

1 BACKGROUND, INTRODUCTION & CONTEXT

1.1 Background

1.1.1 Rolton Kilbride (the "Applicant") is seeking to obtain planning permission for a proposed Renewable Energy Centre (REC) to generate power and heat for local commercial energy users located within the Hams Hall Distribution Centre, off Faraday Avenue near Birmingham (the "Application Site").

1.1.2 The Application site is located within the administrative area of Warwickshire County Council (WCC). The location and context of the Application Site to the wider surroundings is illustrated on **Figure 1.1**, the extent of the Application Site is shown on **Figure 1.2**. The REC is known as Hams Hall Energy and referred to within this Environmental Statement (ES) as the "Proposed Development".

1.1.3 The Proposed Development would generate up to 14.5 megawatts (MW) gross of electricity - the equivalent of powering over 26,000 homes on a continual basis. The plant is capable of accepting approximately 150,000 tonnes of waste per annum which would otherwise go to landfill.

1.2 The Applicant and EIA Project Team

1.2.1 The Applicant is a collaboration between Rolton Group, a long established, multi-disciplined engineering consultancy with specialisms in clean technologies and Kilbride, which offers expertise in development and infrastructure.

1.2.2 Rolton Kilbride are currently working on a portfolio of other REC projects which include sites in Rotherham, Northampton, Swindon and North Warwickshire as well as a site in Castle Bromwich, Birmingham which is currently in the planning system.

1.2.3 This ES has been co-ordinated and managed by Pegasus Group. The consultants who have contributed to the preparation of this ES are referenced in the project directory at the front of this document.

1.3 EIA Process

1.3.1 Environmental Impact Assessment (EIA) is a process, which identifies the potential environmental effects of a development and then seeks to avoid, reduce or offset any adverse effects through mitigation measures. Its key characteristics are that it is:

- Systematic – comprising a sequence of tasks defined both by regulation and by good practice, leading to the use of the information that is gathered to inform decision-making as to whether or not the proposed development should be allowed to proceed;
- Analytical - requiring the application of specialist skills from the environmental sciences;
- Impartial – its aim being to inform the decision maker rather than to promote the project;
- Consultative – with provision being made for obtaining feedback from interested parties including local authorities and statutory agencies;

- Iterative - allowing opportunities for environmental concerns to be addressed during the planning and design of a project; and
- Interactive, whereby the proposals for the key stages of the development are progressively refined in response to environmental as well as technical considerations with a view to minimising the scheme's potential adverse environmental effects and maximising environmental benefits.

1.3.2 The EIA process is an iterative one but the process can be broken down into the following stages which must be followed:

- Site selection and Feasibility;
- Consideration of alternative sites;
- Screening – is an EIA required (unnecessary stage for the Proposed Development);
- Pre-application consultation and Scoping;
- Baseline studies to establish the existing environmental conditions at the site;
- Identification of potential environmental effects;
- Mitigation to avoid or reduce the effects through iterative design process;
- Assessment of residual effects;
- Preparation of Environmental Statement;
- Consideration of application, Environmental Statement and other supporting information by SBC and consultees;
- Determination of Application.

1.4 Need for Environmental Impact Assessment and Scoping

1.4.1 Under the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 as amended the current proposals fall within Schedule 2 Category 3 (a) Industrial installations for the production of electricity, steam and hot water where the development exceeds 0.5 ha.

1.4.2 The Town and Country Planning (Environmental Impact Assessment) Regulations 2011 require that a proposed development which falls within the description of a 'Schedule 2 Development' within the meaning of the Regulations, will require an Environmental Impact Assessment (EIA) where the development is likely to have significant effects on the environment by virtue of such factors as its nature, size or location (Regulation 2).

1.4.3 Under the EIA Regulations Scoping is not a mandatory requirement, but the Applicant has engaged in pre-application consultation with Warwickshire County Council (WCC) as the waste planning authority with responsibility for determining planning applications for waste-related development. A copy of the pre-application advice is provided in Appendix 1 of the Planning Statement which accompanies this Application. It is noted that the pre-application advice refers to both a Renewable Energy Centre and a Short Term Operating Reserve (STOR). The STOR facility was subsequently removed from the scope of the Proposed Development due to uncertainties as to whether this would be brought forward.

1.4.4 Under the EIA Regulations, proposals which fall within the scope of Schedule 2 development, an EIA is discretionary. This EIA has been produced however, in recognition of the strategic significance of the development and the expected local interest in the proposals. The EIA and this ES have been undertaken and prepared with due regard to the criteria of Schedule 4 of the Regulations. The ES includes an assessment of the predicted effects of the Proposed Development, focussing, as required by the EIA Regulations, on those effects that have the potential to be significant. The content of the ES, as well as the overall approach to the EIA, has also been designed to reflect other requirements of the EIA Regulations as well as widely recognised good practice in EIA.

