

PLANNING STATEMENT

ROTHERHAM ENERGY SCHEME RENEWABLE ENERGY CENTRE

Prepared for Rolton Kilbride Rotherham Ltd & Andy Owen McGee





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PLANNING APPLICATION FOR A RENEWABLE ENERGY CENTRE (GASIFICATION) AND MECHANICAL TREATMENT FACILITY

PLANNING STATEMENT

**FORMER TEMPLEBOROUGH STEEL WORKS,
SHEFFIELD ROAD, TEMPLEBOROUGH, ROTHERHAM**

**ON BEHALF OF ROLTON KILBRIDE ROTHERHAM LTD & ANDY OWEN
MCGEE**

**TOWN & COUNTRY PLANNING ACT 1990 (AS AMENDED)
PLANNING AND COMPULSORY PURCHASE ACT 2004**

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PLANNING | **DESIGN** | **ENVIRONMENT** | **ECONOMICS**

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1. INTRODUCTION

- 1.1 This Planning Statement accompanies a full planning application, submitted on behalf of Rolton Kilbride Rotherham Ltd and Andy Owen McGee (“the Applicants”), with respect to the demolition of existing buildings, construction and operation of a Renewable Energy Centre for the recovery of energy (heat and power) from non-hazardous residual waste using an Advanced Conversion Technology process called ‘gasification’, a Mechanical Treatment Facility for the recovery of recyclable materials with the associated plant and infrastructure, with associated access, parking, landscaping and ancillary buildings on land at the Former Templeborough Steel Works, Sheffield Road, Templeborough, Sheffield (“the application site”).
- 1.2 The Site Location Plan accompanying the planning application identifies the location of the application site in relation to the industrial estate and wider urban area.

Summary description of development

- 1.3 The proposed development will be comprised by the following elements:
- Demolition of existing buildings;
 - Construction of a Renewable Energy Centre (REC) and a Mechanical Treatment Facility (MTF);
 - Ancillary buildings including offices, workshop, warehouse, education facility and weighbridge office;
 - Landscaping proposals to enhance the existing environment; and
 - Associated works and infrastructure necessary for the implementation of the development.
- 1.4 A full description of the development proposals which sets out the various aspects of the scheme, including the technology to be used by the REC, types of waste to be used, anticipated vehicular movements and job generation, can be found in Section 3 of this Statement.

Background to the Proposed Development

- 1.5 *Purpose* – The purpose of the proposed REC is to generate energy (heat and power), the majority of which will be renewable, and at the same time to deal efficiently with non-hazardous residual waste, that is waste that has undergone some form of pre-treatment to extract the economically and practically removable recyclable materials.
- 1.6 There is a need to generate renewable energy in the UK, and to produce electrical power and heat at the same time. A facility which operates in this manner is known as a Combined Heat and Power (CHP) plant, which is widely recognised as being one of the most efficient methods of generating energy. CHP developments are being strongly encouraged in national policy (i.e. the Waste Management Plan for England) and local planning policy to increase energy efficiency in the UK.
- 1.7 There is also a need to deal efficiently with the residual waste which remains after recycling efforts have taken place. The best way to deal with this residual waste is to recover energy from it, through such a facility as the one described in this application.
- 1.8 *Applicant* - Rolton Kilbride is a privately owned developer of Renewable Energy Centres. Rolton Kilbride is also working with a set of highly specialised technology partners and advisers who have extensive experience in the field of energy generation, gasification and the use of modern environmental technology. The senior management team have successful, established track records in infrastructure and energy, having worked in this field over many years. They have significant experience in developing Energy from Waste plants, Anaerobic Digestion plants, large scale solar and wind installations.
- 1.9 *Proven Technology* – The proposed development will use an Advanced Conversion Technology (ACT) process called gasification. Gasification technology has an established track-record and is fully proven and bankable. Several European and Financial institutions and banks have completed thorough due diligence on the gasification technology projects, including Barclays, Lloyds, RBS, Bayern, Bank of Ireland, HSBC, HSH Nordbank, Natixis, UniCredit and LB Nord, and all have concluded that it is fully bankable. Furthermore, thorough technical due diligence has been undertaken on behalf of the banks, investors and project developers, carried out by qualified and experienced engineering consultants including Mott Macdonald, Fichtner and Rowan House. As an ACT the proposed development

would qualify under the Renewables Obligation (RO) and the Contracts for Difference (CFD) mechanism.

1.10 *Qualification for Contracts for Difference as a Renewable Energy Source* – As part of the UK Government’s commitment to increasing the generation of low carbon renewable energy from the private sector financial support is provided to investors through the Contracts for Difference (CfD) scheme. The CfD scheme enables the developers of qualifying projects to gain an index linked, government backed, revenue for 15 years. The award of a CfD contract is vitally to the commercial viability of the proposed REC. It is emphasised that CfD are not available to all forms of energy from waste facilities, such as incineration without energy recovery, but are available to advanced conversion technologies including gasification, such as the proposed development.

1.11 In order to secure the CfD contract a developer must apply to the Department for Energy and Climate Change (DECC) and demonstrate that they have met the stated criteria, including the provision of:

- Documents demonstrating that they have secured the necessary planning permission;
- A signed grid connection offer; and
- A declaration that the Proposed Development is not in receipt of Renewables Obligations (RO) or Feed in Tariff (FIT) payments.

1.12 CfDs are allocated once a year; the next allocation date is currently scheduled for November/December 2016. In order to meet all the pre-qualification conditions and to complete the CfD application in a timely manner, the proposed development must secure planning permission in advance of this date.

Pre-application Discussions

1.13 The Applicants have engaged in the pre-application consultation process with officers of Rotherham Metropolitan Borough Council (RMBC), the Waste Planning Authority (WPA) with responsibility for determining planning applications for waste-related development. The advice received was broadly supportive of the proposed development in principle and that the application site as an appropriate location, subject to findings of the required assessments. RMBC also provided guidance as to the planning policy context against which the proposed

development would be considered and identified the documentation necessary to support the planning application.

Community Consultation

- 1.14 The Applicants have actively engaged in a series of public consultation and promotional events prior to the submission of the planning application to include and inform the local and wider community of the development proposals. This included, but not limited to, a public consultation event in April 2016 at the Magna Science Adventure Centre. Full details of the community consultation are provided within the Statement of Community Consultation that accompanies the planning application.

Environmental Impact Assessment

- 1.15 The Applicants commissioned specialist consultants to undertake an Environmental Impact Assessment (EIA) to identify the potentially significant environmental effects (beneficial or adverse) arising from the proposed development. The findings from the EIA are presented within the Environmental Statement (ES) that accompanies the planning application.
- 1.16 In order to determine the scope of the EIA a request for a Scoping Opinion was submitted to RMBC (RMBC) on 22nd March 2016 (application ref. RB2016/0385). RMBC issued their Scoping Opinion on 9th May 2016. A copy of the Scoping Opinion is provided as an appendix to the ES that accompanies the planning application.

The Purpose and Content of the Planning Statement

- 1.17 This Planning Statement is not intended to duplicate details provided within the supporting plans and documents, rather it provides a comprehensive summary of the relevant matters necessary for the determination of the planning application.
- 1.18 This Planning Statement is structured as follows:
- **Chapter 1: Introduction** – introduces the planning application, Applicant, application site and proposed development;
 - **Chapter 2: Application Site and Surrounding Context** – provides a description of the application site and its immediate surrounding context, and an overview of the relevant planning history;

- **Chapter 3: Proposed Development** – provides a summary of the proposed development including the technology used, waste streams, vehicular movements, job generation, etc;
- **Chapter 4: National Policy and Guidance** – provides a summary of the relevant planning and waste management policy and guidance at a national level that comprise a material planning consideration;
- **Chapter 5: Local Policy and Guidance** - provides a summary of the relevant planning and waste management planning policy and guidance at a local level that comprise the Development Plan or other material planning considerations;
- **Chapter 6: Planning Appraisal** - assesses the proposed development in the context of the adopted planning policies within the Development Plan and other material considerations; and
- **Chapter 7: Conclusions** – provides a summary of the key findings.

Application Documentation

1.19 In addition to this Planning Statement, the planning application will comprise the following documents and drawings:

- Application Forms and Certificates
- Arboricultural Survey and Impact Statement
- Coal Risk Assessment
- Design and Access Statement
- Environmental Statement, covering the following topics:
 1. Background, Introduction & Context
 2. Site Description
 3. Development Proposals
 4. Alternatives
 5. Air Quality
 6. Townscape & Visual
 7. Traffic & Transportation

8. Hydrology & Flood Risk
9. Hydrogeology & Ground Conditions
10. Noise & Vibration
11. Ecology & Nature Conservation
12. Archaeology & Cultural Heritage
13. Socio-Economic Impact
14. Summary

- Statement of Community Consultation
- Waste Management Plan
- The following drawings:

<u>Drawing Title:</u>	<u>Drawing Ref:</u>
Existing Site Topographical Survey	4238 A100 Rev P1
Site Location Plan	4238 A101 Rev P1
Site Layout Block Plan	4238 A102 Rev P1
Proposed Roof Plan	4238 A103 Rev P1
Site Protection Plan	4238-A104 Rev P1
Proposed Boiler Room and Bunker Plans	4238-A200 Rev P1
Proposed Turbine Room Floor Plan	4238-A201 Rev P1
Education Centre, Offices and Workshop Plan	4238-A202 Rev P1
Proposed Tipping Hall Plans	4238-A203 Rev P1
Proposed Control Room Floor Plans	4238-A204 Rev P1
Proposed Boiler Room and Bunker Elevations 1 of 2	4238-A300 Rev P1
Proposed Boiler Room and Bunker Elevations 2 of 2	4238-A301 Rev P1
Proposed Offices and Warehouse Elevations	4238-A302 Rev P1
Proposed Tipping Hall Elevations	4238-A303 Rev P1
Proposed Turbine Room and Control Room Elevations	4238-A304 Rev P1
Proposed Water Plant – Plans and Elevations	4238-A305 Rev P1
Proposed Weighbridge Gatehouse – Plans and Elevations	4238-A306 Rev P1
Proposed Site Elevations and Views	4238-A401 Rev P1
Site Perspective Views	4238-A402 Rev P1

2. APPLICATION SITE AND SURROUNDINGS

Site Description

- 2.1 The application site is approximately 3.4 hectares in size and rectangular in shape. The site lies within an industrialised/urbanised area located to the northern side of Sheffield Road (A6178) in Templeborough, approximately 2km south west of Rotherham town centre, 7.5km north east of Sheffield City Centre and 1.5km east of M1 Junction 34 near Meadowhall. The western boundary of the site aligns with the boundary division of RMBC to the east and Sheffield City Council to the west.
- 2.2 The nearby uses to the west and south are generally industrial and/or commercial in nature although the residential area of Tinsley is located approximately 200m south west of the site just east of the motorway junction. The Magna science adventure centre (former Templeborough Steelworks site) lies to the east. To the north beyond the railway line and the River Don lies Blackburn Meadows Waste Water Treatment Works and Blackburn Meadows Nature Reserve and Local Wildlife Site.
- 2.3 The River Don, a main river is located approximately 0.1km to the north east of the site and flowing east. At its closest point to the site the river is approximately 20m wide. An Ordinary Watercourse, The Chapel Flat Dike, lies a short distance to the east of the site flowing in a northerly direction, within a culvert, to discharge into the River Don.
- 2.4 The site is located within Flood Zone 2 and is free from any other environmental designations. There is public sewerage infrastructure across the site which leads to Blackburn Meadows Waste Water Treatment Works. An Air Quality Management Area (AQMA) is located south of the site's boundary. The far north western corner of the site lies within a coal mining referral area. There are no Listed Buildings or Conservation Areas within the vicinity of the site. There are no public rights of way through the site.
- 2.5 The site once formed an integral part of the Templeborough Steelworks which passed through a number of ownerships from Steel Peach and Tozer to British Steel, United Engineering Steels Ltd and to Corus plc. The open part of the site was used for metal fragmentation to supply metal to the adjoining steelworks. The building was used for ingot stripping. All activities at the site ceased

following the closure of Templeborough Steelworks. The site remained vacant and the building and associated infrastructure was retained. In 2008 the Sterecycle Rotherham Waste Recycling and Treatment Facility (Autoclave Vessels and a Materials Recycling Facility (MRF)) became operational and operated within the existing building.

- 2.6 Access to and egress from the site for vehicles is via Phoenix Road to the western boundary. Phoenix Road junctions with Sheffield Road at the south west corner of the site.
- 2.7 The site itself is almost entirely concreted with the majority serving as a car park with the rest either serving as a storage area/warehouse. There are small areas of short amenity grassland and some shrubs and scrub vegetation, including along the northern boundary beside the railway line, although these are not considered to be of significant ecological value. The site is free from established and mature trees. A line of young poplar trees run north-south through part of the site, and there is a short section of overgrown hedgerow containing young beech and hawthorn along the south-eastern boundary.
- 2.8 It is proposed that the REC and MTF will provide the opportunity for power to be supplied to preferably interested local businesses or to the local electricity grid. There is also the opportunity to supply heat in the form of steam and/or hot water or a district heating system to any local businesses that may have a requirement.

Planning History

- 2.9 A review of RMBC's on-line planning history and associated documents revealed the following planning history:

Application Ref	Description of Development	Decision
RB2007/0154	Application for Lawful Development Certificate for proposed use of land and build for waste treatment for the purpose of recycling by the application of steam, temperature and pressure within sealed autoclave vessels and subsequent sorting with not less than 80% being processed into a 'product' together with ancillary storage of processed materials within the site and erection of a single storey extension to house ancillary equipment with the process undertaken on site	Granted 10 th May 2007

Application Ref	Description of Development	Decision
	to the north elevation of the existing building	
RB2008/1720	Extension to existing waste reception/recycling building, erection of two storey office building and fibre processing building, re-siting of weighbridges & gatehouse and installation of associated ancillary facilities	Granted 8 th January 2009
RB2009/0230	Retrospective application for non-compliance with Condition 1 (development only in accordance with specified plans) imposed by RB2008/1720 to allow bio-filters to be sited in amended position	Granted 9 th April 2009
RB2009/1343	Extension to form waste reception/recycling building, erection of two storey office building and fibre processing building, re-siting of weighbridges & gatehouse and installation of associated ancillary facilities (amendment to RB2008/1720)	Granted 14 th January 2010
RB2010/0491	Installation of air cooled condensers and erection of overhead pipe bridge, 4 no. silos, 2 no. external air scrubbers, 51 metre high chimney stack, weighbridge, overhead fibre transfer conveyor and use of fibre processing building as an energy from waste facility (fibre recovery facility)	Granted 12 th August 2010
RB2015/0358	Change of use of existing building to storage (use class B8) with external storage, formation of car park and temporary siting of 1 No. two storey portacabin for use as ancillary office accommodation and 1 No. single storey portacabin	Granted 7 th August 2015 Temporary planning permission for a two year period

3. DESCRIPTION OF PROPOSED DEVELOPMENT

3.1 The proposed development comprises the demolition of existing buildings, construction and operation of a REC and a MTF, on-site vehicle access arrangements and landscaping.

Demolition

3.2 The proposed development would involve the demolition of the existing buildings and structures on the site, and where relevant the breaking up of existing hardstanding.

Built Development

3.3 The proposed facility will have the capacity to process up to 215,000 tonnes of non-hazardous residual waste per annum; that is waste that is left following the practicable removal of recyclable materials (i.e. pre-treated waste) and that may otherwise be disposed of at a landfill site or exported to a similar facility abroad. The residual waste feedstock will predominantly be in the form of a Refuse Derived Fuel (RDF) which is a waste product following pre-treatment; the RDF feedstock would be supplemented by other non-hazardous pre-treated commercial and industrial waste (C&I) and pre-treated municipal solid waste (MSW). It is intended that the residual waste will primarily be sourced from within South Yorkshire; however, the planning application seeks flexibility to receive wastes from a wider catchment for practical and operational reasons. The facility will not accept hazardous or clinical waste.

3.4 Unlike incineration, the facility will employ an ACT, known as 'gasification', that heats the residual waste to very high temperatures, causing the materials to break down whilst also generating a gas which when burnt off in a boiler creates steam, which in turn drives a steam turbine to generate electricity or exported as heat.

3.5 The proposed facility will have capacity to produce circa 23MW of exportable electricity depending on the amount of heat to be exported, which in itself is dependent on the temperature and quantity of heat required by the eventual heat off-taker(s). In the event that a local user cannot be secured for the electricity it would be routed to the national distribution network.

