setting, design etc is unique: the potential impacts associated with one facility may not be the same as the next.

2.3.3 This is recognised by the EIA Regulations by virtue of Regulation 15, under which the planning authority has a duty, if requested, to give their opinion in writing to the applicant on the information to be provided within the ES in the form of a formal 'Scoping Opinion'. The purpose of a scoping exercise is:

-) To focus the EIA on the environmental issues and potential impacts which need the most thorough attention;
-) To identify those which are unlikely to need detailed study; and
-) To provide a means to discuss methods of impact assessment and reach agreement on those most appropriate for a particular scheme.

2.3.4 In order to produce an adequate and focused EIA, and in the interests of transparency, a formal Scoping request was submitted to Durham County Council in addition to topic specific consultations with the relevant bodies.

- 2.3.5 A copy of the scoping request and resulting 'Scoping Opinion' issued by Durham County Council are included as Appendices 2.1 and 2.2 respectively.
- 2.3.6 The content of this Environmental Statement is drawn from the Authority's response to this scoping exercise, together with other informal consultations and the consultant consortium's considerable experience in preparing planning applications and environmental statements for energy facilities and related developments.
- 2.3.7 The key environmental issues which are considered in this ES include:
-) Landscape and Visual Impact;
 -) Geo-Environmental
 -) Noise & Vibration
 -) Air Quality & Human Health (Including dust, odour and stack height analysis);
 -) The Water Environment
 -) Climate Change.
 -) Socio Economic; and
 -) Amenity.
- 2.3.8 Other issues addressed within the Environmental Statement include:
-) Planning History and Policy Context;
 -) Needs and Alternatives; and,
 -) Risk.

Topics Scoped out of ES

- 2.3.9 The following technical disciplines have been scoped out of the Environmental Statement.
-) **Ecology:** There are no statutory site designations or potential habitat for species on site or in the near vicinity and as such ecology and biodiversity has been scoped out of the planning application. The planning application has however, assessed and mitigated potential impacts on ecology, and demonstrate net gain in biodiversity enhancement through the submission of an Ecological Impact Appraisal. The Air Quality Assessment

and Noise Assessment contained within the Environmental Statement has considered the combined impacts on ecology from development, operations and emissions.

- J **Heritage:** The proposed Energy Facility is located within an industrial estate already consented for major commercial development. The proposed development contains proposals for the development of high-quality industrial buildings and structure suitable for its setting within the industrial estate. Given previous site history and previous remediation under previous consents it is concluded that there will be no potential for below ground archaeology, this is addressed within the heritage assessment submitted in support of the planning application. The potential for views of the to affect heritage designations has been considered within the landscape and visual impact assessment contained within the Environmental Statement.
- J **Transport & Transportation:** The proposed development is not anticipated to create a significant level of traffic and as such has been scoped out of the Environmental Statement. A transport statement has, however, been submitted alongside the planning application.

Additional Consultations and Publicity

- 2.3.10 The Applicant has been in discussion with Durham County Council since the formulation of the Durham County Plan with regards to the Project Genesis Masterplan and the proposed energy facility (which forms part of it).
- 2.3.11 Due to the Global Pandemic of COVID 19 public consultation events where not possible, however the applicant undertook the following to ensure that members of the public where fully consulted at the pre-application stage:
 - J Circulation of a newsletter to councillors and local residents.
 - J Publication on website (<https://www.enzygo.com/consultations/consett-energy-recovery-facility>)
- 2.3.12 Further details of this process are provided in Appendix 2.3 (Statement of Community Involvement).
- 2.3.13 The engagement programme will continue through submission and determination of the application.

2.4 Assessment Methodology

2.4.1 The ES will follow established EIA procedures, in accordance with Planning Practice Guidance on Environmental Impact Assessments published in May 2020.

2.4.2 The assessment criteria are outlined below:

Baseline Assessment

2.4.3 A fundamental aspect of any EIA is to determine the baseline environmental conditions prevailing at the application site. These form the benchmark against which predicted changes resultant from the development can be assessed to determine the magnitude of any impact.

2.4.4 The EIA associated with this scheme will include an assessment of the existing conditions at prevailing at the application site (as outline in chapter 3 of this ES) and with the development (plus one, five and fifteen years where appropriate).

2.4.5 Each technical assessment has identified the existing and future conditions that may be altered by the proposed development. The process, which varies according to each of the technical assessments, involves:

-) a desktop review of available information, including identification of statutory and other designations
-) consultation with stakeholders to gather unpublished information
-) field surveys and monitoring, where necessary.

