

South Humber Bank Energy Centre Project

Planning Inspectorate Reference: EN010107

South Marsh Road, Stallingborough, DN41 8BZ

The South Humber Bank Energy Centre Order

Document Reference: 5.7 Fuel Availability and Waste Hierarchy Assessment

The Infrastructure Planning (Applications: Prescribed Forms and Procedures)
Regulations 2009 - Reg 5(2)(q)



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GLOSSARY OF ABBREVIATIONS AND DEFINITIONS

Abbreviation	Description
Energy from waste (EfW)	Process of using waste to generate energy (including power and/ or heat).
European Waste Catalogue (EWC)	Hierarchical list of waste descriptions established by Commission Decision 2000/532/EC, divided into twenty main chapters each of which has a two-digit code between 01 and 20 and with individual wastes within each chapter assigned a six figure code.
Material Recovery Facility (MRF)	Facility that receives, separates and prepares recyclable materials.
In-Vessel Composting (IVC)	Degradation of biodegradable waste in the presence of oxygen within an enclosed container or vessel.
Anaerobic Digestion (AD)	Process by which organic matter such as animal or food waste is broken down to produce biogas, in the absence of oxygen in a sealed container.
Refuse Derived Fuel (RDF)	Processed waste from municipal/ household, commercial and industrial sources.
Solid Recovered Fuel (SRF)	SRF is a specific category of refuse derived fuel which has been produced from non-hazardous waste in compliance with the European standard EN 15359.
SNRHW	Stable non-reactive hazardous waste.

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1.0 EXECUTIVE SUMMARY

- 1.1.1 This Fuel Availability and Waste Hierarchy Assessment has been prepared to support a Development Consent Order (DCO) application for the construction, operation and maintenance of an energy from waste (EfW) power station and comply with the National Policy Statement for Renewable Energy Infrastructure (NPS) EN-3.
- 1.1.2 The report's purpose is to demonstrate that there is sufficient refuse derived fuel (RDF) available to support the operation of the Proposed Development, that the operation of the Proposed Development will conform with the waste hierarchy, and that the Proposed Development will comply with relevant waste plans and policies.
- 1.1.3 An analysis of the amount of RDF likely to be available at the anticipated opening date of 2023 indicates that there is sufficient fuel for the Proposed Development, when considered at either a regional or national level. The quantity of combustible waste that is currently either landfilled, or diverted from landfill but processed into RDF and exported overseas, is greater than the capacity of the Proposed Development, and this remains the case even when considering future increases in recycling rates and the commissioning of other proposed or under construction EfW facilities. The regional assessment considers the East Midlands and Yorkshire and Humber regions, whilst the national assessment covers the whole of England. Regionally, the assessment concludes that around 1 million tonnes of fuel per year will be available in 2023, whilst nationally a total of around 6.7 million tonnes of fuel per year will be available.
- 1.1.4 The operation of the Proposed Development has been assessed for conformity with the waste hierarchy. This assessment has taken into account the relative costs of various methods of waste management, and concludes that the Proposed Development will not recover waste which would otherwise be recycled; instead, it is expected to recover waste that would otherwise be disposed of, or recovered at other facilities outside the UK.
- 1.1.5 The effect of the Proposed Development on relevant waste plans and policies has been assessed, taking into account the results of the fuel availability and waste hierarchy assessments. The assessment has concluded that the Proposed Development is consistent with the relevant plans and policies, which recognise the role that new EfW plants have to play in the management of the UK's residual waste.

2.0 INTRODUCTION

2.1 Overview

- 2.1.1 This Fuel Availability and Waste Hierarchy Assessment (Document Ref. 5.7) has been prepared on behalf of EP Waste Management Limited ('EPWM' or the 'Applicant'). It forms part of the application (the 'Application') for a Development Consent Order (a 'DCO'), that has been submitted to the Secretary of State (the 'SoS') for Business, Energy and Industrial Strategy, under section 37 of 'The Planning Act 2008' (the 'PA 2008').
- 2.1.2 EPWM is seeking development consent for the construction, operation and maintenance of an energy from waste ('EfW') power station with a gross electrical output of up to 95 megawatts (MW) including an electrical connection, a new site access, and other associated development (together 'the Proposed Development') on land at South Humber Bank Power Station ('SHBPS'), South Marsh Road, near Stallingborough in North East Lincolnshire ('the Site').
- 2.1.3 A DCO is required for the Proposed Development as it falls within the definition and thresholds for a 'Nationally Significant Infrastructure Project' (a 'NSIP') under sections 14 and 15(2) of the PA 2008.
- 2.1.4 The DCO, if made by the SoS, would be known as the 'South Humber Bank Energy Centre Order' ('the Order').
- 2.1.5 Full planning permission ('the Planning Permission') was granted by North East Lincolnshire Council ('NELC') for an EfW power station with a gross electrical output of up to 49.9 MW and associated development ('the Consented Development') on land at SHBPS ('the Consented Development Site') under the Town and Country Planning Act 1990 on 12 April 2019. Since the Planning Permission was granted, the Applicant has assessed potential opportunities to improve the efficiency of the EfW power station, notably in relation to its electrical output. As a consequence, the Proposed Development would have a higher electrical output (up to 95 MW) than the Consented Development, although it would have the same maximum building dimensions and fuel throughput (up to 753,500 tonnes per annum (tpa)).