3.6 The built development will comprise the following key elements:

- *Mechanical Pre-Treatment Plant, Tipping Hall & Waste Reception* – The building will be L-shaped in form measuring 126.6m long x 40.6m wide narrowing to 34.2m wide and at its highest point would be 21.65m above ground level. The building will accommodate the reception hall and mechanical pre-treatment plant, with the latter having its own odour control systems. The building would be finished in a combination of built up trapezoidal cladding (horizontally and vertically laid) in silver/grey with built up roof and standing seam cladding for the roof and wall feature in muted copper effect/terracotta, incorporating vents and louvres. Windows and doors would be steel or aluminium framed, doors either timber or steel, with two roller shutter doors to the northern elevation and three roller shutter doors to the eastern elevation.
- *High Level Conveyor* – Comprising a high level, enclosed conveyor located between the Mechanical Treatment Plant and the RDF Bunker.
- *Boiler Room and RDF Bunker* – This building will be T-shaped in form measuring 80m long x 57m wide and at its highest point would be 45m above ground level sloping down to an eaves height of 38.4m above ground level. The building will accommodate the fuel bunker, cranes/crane maintenance area, and gasification processing plant (gasification and combustion chambers, boiler, economiser, chemical dosing system, feed water pumps, etc). The building would be finished in a combination of built up trapezoidal vertical cladding in silver/grey and trapezoidal horizontal cladding in varied colours, with built up roof and standing seam cladding for the roof and wall feature in muted copper effect/terracotta, incorporating vents and louvres. Windows and doors would be steel or aluminium framed, doors either timber or steel.
- *Flue Stack* – A single flue stack will be located towards to the west of the Boiler Room and Bunker measuring 3.7m in diameter at its base and extend to 100m above ground level, with a walk around metal framework platform for access to the continual air quality monitoring system. The flue stack would be finished in a muted grey colour.
- *Offices, Workshops and Education Facility* – This building would be located to the north-west corner of the site. The building will measure 43m long x

20m wide and 15.75m at its narrowest point. The building will have a split roof reflecting the operational requirements within, with the southern part (primarily workshop and storage) constructed to a maximum height of 15m above ground level and the southern part (administrative offices and education centre) constructed to a maximum height of 8m above ground level at its highest point. The building will accommodate the education facility and visitors area, reception, meeting rooms, welfare facilities (toilets and kitchen), offices, workshop, storage, driver restroom, with stairs and lifts. The building would be finished in a combination of built up trapezoidal cladding (horizontally and vertically) and flat panel composite cladding in light grey incorporating vents and louvres, and glazed curtain walling in dark grey, with built up standing seam clad roof in muted copper/terracotta, incorporating rooflights. Windows and doors would be steel or aluminium framed, doors either timber or steel.

- *Control Room and Turbine Hall* – This building will be located towards the southern boundary of the site and measure 69.6m long x 23.7 wide and 16.2m at its narrowest point. The building will have a split roof with the eastern part (control room) constructed to a maximum height of 16.2m above ground level at its highest point and the western part (turbine room) constructed to a maximum height of 30.4m above ground level. The building will accommodate the electrical plant and control room, and the steam turbine/generator, cooling pumps, compressed air system, heating system and controls, etc. The building would be finished in a combination of built up trapezoidal horizontal cladding in light grey and trapezoidal horizontal cladding in varied colours incorporating vents and louvres, with built up standing seam clad roof in muted copper/terracotta. Windows and doors would be steel or aluminium framed, doors either timber or steel.
- *Water Plant Room* – This building will be located to the western elevation of the Turbine Room and Control Room building towards the southern boundary of the site. The building will measure 20.7m long x 14.9m wide and 7.5m at its narrowest point. The sloping roof design will be constructed to a maximum height of 6.9m above ground level. The building would be finished in built up trapezoidal cladding horizontally laid in silver/grey, with built up standing seam clad roof in muted

copper/terracotta. Windows and doors would be steel or aluminium framed, doors either timber or steel.

- *Weighbridge Office and Weighbridges* – The weighbridge office will be located to the north-west of the application site adjacent to the two proposed weighbridges (weighbridge in and weighbridge out). The building will be rectangular in shape measuring 5m long x 3m wide with the roof constructed to a maximum height of 3.4m above ground level. The building would be finished in flat panel cladding in silver/grey with windows and doors steel or aluminium framed, doors either timber or steel.
- *Electricity Sub-Station* – This building will be located to the south-eastern corner of the application site. The building will measure 16.4m long x 7.5m wide with the roof constructed to a maximum height of 2.8m above ground level. The external facing materials and fenestration is still to be determined, potential options include steel with cladding as per other buildings, GRP enclosure if available, or built in brick with cut timber roof and tiles.
- *External Plant* – The precise details and location of external plant will be subject to the technical design phase; however, the external plant will include (not exclusively):
 - Odour Control Plant;
 - Air Cooled Condensers (ACC) Plant;
 - Flue gas filters and associated equipment;
 - Storage silos and bunkers including storage of flue gas cleaning materials, recovered materials and residues;
 - Continuous emission monitoring equipment (CEMs);
 - Water Tank(s), pumps and fire-fighting equipment/pumps, etc;
 - Emergency diesel.
- *Vehicle Access / Service Area* – The proposed development will utilise the existing site access taken from the northern side of the A6178-Sheffield

Road via a priority T-junction arrangement and a comprehensive internal vehicular route will be provided around the entire perimeter of the application site as well as between the main Boiler Room and the Tipping Hall.

- *Vehicle Parking* - 38 car parking spaces in total which includes 2 disabled bays.
- *Cycle Parking* - Provision for 28 cycling spaces.
- *Site security* - Securing the operational area will be 2.4m high fencing with two pairs of double-leaf lockable gates.
- *Lighting* - The facility will be lit by a series of external building mounted and pole mounted directional lighting.
- *Landscaping* - Given the nature of the existing and proposed development there is limited opportunity for providing landscaping. However, additional planting will be provided to include opportunities for tree and shrub planting.

Operational Development

- 3.7 The key stages of the REC operational development are set out below:
- 3.8 *Vehicle Access* - Vehicular access to the Renewable Energy Centre will utilise the existing site access taken from the northern side of the A6178-Sheffield Road via a priority T-junction arrangement.
- 3.9 Vehicles delivering residual waste or for the import/export of process materials (i.e. delivering lime, carbon, etc or removal of metals, bottom ash, fly-ash residue, etc) will be routed to the weighbridges/Weighbridge Office. Access and egress will be controlled by security barriers, operated by staff situated within the Weighbridge Office. A weighbridge will be located in front of each barrier (in and out). Siting the weighbridges within the application site allows for vehicles to enter the facility without queuing on the public highway.
- 3.10 On arrival, waste carrying vehicles will report to the Weighbridge Office where waste documentation, waste carrier certificates and transfer notes will be checked to ensure compliance with the Duty of Care Regulations and the facility's Environmental Permit. Vehicles containing any non-conforming waste will be

quarantined and managed in accordance with the site's Environmental Permit. The quantity of waste the vehicles carry will then be assessed by passing them over the in and out weighbridges to calculate net weight.

- 3.11 The residual waste will be managed according to the different sizes of waste provider organisations, anticipated to be: Tier 1 from the major waste companies will account for approximately 60% of the waste entering the plant; Tier 2 will consist of waste from local operators and will account for 30% waste; and Tier 3 where 10% of the waste will come from the spot market. Economic and contractual obligations will play a large factor in the distance waste travels to a facility (the greater the waste needs to travel, the greater the waste management cost to the operator) and hence waste will not generally be transported over long distances. Although waste from Tier 1 will be transported from major waste organisations it is anticipated that this would be sourced from within South Yorkshire and/or from within the 1-hour drive catchment.
- 3.12 It is anticipated that residual waste will be delivered to the site via a combination of refuse collection vehicles (RCVs) which will typically be 18 to 22 tonne vehicle (gross weight) or articulated bulk haulage vehicles from nearby waste transfer stations under a Duty of Care Waste Transfer Note. The facility is expected to generate up to 126 heavy goods vehicle (HGVs) movements per day (63 in / 63 out), which is the equivalent of 55 deliveries and 8 collections per day. There would also be car trips associated with staff and visitors.
- 3.13 Staff and visitors arriving by car will be routed around the weighbridges using the passing lane and to the car park within the operational area (to either the east or south of the Offices and Workshop building). Access will be controlled by a security barrier, operated by staff situated within the Weighbridge Office.
- 3.14 *Waste Reception* – Once accepted in to the facility, all vehicles delivering residual waste would drive into the Tipping Hall of the Mechanical Treatment Plant (MTP). Once the vehicle is inside the Tipping Hall the fast acting doors will close; the Tipping Hall operates under negative pressure to draw in and contain odours. Odour control units would then clean the air and remove odours as part of the overall emissions control process.
- 3.15 Once the residual waste is unloaded within the Tipping Hall, the vehicles will exit the building; facilities are provided for delivery/collection vehicles to temporarily

lay-up within the operational area to enable drivers to use the welfare facilities located in the Office and Workshop building.

- 3.16 All residual waste would be loaded into the MTP hoppers where it would be passed through a series of shredders and magnets and Eddy Currents to enable any ferrous and non-ferrous materials not previously recovered to be extracted and to shred the material to the size required by the gasification process. The recovered metals will be collected and stored in a bunker, which will be periodically collected and sent for recycling.
- 3.17 Once passed through the MTP, the residual wastes would be conveyed using an enclosed overhead conveyor from the MTP building to the fuel bunker in the Boiler Room and Bunker building. An overhead waste crane will operate on a semi-automatic cycle (some movements would be programmed whilst other operations would be manual) and move around the fuel bunker to mix the residual waste to create a more homogeneous mixture. The crane will then deliver residual waste to the fuel hopper to the ACT unit. The fuel bunker has sufficient storage capacity to enable operations to continue without delivery of residual waste for a period of up to 4 days.
- 3.18 *Thermal Conversion* – Unlike incineration, gasification does not burn (combust) the residual waste, but heats the materials at high temperatures until their composition breaks down. The thermal conversion will take place in two stages. The first stage involves the gasification (heating) of the residual waste within the gasification unit (primary chamber). The outputs from the gasification process is a synthetic gas called 'syngas' and 'bottom ash' (see Ash Management below). The second stage involves the high temperature oxidation of the syngas within the high-temperature oxidation unit (secondary chamber), whereupon there is a complete breakdown of Carbon Monoxide (CO), Total Organic Carbon (TOC) with a final production of a flue gas with low Nitrogen Oxides (NOx) content.
- 3.19 Changing the residual waste to syngas, means the combustion environment can be finely controlled to achieve compliance with the emissions thresholds of the Industrial Emissions Directive (IED) related to combustion (Directive 2010/75/EU of the European Parliament and the Council on industrial emissions).
- 3.20 *Heat Recovery* - The heat recovery system is located adjacent to the gasifiers and combustion chamber. Energy is recovered from the flue gas from the secondary chamber to produce steam or very hot water. Depending on how the energy is

utilised (heat or electricity), the boiler system is designed to deliver saturated steam and superheated steam.

- 3.21 Depending on how the energy is to be utilised (heat or electricity), the boiler system is designed to deliver saturated steam (for the delivery of heat) or superheated steam (for the production of electricity).
- 3.22 *Energy System* – The energy system will consist of a turbine with generator and to the exterior of the building an air cooled vacuum condenser and condensate pumps. Generated electricity will be connected to the Power Company's distribution network. Condensate from the air-cooled condenser will be directed to the feed water tank of the boiler system by condensate pumps.
- 3.23 If required the turbine can be fitted with a suitable extraction point to enable steam, at the appropriate pressure, to be taken from the turbine for use by nearby local consumers.
- 3.24 *Air Pollution Control / Flue Gas Cleaning System* – The gasses generated during the thermal conversion process, having passed through the heat recovery system, enter the flue gas cleaning system. This will comprise a bag house filter, a storage silo for lime and activated carbon, and a filter dust silo. In summary, the flue gases are passed through a bag house filter, where upon lime and activated carbon will be injected to adsorb any contaminants in the flue gas. The bag house filter residue (referred to Air Pollution Control Residue (APCR)), comprises the salts created with the lime and the contaminants such as SO₂, HCl, HF, etc, and with the activated carbon and the heavy metals and dioxins and furans, which is collected and stored in the filter dust silo. The APCR is a hazardous waste, due to its high alkaline content, which would be disposed of at an appropriately licenced hazardous waste landfill. The cleaned flue gas is then discharged to the atmosphere via the stack.
- 3.25 *Control and Monitoring System* – The facility will operate within the terms and conditions set out with the statutorily required Environmental Permit, which is independently authorised, monitored and enforced by the Environment Agency. The facility will be equipped with a control and monitoring system that will provide automatic control of the process during normal operating conditions and continually monitored by fully trained and experienced staff. The emissions from the flue stack are continually monitored to ensure compliance with the emissions thresholds of the Industrial Emissions Directive (IED); in the unlikely event that

emissions thresholds could be breached the facility would be temporarily shut-down until resolved. All emissions data is collated and made available to the Environment Agency.

- 3.26 *Maintenance* - Maintenance will be programmed to occur three times a year and necessitates the ceasing of operations for two minor shutdowns for inspection of around one week each and one major shutdown for maintenance of around three weeks. These times would be programmed to coincide with the manufacturer's shutdown periods. Across the rest of scheduled operation, ad-hoc maintenance and other generation drop-out periods associated with grid-synchronisation and the processing of non-homogenous wastes may result in the need for short-term shut-downs. This includes periods when one line is shut down for maintenance whilst the other lines remain operational. Total shutdown will only be required for maintenance of common systems.
- 3.27 *Bottom Ash Management* (ash from the gasification process) - The ash discharged from the gasification unit (primary chamber) is temporarily stored on site within the bottom ash bunker before being transferred off-site disposal. The ash can be either recycled/recovered, or disposed of at an appropriately licensed landfill site.
- 3.28 *Electricity/Heat Connection* - The Applicant is currently in on-going discussions with local business users for the export of electricity and/or heat via a private connection. Accordingly, the installation and operation of electricity grid connection cabling and/or heat pipework connection are not included within the scope of the Proposed Development.
- 3.29 *Surface Water Management* - A sustainable urban drainage system (SUDs) is proposed for managing the disposal of surface water from the proposed development on the site. As the use of infiltration devices is not appropriate for the majority of the site flow balancing methods are proposed, comprising a system piped and geocellular storage tanks, in order to attenuate surface water runoff to greenfield runoff rates with discharges to the local watercourse.
- 3.30 *Hours of Operation* - The facility will operate continuously: 24 hours a day, 7 days per week.
- 3.31 *Staffing* - The facility will employ circa 42 full time equivalents directly employed over three shifts and a further 10 staff providing specialist services from local

businesses. The staffing complement comprises a variety of skills and levels of expertise, and there will be employment opportunities for local people.

- 3.32 *Vehicle Movements* – During weekdays the facility will be open for deliveries between the hours of 07:00 and 19:00. It is expected that HGVs importing and exporting materials from the site will do so evenly throughout the 12-hour period and there is unlikely to be a peak in movements associated with these operations.
- 3.33 The facility is expected to generate up to 126 heavy goods vehicle (HGVs) movements per day (63 in / 63 out), which is the equivalent of 55 deliveries and 8 collections per day. There would also be car trips associated with circa 42 staff, albeit operating on a shift pattern. It is expected that HGVs importing and exporting materials from the site will do so evenly throughout the 12-hour period and there is unlikely to be a peak in movements associated with these operations.

Construction

- 3.34 Subject to the grant of planning permission, it is anticipated that the construction of the proposed facility would commence in Q4 2017. It is anticipated that construction would last for approximately 30 months followed by a 9.5-month period of commissioning which may overlap with the latter stages of construction.
- 3.35 The construction process would involve the demolition of existing buildings and site clearance, construction of principal access routes, construction of buildings, service areas and parking, followed by the installation of both internal and external plant, and commissioning; landscaping works would be carried out at the end of the construction process.
- 3.36 Construction would normally take place during the hours of 07:00 to 18:00 (Monday to Friday) and 08:00 to 13:00 (Saturday); no construction would take place on Sundays or bank holidays.
- 3.37 Environmental control measures will be imposed to minimise adverse environmental effects during the entire construction phase, from site set-up/demolition works to commissioning. A Construction Environmental Management Plan (CEMP) will be prepared addressing potential effects on noise, vibration, air quality, water quality, surface quality (prevention of contamination of ground/surface waters), site transportation and traffic management, visual intrusion and waste management, as well as providing details on general 'housekeeping' including monitoring and recording, and a mechanism for

communication/addressing complaints from members of the public. The appointed contractor will also be required to register with the Considerate Construction Scheme and will be required to adhere to legislative requirements and standard best construction practice which also includes measures to minimise construction noise/vibration and dust generation both within the site and along the agreed construction routes. Any departures from the CEMP will be submitted to RMBC in advance.

- 3.38 It is anticipated that waste will be generated during all stages of the construction phase. A Site Waste Management Plan (SWMP) will be prepared and all relevant contractors will be required to seek to minimise waste arising at source and, where such waste generation is unavoidable, to maximise its recycling and reuse potential.

4. NATIONAL POLICY AND GUIDANCE

4.1 This chapter provides a summary of the key relevant national planning policy, strategy and guidance that may be material to the determination of the planning application. These comprise the:

- National Planning Policy Framework (NPPF), published 27th March 2012;
- Waste Management Plan for England (WMPE), published December 2013;
- National Planning Practice Guidance (NPPG), initially published 6th March 2014 and periodically updated;
- National Planning Policy for Waste (NPPW), published October 2014;
- Overarching National Policy Statement for Energy (EN-1), published July 2011;
- National Policy Statement for Renewable Energy Infrastructure (EN-3), published July 2011;
- Guidance on Applying the Waste Hierarchy and the accompanying Applying the Waste Hierarchy: evidence summary, both published June 2011; and
- Energy from Waste: A guide to the debate, published February 2014.

National Planning Policy Framework (March 2012)

4.2 **The National Planning Policy Framework (NPPF)** was published on 27th March 2012. The NPPF sets out the Government's overarching planning policies for England. The NPPF reiterates that planning law requires that applications for planning permission must be determined in accordance with the development plan unless material considerations indicate otherwise and confirms that the NPPF is a material planning consideration in the determination of planning applications (**paragraph 2**).

4.3 The NPPF does not contain specific policies with regards waste-related development as this is provided within the National Waste Management Plan for England (discussion on this document provided below). However, the NPPF requires that in the preparation of waste plans and the taking of decisions on

waste-related planning applications local authorities should have regard to the policies in the NPPF in so far as they are relevant (**paragraph 5**).