Timeframes

2.4.6 The Environmental Impact Assessment has identified a range of potential environmental issues, many of which vary in terms of the length of the time they are significant. The key time frames examined within the assessment can be identified as being:

-) **Short term:** Comprising the construction phase which is anticipated to take place within the first 24 months of the development and comprising initial site development works and construction of the Energy and Resource Park.
-) **Long Term:** Comprising the operational phase for the lifetime of the development.

2.4.7 Planning permission is sought for permanent development on the site and therefore it is not considered necessary to consider the impacts of the decommissioning phase within this Environmental Statement.

2.4.8 Identified affects can be temporary; direct or indirect; and positive or negative as follows:

) **Temporary/Permanent effects:** In relation to the different time frames, some of the effects would be temporary, for example site clearance and construction, construction noise and traffic, whilst others would be permanent, such as the impact on landscape.

) **Direct/Indirect effects:** The proposed development would have direct effects upon nearby properties and settlements, together with the environment as a whole in relation to emissions of noise and emissions to air, as well as the changing appearance of the site. Indirect impacts can also occur, largely in relation to emissions associated with plant and increased levels of traffic.

) **Positive/Negative effects:** The proposed development would generate both negative effects and positive benefits, either by virtue of the proposals themselves or as a result of the mitigation measures proposed.

Combined Effects

2.4.9 Whilst individual environmental impacts, such as noise or air quality have been considered in individual sections of this ES, there is the potential for one environmental subject area to impact upon another. Such combined effects have been addressed in each of the respective sections within this Environmental Statement.

2.4.10 There is also the potential for unrelated impacts, which themselves are not significant, to collectively generate an overall impact that is unacceptable. For example, the sum of minor impacts of noise and odour could collectively produce a significant overall impact. The various impacts assessed within this environmental statement have been considered collectively and it is concluded that no significant combined impact would arise.

Cumulative Effects

2.4.11 Cumulative effects are those effects of development that may interact in an additive or subtractive manner with the impacts of other developments that are not currently in existence; but may be by the time the development is implemented. A study of known proposed developments in the locality that could result in cumulative impacts has been undertaken and agreed with Durham County Council.

2.4.12 Proposed or possible future third party projects identified in the locality include:

1. DM/19/01834/VOC – B1 and B2 Industrial Development
2. DM/15/02364/FPA – Solar Farm
3. DM/19/01987/OUT – Outline mixed use development comprising of community hospital (C2) and pharmacy (A1); sheltered care unit (C2); residential care unit (C2); gym and wellbeing centre (D2); hotel (C1); public house (A4); micro-brewery (B2/A4); and vets practice (D1).
4. DM/19/02639/WAS for a waste transfer station (this site is understood to be operational).

2.4.13 Table 2.2 summarises the identified developments and the topic areas where cumulative impacts have the potential to arise and have been assessed within the chapters of this Environmental Statement.

Table 2.2 Potential Cumulative Effects

Scheme	Landscape	Geo	Noise	Air Quality & HH	Hydrology	Climate Change	Socio Economic	Amenity
1	Y	N	Y	N	Y	N	Y	Y
2	Y	N	N	N	N	N	N	N
3	N	N	N	N	N	N	Y	Y
4	N	N	N	N	N	N	N	N

The Assessment of Significance

2.4.14 The individual topic impact assessments have taken into account mitigation and enhancement measures that have been incorporated into the design of the development proposals.

2.4.15 Methodologies for predicting the nature and magnitude of any potential environmental impacts vary according to the subject area. Quantitative methods of assessment can predict values that can be compared against published thresholds and indicative criteria in Government guidance and standards. It is not always possible, though, to ascribe values to environmental assessments, and thus qualitative assessments are used: such assessments

rely on previous experience and professional judgement. The methodologies used for assessing each topic areas are described within the individual assessment chapters.

2.4.16 The potential and residual impacts have been ascertained in accordance with terminology appropriate to the topic specific guidance/regulations. Where these are not available, the following levels of significance have been used:

Table 2.3: Definition of significance

Neutral	No significant effects
Minor	Not noteworthy or material – impacts are of low magnitude and frequency and will not exceed relevant quality standards, residual effects will be negligible
Moderate	Noteworthy, material – impacts are of moderate magnitude and frequency. Relevant quality standards may be exceeded to limited extent. Possible secondary impacts, residual effects will be minimal.
Major	Impacts are likely to be of a high magnitude and frequency with quality standards being exceeded, at times considerably. There may be secondary impacts of some magnitude, residual effects will be of some significance.
Substantial	Impacts will be of a consistently high magnitude and frequency with

2.4.17 Where an effect is described as ‘neutral’ this means that there is no effect or that the significance of any effect is considered to be negligible. All other levels of significance apply to both adverse and beneficial effects.

