



## **Chapter One** **INTRODUCTION**

### **BACKGROUND**

**1.1** Local authorities in Wales are required to achieve waste recycling targets set by the Welsh Assembly Government (WAG), reflecting landfill diversion targets defined in the European Landfill Directive. The targets will become more demanding over time, with fines incurred for waste landfilled over specified target thresholds. These targets apply in addition to the landfill tax, which applies on a rising scale for each tonne of waste disposed to landfill. As a consequence, local authorities are seeking alternatives to landfill.

**1.2** The demise of landfill as the option of choice and convenience for waste disposal has focussed attention on alternative disposal methods that recover more of the value from waste. Enviroparks has been established to promote integrated waste processing, co-locating recycling and commercial operations on one site or 'park'. The concept is to treat diverse streams of waste materials as a resource and to recycle material and recover energy in the most efficient and controlled manner. This approach is designed to deliver a 97.5% diversion from landfill for such material, and would be the most advanced recycling operation in the UK.

**1.3** In liaison with the Welsh Assembly Government, a site for the first Enviroparks facility has been identified at Fifth Avenue on the Hirwaun Industrial Estate, near Hirwaun in South Wales (figure 1.1). This environmental statement accompanies a planning application submitted by Enviroparks (Hirwaun) Limited (EHL) to Rhondda Cynon Taf County Borough Council and Brecon Beacons National Park Authority for this development.

### **ENVIRONMENTAL ASSESSMENT**

**1.4** Environmental impact assessment (EIA) is a process that aims to improve the environmental design of a development proposal and provide decision-makers with sufficient information about the environmental impacts of the project.

**1.5** An environmental statement (ES) is a report that sets out the results of the EIA process. The ES is submitted with an application for planning permission and provides environmental information about the scheme, including a description of the development, its predicted environmental impacts and the measures proposed to ameliorate any adverse effects.

**1.6** The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 include a list of those forms of development that require EIA in all cases (Schedule I) and in certain cases where thresholds are exceeded (Schedule II). EHL's proposal can be classified as a Schedule I (section 6a) development, as it involves the manufacture of a basic organic chemical on an industrial scale using chemical conversion processes in which several units are designed to be functionally linked to one another. Section 10 of Schedule I is also relevant as the proposal would have the capacity to provide



treatment to more than 100 tonnes of non-hazardous waste per day. Furthermore, the application site lies partly within the Brecon Beacons National Park and there is a Special Area of Conservation in the locality.

**1.7** An environmental impact assessment has thus been undertaken for EHL's project. This document is the environmental statement that accompanies the planning application for the proposed development at Hirwaun.

## THE PLANNING APPLICATION

**1.8** The description of development for EHL's proposal is as follows:

**Development of a sustainable waste resource recovery and energy production park comprising 27,562 m<sup>2</sup> of buildings and structures, including a 10,240 m<sup>2</sup> building for use class B1 / B2 use; process buildings; a gatehouse and weighbridge; a visitor centre and administration building; a 20 MW<sub>e</sub> net capacity combined heat and power plant; with a 40 m ventilation stack; external anaerobic digestion, liquid and gas holding tanks; 30,352 m<sup>2</sup> of internal roads and hardstandings; vehicular parking; external security lighting; 17,497 m<sup>2</sup> of landscaping; vehicular ingress and egress from Fifth and Ninth Avenues, and associated utilities infrastructure.**

**1.9** The planning submission comprises the following documents:

- planning application forms and land ownership notification certificates;
- plans and drawings of the proposed development;
- a *Planning Policy Statement*, which reviews the proposal in the light of relevant planning, waste and energy policy;
- a *Design and Access Statement*, which explains the proposed design of the development and the arrangements for access.
- this *Environmental Statement*.

## THE APPLICANT: ENVIROPARKS (HIRWAUN) LIMITED

**1.10** EHL is an energy company that has developed a concept of co-locating waste recycling, energy recovery and associated commercial operations on the same site or 'park'. The company's approach is to recycle diverse waste streams using integrated advanced technologies to maximise recycling and energy generation with the minimum residual waste and environmental impact.

**1.11** Based in Abergavenny, EHL is a wholly-owned subsidiary of Enviroparks Limited, which was established with the aim of developing a chain of Enviroparks in the UK.