- 4.4 The NPPF states that the purpose of the planning system is to contribute to the achievement of sustainable development by balancing the economic, social and environmental roles of development. These roles should not be undertaken in isolation as they are mutually dependent. To achieve sustainable development the planning system should therefore play an active role in guiding development to sustainable solutions (**paragraphs 7 and 8**).
- 4.5 The overarching NPPF policy principle applicable to both plan-making and decision-taking is the 'presumption in favour of sustainable development'. The NPPF states that for decision-taking this means approving development proposals that accord with the development plan without delay. Where the development plan is absent or silent or where policies are out-of-date, planning permission should be granted unless any adverse impacts would significantly and demonstrably outweigh the benefits, or specific policies in the NPPF indicate that development should be restricted (**paragraph 14**).
- 4.6 Sections 2, 3, 5, 6, 8, 9 and 13 of the NPPF are not relevant to the Proposed Development.
- 4.7 **Section 1 'Building a Strong, Competitive Economy'** seeks to secure economic growth to create jobs and prosperity, building on the country's inherent strengths and meeting the twin challenges of global competition and of a low carbon future (**paragraph 18**). Furthermore, the NPPF highlights that planning should operate to encourage and not act as an impediment to sustainable growth and that significant weight should be placed on the need to support economic growth through the planning system (**paragraph 19**).
- 4.8 **Section 4 'Promoting Sustainable Transport'** seeks to facilitate sustainable development whilst contributing to the wider sustainability and health objectives, reducing the need to travel and balancing favour towards sustainable modes of transport. The NPPF requires that developments likely to generate significant amounts of movements should be supported by a Transport Statement or Transport Assessment, with decisions taking account of the opportunities (depending on the nature and location of the site) for sustainable modes of transport to reduce the need for major transport infrastructure, safe and suitable access for all people, and that improvements can effectively limit significant

impacts such that development should only be refused where the residual cumulative impacts are severe (**paragraph 32**).

- 4.9 The NPPF confirms that plans and decisions should ensure that developments that generate significant movements are located where the need to travel is minimised (**paragraph 34**). Furthermore, the NPPF advises that plans should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people (**paragraph 35**), such that developments should be located and designed where practical, inter alia, to accommodate the efficient delivery of goods and supplies.
- 4.10 **Section 7 'Requiring Good Design'** attaches great importance to the design of the built environment, seeking to achieve high quality and inclusive design for all development including individual buildings, public and private spaces and wider area development schemes (**paragraphs 56 and 57**). The NPPF identifies a range of criteria for developments, including that it should: function well and add to the overall quality of the area for its lifetime; establish a sense of place to create attractive and comfortable places to work; optimise the potential of the site to accommodate development; respond to the character and history of the site and its surrounding while not preventing or discouraging appropriate innovation; create safe and accessible environments; and are visually attractive as a result of good architecture and appropriate landscaping (**paragraph 58**). Whilst recognising the importance of appearance the NPPF requires that planning authorities should not refuse permission for buildings or infrastructure that promote high levels of sustainability because of concerns regarding incompatibility with an existing townscape if those concerns have been mitigated by good design (**paragraph 65**).
- 4.11 **Section 10 'Meeting the challenge of climate change, flooding and coastal change'** focuses on climate change, covering aspects of renewable energy and flood risk management.
- 4.12 The NPPF identifies the key role the planning system has to play in supporting the delivery of renewable energy which is considered central to the economic, social and environmental dimensions of sustainable development. To help increase the use and supply of renewable energy local planning authorities are directed to recognise the responsibility on all communities to contribute to energy generation and should, inter alia, have a positive strategy to promote energy from renewable and low carbon sources, design policies to maximise renewable and low carbon

energy development whilst ensuring the adverse impacts are satisfactorily addressed, and identify opportunities where development can draw its energy supply from decentralised, renewable or low carbon energy supply systems (**paragraphs 95 to 97**).

- 4.13 The NPPF also states that in determining planning applications, local authorities should not require applicants to demonstrate the overall need for renewable or low carbon energy and to recognise that even small-scale renewable schemes provide a valuable contribution to cutting greenhouse gas emissions. Furthermore, that local planning authorities should approve applications for renewable energy generation if its impacts are (or can be made) acceptable (**paragraph 98**).
- 4.14 With regards flood risk the NPPF requires that inappropriate development in areas of flood risk should be avoided (**paragraph 100**). In the determination of planning applications local planning authorities should ensure that flood risk is not increased elsewhere and should only be considered appropriate in areas at risk of flooding where informed by a site-specific flood risk assessment, following a sequential test and, if required, an exception test (**paragraph 103**). However, the requirements of the sequential test need not apply for individual developments on sites allocated in development plans following a sequential test (**paragraph 104**).
- 4.15 **Section 11 'Conserving and enhancing the natural environment'** provides the policy framework with regards conserving and enhancing the natural environment, covering a range of aspects including: protecting and enhancing valued landscapes, geological conservation interests and soils; recognising the wider benefits of ecosystems; minimising impacts on biodiversity and providing net gains in biodiversity; preventing both new and existing development from contributing to or being put at an unacceptable risk from or being adversely affected by levels of soil, air, water or noise pollution or land instability; and remediating and mitigating despoiled, derelict, contaminated and unstable land, as appropriate (**paragraph 109**).
- 4.16 The NPPF seeks for local planning authorities, in the preparation of plans, to minimise pollution and other adverse effects on the local and natural environment, allocating land with the least environmental or amenity value where consistent with other policies in the NPPF (**paragraph 110**). The NPPF advises that planning policies and decisions should encourage the effective use of land by

re-using land that has been previously developed (brownfield land), provided that it is not of high environmental value (**paragraph 111**).

- 4.17 With regards matters of landscape the NPPF advises that great weight should be afforded to conserving landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty (AONB), affording these designations the highest status of protection (**paragraph 115**). The NPPF states that planning permission 'in' these designated areas should be refused except in exceptional circumstances where it is demonstrated they are of in the public interest, and setting criteria for their consideration (**paragraph 116**).
- 4.18 With regards matters of ecology and nature conservation the NPPF seeks to conserve and enhance biodiversity by directing local planning authorities to apply the following principles, inter alia: if significant harm resulting from a development cannot be avoided, adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused; development likely to have an adverse effect on a SSSI (either individually or in combination with other developments) should not normally be permitted, except where the benefits of the development at the site clearly outweigh both the impacts on those special features of the SSSI and any broader impacts on the network of SSSIs; opportunities to incorporate biodiversity should be encouraged; and planning permission should be refused where development would result in the loss or deterioration of irreplaceable habitats (including ancient woodland, aged/veteran trees) unless the benefits clearly outweigh the loss (**paragraph 118**).
- 4.19 The NPPF advises that with regards the use of potentially contaminated or unstable sites the responsibility for securing a safe development rests with the developer and/or landowner (**paragraph 120**). However, the NPPF also seeks for local planning authorities to ensure that a site is suitable for its new use taking into account ground conditions and land instability, including hazards occurring naturally or from a former use (**paragraph 121**).
- 4.20 In applying the above, local authorities are guided to focus on whether the development itself is an acceptable use of land and the impact of use, rather than the control of processes or emissions where these are subject to approval under pollution control regimes. With this regard, local planning authorities are to assume that these regimes operate effectively (**paragraph 122**).

- 4.21 With regards to noise, the NPPF seeks for decisions to avoid significant adverse impacts on health and quality of life from noise; to mitigate and reduce to a minimum other adverse impacts on health and quality of life arising from noise from new development; recognise that development will often create some noise and existing businesses wanting to develop should not have unreasonable restrictions placed upon them; and to identify areas of tranquillity which are valued for this reason (**paragraph 123**).
- 4.22 With regards to air quality, the NPPF confirms that planning policies should sustain compliance with and contribute towards national objectives for pollutants, taking into account the presence of Air Quality Management Areas (AQMA) and the cumulative impacts on air quality from individual sites in local areas. Planning decisions should be consistent with the local Air Quality Action Plan (**paragraph 124**).
- 4.23 Furthermore, the NPPF encourages good design of built development that limits the impact of light pollution from artificial light on local amenity and nature conservation (**paragraph 125**).
- 4.24 **Section 12 'Conserving and enhancing the historic environment'** seeks the conservation and enhancement of the historic environment, stating a requirement for applicants to describe the significance of any heritage assets that may be affected and their setting, at a level proportionate to the potential impact and the asset's importance. Local planning authorities are directed to consider both the relative significance of an asset and the desirability of sustaining or enhancing this significance, the positive contribution it makes to sustainable communities including their economic viability and the desirability the new development takes to the local character and distinctiveness (**paragraph 128**).
- 4.25 In setting the general principles of '**Decision-taking**' the NPPF requires that local planning authorities should "... **approach decision taking in a positive way to foster the delivery of sustainable development**" and "**seek to approve applications for sustainable development where possible**". With this regard the NPPF concludes by stating that authorities "**should work proactively with applicants to secure developments that improve the economic, social and environmental conditions of the area**" (**paragraphs 186 and 187**).

- 4.26 Whilst in terms of '**Determining applications**' the NPPF, confirms that the planning system is plan-led and that **"planning law requires that applications for planning permission must be determined in accordance with the development plan unless material considerations indicate otherwise and that the NPPF is a material consideration in the planning process"** and that **"in assessing and determining development proposals, local planning authorities should apply the presumption in favour of sustainable development"** (paragraphs 196 and 197).

Waste Management Plan for England (December 2013)

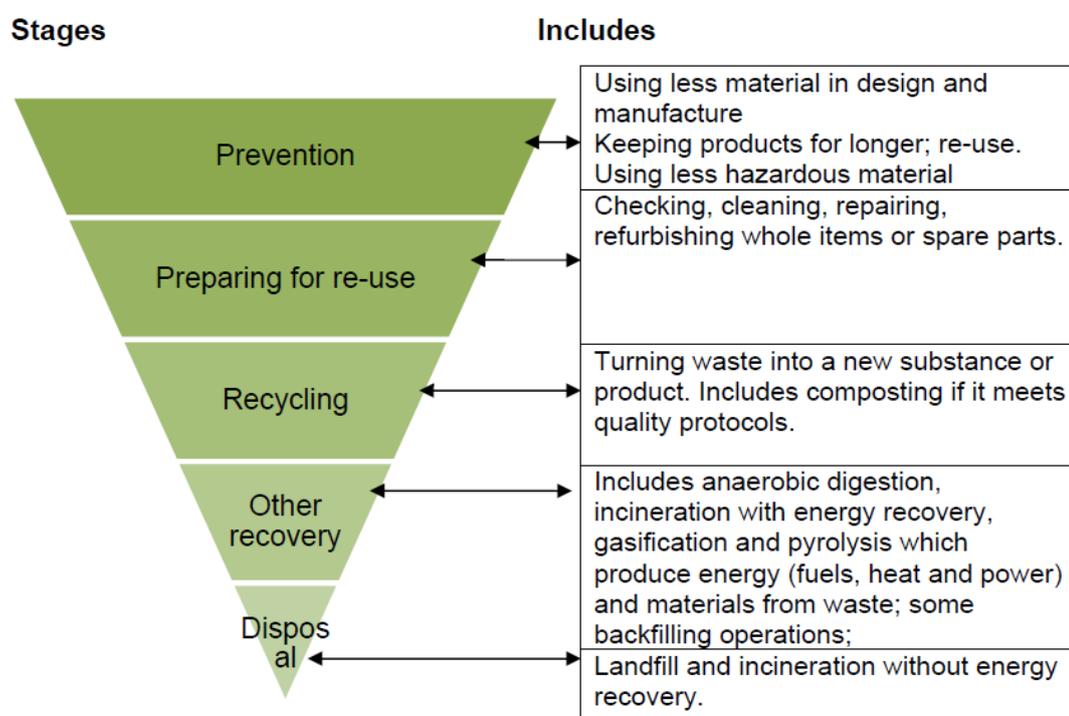
- 4.27 The **Waste Management Plan for England (WMPE)** was published in December 2013 and sets out where the Government is now in terms of the waste generated in England and how those materials can be managed. It supersedes and records progress made since the publication of the Waste Strategy for England 2007.
- 4.28 The introduction to the WMPE identifies its purpose as a high level document which is non-site specific. The WMPE provides an analysis of the current waste management situation in England and evaluates how it will support implementation of the objectives and provisions of the revised Waste Framework Directive (WFD)¹. The WMPE covers matters relating to municipal waste (household waste and commercial waste similar to household waste), industrial waste (including agricultural) and commercial waste, construction and demolition wastes, and hazardous wastes.
- 4.29 With regards the waste management planning policy at the time of the WMPE's publication, it states that:

"National planning policy on waste is currently set out in Planning Policy Statement 10 'Planning for Sustainable Waste Management'. It provides the planning framework to enable local authorities to put forward, through local waste management plans, strategies that identify sites and areas suitable for new or enhanced facilities to meet the waste management needs of their areas. This policy is currently being updated and has been subject to public consultation. Once it has been finalised, the updated policy will replace Planning Policy Statement 10 as the national planning policy for sustainable waste management." (Page 2)

¹ Directive 2008/98/EC of the European Parliament and of the Council, 19 November 2008

4.30 The WMPE (page 10) sets out how the Government is working towards moving beyond our current throw-away society to a 'zero waste economy' in which material resources are reused, recycled or recovered wherever possible and only disposed of as the option of last resort. The WFD defines waste management as **"the collection, transport, recovery and disposal of waste, including supervision of such operations and the after-care of disposal sites, and including actions taken as a dealer or broker"**.

4.31 Underpinning waste management in England, and enshrined in law through the Waste (England and Wales) Regulations 2011 is the waste hierarchy (see below, extracted from the WMPE page 11).



4.32 The proposed development falls within the scope of 'Other Recovery' for which the WMPE (page 13) states that **"The Government supports the efficient energy recovery from residual waste – of materials that cannot be reused or recycled - to deliver environmental benefits, reduce carbon impact and provide economic opportunities"**, albeit noting that the Government aims to get the most energy out of waste, not to get the most waste into energy recovery. With this regard it is noted that **"It is for the Environment Agency to determine on a case by case basis whether an application for an environmental permit constitutes a waste recovery or a disposal operation"**.

- 4.33 In terms of waste regulation, the WMPE confirms (page 15) that **“The Environment Agency is the main regulator of waste management in England. Among its responsibilities are the determination of applications for environmental permits required under Article 23 of the revised Waste Framework Directive; and carrying out inspection and other compliance assessment activities.”**
- 4.34 With regards the import and export of waste materials, the WMPE notes that (page 20) **“The UK also exports refuse derived fuel (RDF) mainly to northern continental Europe and Scandinavia for energy recovery. RDF is mixed solid waste that has been pre-treated so it consists largely of combustible components such as plastic and biodegradable waste. Exports of RDF have increased significantly in recent years in response to the rising costs of landfill in the UK. Exports of wood/biomass for energy recovery are not included within the RDF data. Exports of RDF have risen from zero in 2009 to 13,258 tonnes in 2010 and 887,465 tonnes in 2012.”**
- 4.35 The WMPE sets out the Government’s ambitions for waste management highlighting **“...the importance of putting in place the right waste management infrastructure at the right time and in the right location. We aim to have the appropriate waste reprocessing and treatment infrastructure constructed and operated effectively at all levels of the waste hierarchy to enable the most efficient treatment of our waste and resources”** (page 29).
- 4.36 The WMPE notes that the revised WFD establishes the principles of ‘proximity’ requiring each member state to **“...establish an integrated and adequate network of waste disposal installations for recovery of mixed municipal waste collected from private households...”** and confirming that this requirement also includes where such collection also covers waste from other producers (page 29). Furthermore, that **“The network must enable waste to be disposed of, or be recovered, in one of the nearest appropriate installations, by means of the most appropriate methods and technologies, in order to ensure a high level of protection for the environment and public health.”** This is required to enable member states to move towards self-sufficiency in waste disposal and recovery.

- 4.37 Reference to waste planning policy (page 30) is no longer relevant following the publication of the National Planning Policy for Waste in October 2014 (see below).
- 4.38 With regards to the appropriate technologies to managing residual waste, the WMPE draws on the findings of the 2011 Waste Review. The WMPE clearly states that the Government does not express a preference for one technology over another, since local circumstances differ. Any given technology is more beneficial if both heat and electricity can be recovered. Particular attention should therefore be given to the location of the plant to maximise opportunities for heat use (pages 31 and 32).

National Planning Practice Guidance (March 2014, as amended)

- 4.39 On the 6th March 2014 the Department for Communities and Local Government (DCLG) launched the web-based **National Planning Practice Guidance (NPPG)**. The web-based format allows DCLG to update the NPPG electronically periodically, and for the avoidance of doubt, where this Planning Statement relies upon the advice, reference is drawn to the date the relevant section of the guidance was published.
- 4.40 The most relevant guidance in the NPPG to the application is set out in the section entitled '**Waste**' and in particular paragraphs 002, 004, 006/007, 009 and 050.
- 4.41 **Paragraph 002** (16/10/2014) sets out a list of matters which can be considered as waste operations. Whilst it indicates that it is a non-exhaustive list and though interpretation is ultimately a matter for the courts, it identifies that both 'energy from waste incineration and other waste incineration' and 'pyrolysis/gasification' constitute 'waste development'.
- 4.42 **Paragraph 004** (16/10/2014) sets out the role of the waste planning authority (in this instance SBC) in implementing the European Waste Framework Directive, specifically with regards: Article 4, the waste hierarchy; Article 13, the protection of human health and the environment; Article 16, the principles of proximity and self-sufficiency; Article 28, waste management plans; and article 34 periodic inspections. In this respect and with regards the determination of planning applications for waste facilities, Annex 1 (**paragraph 55**, 16/10/2014) notes that the application of the Article 4, the waste hierarchy, is capable of being a material consideration in determining proposals of waste management facilities; and that

planning authorities have a duty to have regard to the provision of Articles 13 and 16 in the exercise of their planning functions.