1.5 The Environmental Statement

1.5.1 The scope and content of the ES is based on the following:

- Review of the baseline situation through existing information, including data, reports, surveys and desk-top studies;
- Consideration of relevant National and Development Plan policies;
- Consideration of potential sensitive receptors;
- Identification of likely significant environmental effects and an evaluation of their duration and magnitude;
- Expert opinion;
- Modelling;
- Use of relevant technical and good practice guidance; and
- Specific consultations with appropriate bodies.

1.6 Structure of Environmental Statement

1.6.1 This ES comprises studies on each of the aspects of the environment identified as likely to be significantly affected by the Proposed Development, which are supported with technical appendices where appropriate. This ES is structured as follows:

- Volume 1: Comprises the written statement and graphic material in the form of figures, drawings and photomontages, which is the main volume of the ES. A breakdown of the contents of each chapter of the written statement is provided below;
- Volume 2: Contains the Technical Appendices to the main volume of the ES;
- Non-Technical Summary which provides a concise summary of the ES.

1.6.2 The chapters in Volume 1 are set out as follows:

- **Chapter 1:** Background, Introduction & Context – to introduce the Proposed Development and set out the EIA Regulations and structure of the ES;
- **Chapter 2:** Site Description – describes the existing site conditions and site context.
- **Chapter 3:** Development Proposals – describes the scheme proposals including issues such as grid connection, construction and operation;

- **Chapter 4:** Need and Alternatives – explains the need for the project, reasons for site selection, consideration of alternatives and consideration of cumulative issues;
- **Chapter 5:** Air Quality – a detailed assessment which considers road traffic emissions and those from the chimney stack;
- **Chapter 6:** Landscape / Townscape and Visual Impact – evaluates the likely significant effects of the Proposed Development upon the landscape / townscape character of the area (both built-up areas and green spaces) and on the visual amenity of receptors;
- **Chapter 7:** Traffic and Transport – addresses the transport and access issues which could arise on the transport network and which could be attributable to changes in predicted travel demand associated with the Proposed Development;
- **Chapter 8:** Hydrology & Flood Risk – an assessment of the potential effects on water resources, to encompass surface water and groundwater quality, surface water and groundwater resources and flooding issues within the vicinity of the Proposed Development;
- **Chapter 9:** Hydrogeology and Ground Conditions – evaluates issues relating to existing geo-environmental conditions at the Proposed Development;
- **Chapter 10:** Noise - an assessment of the potential noise effects of the Proposed Development during construction and operation;
- **Chapter 11:** Ecology and Nature Conservation – evaluates the ecological interest of the site and the likely significant effects of the Proposed Development on any sensitive species and habitats;
- **Chapter 12:** Archaeology and Cultural Heritage – an assessment of potential effects upon heritage assets which include below-ground archaeological remains and above ground features such as buildings or earthworks;
- **Chapter 13:** Socio-Economics – considers the socio-economic effects of the Proposed Development and addresses issues such as employment;
- **Chapter 14:** Summary – provides a summary of each of the chapters contained in the ES, including any key issues which are identified and how they will be addressed.

1.7 EIA Methodology

1.7.1 This ES reports the findings of the assessment of the likely significant environmental effects of the scheme. Although each assessment applies a specific series of matrices and decision making tools to assist the assessor in determining the significance of predicted effects identified in the ES, the same general approach of information gathering and assessment has been undertaken throughout the EIA process.

1.7.2 Following the identification of the possible issues, technical assessments were carried out to assess the likely significant effects that are associated with the Proposed Development. In general terms, the technical studies undertaken for each topic area and chapter includes:

- Assessment Approach & Methodology;
- Description of baseline conditions;

- Identification, Description and Evaluation of likely significant environmental effects;
- Determining Significance
- Mitigation;
- Residual effects;
- Cumulative Effects.

Assessment Approach and Methodology

1.7.3 This identifies the study area assessed and explains why this area is appropriate. It also identifies the criteria for assessing and describing significance, whilst confirming what assessments have been carried out and when. The methodology will provide detailed information of any consultation undertaken both pre and post Scoping. It will also include a section on relevant policy and guidance.

Description of Baseline Conditions

1.7.4 Information relating to the existing environmental conditions has been collected. This may include one or all of the following: desk based assessment, information from consultees, public records and other archive sources. Where site surveys have been required the methods of data collection have been discussed and agreed with the relevant consultees. Individual data sources are described in each Chapter.