Enviroparks Limited is owned by private investors, industrial property developer Marlborough Developments Limited and Enviroactive Limited. Enviroactive Limited was responsible for the development of a lead acid battery recycling plant in Ebbw Vale. This facility is the most modern of its kind in Europe and one of only two in the UK. It has a total processing capacity of 100,000 tonnes per year with 150 employees, and will become the biggest single producer of lead for roofing in the world.

## THE PROJECT TEAM

**1.12** EHL is advised by a team of experienced consultants. Companies working on the project design and the EIA of the scheme, together with the tasks and specialist issues for which each is responsible, are as follows.

**Enertech** – a specialist in renewable energy projects that is providing project management services, advice on process integration and design evaluation.

**Savills** – town and country planning consultant and the EIA coordinator for the project. Savills is also providing visual assessment and landscape architectural services.

**Envisage** – an environmental consultancy service undertaking the technical assessment of environmental effects.

**Pell Frischmann** – environmental, structural and civil engineers responsible for the investigation of ground conditions and hydrology and for the preparation of a lighting strategy for the proposal.

**PRC Architects** – the project architect, responsible for developing the site layout and building designs

**1.13** EHL is also working in partnership with several specialist technology providers to deliver its aims. The combination of technologies brought together by EHL is designed to ensure high levels of efficiency with regard to fuel preparation and electricity production. These technologies are intended to represent Best Available Techniques for the functions they serve.

## THIS ENVIRONMENTAL STATEMENT

**1.14** The ES comprises a main report (this document), appendices presented in a separate lever-arch file, and separate non-technical summary (NTS). Following this introductory chapter, this main report is organised as follows:

2. Site description
3. Proposed development and land uses
4. Site selection, alternatives and scheme evolution
5. Planning policy context



6. Scoping and consultation
7. Community effects
8. Transport and access
9. Air quality
10. Noise and vibration
11. Ground conditions, drainage and flood risk
12. Landscape and visual effects
13. Ecology
14. Archaeology and cultural heritage
15. Conclusion

**1.15** Chapter 2 provides a description of the existing site and current land uses and considers how this is likely to change in future irrespective of the proposed scheme being developed. Chapter 3 explains each element of EHL's proposal and, with the planning application plans and drawings, defines the physical and operational parameters that have been assessed during the EIA.

**1.16** Chapter 4 summaries the site selection and evaluation process and explains how the layout has evolved through a series of iterations - effectively alternative options.

**1.17** Chapter 5 provides a summary of relevant planning and other policy as directly relevant to the EIA of the current proposals. As already explained, a more detailed policy analysis is provided in a *Planning Policy Statement* that accompanies EHL's planning application. The 'scope' of the EIA is then identified in chapter 6. This explains how the ES provides the environmental information identified by the local planning authorities and statutory consultees during the preliminary stages of the EIA process.

**1.18** The main element of the EIA process is then reported in chapters 7 to 14. The final chapter of the ES provides a summary of the mitigation incorporated into the proposed development. This will assist in ensuring that these measures are translated into legal instruments and, where relevant, a construction and environmental management plan for the project. Chapter 15 also set out the residual impacts of the proposal after the proposed mitigating measures have been taken into account. Where appropriate, technical reports have been included as appendices to the ES.

**1.19** A non-technical summary provides, in plain language, a summary of the ES and contains the essential illustrative material required to support the description of the proposal and its environmental effects.



## THE APPROACH TO ASSESSMENT

**1.20** The framework used to express the predicted significance of the environmental effects identified is explained in each ES chapter. In summary, unless best practice guidance for technical assessment dictates otherwise, each predicted impact and residual effect will be ascribed one of the following levels of significance:

- negligible;
- low;
- medium; or
- high.

**1.21** Those elements of the development that have been introduced to mitigate potential adverse effects are identified within each chapter. The mitigation included in the scheme can be categorised into two types - 'inherent' and 'additional' mitigation. Inherent mitigation is amelioration that is a fundamental part of the scheme and can generally be represented in the application plans. Additional mitigation is generally less capable of being shown in the planning application drawings, because it might involve controls on the construction or operation of the development, for example. The need for additional mitigation might be enforced through planning conditions or obligations associated with a grant of planning permission for the proposals.