- 4.43 **Paragraphs 006 and 007** (16/102014) are concerned with the local planning authority's obligation under Article 16 of the Waste Framework Directive, as transposed into The Waste (England and Wales) Regulations 2011 (Regulation 18), to have regard to the principles of self-sufficiency and the proximity in the exercising of their planning functions. **Paragraph 007**, clearly states that **"Though this should be the aim, there is no expectation that each local planning authority should deal solely with its own waste to meet the requirements of self-sufficiency and proximity principles. Nor does the proximity principle require using the absolute closest facility to the exclusion of all other considerations."** The guidance continues by identifying that in certain circumstances it may be uneconomic to have a facility in each local authority or that there may be significant economies of scale for cross-border facilities to enable waste to be handled effectively. Most notably, the guidance states **"The ability to source waste from a range of locations/ organisations helps ensure existing capacity is used effectively and efficiently, and importantly helps maintain local flexibility to increase recycling without resulting in local overcapacity."**
- 4.44 **Paragraph 009** (16/102014) expresses that moving waste up the Waste Hierarchy is an integral part of the WMPE and national planning policy for waste. Furthermore, that national waste planning policy is capable of being a material consideration in decisions on planning applications for waste management facilities.
- 4.45 **Paragraph 050** (16/10/2014) requires that where issues are covered by other regulatory regimes, waste planning authorities (in this instance RMBC), should assume that these regimes will operate effectively. Accordingly, **"The focus of the planning system should be on whether the development itself is an acceptable use of the land and the impacts of those uses, rather than any control processes, health and safety issues or emissions themselves where these are subject to approval under other regimes."**
- 4.46 With this regard, it is noted (**paragraph 051**, 16/10/2014) that it is **"The role of the environmental permit, regulated by the Environment Agency, is to provide the required level of protection for the environment from the operation of a waste facility. The permit will aim to prevent pollution**

through the use of measures to prohibit or limit the release of substances to the environment to the lowest practicable level. It also ensures that ambient air and water quality meet standards that guard against impacts to the environment and human health.”

National Planning Policy for Waste (October 2014)

4.47 The **National Planning Policy for Waste (NPPW)** was published in October 2014 and replaces Planning Policy Statement 10: Planning for Sustainable Waste Management (PPS10).

4.48 **Paragraph 1** acknowledges that the WMPE sets out the Government’s ambition to work towards a more sustainable and efficient approach to resource use and management. Furthermore, that positive planning plays a pivotal role in delivering this country’s waste ambitions through:

- “• **delivery of sustainable development and resource efficiency, including provision of modern infrastructure, local employment opportunities and wider climate change benefits, by driving waste management up the waste hierarchy (see Appendix A);**
- **ensuring that waste management is considered alongside other spatial planning concerns, such as housing and transport, recognising the positive contribution that waste management can make to the development of sustainable communities;**
- **providing a framework in which communities and businesses are engaged with and take more responsibility for their own waste, including by enabling waste to be disposed of or, in the case of mixed municipal waste from households, recovered, in line with the proximity principle;**
- **helping to secure the re-use, recovery or disposal of waste without endangering human health and without harming the environment; and**
- **ensuring the design and layout of new residential and commercial development and other infrastructure (such as safe and reliable transport links) complements sustainable waste management, including the provision of appropriate storage and segregation facilities to facilitate high quality collections of waste.”**

4.49 In terms of determining planning applications for waste development, **Paragraph 7** advises that waste planning authorities should:

- “• **only expect applicants to demonstrate the quantitative or market need for new or enhanced waste management facilities where proposals are not consistent with an up-**

to-date Local Plan. In such cases, waste planning authorities should consider the extent to which the capacity of existing operational facilities would satisfy any identified need;

- recognise that proposals for waste management facilities such as incinerators that cut across up-to-date Local Plans reflecting the vision and aspiration of local communities can give rise to justifiable frustration, and expect applicants to demonstrate that waste disposal facilities not in line with the Local Plan, will not undermine the objectives of the Local Plan through prejudicing movement up the waste hierarchy;
- consider the likely impact on the local environment and on amenity against the criteria set out in Appendix B and the locational implications of any advice on health from the relevant health bodies. Waste planning authorities should avoid carrying out their own detailed assessment of epidemiological and other health studies;
- ensure that waste management facilities in themselves are well-designed, so that they contribute positively to the character and quality of the area in which they are located;
- concern themselves with implementing the planning strategy in the Local Plan and not with the control of processes which are a matter for the pollution control authorities. Waste planning authorities should work on the assumption that the relevant pollution control regime will be properly applied and enforced;
- ensure that land raising or landfill sites are restored to beneficial after uses at the earliest opportunity and to high environmental standards through the application of appropriate conditions where necessary."

4.50 **Appendix A** provides a copy of the waste hierarchy (see **paragraph 4.31** of this Planning Statement).

4.51 **Appendix B** sets out the factors to be used to test the suitability of sites and areas in the preparation of Local Plans and in determining planning applications, depending on their applicability with regards the envisaged waste management facility in terms of type and scale. The factors are:

- protection of water quality and resources and flood risk management;
- land instability;
- landscape and visual impacts;
- nature conservation;

- conserving the historic environment;
- traffic and access;
- air emissions, including dust;
- odours;
- vermin and birds;
- noise, light and vibration;
- litter; and
- potential land use conflict.

Overarching National Policy Statement for Energy (EN-1) (July 2011)

4.52 The **Overarching National Policy Statement for Energy (EN-1)** was published by the Department of Energy & Climate Change (DECC) in July 2011 and sets out the national policy for the energy infrastructure. Whilst relevant to projects in excess of 50MW, paragraph 1.2.1 explains that it may be a material consideration in decision making on applications that fall under the Town and Country Planning Act 1990 (as amended).

4.53 Paragraph 3.4.1 sets out the UK commitments to sourcing 15% of energy from renewable sources by 2020. To achieve this target and to largely decarbonise the power sector by 2030, EN-1 states that:

“It is necessary to bring forward new renewable electricity generating projects as soon as possible. The need for new renewable energy electricity generation projects is therefore urgent.”

4.54 The National Policy Statement (NPS) sets out how the energy sector can help deliver the Government’s climate change objectives by clearly setting out the need for new low carbon energy infrastructure to contribute to climate change mitigation.

4.55 **Paragraph 3.4.1** reiterates the UK Government’s commitment to sourcing 15% of its total energy (across the sectors of transport, electricity and heat) from renewable sources by 2020 and that new projects need to continue to come forward urgently to ensure that this target is met.

4.56 **Paragraph 3.4.3** indicates that future large-scale renewable energy generation is likely to come from a range of sections including onshore and offshore wind, biomass, energy from waste (EfW) and wave and tidal energy. In terms of Energy from Waste (EfW) it states that:

“...the principal purpose of the combustion of waste, or similar processes (for example pyrolysis or gasification) is to reduce the amount of waste going to landfill in accordance with the Waste Hierarchy and to recover energy from that waste as electricity or heat. Only waste that cannot be re-used or recycled with less environmental impact and would otherwise go to landfill should be used for energy recovery. The energy produced from the biomass fraction of waste is renewable and is in some circumstances eligible for Renewables Obligation Certificates, although the arrangements vary from plant to plant”

4.57 **Paragraph 3.4.4** recognises that the ability of EfW to deliver predictable, controllable electricity which is increasingly important in ensuring the security of UK supplies.

4.58 **Part 4** of EN-1 sets out a range of ‘Assessment Principles’ with **Part 5** providing guidance on the consideration of ‘Generic Impacts’ associated with large-scale energy generation schemes.

National Policy Statement for Renewable Energy Infrastructure (EN-3) (July 2011)

4.59 The **National Policy Statement for Renewable Energy Infrastructure (EN-3)** was also published by DECC in July 2011 and sets out the national policy for renewable energy projects. NPS EN-3 should be read in conjunction with EN-1.

4.60 EN-3 sets out the importance of renewable energy in achieving the Government’s ambitious targets for renewable energy generation, highlighting that a significant increase in generation from large-scale renewable energy infrastructure is necessary to meet the 15% renewable energy target.

4.61 **Paragraph 2.5.2** acknowledges that the recovery of energy from the combustion of waste will play an increasingly important role in meeting the UK’s energy needs. It goes on to say that where the waste burned is deemed renewable, this can also contribute to meeting the UK’s renewable energy targets. The paragraph concludes by advising that the recovery of energy from the combustion of waste forms an important element of waste management strategies in both England and Wales.

Guidance on Applying the Waste Hierarchy and Applying the Waste Hierarchy: evidence summary, published June 2011

4.62 The **Guidance on Applying the Waste Hierarchy** and the accompanying **Applying the Waste Hierarchy: evidence summary**, were both published in June 2011 by the Department of Environment Food and Rural Affairs (DEFRA). Their purpose was to guide persons in the application of Regulation 12 of the Waste (England and Wales) Regulations 2011, which states that:

“12.-(1) An establishment or undertaking which imports, produces, collects, transports, recovers or disposes of waste, or which as a dealer or broker has control of waste must, on the transfer of waste, take all such measures available to it as are reasonable in the circumstances to apply the following waste hierarchy as a priority order –

- (a) Prevention**
- (b) Preparing for re-use**
- (c) Recycling;**
- (d) Other recovery (for example energy recovery);**
- (e) Disposal”**

4.63 Regulation 12(2) makes provision for the departure from the waste hierarchy so as to achieve the best overall environmental outcome where justified by life-cycle analysis and in the context of the overall impacts of the generation and management of waste. Regulation 12(3) provides further guidance on the considerations that should be taken into account where departing from the waste hierarchy.

4.64 The waste hierarchy is defined under Section 1.1 of the Guidance; this is exactly as presented within the WMPE (page 11) (as shown above, see paragraph 4.31 of this Planning Statement).

4.65 The accompanying Evidence Base report sets out the current scientific research on the environmental effects of various waste management options and explains how the options for dealing with waste have been ranked in the order of environmental preference in the waste hierarchy. The Evidence Base reiterates the waste hierarchy as the WMPE (page 11) with the added notes confirming that ‘Disposal’ relates to landfill and incineration without energy recovery, noting that the Waste Framework Directive sets the efficiency threshold above which municipal waste incinerators can be classified as either recovery or disposal.

4.66 Of most relevance to the proposed development is Section 15 'Residual Black Bag Waste', which provides most discussion/guidance with regards Energy Recovery. The Evidence Base notes that there are three common routes for producing energy from residual waste: i) intermediate technologies such as mechanical and biological treatment to create Solid Recovered Fuel (SRF); ii) Direct Combustion; and iii) Gasification or Pyrolysis. The Evidence Base, in referring to the 2009 UK Renewable Energy Strategy, identifies "**...waste biomass as an under-used resource that could provide a significant contribution to renewable energy targets and reduce the total amount of waste that is landfilled in the UK**". Furthermore, it notes that generating heat only, or heat and electricity together, are ways of making energy production more efficient, and that combined heat and power (CHP) should be implemented wherever possible. With regards the energy recovery technologies, the guidance distinguishes between (ii) direct combustion (incineration) and (iii) gasification. Gasification is then defined as the heating of organic materials including mixed waste or biomass, at high temperature with a reduced amount of oxygen or steam, producing a solid residue and a synthetic gas (syngas), which can be processed to produce electricity.

Energy from Waste: A guide to the debate, February 2014

4.67 The **Energy from Waste: A guide to the debate** was published by DEFRA and whilst not a policy document it does provide guidance on the underlying principles of waste management in accordance with the overarching UK Government strategy and relevant legislation.

4.68 **Definitions** - Energy from Waste (EfW) is defined (paragraph 12) as the term used to collectively describe a number of different treatment processes and technologies that are used to generate usable forms of energy and to reduce the solid volume of residual waste. It is also noted that 'incineration' is "**...often used erroneously to describe all energy from waste processes...**" Other terms of relevance to the proposed development and in the interpretation of the Guide, and that provide clarity to the overall debate on energy recovery, include:

- Conversion Treatments - "**...processes which convert residual or RDF/SRF into a more useable form of energy such as heat or electricity. These processes include: incineration; gasification (including plasma gasification); pyrolysis; anaerobic digestion (from mixed residual waste, often as part of an MBT process)**" (paragraph 16).
- Residual Waste - "**...mixed waste that cannot be usefully reused or recycled and which may contain material that could theoretically be**

- recycled, if they were perfectly separated and clean, but these materials are currently too contaminated for recycling to be economically or practically feasibly. It may also be that there is currently no market for the material or it is uneconomic to take to market” (paragraph 18).
- Partially renewable energy – “...energy which comes from renewable non-fossil sources...Residual waste contains a significant proportion of materials like food and wood (‘biogenic’ materials) and energy from this proportion is considered renewable. However, residual waste also contains waste from ‘fossil’ sources (oil etc.) such as plastic. Therefore when energy is recovered from mixed residual waste it is considered to be only a partially renewable energy source...” (paragraph 19).
- 4.69 **Capacity** – In terms of capacity and infrastructure, the Guide states that the UK has a predominantly market-led approach to infrastructure such that it helps to “...avoid the development of too much, or too little, energy from waste capacity” (paragraph 27). The Guide continues by referencing a Eunomia² report which estimated a 22mt/annum capacity gap in residual waste treatment within Great Britain and whilst this is anticipated to decrease in light of consented capacity to be brought forward, there is still a 7mt/annum capacity gap.
- 4.70 **Waste Hierarchy** – Section 2 of the Guide references the waste hierarchy as a guide to sustainable waste management and a legal requirement of the EU Waste Framework Directive, enshrined in UK law through the Waste (England and Wales) Regulations 2011. The Waste Hierarchy is again inserted (as per the WMPE, page 11), and it is stated that “...waste should be treated at the optimal level in the hierarchy in environmental and economic terms” (paragraph 20).
- 4.71 **Typical Residual Waste and its Carbon Content** – In clarifying the contents of typical residual waste the Guide notes that it will contain a mixture of different materials such as paper, food, plastic, clothes, glass and metals, noting that this will contain some wastes that would have come from biological sources (e.g. food) for which the carbon stored is referred to as ‘biogenic carbon’, and some waste from fossil fuels (e.g. plastics), and mixtures of both. Accordingly, a typical black bag of residual waste (noting definition above) will contain between 50% to 66% of biogenic carbon materials.
- 4.72 In terms of carbon saving, the Guide notes that energy from waste plants will generate some energy, which, in addition to that required to run the facility itself

² Residual Waste Infrastructure Report – High Level Analysis, Eunomia (2011)

(the parasitic load), would substitute energy that would be otherwise generated by conventional gas-fired power stations, such that the fossil carbon element of residual waste would be offset by the saving from a conventional gas-fired station, reducing the overall impacts. In summary, the Guide notes that **“...in carbon terms, currently energy from waste is generally a better management route than landfill for residual waste”**.

- 4.73 **Recovery or Disposal** – The Guide provides additional information on the distinction between Recovery (R1) and Disposal (D10), for which it is noted that all municipal waste incinerators (noting the definitions used in this Guide clearly state this relates to combustion technologies, not gasification) were and are deemed as disposal activities (D10) unless and until they are shown to meet the requirements of R1. Whilst noting that having R1 status is **“...important for planning purposes and in the application of the Proximity Principle...”** (paragraph 54) the Guide also states **“R1 status is not mandatory for energy from waste plant and will not form part of an environmental permit”** (paragraph 53, emphasis added).
- 4.74 **Exports** – Commentary is provided (paragraph 57) with regards the UK’s ability to manage SRF/RDF, such that domestic capacity has not matched the expansion of material produced and passing through MBT facilities. It is reported that in 2012 some 963,944 tonnes of RDF was exported from the UK, and that whilst such exports are permissible, the energy recovered from the waste is a lost resource to the UK and does not contribute to the UK renewable energy targets.
- 4.75 **The Proximity Principle** – The Guide clearly explains the context and interpretation of the ‘Proximity Principle’ and how this relates to the consideration of new EfW facilities. The proximity principles is routed in Article 16 of the Waste Framework Directive ‘Principles of self-sufficiency and proximity’. However, the Guide confirms that this principle is **“...often over-interpreted to mean that all waste has to be managed as close to its source as possible to the exclusion of other considerations”** (paragraph 152, emphasis added). The Guide clearly states that this is not so. Furthermore, that in quoting the Waste Framework Directive the proximity principles requires that mixed municipal waste **“...be recovered in one of the nearest appropriate installations, by means of the most appropriate methods and technologies, in order to ensure a high level of protection for the environment and public health”** (paragraph 152). The implications of which are summarised as:

- It does not have to be the absolute closest facility to the exclusion of all other considerations;
- It may be justified to use a more distant solution;
- It does not require the construction of new facilities to provide capacity in every country and equally the presence of capacity elsewhere does not preclude the development of a more proximate solution;
- There is no reference to administrative boundaries other than the overall EU border, nor does it imply a facility can only process 'local' waste.

4.76 The Guide clearly states **"There is nothing in the legislation or proximity principle that says accepting waste from another council, city, region or country is a bad thing and indeed in many cases it may be the best economic and environmental solution and/or be the outcome most consistent with the proximity principle"** (paragraph 154). The Guide continues by stating that **"...an overemphasis on restricting facilities to 'local waste', particularly by defining it by administrative ownership of waste and the boundaries and quantities it implies, can lead to sub-optimal solutions in terms of cost, efficiency and environmental impact; and a significant loss of long term flexibility"** (paragraph 155). Furthermore, the Guide states that **"The ability to source waste from a range of locations/organisations helps ensure existing capacity is used effectively and efficiently and importantly helps maintain local flexibility to increase recycling without resulting in local overcapacity for residual waste"** (paragraph 156).

4.77 **Permitting and Control** – The Guide reaffirms the role of the Environment Agency as the regulatory authority responsible for issuing, monitoring and enforcing compliance with an Environment Permit in accordance with The Environmental Permitting (England and Wales) Regulations 2010, and necessary for operating an EfW facility. In addition, the Guide confirms that EfWs are required to comply with the requirements of the Industrial Emissions Directive (IDD) which sets mandatory emission limit values (ELVs) and monitoring requirements for a range of potential emissions.

