Medworth Energy from Waste
Combined Heat and Power Facility

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June 2022

Environmental Statement
Chapter 1: Introduction

Regulation reference: The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 Regulation 5(2)(a)

We inspire with energy.

Contents

1. Introduction

1.1 Overview of the Proposed Development

1.1.1 Medworth CHP Limited (the Applicant) is applying to the Secretary of State (SoS) for a Development Consent Order (DCO) to construct operate and maintain an Energy from Waste (EfW) Combined Heat and Power (CHP) Facility on the industrial estate, Algores Way, Wisbech, Cambridgeshire. Together with associated Access Improvements, Grid Connection, CHP Connection, Water Connections, and Temporary Construction Compound (TCC), these works are the Proposed Development. The site location is illustrated on **Figure 1.1: Site Location (Volume 6.3)**.

1.1.2 The Proposed Development would recover useful energy in the form of electricity and steam from over half a million tonnes of non-recyclable (residual), non-hazardous municipal, commercial and industrial waste each year. The Proposed Development has a generating capacity of over 50 megawatts and the electricity would be exported to the grid. The Proposed Development would also have the capability to export steam and electricity to users on the surrounding industrial estate. Further information is provided in **Chapter 3: Description of the Proposed Development (Volume 6.2)**.

1.1.3 The Proposed Development is a Nationally Significant Infrastructure Project (NSIP) under Part 3 Section 14 of the Planning Act 2008 (2008 Act) by virtue of the fact that the generating station is located in England and has a generating capacity of over 50 megawatts (Section 15(2) of the 2008 Act). It, therefore, requires an application for a DCO to be submitted to the Planning Inspectorate (PINS) under the 2008 Act. PINS will examine the application for the Proposed Development and make a recommendation to the SoS for Business, Energy and Industrial Strategy (BEIS) to grant or refuse consent. On receipt of the report and recommendation from PINS, the SoS will then make the final decision on whether to grant the Medworth EfW CHP Facility DCO.

1.2 The Applicant and MVV

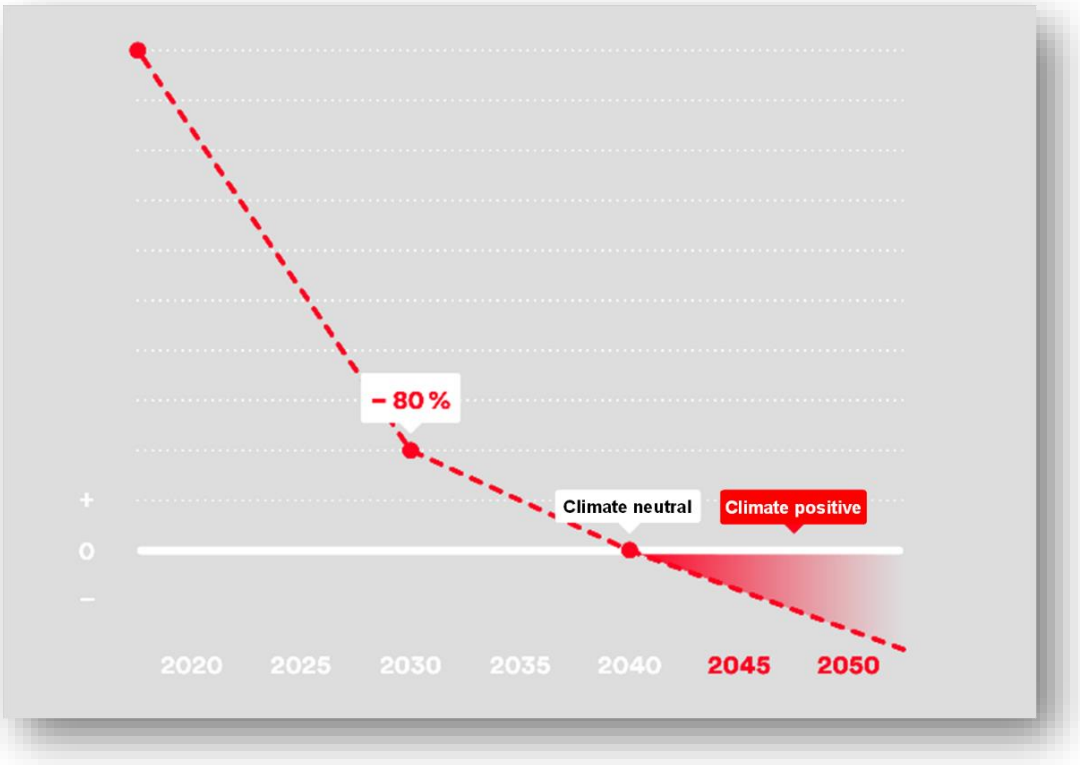
1.2.1 The Applicant is a wholly owned subsidiary of MVV Environment Limited (MVV). MVV is part of the MVV Energie AG group of companies. MVV Energie AG is one of Germany's leading energy companies, employing approx. 6,500 people with assets of around €5 billion and annual sales of around €4.1 billion. The Proposed Development represents an investment of approximately £450m.