2.2 The Applicant

- 2.2.1 The Applicant is a subsidiary of EP UK Investments Limited ('EPUKI'). EPUKI owns and operates a number of other power stations in the UK. These include SHBPS and Langage (Devon) Combined Cycle Gas Turbine ('CCGT') power stations, Lynemouth (Northumberland) biomass-fired power station, and power generation assets in Northern Ireland. EPUKI also owns sites with consent for new power stations in Norfolk (King's Lynn 'B' CCGT) and North Yorkshire (Eggborough CCGT).
- 2.2.2 EPUKI is a subsidiary of Energetický A Průmyslový Holding ('EPH'). EPH owns and operates energy generation assets in the Czech Republic, Slovak Republic, Germany, Italy, Hungary, Poland, Ireland, and the United Kingdom.

2.3 The Proposed Development Site

- 2.3.1 The Proposed Development Site (the 'Site' or the 'Order limits') is located within the boundary of the SHBPS Site, east of the existing SHBPS, along with part of the carriageway within South Marsh Road. The principal access to the site is off South Marsh Road.
- 2.3.2 The Site is located on the South Humber Bank between the towns of Immingham and Grimsby; both over 3 km from the Site. The surrounding area is characterised by industrial uses dispersed between areas of agricultural land with the nearest main settlements being the villages of Stallingborough, Healing and Great Coates. The Site lies within the parish of Stallingborough although Stallingborough village lies over 2 km away.
- 2.3.3 The Site lies within the administrative area of NELC, a unitary authority. The Site is owned by EP SHB Limited, a subsidiary of EPUKI, and is therefore under the control of the Applicant, with the exception of the highway land on South Marsh Road required for the new Site access.
- 2.3.4 The existing SHBPS was constructed in two phases between 1997 and 1999 and consists of two CCGT units fired by natural gas, with a combined gross electrical capacity of approximately 1,400 MW. It is operated by EP SHB Limited.
- 2.3.5 The Site is around 23 hectares ('ha') in area and is generally flat, and typically stands at around 2.0 m Above Ordnance Datum (mAOD).
- 2.3.6 The land surrounding the Site immediately to the south, west and north-west is in agricultural use with a large polymer manufacturing site, Synthomer, and a waste management facility, NEWLINCS, both located to the north of the Site and also accessed from South Marsh Road. The estuary of the River Humber lies around 175 m to the east of the Site.
- 2.3.7 Access to the South Humber Bank is via the A180 trunk road and the A1173. The Barton railway line runs north-west to south-east between Barton-on-Humber and Cleethorpes circa 2.5 km to the south-west of the Site and a freight railway line runs north-west to south-east circa 300 m (at the closest point) to the Site.
- 2.3.8 A more detailed description of the Site is provided at Chapter 3: Description of the Proposed Development Site in the Environmental Statement ('ES') Volume I (Document Ref. 6.2).

2.4 The Proposed Development

- 2.4.1 The main components of the Proposed Development are summarised below:
- Work No. 1— an electricity generating station located on land at SHBPS, fuelled by refuse derived fuel ('RDF') with a gross electrical output of up to 95 MW at ISO conditions;
 - Work No. 1A— two emissions stacks and associated emissions monitoring systems;
 - Work No. 1B— administration block, including control room, workshops, stores and welfare facilities;

- Work No. 2— comprising electrical, gas, water, telecommunication, steam and other utility connections for the generating station (Work No. 1);
- Work No. 3— landscaping and biodiversity works;
- Work No. 4— a new site access on to South Marsh Road and works to an existing access on to South Marsh Road; and
- Work No. 5— temporary construction and laydown areas.

2.4.2 Various types of ancillary development further required in connection with and subsidiary to the above works are detailed in Schedule 1 of the DCO. A more detailed description of the Proposed Development is provided at Schedule 1 'Authorised Development' of the Draft DCO and Chapter 4: The Proposed Development in the ES Volume I (Document Ref. 6.2) and the areas within which each of the main components of the Proposed Development are to be built is shown by the coloured and hatched areas on the Works Plans (Document Ref. 4.3).