4.78 **Forward Policy** – Finally, the Guide states that the UK Government **"...sees a long term role for energy from waste both as a waste management tool and as a source of energy"**. Furthermore, that EfW **"...is in a unique position to fulfil a range of objectives across a number of Government departments. For DEFRA it helps divert waste out of landfill, for DECC it is a potential source of low carbon energy, for DCLG it can be a**

contributor to waste planning objectives and for DfT it is a potential source for a variety of transport fuels” (paragraph 214), albeit the latter is not relevant to the proposed development. The four key principles stated as underpinning current thinking on energy from waste are stated as:

- **“i) energy from waste must support the management of waste in line with the waste hierarchy;**
- **ii) energy from waste should seek to reduce or mitigate the environmental impacts of waste management and then seek to maximise the benefits of energy generation;**
- **iii) Government support for energy from waste should provide value for money and make a cost effective contribution to UK environmental objectives in the context of overall waste management and energy goals;**
- **iv) Government will remain technology neutral expect where there is a clear market failure preventing a technology competing on a level footing”** (paragraph 219).

5. LOCAL PLANNING POLICY AND GUIDANCE

- 5.1 This chapter provides a summary of the key relevant policies of the Development Plan for the area and emerging planning policy documents that may be material to the determination of the planning application.
- 5.2 The Development Plan for the area as relevant to waste management planning applications comprises the following:
- Barnsley, Doncaster and Rotherham Joint Waste Plan (adopted March 2012);
 - Rotherham Core Strategy 2013-2028 (adopted September 2014); and
 - Saved policies of the Rotherham Unitary Development Plan (adopted June 1999).

The Development Plan

Barnsley, Doncaster and Rotherham Joint Waste Plan (March 2012)

- 5.3 Whilst RMBC is a unitary authority, and thereby a WPA, planning policy on waste matters has been carried out jointly with Barnsley Metropolitan Borough Council and Doncaster Metropolitan Borough Council. The **Barnsley, Doncaster and Rotherham Joint Waste Plan (BDRJWP)** was adopted in March 2012 and sets out the overall approach to managing waste across the metropolitan boroughs over the period to 2026. The BDRJWP predates both the NPPF and NPPW (see Chapter 4 of this Statement).
- 5.4 The BDRJWP sets out at **Paragraph 2.31** that by 2026, Barnsley, Doncaster and Rotherham must provide sufficient new waste management facilities to meet the capacity shortfall of around 517,000 tonnes of recycling, treatment and recovery capacity for municipal, commercial and industrial waste. It goes on to advise that this could be met through the provision of three large sites (100-400,000 tonnes/year) or a number of smaller sites. Table 7 from the plan, repeated on the following page, shows the total new municipal, commercial and industrial recycling treatment and recovery capacity required to meet the future shortfall. The figures indicated are presented as thousand tonnes per year.

Additional recycling, composting and treatment capacity	2010	2015	2021	2026
Municipal waste	0	167	324	337
Commercial and industrial waste	237	132	155	180
Total	237	299	479	517

5.5 **Policy WCS1 (Barnsley, Doncaster and Rotherham’s Overall Strategy for Achieving Sustainable Waste Management)** advises that provision will be made to maintain, improve and expand the network of waste management facilities throughout Barnsley, Doncaster and Rotherham to achieve sustainable waste management across all waste streams. All development proposals must promote high quality design and the key principles that will guide the assessment of waste proposals include, inter alia:

- Large scale waste management proposals will be directed towards the strategic site allocations where possible;
- Innovative waste management technologies will be allowed and promoted where these support the vision and aims of the Joint Waste Plan;
- Proposals will be supported which enable Barnsley, Doncaster and Rotherham’s waste to be managed locally, whilst allowing waste to be imported or exported where this represents the most sustainable option;
- Priority will be given to waste proposals which maximise the reuse of vacant or underused brownfield land, particularly within established employment areas; and
- Waste proposals will be directed towards accessible locations with good transport links, particularly in and around urban areas.

5.6 The supporting text at **Paragraph 3.20** advises that meeting the capacity shortfall will require a combination of different waste facilities and processes on both existing and new strategic sites. This includes safeguarding of existing sites that have a strategic role within the waste management network (including the application site – see Policy WCS2 below) and the provision of three additional large-scale waste recycling, composting, treatment and recovery facilities.

- 5.7 **Policy WCS2 (Safeguarding and Enhancing Existing Strategic Waste Management Sites)** identifies the application site as a 'Safeguarded Site' to help achieve recycling, composting and recovery targets as well as the requirements of statutory bodies, and also ensure the delivery of municipal waste management strategies. It goes on to say that where sites are expanded or redeveloped to improve efficiency or accommodate new facilities, the opportunity must be taken to reduce or mitigate their impact and develop innovative solutions that move waste up the hierarchy in line with the vision and aims of the Joint Waste Plan and other policy requirements. These proposals will be assessed in the same way as they would on non-allocated sites.
- 5.8 The supporting text at **Paragraph 4.2** advises that the purpose of this policy is to protect and safeguard these sites for waste management purposes. Particularly on the basis that, inter alia, they are essential to achieving the overall strategy of the BDRJWP; the capacity of these sites will continue to make a significant contribution towards meeting overall waste needs and capacity targets across the plan area; and safeguarding these sites provides flexibility in the event that waste facilities do not come forward on other strategic sites as anticipated/or capacity targets are revised in light of new evidence.
- 5.9 Furthermore, **Paragraph 4.3** indicates that in some cases there may be scope to increase the capacity of existing licensed waste management facilities to improve their operational efficiency or accommodate new waste processes and technologies.
- 5.10 **Policy WSC6 (General Considerations for all Waste Management Proposals)** sets out a range of criteria against which waste development proposals in the plan area (on both allocated and unallocated sites) will be assessed. Proposals will only be permitted where they can demonstrate how they would, inter alia, provide:
- Support the vision, aims and overall strategy of the BDRJWP;
 - Provide access to and from the main transport network;
 - Ensure there is adequate highway capacity to accommodate additional vehicles generated;
 - Ensure there is adequate space on site for vehicles to enter, wait, unload and leave safely;

- Propose technology which is suitable for the location and nature of the site;
- Provide high quality design and architecture sympathetic to its context and surroundings;
- Provide adequate means of controlling noise, vibration, glare, dust, litter, odour and vermin, and other emissions (e.g. greenhouse gases and leachate);
- Would not result in loss or damaged to the diversity of wildlife and habitats;
- Will not have an adverse impact upon the quality of ground and surface water or drainage;
- Will not have an adverse impact upon the significance of heritage assets and features;
- Will not reduce the safety of air travel;
- Will not increase the risk of flooding elsewhere in the catchment areas and will, where possible, improve the existing flood risk situation; and
- Will maximise any training and educational opportunities arising from the development.

5.11 The policy goes on to advise that proposals must include sufficient information with the planning application to demonstrate how they comply with the criteria. This will include:

- the type of process;
- the amount and type of waste to be handled or treated at the site (together with any residues) and how they will be addressed (including estimated annual throughput); and
- Details of proposed hours of working, expected number of existing and proposed employees and the anticipated number and type of vehicle movements per day both in and out of the site.

- 5.12 The supporting text at **Paragraph 4.27** advises that the locations with the greatest potential for recycling and treatment are concentrated on existing industrial estates and employment areas within or adjoining the main urban areas of the three boroughs. Other suitable locations may also include vacant brownfield land and sites adjacent to an existing waste management uses. It goes on to advise that new recovery technologies (e.g. energy from waste) will particularly suit locations that have access to gas, electricity and freight networks.
- 5.13 With regard to EfW proposals, **Paragraph 4.29** indicates that the opportunity should be taken to supply renewable energy (e.g. heat or electricity) to existing or new networks, such as district heating or combined heat and power schemes. This will contribute towards reducing carbon footprint and addressing energy needs over the long term.
- 5.14 **Policy WCS7 (Managing Waste in all Developments)** advises that all development proposals (including waste management facilities) must submit a Waste Management Plan as part of the planning application. Such plans will need to, inter alia, include:
- Information on the amount and type of waste that will be generated from the site;
 - Measures to reduce, re-use and recycle waste within the development;
 - An assessment to re-use or adapt existing buildings on the site – if demolished an explanation why it is not possible to retain them;
 - Construction and design measures that minimise the use of raw materials and encourage the re-use of recycled or secondary resources; and
 - Details on how the development will be monitored following its completion.
- 5.15 Furthermore, where waste management plans include on-site recycling, recovery and re-processing provision they must demonstrate how these activities will comply with the requirements set out under Policy WCS6.
- 5.16 In accordance with the provisions of Policy WCS7, a Waste Management Plan accompanies the submission of the planning application.

Rotherham Core Strategy 2013-2028 (September 2014)

- 5.17 The **Rotherham Core Strategy** was adopted in September 2014 and covers the plan period 2013 to 2028. The Core Strategy has been prepared in the context of the NPPF and sets out a "spatial" strategy identifying the towns and settlements where, inter alia, new housing schemes and land to support new industry and business are required. It also sets out the strategic policies to achieve this strategy, taking into consideration potential environmental impacts and the implications of climate change. A supporting Sites and Policies document will show specific development sites and contain policies to guide the release of land and design of new development (see paras 5.36 to 5.39 below).
- 5.18 **Policy CS9 (Transforming Rotherham's Economy)** advises that Rotherham's economic performance and transformation will be supported by, inter alia, protecting viable employment sites and supporting the regeneration and intensification of previously developed land.
- 5.19 The supporting text at paragraph 5.4.16 describes how the policy supports proposals which would help achieve the safeguarding of established industrial and business areas through improvements to buildings, infrastructure and the environment.
- 5.20 **Policy CS14 (Accessible Places and Managing Demand for Travel)** states that the Council will work to make places more accessible and on changing travel behaviour. Accessibility will be promoted through the proximity of people to employment, leisure, retail and health and public services by, inter alia, the use of Transport Assessments for appropriate sized developments, and not allowing development in AQMAs unless traffic and air quality impacts are appropriately mitigated.
- 5.21 **Policy CS 20 (Biodiversity and Geodiversity)** advises that the Council will conserve and enhance Rotherham's natural environment. Biodiversity and geodiversity resources will be protected and measures will be taken to enhance these resources in terms of nationally and locally prioritised sites, habitats and features and protected and priority species.
- 5.22 **Policy CS21 (Landscape)** sets out how new development will be required to safeguard and enhance the quality, character, distinctiveness and amenity value of the Borough's landscapes.

- 5.23 **Policy CS 23 (Valuing the Historic Environment)** advises that Rotherham's historic environment will be conserved, enhanced and managed by requiring proposals to, inter alia, conserve and enhance the heritage significance and setting of the borough's heritage assets, specifically those elements which contribute to the distinct identity of the borough.
- 5.24 **Policy CS25 (Dealing with Flood Risk)** indicates that proposals will be supported which ensure that new development is not subject to unacceptable levels of flood risk, does not result in increased flood risk elsewhere and, where possible, achieves reductions in flood risk overall. Sites within Flood Zone 2 will only be considered when it can be demonstrated that there are no reasonably available sites within Flood Zone 1 and similarly sites with Flood Zone 3 will only be considered where there are no reasonably available sites within Flood Zones 1 or 2. The extent and impact of flooding will be reduced by, inter alia, requiring all developments on brownfield sites to reduce surface water run-off by at least 30%, unless it can be demonstrated to be impracticable or unfeasible.
- 5.25 **Policy CS27 (Community Health and Safety)** indicates that development proposals will be supported which protect, promote or contribute to securing a healthy and safe environment and minimises health inequalities. Development should seek to contribute towards reducing pollution and not result in pollution or hazards which may prejudice the health and safety of communities or their environments. Appropriate mitigation measures may be required to enable development. When the opportunity arises remedial measures will be taken to address existing problems of land contamination, land stability or air quality. Furthermore, proposals within Coal Mining Development Referral Areas must be accompanied with a risk assessment.
- 5.26 **Policy CS28 (Sustainable Design)** advises that proposals for development should respect and enhance the distinctive features of Rotherham. Development proposals should be responsive to their context and be visually attractive as a result of good architecture and appropriate landscaping.
- 5.27 **Policy CS30 (Low Carbon & Renewable Energy Generation)** sets out that proposals for the development of renewable and low carbon sources of energy will be encouraged provided that there are no unacceptable adverse effects on, residential living conditions, amenity and quality of life; character and appearance of the landscape and surrounding area; biodiversity, geodiversity and water

quality; historical, archaeological and cultural heritage assets; and highway safety and infrastructure.

- 5.28 The supporting text at paragraph 5.7.44 advises that whilst the greatest potential renewable resource in Rotherham Borough is medium and large commercial scale wind power, it also recognises the potential of, inter alia, energy from waste.

Saved policies of the Rotherham Unitary Development Plan (June 1999)

- 5.29 The **Rotherham Unitary Development Plan (UDP)** was adopted in June 1999 and was intended to cover the period 1986 to 2001 and therefore its quantitative provisions are time expired. Full weight cannot be given to the saved policies of the plan because it was not adopted in accordance with the Planning and Compulsory Purchase Act 2004 and any weight that is given will depend on the degree of consistency with the NPPF (paragraphs 214 and 215).
- 5.30 The Plan's policies have however, for the most part been saved. The Secretary of State's (SoS) "saving letter" of 17th September 2007 makes it plain that the extended policies should be read in context and notes that it is likely that material considerations, in particular the emergence of new national Policy, will be afforded considerable weight.
- 5.31 The saved policies of the UDP of relevance to the proposed development include:
- 5.32 **Policy EC3.1 (Land Identified for Industrial and Business Uses)** advises that within areas allocated on the Proposals Map for industrial and business use, development proposals falling within Classes B1, B2 and B8 will be acceptable, subject to no adverse effect on the character of the area or on residential amenity; adequate arrangements for the parking and manoeuvring of vehicles associated with the proposed development; and compatibility with adjacent existing and proposed land uses.
- 5.33 **Policy ENV2 (Conserving the Environment)** indicates that the Council will ensure effects on the wildlife, historic and geological resources of the Borough are fully taken into account. The Council will only permit development where it does not adversely affect key environmental resources; the character or quality of the wider environment; and where development causes environmental losses that these are reduced to a minimum and outweighed by enhancements in compensation for losses.

5.34 **Policy ENV3 (Borough Landscape)** states that the Council recognises the vital importance of maintaining and enhancing the landscape of the Borough and this will be taken into account when considering development proposals, taking full account of their effect on and contribution to the landscape.

5.35 **Policy ENV3.2 (Minimising the Impact of Development)** advises that in considering scale, appearance, nature and location of development and infrastructure proposals, the Council will seek to minimise adverse impact on the environment and to conserve and improve its quality.

Emerging Planning Policy

Rotherham Site and Policies Development Plan Document (Publication Draft, September 2015)

5.36 The **Rotherham Sites and Policies Development Plan Document (DPD)** was published for consultation in September 2015 and when adopted will supersede the remaining saved policies of the UDP and form part of the Development Plan alongside the adopted Core Strategy and BDRJWP. The Sites and Policies DPD will support the delivery of the Core Strategy and Joint Waste Plan by allocating development sites to meet Core Strategy targets for new housing, retail and employment land and providing development management policies to guide the determination of planning applications and the implementation of the site allocations. The DPD was submitted for examination on 21st March 2016 and it is anticipated that the examination will commence in July 2016. Adoption of the DPD is not anticipated until late 2016/early 2017.

5.37 The relevant policies in the emerging DPD that would in time be applicable to the proposed development include:

- Policy SP 29 (Sustainable Transport for Development)
- Policy SP 35 (Green Infrastructure and Landscape)
- Policy SP 36 (Conserving the Natural Environment)
- Policy SP 50 (Understanding and Managing Flood Risk and Drainage)
- Policy SP 55 (Pollution Control)
- Policy SP 56 (Hazardous Installations)

- Policy SP 57 (Contaminated and Unstable Land)
- Policy SP 58 (Design Principles)
- Policy SP 59 (Car Parking Layout)

5.38 However, in accordance with paragraph 216 of the NPPF, due weight may only be given to policies in the emerging plans according to:

- The stage in preparation of the emerging plan;
- The extent to which there are unresolved objections to relevant policies; and
- The degree of consistency with the NPPF.

5.39 Therefore, given that the emerging DPD has not been subject of examination or been adopted, little weight should be given to the emerging plan in the determination of this planning application in accordance with aforementioned paragraph of the NPPF.

Rotherham Community Infrastructure Levy (Submission Draft, February 2016)

5.40 The **Rotherham Community Infrastructure Levy Submission Draft Charging Schedule** was submitted for examination on 12th February 2016 and an examination hearing was held on 28th April 2016.

5.41 The proposed Community Infrastructure Levy (CIL) rates set out in the Draft Charging Schedule are shown in the table below:

Type of Development	Charge Area	CIL Charge Rate (£/m ²)
Residential Zone 1 High	Broom, Moorgate, Whiston, Wickersley, Bramley & Ravenfield	£55
Residential Zone 2 Medium	Rural North West, the Dearne and South Rotherham	£30
Residential Zone 3 Low	Rest of Rotherham Urban Area (part)	£15
Residential Zone 4	Bassingthorpe Farm Strategic Allocation	£15

Retirement Living	Borough-wide	£20
Supermarket	Borough-wide	£60
Retail Warehouse / Retail Park	Borough-wide	£30
All Other Uses	Borough-wide	£0

5.42 The proposed development would fall within the 'All Other Uses' category and accordingly CIL would not be payable should the Charging Schedule be adopted at the point of determining the planning application.

6. PLANNING APPRAISAL

6.1 Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that all planning applications be determined in accordance with the Development Plan unless material considerations indicate otherwise.

6.2 This section addresses the planning matters that may be considered material to the determination of the planning application, set in the context of the statutory Development Plan and material considerations as set out within Chapters 4 and 5 of this Statement.