1.2.2 The company has over 50-years' experience in constructing, operating, and maintaining EfW CHP facilities in Germany and the UK. MVV Energie's portfolio includes a 700,000 tonnes per annum residual EfW CHP facility in Mannheim, Germany.

1.2.3 MVV Energie has a growth strategy to be carbon neutral by 2040 and thereafter carbon negative, i.e., climate positive. Specifically, MVV Energie intends to:

- reduce its direct carbon dioxide (CO_2) emissions by over 80% by 2030 compared to 2018;
- reduce its indirect CO_2 emissions by 82% compared to 2018;
- be climate neutral by 2040; and
- be climate positive from 2040.

Graphic 1.1: MVV Energie climate growth strategy targets



1.2.4 MVV's UK business retains the overall group ethos of 'belonging' to the communities it serves whilst benefitting from over 50 years' experience gained by its German sister companies. In the UK, MVV currently consists of six separate companies (see **Table 1.1 MVV Environment UK Group of Companies**).

1.2.5 MVV's largest project in the UK is the Devonport EfW CHP Facility in Plymouth. Since 2015, this modern and efficient facility has been using around 265,000 tonnes of municipal, commercial and industrial residual waste per year to generate electricity and heat, notably for Her Majesty's Naval Base Devonport in Plymouth, and exporting electricity to the grid.

1.2.6 In Dundee, MVV has taken over the existing Baldovie EfW Facility and has developed a new, modern facility alongside the existing facility. Operating from 2021, it uses up to 220,000 tonnes of municipal, commercial and industrial waste each year as fuel for the generation of usable energy.

1.2.7 Biomass is another key focus of MVV's activities in the UK market. The biomass power plant at Ridham Dock, Kent, uses up to 195,000 tonnes of waste and non-

recyclable wood per year to generate green electricity and is capable of exporting heat.

Table 1.1 MVV Environment UK Group of Companies

Company	Detail
Medworth CHP Limited	The wholly owned subsidiary of MVV Environment Limited proposing to submit the application for the DCO (the Applicant).
MVV Environment Limited	The company developing and funding the Proposed Development.
MVV Environment Baldovie Limited	Energy from Waste CHP Facility, diverting up to 220,000 tonnes per annum of residual waste from landfill for Dundee and Angus Councils and for private waste disposal companies.
MVV Environment Devonport Limited	Energy from Waste CHP Facility, diverting 265,000 tonnes per annum of residual waste from landfill for the South West Devon Waste Partnership and for private waste disposal companies.
MVV Environment Ridham Limited	Merchant biomass facility generating energy up to 195,000 tonnes per annum of waste wood.
MVV Environment Services Limited	The UK electricity trading subsidiary of MVV.

1.3 Competence

1.3.1 Regulation 14(4) of *The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (SI 2017 No. 572)* (hereafter referred to as the EIA Regulations) requires that an Environmental Statement (ES) is prepared by 'competent experts' and that the ES is accompanied by a statement outlining the relevant expertise or qualifications of such experts. This information is provided in the following paragraphs and associated appendices.

1.3.2 To prepare the ES for the Proposed Development, the Applicant has engaged Wood Group UK Limited (Wood). Wood is registered with the Institute of Environmental Management and Assessment (IEMA)'s EIA Quality Mark scheme. The scheme allows organisations that lead the co-ordination of EIAs in the UK to make a commitment to excellence in their EIA activities and have this commitment independently reviewed.

1.3.3 A statement outlining the relevant experience and qualifications of the competent experts who have prepared this ES is provided in **Appendix 1A List of Competent Experts (Volume 6.4)**. A statement from the Applicant that confirms that it considers the experts to be competent is included in **Appendix 1B Applicant's Confirmation of Competent Experts (Volume 6.4)**.