Identification, Description and Evaluation of Likely Significant Environmental Effects

1.7.5 This section recognises the effects which are likely.

1.7.6 The stated methodology is applied to the scheme design. This section covers the construction and operation of the Proposed Development. The site receptors are identified at this stage in the process, including human receptors and environmental resources such as flora, fauna, the water environment and cultural heritage.

1.7.7 Conclusions about significance are derived with reference to available information about the project description and the site receptors, and to predictions about the impacts which the development proposed, would have, assuming it is consented, on identified receptors.

1.7.8 In each of the environmental topic chapters, professional judgement is used in combination with relevant guidance to assess the interaction of the receptor's sensitivity (this may be defined in terms of importance, value, rarity, quality) against the predicted magnitude of change to identify a level of effect.

1.7.9 In general terms, and in order to assist consistent interpretation of the final results of the EIA, receptor sensitivity, magnitude of change and level of effect for each environmental topic are categorised as shown in **Tables 1.1 to 1.4**.

1.7.10 The type of categorisation illustrated in **Table 1.1 to 1.4** provides a guide only, and may be moderated by the individual professional that undertakes the assessment in accordance with judgement and experience. In particular, the divisions between

categories of receptor sensitivity, magnitude of change, and level of effect should not be interpreted as definitive.

Determining Significance

1.7.11 Significance reflects the relationship between two factors:

- The magnitude or severity of an effect (i.e. the actual change taking place to the environment); and
- The sensitivity, importance or value of the resource or receptor.

1.7.12 The broad criteria methodology for determining magnitude is set out in **Table 1.1**.

Table 1.1: Degrees of Magnitude and their criteria

Magnitude of Effect	Criteria
High	Total loss or major/substantial alteration to elements/features of the baseline (pre-development) conditions such that the post development character/composition/attributes will be fundamentally changed.
Medium	Loss or alteration to one or more elements/features of the baseline conditions such that post development character/composition/attributes of the baseline will be materially changed.
Low	A minor shift away from baseline conditions. Change arising from the loss/alteration will be discernible/detectable but the underlying character / composition / attributes of the baseline condition will be similar to the pre-development.
Negligible	Very little change from baseline conditions. Change not material, barely distinguishable or indistinguishable, approximating to a 'no change' situation.

Table 1.2: Degrees of sensitivity and their criteria

Sensitivity	Criteria
High	The receptor / resource has little ability to absorb change without fundamentally altering its present character, or is of international or national importance.
Medium	The receptor / resource has moderate capacity to absorb change without significantly altering its present character, or is of high and more than local (but not national or international) importance.
Low	The receptor / resource is tolerant of change without detrimental effect, is of low or local importance.
Negligible	The receptor / resource is can accommodate change without material effect, is of limited importance.

Significance

1.8.1 The significance of an environmental effect is determined by the interaction of magnitude and sensitivity, whereby the effects can be positive or negative (beneficial or adverse). **Table 1.3** shows how magnitude and sensitivity interact to derive significance of effects.

Table 1.3– Establishing the Significance of the Effect

		Sensitivity of Receptor		
		Low	Medium	High
Magnitude of Effect	No Change	Insignificant	Insignificant	Insignificant
	Minimal Change	Negligible –Minor	Minor	Minor - Moderate
	Low	Minor	Minor - Moderate	Moderate
	Medium	Minor - Moderate	Moderate	Moderate - Major
	High	Moderate	Moderate - Major	Major - Substantial

1.8.2 The following definitions of the ‘Significance of Effects’ are used to determine the potential effects of the Proposed Development:

Table 1.4: Significance of Effects Definitions

Major Beneficial	Total gain or major/substantial positive alteration to elements/features of the baseline (pre-development) conditions such that the post development composition/attributes will be fundamentally improved from an environmental perspective on a regional, national or international basis.
Moderate Beneficial	Alteration or gain to one or more elements/features of the baseline conditions such that post development composition/attributes of the baseline will be materially improved, including significant enhancements to the environment of the inner and outer impact areas.
Minor Beneficial	A minor shift away from baseline conditions. Change arising from the gain/alteration will be detectable but the underlying character / composition / attributes of the baseline condition will be similar to the pre-development and the proposals meet the needs of the proposed environment.
Negligible	No or very little change from baseline conditions. Change not material, barely distinguishable or indistinguishable.
Minor Adverse	A minor shift away from baseline conditions. Change arising from the loss/alteration will be detectable but the underlying composition / attributes of the baseline condition will be similar to the pre-development.