6.3 The relevant planning matters are:

- The Principle of Waste Management Facilities;
- Proximity Principle and Location of Waste Management Facilities;
- Landscape and Visual Amenity;
- Transport and Highways;
- Air Quality;
- Noise;
- Light Pollution;
- Cultural Heritage;
- Ecology and Nature Conservation;
- Flood Risk and Drainage;
- Contaminated Land;
- Permitting and Pollution Control;
- Design;
- Coal Mining Risk Assessment;
- Restoration;
- Employment; and
- The Principle of Sustainable Development and Planning Balance.

6.4 Each of the above matters is addressed separately as follows:

The Principle of Waste Management Facilities

6.5 As a starting point it is important to note that the proposed REC will manage residual waste, which is waste that is left following the practicable removal of recyclable materials (i.e. pre-treated waste), either as RDF or as other pre-treated wastes. Furthermore, the proposed REC would use a proven form of ACT, known as gasification, to generate circa 23MW of exportable electricity depending on the amount of heat to be exported, which in itself it dependent on the

- temperature and quantity of heat required by the eventual heat off-taker(s). The proposed REC would have capacity to process up to 215,000 tonnes of waste per annum.
- 6.6 *Waste Hierarchy* - In accordance with the waste hierarchy the proposed REC constitutes 'other recovery', that is a technology that produces energy from the waste. This is explicit in the Overarching National Policy Statement for Energy (EN-1) which states (paragraph 3.4.3) that **"... the principal purpose of the combustion of waste or similar processes ... is to reduce the amount of waste going to landfill in accordance with the Waste Hierarchy and to recover energy from that waste as electricity and heat"** (emphasis added).
- 6.7 In this respect the WMPE (page 10) indicates that in moving towards the 'zero waste economy' materials should be reused, recycled or recovered wherever possible. The WMPE illustrates the waste hierarchy (page 11) and explicitly (in text) identifies 'gasification which produces energy' as a technology falling within the 'other recovery' tier, and thereby not the lowest tier which is reserved for 'landfill and incineration without energy recovery'. In this respect, the WMPE indicates the Government's support for the recovery of energy from residual waste and identifies that this also delivers environmental benefits, reduces carbon impacts and provides economic opportunities (page 13).
- 6.8 Similarly, the NPPW (paragraph 1) states the driving of waste management up the waste hierarchy supports the achievement of sustainable development and resource efficiency. The NPPW (Annex A) also provides an illustration of the waste hierarchy with the supporting text identifying 'other recovery' as where **"Waste can serve a useful purpose by replacing other materials that would otherwise have been used"**, with 'disposal' being **"the least desirable solution where none of the above options is appropriate"**. Given that the proposed REC will serve a useful purpose (i.e. the recovery of energy) and thereby replace other less desirable materials (i.e. fossil fuels used for conventional energy generation), it is clear that within the scope of the NPPW definition of the waste hierarchy the proposed REC constitutes 'other recovery'. Similarly, that moving waste up the waste hierarchy is also an integral part of the NPPG (paragraph 009).
- 6.9 The application of the waste hierarchy is manifest in Article 4 of the European Waste Framework Directive and translated into UK legislation through the Waste (England and Wales) Regulations 2011. The waste hierarchy is defined within

Regulation 12 as comprising: **“(a) prevention; (b) preparing for re-use; (c) recycling; (d) other recovery (for example energy); and (e) disposal.”**

- 6.10 Government (DEFRA) Guidance on Applying the Waste Hierarchy (Section 1.1), illustrates the waste hierarchy as identified in the WMPE (see above) which explicitly identifies gasification as falling within ‘other recovery’. The Guidance and accompanying Evidence Base distinguishes between different forms of energy from waste technologies, such that incineration (direct combustion) is clearly differentiated from gasification. Accordingly, when applying the waste hierarchy ‘gasification’ falls within the ‘other recovery’ tier in its own right, unlike incineration for which it is necessary to demonstrate the difference between incineration with energy (i.e. falling within ‘other recovery’) or incineration without energy (i.e. falling within ‘disposal’); no such distinction is made with regards gasification.
- 6.11 Similarly, the more recent Government (DEFRA) Energy from Waste: A guide to the debate report also makes this distinction (explicitly stating the relevant definitions and that the term incineration is often erroneously used to cover all forms of energy from waste) and requires that waste be treated at the highest tier of the waste hierarchy in environmental and economic terms (paragraph 20). The waste hierarchy is again illustrated as that shown in the WMPE (see above) which explicitly identifies gasification as falling within ‘other recovery’.
- 6.12 The Guide to the Debate also makes a distinction between recovery (R1) and disposal (D10) operations for which it states that all municipal waste incinerators (noting that differentiation between incineration and gasification) be deemed as disposal unless and until they are demonstrated to exceed the threshold to qualify as a recovery operation. In summary, the formula used calculates the efficiency of the municipal solid waste incinerator and expresses this as a fraction, based on the total energy produced as a proportion of the fuel incinerated, and incorporates a number of variables that can only be determined with any accuracy at the detailed technology design phase. Furthermore, the formula is dependent on the proportion of energy that is output as heat or electricity, which can only be determined once the balance of energy off-take has been established following the negotiations for supply contracts at the post-planning stage.
- 6.13 Notwithstanding the above, whilst the Guide to the Debate indicates that demonstrating R1 status is **“... important for planning purposes and in the application of the Proximity Principle ...”** (paragraph 54) it also clearly states

that "**R1 status is not mandatory for energy from waste plant** [Energy from Waste being defined as all conversion technologies, including incineration and gasification] **and will not form part of an environmental permit**" (emphasis added).

- 6.14 It is worthy of note that neither the NPPF, WMPE, NPPG nor EN-1 make reference to the R1 status being required to be demonstrated in order to meet the requirements of the waste hierarchy. It is also worthy of note that many of the energy from waste plants within the UK are capable of being R1 compliant, but because this is not a mandatory requirement unless the facility proposing to import waste from abroad, the operators have not applied to the Environment Agency (as the body responsible for certifying the R1 calculation) for such certification.
- 6.15 It is therefore clear that whilst demonstrating the recovery credentials of a facility is 'important' the use of the R1 calculation is not a 'mandatory' requirement nor is it required for environmental permitting; furthermore, the R1 calculation can only be established with any accuracy at a post-planning phase once technology design and balance of energy off-take has been confirmed, and in any event the waste hierarchy identifies gasification as an 'other recovery' operation. It is therefore interpreted that the R1 status is not required to be demonstrated with regards the proposed REC development, which is for gasification, and that the waste hierarchy clearly identifies gasification as forming an 'other recovery' operation.
- 6.16 The application site is located within an existing industrial area that is allocated in the Joint Waste Plan as a 'Safeguarded Site' by Policy WCS2. The purposes of these sites are to protect and safeguarded existing sites used for waste management purposes and are essential to achieving the overall strategy of the Joint Waste Plan. The capacity of these sites will make a significant contribution to meeting overall waste needs and capacity targets across the Plan area and in some cases there may be scope to increase the capacity of existing sites to improve their operational efficiency or accommodate new waste processes and technologies. This is echoed by Policy WCS1 of the Joint Waste Plan where large scale waste management proposals will be directed towards strategic allocations where possible and that innovative waste management technologies will be allowed and promoted where they support the vision and aims of the Joint Waste Plan. Furthermore, priority will be given to waste proposals which maximise the

reuse of vacant or underused brownfield land, particularly within established employment areas. This last point is reflected in Policy CS9 of the Rotherham Core Strategy where Rotherham's economic performance and transformation will be supported by, *inter alia*, protecting viable employment sites and supporting the regeneration and intensification of previously developed land.

- 6.17 Accordingly, the proposed REC, a waste management proposal, would be consistent with the provisions of the Joint Waste Plan (Policies WCS1 and WCS2) and the Rotherham Core Strategy (Policies CS9) on the basis that the facility will be located on a parcel of land safeguarded for waste management purposes, it is located within an existing employment area, the proposal will be making more efficient use of an area of previously developed land through the use of an innovative waste management technology, and the site is in an accessible location with good transportation links. The combination of which will contribute towards the performance of the local economy and assist with the regeneration and transformation of this part of Rotherham.
- 6.18 Whilst in terms of energy generation, Policy CS30 of the Rotherham Core Strategy is supportive which encourages development of renewable and low carbon sources of energy providing there are no unacceptable adverse effect on residential amenity, character and appearance of the area, biodiversity, etc. The supporting text to the policy at Paragraph 5.7.44 goes on to acknowledge the potential renewable resources including the potential of energy from waste.
- 6.19 The proposed REC will generate circa 23MW of exportable electricity depending on the amount of heat to be exported, which in itself it dependent on the temperature and quantity of heat required by the eventual heat off-taker(s). The Applicant is currently in discussions with a number of potential local recipients of the energy that will be generated at the proposed REC. Accordingly, it is proposed that the electricity generated would be routed by private wire to a nearby user and/or, in the event that a local user cannot be secured, routed to the national distribution network. Similarly, it is proposed that the heat generated at the facility would also be routed to a local user and/or potentially used within the facility. The application site is appropriately located adjacent to high-energy users.
- 6.20 Accordingly, the proposed REC would be consistent with the objectives of Rotherham Core Strategy (Policy CS30) by providing the infrastructure for renewable energy production. The benefit of which could be felt in the local

economy with the Applicant involved in on-going negotiations for the supply of energy (heat and electricity) to local business users.

6.21 In summary, moving waste up the waste hierarchy is an integral facet of European and national legislation and thereby enshrined in national and local planning policy. With this respect it is emphasised that:

- i) The proposed REC would only treat residual waste, that is waste that is left following the practicable removal of recyclable materials (i.e. pre-treated waste) and thereby cannot be treated at any higher tier of the waste hierarchy;
- ii) The proposed REC will use gasification, an ACT, that recovers energy from the waste in the form of heat and/or electricity, the proportion of which will depend on the off-take user;
- iii) Gasification is explicitly identified within the waste hierarchy as stated in the WMPE, NPPW, the Defra Guidance on Applying the Waste Hierarchy and Defra Energy from Waste: A Guide to the Debate as falling within the 'other recovery' tier and therefore does not fall within the lowest tier of the waste hierarchy;
- vi) Gasification, as distinct from incineration, is not required within the waste hierarchy to demonstrate whether it qualifies as 'other recovery' (R1) or 'disposal' (D10), and therefore calculating R1 is not a necessary facet to demonstrate its energy recovery credentials;
- v) Notwithstanding the above, demonstrating compliance with R1 status is not a mandatory requirement for Energy from Waste facilities as stated in the DEFRA Guide to the Debate;
- vi) The proposed REC is in accord with local planning policies that seek to maximise opportunities for renewable energy production, and encourages and supports the delivery of renewable and low carbon infrastructure;
- vii) The REC would also recover value through the removal of ferrous / non-ferrous metals; and
- viii) The REC would also recover value through the recycling/re-use of the bottom ash from the gasification process which can be used as construction materials / road substrate.

6.22 Accordingly, the proposed REC is compliant and supportive of the waste hierarchy in recovering value from residual waste at the highest tier as possible.

6.23 *Need* - The need for the proposed REC is set in the context of both the national and local perspective, with the NPPW requiring that a quantitative or market need should only be required to be demonstrated where proposals are not consistent with an up-to-date Local Plan (paragraph 7). The DEFRA Guide to the Debate references a 2011 European report that identified that even when taking into account the consented yet unbuilt capacity, there remains an estimated 7mt/annum capacity gap in residual waste treatment within Great Britain. Furthermore, that the UK's ability to manage SRF/RDF is insufficient to meet the

expansion in materials produced and passing through Mechanical and Biological Treatment Plants (MBTs), which extract the recyclate. The Guide to the Debate states that in 2012 circa 963,944 tonnes of RDF was exported from the UK; the WMPE (page 20) identifies that the volume of RDF exported from the UK has grown significantly, from zero in 2009 to nearly 900,000 tonnes in 2012. The Guide to the Debate notes that whilst such exports are permissible, the energy recovered from the waste is a lost resource to the UK and does not contribute to the UK renewable energy targets; nor does it contribute to securing UK energy supplies or reducing the reliance on fossil fuels within the UK.

6.24 The Overarching National Policy Statement for Energy (EN-1) (paragraph 3.4.1) sets the need for new renewable electricity generating projects in the context of the UK Government's commitment to sourcing 15% of its total energy from renewable sources by 2020 and identifies this need as urgent with energy from waste facilities being one of several sectors that would assist in the achievement of this target. Furthermore, EN-1 states (paragraph 3.4.4) that the ability of energy from waste projects to deliver predictable and controllable electricity is increasingly important in ensuring the securing of UK energy supplies. Similarly, the National Policy Statement for Renewable Energy (EN-3) states that waste burned is deemed renewable and contributes to meeting the UK's renewable energy targets. The NPPF (paragraphs 95 to 98) identify the planning system as key to supporting the delivery of renewable energy, considered central to economic, social and environmental dimensions of sustainability and to have a positive strategy to the promotion of renewable energy and low carbon sources, and to identify opportunities where development can draw its energy from a decentralised, renewable supply. It is also noted within the NPPF (paragraph 98) that applicants should not be required to demonstrate the overall need for renewable energy schemes and should approve such applications if the impacts are or can be made acceptable. The DEFRA Guide to the Debate notes that the typical content of residual waste includes between 50% to 66% of biogenic materials (i.e. food wastes / wood) which cannot be extracted for recycling due, for example, to the waste being too contaminated to be economically or practically separated (paragraph 18). Furthermore, that the energy recovered from residual waste is considered to be a partially renewable energy source (paragraph 19).

6.25 Accordingly, the proposed development supports the national need for waste recovery facilities to meet the national capacity gap in residual waste treatment

facilities, to reduce the unsustainable export of RDF to other nations, to enable the recovery of energy (heat and power) that is currently lost to UK energy supplies and thereby support the security of UK energy supply, reduce reliance of fossil fuels and assist in the achievement of UK targets for renewable energy.

6.26 At the local level the Joint Waste Plan states that by 2026, Barnsley, Doncaster and Rotherham must provide sufficient new waste management facilities to meet the capacity shortfall of around 517,000 tonnes of recycling, treatment and recovery capacity for municipal, commercial and industrial waste. It goes on to say that this could be met through the provision of three large sites (100-400,000 tonnes/year) or a number of smaller sites. The Joint Waste Plan (Policy WCS1) makes provision to address the identified waste management capacity gap by maintaining, improving and expanding the network of waste management facilities throughout Barnsley, Doncaster and Rotherham to achieve sustainable waste management across all waste streams. Accordingly, the proposed REC would provide a recovery facility that supports a reduction in the identified capacity gap, whilst being located within an identified 'Safeguarded Site' for waste management purposes.

6.27 It is also worthy of note that, as identified in the DEFRA Guide to the Debate, provision of waste management infrastructure within the UK is largely market-led, such that the ability to secure funding and/or commercial contracts for the residual waste feedstock provides control over capacity and thereby avoids too much or too little provision.

6.28 In summary, the proposed REC supports the treatment of residual waste in accordance with the waste hierarchy as an 'other recovery' facility, supports a reduction in RDF exports (thereby maximising opportunities to recover energy within the UK), supports the achievement of renewable energy targets and security of UK energy supplies, whilst addressing the capacity gap in both national and local recovery facilities. Accordingly, the principle of development has been demonstrated to be in accord with relevant national and local planning policy.

Proximity Principle and Location of Waste Management Facilities

6.29 The proximity principle is the subject of Article 16 of the Waste Framework Directive. That the proximity principle is capable of being a material planning

matter is manifest in The Waste (England and Wales) Regulations 2011 and set out within the NPPG (paragraph 55).

- 6.30 The NPPW (paragraph 1) seeks for communities and business to take responsibility for their own waste in line with the proximity principle. The WMPE seeks (page 29) to establish a network of waste management facilities to enable waste to be treated at one of the nearest appropriate installations, i.e. the 'proximity principle', with every member state working towards self-sufficiency.
- 6.31 However, both the NPPG (paragraph 007) and the Guide to the Debate (paragraph 152) make it clear that the proximity principle does not require that waste be treated at the absolute closest facility to the exclusion of all other considerations. The Guide to the Debate quotes the Waste Framework Directive and that the proximity principle requires only that mixed municipal waste **"... be recovered in one of the nearest appropriate installations, by means of the most appropriate methods and technologies, in order to ensure a high level of protection for the environment and public health"** (paragraph 152).
- 6.32 Furthermore, the NPPG (paragraph 007) also makes it clear that **"... there is no expectation that each local authority should deal solely with its own waste to meet the requirements of self-sufficiency and proximity principles"**; and that **"The ability to source waste from a range of locations / organisations helps ensure existing capacity is used effectively and efficiently, and importantly helps maintain local flexibility to increase recycling without resulting in over capacity"** (which is also quoted in the Defra Guide to the Debate, paragraph 156). In addition, the Guide to the Debate states that **"There is nothing in the legislation or proximity principle that says accepting waste from another council, city, region or country is a bad thing and indeed in many cases it may be the best economic and environmental solution and/or be the outcome most consistent with the proximity principle"** (paragraph 154). With this respect the Guide to the Debate highlights that there is **"... an overemphasis on restricting waste to local waste, particularly by defining it by administrative ownership of waste and quantities it implies, can lead to sub-optimal solutions in terms of cost, efficiency and environmental impact; and a significant loss in long term flexibility"** (paragraph 155).
- 6.33 This approach is reflected in the Development Plan, namely Policy WSC1 of the Joint Waste Plan where it states **"Proposals will be supported which enable**

Barnsley, Doncaster and Rotherham’s waste to be managed locally, whilst allowing waste to be imported or exported where this represents the most sustainable option”.