1.4 The requirement for an Environmental Statement

1.4.1 This ES has been prepared as part of the EIA requirements relating to the Proposed Development.

1.4.2 In accordance with Regulation 14 (1) of the EIA Regulations, an application for an order granting development consent that is EIA development must be accompanied by an environmental statement. Regulation 14(3) requires that the ES be based on the most recent scoping opinion, include information reasonably required for reaching a reasoned conclusion on the significant effects of the development on the environment and be prepared taking into account the results of any relevant UK environmental assessment, which is reasonably available with a view to avoiding duplication of assessment.

1.5 Environmental Impact Assessment

1.5.1 An EIA is required because the Proposed Development falls within paragraph 10 of Schedule 1 of the EIA Regulations, which refers to:

> *"Waste disposal installations for the incineration or chemical treatment (as defined in Annex I to Directive 2008/98/EC under heading D9) of non-hazardous waste with a capacity exceeding 100 tonnes per day."*

1.5.2 As such, an EIA has been undertaken in respect of the Proposed Development in support of the DCO application. In accordance with Regulation 8(1)(b) of the EIA Regulations, the Applicant formally notified the SoS in writing on the 3 December 2019 of the intention to provide an ES in respect of the Proposed Development (**Appendix 1C Regulation 8(1)(b) Notice Volume 6.4**).

1.5.3 In accordance with good practice, a scoping report was prepared for the Proposed Development to identify the potential likely significant environmental effects of the Proposed Development (EIA Scoping Report dated 03 December 2019). Of these effects, those that were assessed as being likely to be significant were proposed for further assessment in the EIA. This reflects the requirement of the EIA Regulations for the ES to only discuss in depth, those effects that are likely to be significant.

1.5.4 The scoping report was issued to the PINS, who act on behalf of the SoS, on 3 December 2019, together with a request for a scoping opinion under the EIA Regulations. Under these regulations the SoS is required to consult with the '*consultation bodies*' (as defined in the EIA Regulations). The PINS, on behalf of the SoS, issued a formal Scoping Opinion on 13 January 2020 (**Appendix 1D EIA Scoping Opinion Volume 6.4**). A late Scoping consultation response was also received (**Appendix 1E Late Scoping Opinion Consultation Responses Volume 6.4**).

1.5.5 Drawing upon the Scoping Opinion, and subsequent scoping and assessment work informed by responses to statutory consultation and Stakeholder engagement, the ES includes the environmental information compiled by the Applicant to identify the likely significant environmental effects of the Proposed Development.

1.5.6 Regulation 14(2) and Schedule 4 of the EIA Regulations set out the information that should be included in an ES. **Table 1.2 Schedule 4 requirements** sets out where the information in Schedule 4 is found within the ES.

Table 1.2 Schedule 4 requirements

Schedule 4 Requirements	Location in the ES
1(a) a description of the location of the development.	Chapter 3: Description of the Proposed Development
1(b) a description of the characteristics and land-use requirements of the whole development, considering construction and operation (including requisite demolition works where relevant) and the land-use requirements during the construction and operational phases.	Chapter 3: Description of the Proposed Development
1(c) a description of the main characteristics of the operational phase of the development (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.	Chapter 3: Description of the Proposed Development; Chapter 11: Biodiversity; Chapter 12: Hydrology; Chapter 13: Geology, Hydrogeology, Contaminated Land; and Chapter 14: Climate Change.
1(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).	Chapter 3: Description of the Proposed Development; Chapter 7: Noise and Vibration; Chapter 8: Air Quality; Chapter 12: Hydrology; and Chapter 13: Geology, Hydrogeology, Contaminated Land.
2. A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the applicant, 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.	Chapter 2: Alternatives
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 development 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.	Environmental Topic Chapters 6-17; Description of baseline conditions.