2.4.18 These impacts can be at the local, regional, national or even international scale.

2.4.19 Finally, if significant environmental impacts are predicted in the EIA process, then the ES provides mitigation measures over and above those already incorporated into the development proposals that can be employed to eliminate or ameliorate the impact to acceptable levels. Mitigation measures can be in the form of changes to operational practice, or changes/additions to the design of the facility. Accordingly, the EIA process forms part of an iterative design process.

2.5 Technical Issues

2.5.1 Technical difficulties encountered and limitations of assessments are detailed within individual chapters and summarised below:

-) **Landscape:** This assessment is based on views from publicly accessible locations, and where impacts to residential and other private views (for example commercial occupiers) are noted these have necessarily been estimated.

Where views are described relating to residential and other receptors on private land (for example commercial occupiers, users of private recreation sites/sports clubs) then these are a best judgement of baseline and effects noted from nearby accessible locations together with desk based materials such as on line Google street view and aerial photography.

The viewpoints illustrated are representative of typical views experienced by a range of receptors in the area but cannot represent visibility from all locations and receptors.

ZTV mapping has limitations in that it is computer generated and follows certain specified parameters. The ZTV maps included in this assessment present a 'visible' or 'not visible' result and do not include any differentiation of the amount of development that would be visible. For example, the same 'visible' result is recorded where a substantial amount of the development is theoretically visible as for a smaller amount.

-) **Geo-Environmental:** The study is limited to the Phase I Preliminary Assessment undertaken together with site investigation documents provided.
-) **Noise & Vibration:** The assessment is based upon a range of measurements, a system of calculations and noise predictions using drawings provided by the client. As such, the report attempts to quantify fluctuations in air pressure and is subject to the effects of meteorology, physical and perceived anomalies, tolerances within the measuring and monitoring equipment and accuracy margins within the drawings, noise modelling software and information provided. In the interests of repeatability, this report must be considered as being affected by common factors involved in the measurement and calculation of noise propagation.

All measurement values, outcomes and assumptions are subject to a margin of uncertainty. This had been quantified and assessed as follows:

Rounding errors – systemic tolerance of ± 1 dB.

Class 1 sound level meter – operational tolerance of ± 1.1 dB.

Meteorology – allowance of ± 1.9 dB.

CadnaA noise modelling software – data input and operational accuracy of ± 2.1 dB

The most influential uncertainty factors for the assessment of noise are considered equipment tolerance, weather conditions and software accuracy.

A root-sum-square statistical average has been used to provide an overall margin of uncertainty of ± 3 dB.

) **Air Quality & Human Health:** The ADMS-5 model used in this assessment is dependent upon the data that have been input, which will have inherent uncertainties associated with them. In order to account for this uncertainty, conservative and worst-case assumptions have been made where appropriate and required. In particular, by assuming continuous operation of the main plant throughout the year (when the EfW process will be shut down for 4-5 weeks per year), and by using emission concentrations set at the regulatory maxima (when the plant will operate well below these limits most of the time), the assessment is likely to have over-predicted the process contributions by a relatively large margin.

Additional steps have also been taken to account for model uncertainty, such as the use of five years of meteorological data, and the worst-case (highest) modelled concentrations from any of these five years have been presented for robustness.

) **Water Environment:** The chapter is based on best available data at the time it was written, including desktop study of mapping and consultation responses. It is assumed the available information is correct.

) **Climate Change:** This chapter has made general assumptions as to the carbon capture of existing waste management infrastructure.

) **Socio Economic:** The analysis has been undertaken using the Indices of Deprivation, which are a group of measures of relative deprivation primarily for small areas (lower

super output areas) in England. They provide deprivation scores for each LSOA in England, and also ranks from 1 (most deprived area) to 32,844 (least deprived area). However, the values of the indicators used in the 2019 Indices mostly date from 2015/16 and as such are out of date.

Furthermore, the baseline figures used in this chapter do not take into consideration the likely impact that Coronavirus will have had on jobs and the local economy, as it is not possible at this stage to accurately predict the outcomes.