- 6.34 The proposed REC will accept residual waste primarily from the South Yorkshire area to meet an identified local need (see above), but also seeks the flexibility to accept residual wastes from beyond this catchment to meet the operational requirement to have a continuous feedstock of residual waste and the ability to secure appropriate contracts for such feedstock as and when commercial contracts are available/up for renewal. In the wider context, the proposed REC could support a reduction in the significant volumes of RDF exported from England resulting in the loss of energy to the UK market and environmental cost of transporting waste abroad.
- 6.35 In supporting both the national need to reduce exports from England and in meeting the local shortfall in capacity for residual waste treatment, the proposed REC would be in accord with the proximity principle. Furthermore, in acknowledgement of comments made in both the NPPG and the Defra Guide to the Debate, the proposed REC facility should not be limited to receiving wastes only from particular catchment area.
- 6.36 The proposed development is consistent with the Joint Waste Plan (Policy WCS2) in that it would be located on a ‘Safeguarded Site’ for waste management purposes and is appropriately located within an existing industrial area with access to the strategic highway network, notably the M1 Motorway. In terms of the proximity principle, the Joint Waste Plan (Policy WCS1) acknowledges that such strategic facilities are expected to serve a catchment that may extend beyond the Plan area, serving areas covered by other local authorities in a sub-regional context.
- 6.37 In summary, the proposed REC will accept residual waste primarily from the South Yorkshire area to meet the identified local need, but also seeks the flexibility to accept residual wastes from beyond this catchment to meet operational needs and meet a national need to reduce the exports of RDF abroad. The proposed REC will be located on an appropriately ‘safeguarded’ site for waste management purposes and accessible to major haulage routes. Furthermore, the application site is of a suitable size and configuration to accommodate the proposed development, is appropriately located in an industrial setting away from residential receptors and is in close proximity to a number of potential energy

users that could benefit from the off-take of energy, either as heat or electricity. Accordingly, the location of the proposed REC has been demonstrated to be in accord with relevant national and local planning policy.

Landscape and Visual Amenity

- 6.38 The application site is not subject to any statutory or non-statutory landscape designations and is currently occupied by a large industrial building. The surrounding area is characterised by industrial units of varying design, generally large mass, and of considerable height. The built form is strongly geometric, generally based on a rectangular footprint. Chimney stacks, water towers and cranes are also present.
- 6.39 The proposed development would result in the demolition of the existing buildings on the site and replacement with a number of other, slightly larger industrial buildings up to 45m in height, together with a 100m tall stack. The development has been designed to respond to the character of the local area and to meet the operational requirements of the facility including those of the pre-requisite Environmental Permit. The main building and other structures of the proposed REC have been designed to be as small as possible whilst accommodating the necessary plant and machinery, and the movement of vehicles around the site. The proposed flue stack has been designed to be as narrow as possible, with the height (100m) being the minimum required to ensure compliance with the relevant emissions targets set by the European Industrial Emissions Directive (IED). The building and other structures, as applicable, would be sensitively cladded using materials and coloured to minimise their visual effect.
- 6.40 The potential effects on the landscape character and visual amenity have been assessed as part of the Environmental Impact Assessment (see **Environmental Statement, Chapter 6**). This landscape and visual amenity impact assessment (LVIA) provides an assessment of the impacts on the landscape/townscape within and around Rotherham.
- 6.41 THE LVIA concludes that the nature of the proposed development, together with the context provided by the land uses surrounding the application site, would mean that the proposed development is considered to be appropriate to the setting and townscape character of the site. The introduction of the proposed development would not result in any significant effects on local landscape or townscape features or elements, or the character of the landscape/townscape

within and around Rotherham. In cumulative terms there would be no significant effects.

- 6.42 Furthermore, effects upon visual amenity would also be generally not significant with only three locations assessed as subject to significant visual effects. Such higher degree of effects reflects close proximity and relatively open views towards the proposed development. In cumulative terms however, such effects would not be significant due to the context provided by the surrounding land uses.
- 6.43 Accordingly, the proposed development is in accord with the Joint Waste Plan (Policy WSC6), the Rotherham Core Strategy (Policies CS9, CS21 and CS28) and the Rotherham UDP (Saved Policies ENV2, ENV3 and ENV3.2) as the proposed REC would not adversely affect, and thereby protects, the national, district or local landscape character and provide additional tree and shrub planting, enhancing local landscape features. Furthermore, the proposed development has been designed to respond to the materials of adjacent buildings whilst providing a landscape buffer to the boundary of the facility to soften its appearance at the street level.

Transport and Highways

- 6.44 The planning application is accompanied by a Transport Assessment (TA) (see **Environmental Statement, Chapter 7 and Appendix 7.1**), in accord with the requirements of the NPPF (paragraph 32) and the Rotherham Core Strategy (Policy CS14).
- 6.45 *Access and manoeuvrability* – Vehicular access to the REC will utilise the existing site access taken from the northern side of the A6178-Sheffield Road via a priority T-junction arrangement. The access to the site was upgraded as part of a recent planning permission and has been designed to comfortably accommodate the movements of HGV vehicles, with a carriageway width of 9m and kerb radii of 10m. In addition, a comprehensive internal vehicular route will be provided around the entire perimeter of the application site as well as between the main Boiler Room and the Tipping Hall. To demonstrate the manoeuvrability to, from and within the site the TA includes a swept path analysis showing how the all vehicles that visit the site can enter and exit the site in a forward gear, and manoeuvre within the confines of the site in a safe and efficient manner. Accordingly, no works are proposed to the existing site access.

- 6.46 *Pedestrian and cycle arrangements* – Pedestrian access to the application site is provided via a segregated 1.8m wide footway routing along the east side of the site access road, which links the workshop and warehouse building directly with the surrounding pedestrian infrastructure provided on the A6178-Sheffield Road. Further pedestrian footways are provided around the perimeter of the proposed buildings, creating a segregated route from operational traffic.
- 6.47 Pedestrian and cycling infrastructure in the vicinity of the site is considered to be of a good standard. All roads accommodate footways on either side of the carriageway, with street lighting and appropriate crossing facilities provided throughout. In terms of cycle infrastructure, the A6178-Sheffield Road also accommodates an on-road local cycle route, which provides a link to/from National Cycle Route 6 approximately 700m to the west of the application site.
- 6.48 Notwithstanding the above, the TA considers the credentials of the site further by way of GIS-based modelling to identify the geographical catchment area for walking and cycling accessibility. The results of the walking analysis confirm that the neighbouring residential area of Tinsley is within the walking catchment of the application site, as well as the Meadowhall Shopping Centre. In line with current planning policy the proposed development is considered to be well placed to encourage and provide for trips to be made by foot from the local area. Whilst the results of the cycling analysis confirm that the neighbouring residential areas of Rotherham, Canklow, Brinsworth, Wincobank and Meadowhall are all within the cycle catchment of the application site. Local routes also provide links to Rotherham Railway Station for on-ward travel. On this basis the proposed development is considered to be well placed to encourage and provide for trips to be made by bicycle.
- 6.49 *Public Transport* – The nearest public bus stops are located either side of the A6178-Sheffield Road, approximately 100 to 200m to the south of the site. Both bus stops are well maintained, providing a bus shelter, a seating area, timetable information and real time information. The services provided at the aforementioned bus stops have been summarised in the TA.
- 6.50 The TA also identifies a geographical catchment area for bus accessibility taking a 30-minute journey time which reflects the National Travel Survey findings of the average time spent commuting to work. This modelling work identifies that a 30-minute bus catchment covers a large area around the site as well as including the

residential areas of Rotherham, Sheffield, Brinsworth, Tinsley, Darnall and Attercliffe.

- 6.51 *Parking provision* – With regard to parking provision, the proposed level of car parking has been based upon the expected number of users at the site and in this regard, the REC will provide a total of 38 car parking spaces, inclusive of 2 disabled bay. This has been calculated on the basis that 42 operational staff would be required to operate the plant on a 3 shift pattern. Each shift would therefore require approximately 14 staff per shift and during shift changeovers, there could be a need for 28 car parking spaces. The residual spaces would provide adequate space for visitors and ensure against overspill parking on the surrounding road network. The provision also reflects the arrival and departure periods, which are likely to be at unsocial times and during hours of darkness and are therefore likely to result in the use of car travel amongst staff.
- 6.52 *Traffic generation* – In order to quantify the highway impact of the development, the TA has undertaken a vehicular trip generation exercise. Based on the lawful use of the land, the existing traffic generated comprises of 258 two-way vehicle movements per day, of which 152 would be HGV movements. On average, it has been calculated that 16 two-way HGV movements would be attracted to the site per hour of operation, based on a delivery window of 10 hours per day.
- 6.53 In comparison, the proposed REC is expected to generate a total of 126 HGV trips per day (63 in / 63 out). The REC is to be designed to operate continuously, 24 hours a day, 7 days per week but in terms of deliveries it is anticipated that during weekdays the facility will be open for deliveries between the hours of 07:00 and 19:00 and HGVs importing and exporting materials from the site are expected to do so evenly throughout the 12-hour period and there is unlikely to be a peak in movements associated with these operations. It is also anticipated that 42 operational staff would be required to operate the plant on a 3 shift pattern.
- 6.54 This therefore demonstrates that the impact of the proposed development on the surrounding highway network will be low in comparison the lawful use of the site, with a reduction in total vehicular trips and HGV movements throughout the day.
- 6.55 However, for completeness, the TA has also considered the trip generation of the temporary land use which is due to expire in August 2017 to accommodate site offices and storage space for the Highways England Managed Motorways project

to upgrade the M1 between Junction 32 and Junction 35A. The proposed development would demonstrate a significant reduction when compared with the temporary use as site offices and storage with a daily reduction of up to 819 PCUs.

- 6.56 *Traffic impact* – In light of the discussion on traffic generation above, the TA concludes that the proposed development would result in a total net reduction of 49 vehicular movements and 26 HGV trips in comparison with the lawful use of the application site. The estimated impact of trips generated would be both immaterial and indiscernible in the context of highway capacity or safety and would likely result in an improvement in comparison with the lawful use of the site.
- 6.57 It is therefore considered that the developments proposals would not increase the risk of adverse material harm occurring to the safe and efficient operation of the local highway network, both in terms of operation and junction capacity. In comparison with the lawful use of the site analysis within the TA has shown a decrease in HGV and total vehicular movements as a result of the proposed development. This demonstrates that the proposed development can be accommodated without detriment to the surrounding highway network.
- 6.58 *Summary* – Accordingly, the proposed development is in accord with the relevant transport-related principles of the NPPF (paragraph 32) and that of the Joint Waste Plan (Policies WSC1 and WSC6), the Rotherham Core Strategy (Policy CS14) and the Rotherham UDP (Saved Policy EC3.1), specifically that the proposed REC is of a scale and nature that is appropriately located within an existing industrial estate, with safe and suitable access to the public highway and would not have an adverse effect on the operation of the surrounding highway network, without the need for additional transport infrastructure. Furthermore, the site is accessible for walking/cycling from a potential employee catchment area and by the public transport network.
- 6.59 In any event, the proposed development is located within close proximity to the strategic highway network (Junction 34 of the M1 Motorway) with the connecting A6178-Sheffield Road designed to accommodate the nature and volume of vehicles that will be generated by the proposed development. Accordingly, the proposed development is in accord with the principles of sustainable transport, the application site is located and designed to accommodate the efficient delivery

of goods and supplies in accordance with the NPPF (paragraph 35) and the relevant aforementioned policies in the Development Plan.

Air Quality

- 6.60 The planning application is accompanied by an Air Quality Assessment (AQA) (see **Environmental Statement, Chapter 5**) which assesses the potential effects on air quality arising from the emissions from the flue stack, bio-aerosol emissions and odour from the operation of the REC facility, and the potential dust emissions during construction and emissions associated with the traffic generated from the operation of both the proposed REC facility.
- 6.61 The AQA concludes that the construction works have the potential to create dust and during that phase of the development it will be necessary to apply a package of mitigation measures to minimise dust emission. With these measures in place, it is expected that any residual effects will not be significant. However, the guidance recognises that, even with a rigorous dust management plan in place, it is not possible to guarantee that the dust mitigation measures will be effective all of the time, for instance under adverse weather conditions. The local community may therefore experience occasional, short-term dust annoyance. The scale of this would not normally be considered sufficient to change the conclusion that the effects will not be significant.
- 6.62 The odour risk assessment demonstrates that the odour effects for all local receptors will be negligible. Overall the risk assessment has judged the proposed development to be insignificant in terms of odour effects. The odour modelling has reinforced this conclusion, indicating that odour concentrations will be below the relevant criterion at all local sensitive locations.
- 6.63 Furthermore, the qualitative bioaerosol assessment demonstrates that the proposed development will have an insignificant effect on local receptors in terms of bioaerosol concentrations.
- 6.64 Accordingly, the proposed development would not have an adverse effect on the ability to comply with the national air quality objectives nor any Air Quality Management Areas (AQMAs), and would therefore be in accord with the principles set out within the NPPF (paragraphs 109 and 124). Furthermore, it has been demonstrated that the proposed development would not lead to an adverse effect on air quality and would be appropriately controlled such that there would not be a significant loss of amenity for existing land uses or habitats, and is therefore in

accordance with the Joint Waste Plan (Policy WSC6) and the Rotherham Core Strategy (Policies CS20 and CS27) in managing and mitigating potential effects on air quality.

- 6.65 In addition to the above, all emissions from the flue stack will be continually monitored to ensure compliance with the emissions thresholds of the Industrial Emissions Directive (IED) and all emissions data collated, as part of the conditions under the pre-requisite Environmental Permit which is issued, monitored and enforced by the Environment Agency. In this respect it is noted the NPPF (paragraph 122), as reiterated within the NPPG (paragraph 050), the NPPW (paragraph 7), requires that Local Planning Authorities focus on whether a proposed development is an acceptable use of land and the impact of that use, rather than the control of processes, health and safety issues, or emissions that are subject to approval under pollution control regimes; in this instance, the pre-requisite Environmental Permit, which will ensure that the facility operates such that air quality standards will be complied with to protect the environment and human health.

Noise

- 6.66 The planning application is accompanied by a Noise Assessment (see **Environmental Statement, Chapter 10**) which assesses the potential effects on noise quality associated with both construction activities and operations.
- 6.67 The application site whilst being surrounded by industrial development is located within an urban area with a number of noise sensitive receptors to the west, north and east. Monitoring was undertaken to determine the existing noise levels at properties which would be potentially affected by the construction and operation of the proposed development. The surveys indicated that noise levels at the surrounding properties are principally influenced by road traffic travelling on the surrounding road network, both during the day and night-time periods. The assessment concluded that noise levels associated with the construction of the proposed development would result in a negligible effect. Whilst during the operation of the development, it is anticipated to remain within acceptable levels of noise when assessed against the requirements of relevant standards and guidelines. A range of mitigation measures have been incorporate in the design of the facility so that the noise levels would result in a negligible effect at surrounding properties.

6.68 Accordingly, the proposed development would not have a significant adverse effect on health and quality of life from noise and is therefore in compliance with the NPPF (paragraphs 109 and 123), the Joint Waste Plan (Policy WSC6) and the Rotherham Core Strategy (Policy CS27).

Light Pollution

6.69 The Application Site is not located within a light sensitive area, being set within the context of an existing industrial estate with street lighting along both sides of Sheffield Road, and within the Rotherham/Sheffield urban area such that the area is not subject to 'dark skies'. Accordingly, the proposed development is compliant with the relevant policies of the NPPF (paragraph 125) which seeks to protect against light pollution and its effect on local amenity and nature conservation, and the Joint Waste Plan (Policy WSC6) and the Rotherham Core Strategy (Policies CS20 and CS27).

Cultural Heritage

6.70 The planning application is accompanied by an Archaeology and Cultural Heritage Assessment (see **Environmental Statement, Chapter 12**) and accompanying Desk Based Heritage Assessment (see **Environmental Statement, Appendix 12.1**) in accord with the requirements of the NPPF (paragraph 128) which requires an applicant to describe the significance of any heritage assets and their setting.

6.71 The Heritage Assessment identified that there were no heritage assets within the application site. There is a Scheduled Monument (Roman Ridge, SE of Hill Top 600m long, Meadowhall Road to Top Hill) approximately 930m to the north-west of the application site at its nearest point and there are three Grade II Listed Buildings within 1km of the site. There have been no previous archaeological investigations recorded at the application site.

6.72 The Heritage Assessment concluded that there would be no adverse effects upon archaeological remains attributable to either the construction phase or operational phases. The baseline survey clarified that much of the application site has been heavily impacted upon by the previous impacts of the steel works and associated machinery. Furthermore, the majority of heritage assets will encounter no change or harm to their setting and although the proposed development will introduce an element of change in the broader setting of several designated assets, this change will not result in harm to the setting. Mitigation in

the form of archaeological monitoring is proposed; however, as the assessment and survey did not identify any potential heritage assets this mitigation would be sufficient to manage any eventuality that remains are present that were not identified during geophysical survey.

- 6.73 It is therefore concluded that the proposed development would not conflict with the objectives of the NPPF (Section 12) which seeks to conserve and enhance the historic environment. In particular, the proposed development is consistent with the requirement that LPAs, with regard to heritage assets, 'conserve them in a manner appropriate to their 'significance' (paragraph 126). The information supplied with the planning application is consistent with the requirement (paragraph 128) for an applicant 'to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail is proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance.' No harm to heritage assets has been identified, and thus no weight regarding harm to heritage has been identified to be put in the planning balance (as per paragraphs 134 and 135). Furthermore, appropriate mitigation has been recommended, as per the advice set out in the Framework (paragraph 141).
- 6.74 Similarly, the proposed development will accord with the Joint Waste Plan (Policy WSC6), Rotherham Core Strategy (Policy CS23) and the Rotherham UDP (Saved Policy ENV2) on the basis that it would not have any adverse effects on the archaeology, known heritage assets or their setting.
- 6.75 The proposed development would not lead to harm to any Listed buildings, and would be consistent with the requirement of Section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 which requires 'special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses'.