Schedule 4 Requirements	Location in the ES
A description of the factors specified in regulation 5(2) likely to be significantly affected by the development: 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.	**Population:** Chapter 6: Traffic and Transport; Chapter 7: Noise and Vibration; Chapter 8: Air Quality; Chapter 9: Landscape and Visual; Chapter 15: Socio economics, Tourism, recreation and Land Use; and Chapter 16: Health. **Human Health:** Chapter 16 Health. **Biodiversity:** Chapter 11: Biodiversity. **Land:** Chapter 13: Geology, Hydrogeology and Contaminated Land. **Soil:** Chapter 13: Geology, Hydrogeology and Contaminated Land. **Water:** Chapter 12: Hydrology. **Air:** Chapter 8: Air Quality. **Climate:** Chapter 14: Climate Change **Material Assets:** Chapter 13: Geology, Hydrogeology and Contaminated Land. **Cultural Heritage:** Chapter 10: Historic Environment. **Landscape:** Chapter 9: Landscape and Visual.
5. A description of the likely significant effects of the development on the environment resulting from: 5(a) the construction and existence of the development, including, where relevant, demolition works;	Environmental Topic Chapters 6-18
5(b) the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources;	Chapter 11: Biodiversity; Chapter 12: Hydrology; and Chapter 13: Geology, Hydrogeology and Contaminated Land.
5(c) the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste;	Chapter 3: Description of the Proposed Development; Chapter 8: Air Quality; Chapter 7: Noise and Vibration; and Chapter 13: Geology, Hydrogeology and Contaminated Land.
5(d) the risks to human health, cultural heritage or the environment (for example due to accidents or disasters);	Chapter 10: Historic Environment; Chapter 13: Geology, Hydrogeology and Contaminated Land;

Schedule 4 Requirements	Location in the ES
	Chapter 16: Health; and Chapter 17: Major Accidents and Disasters.
5(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;	Chapter 18: Cumulative Effects Assessment
5(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; and	Chapter 14: Climate Change
5(g) the technologies and the substances used.	Chapter 3: Description of the Proposed Development
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.	Environmental Topic Chapters 6-17; Assumptions and limitations, Methodology.
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.	Environmental Topic Chapters 6-17 and Chapter 19; Embedded Mitigation; Additional Mitigation.
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. 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.	Chapter 17: Major Accidents and Disasters.

Schedule 4 Requirements	Location in the ES
9. A non-technical summary of the information provided under paragraphs 1 to 8.	Non-Technical Summary (provided separately)
10. A reference list detailing the sources used for the descriptions and assessments included in ES.	Provided as footnotes within each ES chapter.

1.6 Structure and content of the ES

1.6.1 The structure and content of the ES is set out in **Table 1.3 Structure and content of the ES** below.

Table 1.3 Structure and content of the ES

Document reference	Title
Chapter 1	Introduction
Chapter 2	Alternatives
Chapter 3	Description of the Proposed Development
Chapter 4	Approach to the EIA
Chapter 5	Legislation and Policy
Chapter 6	Traffic and Transport
Chapter 7	Noise and Vibration
Chapter 8	Air Quality
Chapter 9	Landscape and Visual
Chapter 10	Historic Environment
Chapter 11	Biodiversity
Chapter 12	Hydrology

Document reference	Title
Chapter 13	Geology, Hydrogeology and Contaminated Land
Chapter 14	Climate Change
Chapter 15	Socio-economics, Tourism, Recreation and Land Use
Chapter 16	Health
Chapter 17	Major Accidents and Disasters
Chapter 18	Cumulative Effects Assessment
Chapter 19	Schedule of Mitigation and Monitoring
-	Non-Technical Summary

1.6.2 A summary of all terms and abbreviations used throughout the ES is provided in **Appendix 1F Terms and Abbreviations (Volume 6.4)**.

1.7 Other documents

1.7.1 A suite of other environmental documents are provided with the DCO application to accord with the requirements of the Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009 (as amended). These include:

- Consultation Report (**Volume 5.1**);
- Statutory Nuisance Statement (**Volume 5.2**);
- Habitat Regulations Assessment No Significant Effects Report (**Volume 5.3**);
- List of Other Consents and Licences (**Volume 5.4**); and
- Flood Risk Assessment (**Volume 6.4**).

1.7.2 Additional documents include:

- Grid Connection Statement **(Volume 7.2);**
- Waste Fuel Availability Assessment (**Volume 7.3**);
- Design and Access Statement (**Volume 7.5**);
- Combined Heat and Power Assessment (**Volume 7.6**);
- Outline Landscape and Ecology Management Plan **(Volume 7.7)**;
- Outline Employment and Skills Strategy **(Volume 7.8)**;

- Outline Flood Emergency Management Plan **(Volume 7.9)**;
- Outline Fire Prevention Plan **(Volume 7.10)**;
- Outline Odour Management Plan **(Volume 7.11)**;
- Outline Construction Environmental Management Plan (**Volume 7.12**); and
- Tree Survey **(7.13)**.