	The proposals incorporate insufficient measures to ensure that the scheme would meet its own needs and not put undue pressure on existing resources and cannot be substantially mitigated because of the scale of the proposal.
Moderate Adverse	Loss or alteration to one or more elements/features of the baseline conditions such that post development composition/ attributes of the baseline will be materially changed. Mitigation would not prevent the scheme from affecting on both inner and outer impact areas in the longer term.
Major Adverse	Total loss or major/substantial alteration to elements/features of the pre-development baseline conditions such that the post-development composition/attributes will be fundamentally changed.

1.8.3 As discussed above the above magnitude, sensitivity and significance criteria are provided as a guide for specialists to categorise the significance of effects. Where discipline specific methodology has been applied that differs from the generic criteria above, this is explained within the given chapter under the Assessment Approach & Methodology section.

1.8.4 The assessment of potential environmental effects, in line with the requirements of the EIA Regulations, establishes whether identified effects are:

- Direct, indirect, secondary and cumulative;
- Positive or negative; (where above effects are also described as:
 - Adverse – detrimental or negative effects on an environmental resource or receptor;
 - Beneficial – advantageous or positive effect on an environmental resource or receptor; or
 - Negligible – a neutral effect on an environmental resource or receptor).
- Short, medium or long term;
- Permanent or temporary.

1.8.5 Most predicted effects will be either positive or negative, and will be described as such. However, in some cases it is appropriate to identify that the interpretation of a change is a matter of 'subjectivity'.

1.8.6 The temporal scope of environmental effects is stated where known. Effects are typically described as:

- Temporary – these are likely to be related to a particular activity and will cease when the activity finishes. The terms 'short-term' and 'long-term' may also be used to provide further clarification;
- Permanent – this typically means an unrecoverable change.

Mitigation

1.8.7 This section identifies any measures required to prevent, reduce or compensate for significant adverse impacts, or enhance positive effects.

1.8.8 It also takes into account the likelihood of the success of the mitigation measures proposed.

1.8.9 Where effects cannot be avoided individual chapters outline appropriate mitigation to reduce these effects or recommend compensatory measures.

Residual Effects

1.8.10 Each of the technical assessments includes a description and evaluation of the residual effects of the development proposed, i.e. those effects which are considered to be significant in terms of the EIA Regulations following the implementation of mitigation measures.

Cumulative Effects

1.8.11 Schedule 4, part 1, paragraph 4 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 requires that a description of the likely significant effects of the development on the environment should cover cumulative effects.

1.8.12 The main aim of a cumulative assessment is to assess the additional impact of the Proposed Development on the baseline of projects that are either already operational, have planning permission or which are in the planning system.

1.8.13 This may be more relevant to certain technical areas and therefore will be addressed individually in each chapter. Cumulative Issues are considered in further detail within Chapter 4 of Volume 1 of this ES.

1.9 Environmental Statement Availability and Comments

1.9.1 This ES is available for public viewing as a hard copy within WCC offices during normal office hours:

Warwickshire County Council
Shire Hall
Market Place
Warwick
CV34 4SA

1.9.2 The ES may be purchased in Volumes, the costs for which are set out below:

- Non-Technical Summary – Free of charge
- Volume 1: Main Volume and Figures - £150
- Volume 2: Technical Appendices - £150

1.9.3 Copies of all documents can be obtained on CD for £15. For copies of any of the above please contact Pegasus Group at the following address:

Pegasus Group
Pegasus House
Querns Business Centre
Whitworth Road
Cirencester
Gloucestershire
GL7 1RT

Tel: 01285 641717
Fax: 01285 642348

1.10 Other Documents

1.10.1 A number of other documents have been submitted to WCC as part of or accompanying the planning application. These are set out in the covering letter to the planning application and summarised below:

- Application Forms
- Technical Drawings
- Planning Statement
- Design Statement
- Statement of Community Consultation

1.11 Pre-Application Consultations with WCC

1.11.1 The Applicants have been engaged in a pre-application consultation process with Warwickshire County Council prior to the submission of the planning application. The advice received included guidance setting out the planning policy context that an application would be judged against and an indication of the documentation necessary to support an application.

1.12 Public Consultation

1.12.1 Public consultation was a fundamental and integral process of the planning application. A well thought out strategy to engage with local stakeholders was carefully delivered from the outset and comprised; a leaflet drop and invitation to a public exhibitions where members of the design team as well as the technology providers, air quality and transport consultants were on hand to answer any queries; and pre-application meetings with Ward Members and Parish Councillors to inform them of the scheme design and technological aspects.

1.12.2 The full details of the public consultation strategy and feedback from the events are included within the Statement of Community Consultation which is a separate report submitted with the planning application documentation.