Ecology and Nature Conservation

- 6.76 The planning application is accompanied by an Ecological Assessment and Phase 1 Habitat Survey, and bat activity survey (see **Environmental Statement, Chapter 11**), and therefore meets the requirements of the Development Plan to provide an objective assessment of the potential effects on biodiversity.
- 6.77 The ecological assessment identified eight statutory designated sites within 5km of the application site, the nearest of which is Centenary Riverside Local Nature

Reserve (LNR) at 1.3km followed by the Bradgate Brickworks Site of Special Scientific Interest (SSSI) at 1.8km, and the Peak District Moors Special Protection Area (SPA) is within 20km of the site.

- 6.78 Twelve non-statutory designated sites, the majority of which are Local Wildlife Sites (LWSs), were identified within 2km of the application site, the nearest being the Blackburn Meadows LWS at 20m to the north and the River Don at 60m also to the north. However, no direct habitat linkage is present due to the adjacent railway line and absence of equivalent habitat within the application site.
- 6.79 No protected or notable plant species were identified during the Extended Phase 1 habitat survey and it was determined that the hardstanding land within the application site was considered unsuitable for the majority of protected and notable species, although lit areas provide some limited foraging interest for some species of bat. The features of site level ecological value comprised several relatively isolated extents of hedgerow, scrub and tree-lines; however only the line of immature trees will be directly affected by proposed works.
- 6.80 The overall importance of the application site habitats to protected and notable species was assessed to be very low. Whilst a number of trees are proposed to be removed as part of the development proposals, new planting is proposed along the southern and western boundaries of the site providing new habitat and opportunities for nesting and foraging.
- 6.81 The ecological assessment also recommended a lighting scheme that avoids light spill to adjacent habitats and the installation of bird and bat boxes as further enhancement. In addition, pollution prevention and control measures will be employed to ensure there would be no significant harm during the construction phase.
- 6.82 Accordingly, the proposed development accords with the relevant principles of the NPPF (paragraphs 109 and 118, and paragraph 125 with regards to light pollution and mitigation), the Joint Waste Plan (Policy WSC6), Rotherham Core Strategy (Policy CS20) and the Rotherham UDP (Saved Policy ENV2). Furthermore, the proposed pollution prevention and control measures adopted during the construction phase and the operation of the proposed REC facility in compliance with the pre-requisite Environmental Permit, would ensure that emissions are controlled such that there would be no significant loss of habitats.

Flood Risk and Drainage

- 6.83 The planning application is accompanied by an assessment of the potential effects on Hydrology and Flood Risk (see **Environmental Statement, Chapter 8**) and a Flood Risk Assessment (see **Environmental Statement, Appendix 8.1**) in accordance with the requirements of the NPPF (paragraph 100) and the Rotherham Core Strategy (Policy CS25).
- 6.84 The application site consists of industrial buildings with large areas of vehicle parking/hardstanding, with limited, if any, landscaped area. The site is relatively flat and falls gently from south to north with the main body of the site below the access road from Sheffield Road to the southern boundary. The access road falls from a level of approximately 37m above Ordnance Datum (AOD) to 32.5 AOD where the existing buildings are situated. A main river, The River Don, flows to the north of the site and an ordinary watercourse, the Chapel Dyke, is situated to the east of the site. The watercourse flows south to north and is culverted under buildings to the east of the site discharging into the River Don. Yorkshire Water is the sewerage and water supply undertaker for the area and a public sewer runs south to north across the application site, with pumping stations identified to the east of the site. A number of surface water sewers are identified on the site and they generally flow in an easterly direction away from the site. The application site is located within Flood Zone 2, which indicates that the site would be affected by a 1 in 1000-year event. Historical flooding was recorded on the site in 2007.
- 6.85 Details of the outline drainage strategy are provided in the Flood Risk Assessment. In summary, based on the previously developed nature of the site, the use of soakaways would not provide a suitable means of draining surface water runoff from development on the site. Therefore, a sustainable drainage strategy, involving the implementation of SUDS, is proposed for managing the disposal of surface water runoff from the proposed development. The use of infiltration devices was not considered appropriate and for the majority of the site flow balancing methods are proposed, comprising a system piped and geocellular storage tanks, in order to attenuate surface water runoff to greenfield runoff rates with discharges to the local watercourse. The proposed drainage strategy would ensure that surface water arising from the developed site would be managed in a sustainable manner to mimic the surface water flows arising from the site prior to the proposed development, while reducing the flood risk to the site itself and elsewhere, taking climate change into account. By limiting the development rate of runoff to the existing runoff less a 30% betterment in line

with South Yorkshire Interim Local Guidance for Sustainable Drainage Systems (June 2015), for all rainfall events up to the 1 in 100 year return period event, including an allowance for climate change, the proposed development would reduce flood risk overall when compared to existing runoff rates.

- 6.86 In terms of foul drainage, it has been demonstrated that a suitable means of drainage can be provided to serve the proposed development. The proposed foul and surface water drainage arrangements can be covered by a suitably worded condition requiring the submission of details to be submitted to and approved by the LPA.
- 6.87 Drainage and pollution control mechanisms specific to the proposed REC include that all waste would be transferred from vehicles within the main building, minimising opportunity for rainwater contamination; the waste bunker will be water retaining with a sump such that impermeable to groundwater inflow and pumped waters could be appropriately disposed; waters originating from within the facility from wash down/cleaning would be directed to the foul water drainage under a trade effluent licence and under relevant consents; and any plant containing potentially polluting substances will be appropriately bunded in accordance with the Control of Pollution (Oil Storage) (England) Regulations 2011.
- 6.88 The assessment concluded that with the implementation of the proposed drainage strategy the proposed development would be appropriately safe for its lifetime taking account of the vulnerability of its users, the development would not increase flood risk elsewhere, and would reduce flood risk overall. Furthermore, with the use of the proposed oil separators and appropriately designed plant, the risk of surface water contamination would be negligible.
- 6.89 Accordingly, the proposed development is in accord with the principles of the NPPF (paragraphs 100 and 103, and paragraph 109 with regards water quality), the Joint Waste Plan (Policy WSC6) and the Rotherham Core Strategy (Policy CS25).

Contaminated Land

- 6.90 The planning application is accompanied by an assessment of the potential effects on Hydrology and Ground Conditions (see **Environmental Statement, Chapter 9**). The assessment included a site walkover and Phase 1 Desktop Study (see **Environmental Statement, Appendix 9.1**). The assessment considers, inter

alia, the extent and methods of foundation construction, the anticipated degree of disturbance of the ground, the final form of the development, and the relevant national policies for contaminated land assessment and management.

- 6.91 The assessment describes how prior to mitigation a number of likely significant effects have been identified relating to the risk of the effects of contaminated land on construction workers, end users and controlled waters.
- 6.92 A package of mitigation and enhancement measures are recommended which are set out in detail in the aforementioned chapter and following the implementation of the recommended mitigation measures the residual effect of the proposed development with respect to all receptors has been assessed to be neutral, as either ground contamination sources or transport pathways to receptors will have been removed.
- 6.93 Accordingly, the proposed development is in accord with the relevant principles of the NPPF (paragraphs 109 and 121), and the Rotherham Core Strategy (Policy CS27) such that the application site is/can be made suitable for development with appropriate mitigation measures.

Permitting and Pollution Control

- 6.94 The proposed REC facility would be designed and operated with due regard to the requirements of the pre-requisite Environmental Permit which is issued, monitored and enforced by the Environment Agency under The Environmental Permitting (England and Wales) Regulations 2010. In addition, the proposed REC facility will be required to comply with the requirements of the Industrial Emissions Directive (IED) which sets mandatory emission limit values (ELVs) and monitoring requirements for a range of potential emissions, compliance with which is also undertaken by the Environment Agency under the Environmental Permit.
- 6.95 The Environmental Permit will contain conditions to protect the environment and human health, typically:
- Waste inputs – type, quantities, annual throughput;
 - Process controls – how activities on site will be managed
 - Emissions limits – air, land and water
 - Performance monitoring – on-going measurement of activity

6.96 Furthermore, the WMPE (page 15) confirms that the Environment Agency is the main regulator of waste management and that among its responsibilities is the determination of applications for Environmental Permits under Article 23 of the revised Waste Framework Directive.

6.97 The NPPF (paragraph 122), as reiterated within the NPPG (paragraph 050) and the NPPW (paragraph 7), requires that LPAs focus on whether a proposed development is an acceptable use of land and the impact of that use, rather than the control of processes, health and safety issues, or emissions that are subject to approval under pollution control regimes; in this instance, the pre-requisite Environmental Permit, which will ensure that the facility operates such that the necessary standards will be complied with to protect the environment and human health.

Design

6.98 The proposed development has been designed to respond to the character of the local area and, with regards the proposed REC, to meet the operational requirements of the facility including those of the pre-requisite Environmental Permit. The main building and other structures of the proposed REC have been designed to be as small as possible whilst accommodating the necessary plant and machinery, and movement of vehicles and plant both within the site layout and internally within the main building. The proposed REC flue stack has been designed to be as narrow as possible, with the height (100m) being the minimum required to meet the relevant emissions targets as set by the European Industrial Emissions Directive (IED). The main building and other structures of the proposed development would be clad using materials similar to adjacent industrial buildings and coloured to minimise their visual effect.

6.99 The proposed development meets the relevant principles of the NPPF (paragraph 58), specifically, the site layout both internally and externally within the proposed REC is functional and provides for the safe movement and separation of vehicles and people, including staff, visitors and members of the public. Whilst functional, the materials and design of buildings reflect that of neighbouring industrial properties for which the LVIA determined would be appropriate to the local landscape character. Furthermore, notwithstanding the proposed REC facility's functional design and the necessary plant and machinery, the NPPF (paragraph 65) guides decision-makers not to refuse permission for buildings or infrastructure that promote high levels of sustainability because of concerns over

any incompatibility with a townscape where such concerns have been mitigated. In this respect the proposed development is also in accord with the relevant requirements of the NPPW (paragraph 7). Accordingly, the proposed development is also in accord with the relevant principles of the Joint Waste Plan (WSC6), Rotherham Core Strategy (Policies 21 and 28) and Rotherham UDP (saved Policies ENV3 and ENV3.2), being of a high quality design sympathetic to its context and surroundings to enhance the quality, character, distinctiveness and amenity value of the Borough's landscape.

Coal Risk Assessment

- 6.100 The planning application is accompanied by a Coal Risk Assessment due to the application site being located within a Coal Mining Referral Area in accordance with the requirements of the Rotherham Core Strategy (Policy CS27).
- 6.101 The submitted Risk Assessment concludes that there is a low to medium risk of shallow foundations intersecting coal seams beneath parts of the application site, although deeper foundations may intersect coal seams and an intrusive investigation may be necessary to assess the ground conditions and to facilitate the design of foundations. Furthermore, it is considered that there is a low to medium risk for the potential for land gases to generate from the coal seams should the foundations intersect shallow coal seams and if present a low risk to the proposed industrial development of the site. Subject to the findings of an intrusive investigation, suitable gas mitigation measure can be installed if necessary, for example sealed service entry points and designing foundations which do not intersect coal seams.
- 6.102 Accordingly, the proposed development is in accord with the relevant provisions of the Rotherham Core Strategy (Policy CS27) in that careful consideration has been given to the location and design of the development in light of the potential for past mining activity in the area.

Restoration

- 6.103 The proposed REC would be a permanent facility for which it is anticipated would be subject to the periodic replacement and upgrading of plant, and modernisation of the building and structures, as and when required. Accordingly, it is not considered relevant to provide a restoration scheme as part of the application.

Employment

6.104 The proposed REC facility would generate circa 42 new employment opportunities for a range of skilled/unskilled workers, comprising with a further 10 indirectly employed from local specialist businesses. It is to be anticipated that there would be opportunities for local people and for training and apprenticeships in both facilities. Furthermore, cheaper energy supplied to local businesses may in turn lead to expansion and further job creation.

6.105 Accordingly, whilst the operational employment opportunities may be modest, support is provided within the NPPF (paragraph 18) to development that seeks to secure economic growth to create jobs and prosperity, and the ambitions of the NPPW (paragraph 1), and that of the adopted Joint Waste Plan (Policy WSC6).

The Principle of Sustainable Development and Planning Balance

6.106 The NPPF (paragraph 2) reiterates that planning law requires that applications for planning permission should be determined in accordance with the Development Plan unless material considerations indicate otherwise. Furthermore, the NPPF (paragraph 7) states that the purpose of the planning system is to contribute to the achievement of sustainable development which is set in the context of the economic, social and environmental roles.

6.107 In this respect, it has been demonstrated that the proposed development would:

- Economic:
 - Provide a reliable form of decentralised source of energy in the form of heat and/or power that will be provided either to local business users (subject to on-going discussions) and/or the national distribution network;
 - Provide cheaper energy to local businesses, thereby reducing costs which may in turn lead to expansion, employment stability or creation;
- Social:
 - Meet an identified need for waste management facilities to treat residual waste from the South Yorkshire area and wider catchment, and to reduce the export of RDF abroad;
 - Manage waste responsibly and in accordance with the principles of the waste hierarchy and proximity principle;
 - Provide employment opportunities for a range of skilled/unskilled workers both directly within the proposed REC and indirectly through the supply chain; such positions may be filled by local residents;
 - Be accessible by walking, cycling and public transport for potential employees from within the locality;

- Environmental:
 - Manage residual waste at the highest tier possible within the waste hierarchy;
 - Support the achievement of UK targets for renewable energy generation and thereby tackle climate change;
 - Be operated in accordance with the pre-requisite Environment Permit such that the facility will be modern, clean and efficient facility in accordance with European and UK standards and would not therefore have an adverse effect on human health or the environment;
 - Be of a high quality design which is in context with the local area and provide additional landscaping and planting to mitigate and enhance both visual amenity and the biodiversity of the locality;
 - Be appropriately located in an area that is not environmentally sensitive and for which the accompanying Environment Statement has demonstrated that any potentially significant adverse effects on the environment can be satisfactorily mitigated to an acceptable level;
 - Be appropriately located in an area that benefits from good transport links to the strategic highway network and for which it has been demonstrated can accommodate the nature and volume of predicted traffic; and
 - Be an efficient use of land that is safeguarded for waste management purposes, and is of a layout that maximises the site's potential without detriment to the design or environment.

6.108 Accordingly, the proposed development is demonstrably in accord with the principles of sustainable development.

6.109 With this regard, the NPPF (paragraph 14) places a 'presumption in favour of sustainable development' such that decision-takers are required to approve without delay development that is in accord with the Development Plan, or where the Development Plan is absent, silent or out of date, planning permission should be granted unless any adverse effects would significantly and demonstrably outweigh the benefits or that specific policies of the NPPF indicate otherwise. The Rotherham Core Strategy (Policy CS33) seeks for the councils to take a positive approach that reflects the presumption in favour of sustainable development, as set out in the NPPF.

6.110 This planning appraisal has demonstrated that the proposed development is in accord with the relevant policies of the Development Plan, and other material considerations, including the principle of sustainable development.

7. SUMMARY AND CONCLUSIONS

- 7.1 This Planning Statement accompanies a detailed planning application, submitted on behalf of Rolton Kilbride Rotherham Ltd and Andy Owen McGee, with respect to the demolition of existing buildings, construction and operation of a REC for the recovery of energy (heat and power) from non-hazardous residual waste using an ACT process called 'gasification', and a MTF for the recovery of recyclable materials with the associated plant and infrastructure, new on-site vehicle access arrangements and landscaping on land at the Former Templeborough Steel Works, Sheffield Road, Templeborough, Sheffield ("the Application Site").
- 7.2 The proposed REC would manage non-hazardous residual waste, which is waste that has already undergone some form of primary treatment to remove recyclable materials, and will have the capacity to process up to 215,000 tonnes of non-hazardous waste per annum. Furthermore, the proposed facility would generate circa 23MW of exportable electricity depending on the amount of heat to be exported, which in itself is dependent on the temperature and quantity of heat required by the eventual heat off-taker(s), and could be routed to nearby business users with any excess electricity fed into the national distribution network.
- 7.3 The proposed REC complies with the principles of the waste hierarchy, such that the RDF and other pre-treated wastes would be treated at the highest tier possible. There is a demonstrable national need for such facilities to reduce the export of RDF abroad and support the achievement of the UK's renewable energy targets and providing security of UK energy supplies. At a local level the proposed REC would address an identified need for recovery facilities. The facility would primarily source the waste materials from within the South Yorkshire area and is compliant with the principles of the proximity principle.
- 7.4 The application site is located within an existing industrial area and safeguarded for waste management purposes, such as the proposed REC, and is appropriately located to the strategic highway network for which it has been demonstrated as capable of accommodating the nature and volume of predicted traffic. Both the REC and MTF would generate employment opportunities for skilled/unskilled persons, and may be drawn from the local area; the application is within walking

and cycling distance from the Rotherham and Sheffield urban areas and served by public transport.

- 7.5 The application site is not located within an environmentally sensitive area. However, an Environmental Impact Assessment has been carried out to assess the potential effects arising from the proposed development from which it was concluded that any potentially significant adverse effects on the environment can be satisfactorily mitigated to an acceptable level. Furthermore, the proposed REC would be operated under conditions set within the pre-requisite Environmental Permit, issued, monitored and enforced by the Environment Agency to ensure no there would be no adverse effect on human health or the environment. In addition, emissions to air would be continuously monitored to ensure compliance with the European Industrial Emissions Directive.
- 7.6 The proposed development accords with the relevant policies of the Development Plan and other material planning considerations including the principle of sustainable development. Accordingly, in accordance with the presumption in favour of sustainable development as set out within the NPPF, the proposed development should be approved without delay.