-)] **Amenity:** This chapter is reliant on the technical assessments contained within other chapters within the Environmental Statement.

2.6 Organisation of the Environmental Statement

2.6.1 This ES has been prepared in accordance with The EIA Regulations and comprises 3 volumes:

-)] Volume 1: Part A: Non-Technical Summary;
-)] Volume 1: Part B: The main ES text (subdivided into chapters);
-)] Volume 2: Supporting Technical Appendices;
-)] Volume 3: Drawings and Plans

2.6.2 Volume 1 is structure as follows:

-)] Introduction;
-)] Legislation and Planning Context;
-)] Assessment Methodology;
-)] Baseline Conditions;
-)] Incorporated Enhancement and Mitigation;
-)] Identification and Evaluation of Key Impacts;
-)] Mitigation;
-)] Residual Impacts;
-)] Conclusions; and

) References.

- 2.6.3 The individual chapters are summarised below:
- 2.6.4 **Chapter 1: Introduction** comprises an introduction to the scheme, the applicant and the statement of competency for the EIA;
- 2.6.5 **Chapter 2: Approach to ES** comprises the general assessment procedures and content of the ES.
- 2.6.6 **Chapter 3: Site and Setting** describes the physical and environmental characteristics of the application site and its surrounding environs;
- 2.6.7 **Chapter 4: Planning Policy Context** describes the national, regional and local planning policy context of the proposal;
- 2.6.8 **Chapter 5: Development Description** describes the development proposal for which planning permission is sought and for which the assessments have been carried out. It also provides a summary of estimates, by type and quantity of expected residues and emissions associated with the development proposal;
- 2.6.9 **Chapter 6: Needs and Alternatives** assesses the need for the facility and alternatives considered;
- 2.6.10 **Chapter 7: Landscape and Visual** assesses the landscape and visual impact issues associated with the proposed development;
- 2.6.11 **Chapter 8: Geo-Environmental** considers hydrogeology, contamination and geotechnical issues and is supported by a Phase 1 Preliminary Risk Assessment and Ground Investigation Interpretive Report.
- 2.6.12 **Chapter 9: Noise** assesses noise climate and likely noise impacts of construction and operation of the facility including road traffic noise associated with the development.
- 2.6.13 **Chapter 10: Air Quality and Human Health** assesses the air quality impacts of construction and operation of the proposed development. It includes a stack height assessment, human health assessment, odour and dust assessment.
- 2.6.14 **Chapter 11: The Water Environment** includes assessment of the existing and future hydrological environment, sets out the developments drainage strategy and assesses the impacts of the proposed development on the locality.

- 2.6.15 **Chapter 12: Climate Change** includes an assessment of the developments impact on climate change.
- 2.6.16 **Chapter 13: Socio Economic Impact** This includes an assessment of the impact of the proposed facility on the local economy.
- 2.6.17 **Chapter 14: Amenity** An assessment of the proposed facility against the wider amenity of the local area.
- 2.6.18 **Chapter 15: Summary and Conclusions;** summarises the above sections and draws conclusions regarding the overall effects (including combined, secondary and cumulative) of the proposed development. The chapter also includes a schedule of mitigation and assessment if risk against major disasters and accidents.

2.7 Definitions of Key Terms

2.7.1 The terms 'impacts' and 'effects' are used throughout this statement. They are defined as follows:

-) **Impacts:** These are any changes to the environment that are attributable to the development proposal.

-) **Effects:** These are the results of the changes on specific receptors or resources.

2.7.2 On occasions, impacts and effects will be one and the same e.g. land take from a sensitive landscape area is both an impact and effect. At other times they can be clearly distinguished e.g. an increase in noise levels may be an impact that has effects on nearby residents and wildlife.

2.7.3 Receptors and resources are defined as:

-) **Receptors:** These are the people and the flora and fauna, directly affected by impacts or may be indirectly affected through impacts on their surroundings.

-) **Resources:** These are the 'capital assets' of the environment such as habitats, cultural heritage and landscape, which constitute the environment that people and the flora and fauna inhabit.

2.7.4 Key Stakeholders are considered to be:

-) Durham County Council;

-) Highways England;

-) Historic England;
-) Environment Agency;
-) English Heritage.

2.7.5 Publicity and consultation carried out in relation to the project has sought engagement with these and other community groups.

References

-) The Town and Country Planning (Environmental Impact Assessment) (England) Regulations 2017.
-) Planning Practice Guidance Environmental Impact Assessments May 2020.