2.5 Relationship with the Consented Development

2.5.1 The Proposed Development comprises the works contained in the Consented Development, along with additional works not forming part of the Consented Development ('the Additional Works'). The Additional Works are set out below along with an explanation of their purpose.

- a larger air-cooled condenser (ACC), with an additional row of fans and heat exchangers – this will allow a higher mass flow of steam to be sent to the steam turbine whilst maintaining the exhaust pressure and thereby increasing the amount of power generated;
- a greater installed cooling capacity for the generator – additional heat exchangers will be installed to the closed-circuit cooling water system to allow the generator to operate at an increased load and generate more power;
- an increased transformer capacity – depending on the adopted grid connection arrangement the capacity will be increased through an additional generator transformer operating in parallel with the Consented Development's proposed generator transformer or a single larger generator transformer. Both arrangements would allow generation up to 95 MW; and
- ancillary works – the above works will require additional ancillary works and operations, such as new cabling or pipes, and commissioning to ensure that the apparatus has been correctly installed and will operate safely and as intended.

2.5.2 The likely construction scenario is for work on the Consented Development (pursuant to the Planning Permission) to commence in Quarter 2 ('Q2') of 2020 and to continue for around three years. Following grant of a DCO for the Proposed Development (approximately halfway through the three-year construction programme), the Applicant would initiate powers to continue development under the Order instead of the Planning Permission. The Order includes appropriate powers and notification requirements for the 'switchover' between consents, to provide clarity for the relevant planning authority regarding

the development authorised and the applicable conditions, requirements, and other obligations. Once the Order has been implemented the additional works would be constructed and the Proposed Development would be built out in full. The Proposed Development would commence operation in 2023.

2.5.3 Alternative construction scenarios, involving construction entirely pursuant to the Order, are also possible. Accordingly, three representative scenarios are described within Chapter 5: Construction Programme and Management in the ES Volume I (Document Ref. 6.2) and assessed in the Environmental Impact Assessment ('EIA').

2.6 Purpose and Structure of this Report

2.6.1 The National Policy Statement for Renewable Energy Infrastructure (EN-3), taken together with the Overarching National Policy Statement for Energy (EN-1), provide the primary basis for decisions by the Secretary of State on applications for nationally significant renewable energy infrastructure such as the Proposed Development (see the Planning Design and Access Statement (Document Ref. 5.5) for more information on the legal and policy position).

2.6.2 EN-3 is concerned with impacts and other matters which are specific to biomass and EfW, onshore and offshore wind energy, or where, although the impact or issue is generic and covered in EN-1, there are further specific considerations arising from the technologies.

2.6.3 EN-3 requires as follows (at paragraphs 2.5.66 – 2.5.69):

“An assessment of the proposed waste combustion generating station should be undertaken that examines the conformity of the scheme with the waste hierarchy and the effect of the scheme on the relevant waste plan or plans where a proposal is likely to involve more than one local authority.

The application should set out the extent to which the generating station and capacity proposed contributes to the recovery targets set out in relevant strategies and plans, taking into account existing capacity...

The results of the assessment of the conformity with the waste hierarchy and the effect on relevant waste plans should be presented in a separate document to accompany the application to the [Secretary of State]”.

2.6.4 The purpose of this document is therefore to demonstrate that:

- there is sufficient fuel available to support the operation of the Proposed Development;
- the operation of the Proposed Development will conform with the waste hierarchy; and
- the Proposed Development will comply with relevant waste plans and policies.

2.6.5 The report is structured as follows:

- the assessment of fuel availability is presented in Section 3;
- the waste hierarchy assessment is presented in Section 4;

- Section 5 sets out the consideration of waste plans and policies; and
- a summary and conclusions are provided in Section 6.

3.0 FUEL AVAILABILITY

3.1 Introduction

- 3.1.1 This assessment evaluates the likely fuel availability for the Proposed Development.
- 3.1.2 The assessment is based on the assumption that fuel for the Proposed Development will comprise waste which is currently being managed at a lower level of the waste hierarchy, or which is exported for energy recovery overseas.
- 3.1.3 This assumption has been validated in the Waste Hierarchy Assessment in Section 4 of this document.

3.2 Study Area

- 3.2.1 The Study Area for fuel availability is examined at two levels.
- 3.2.2 Firstly, data for the combined regions of Yorkshire and Humber and the East Midlands is presented. These regions have been selected since, in each case, a large proportion of the population centres are within two hours road travel distance (by HGV) from the Proposed Development, although this does not imply that fuel would solely be sourced from these regions.
- 3.2.3 Recognising that fuel could potentially be sourced from further afield, data is also presented for England.

3.3 Waste Disposed to Landfill

- 3.3.1 Data on waste sent to landfill in England is published by the Environment Agency in their annual Waste Data Interrogator and summarised in a series of data tables¹.
- 3.3.2 Table 3.1 below shows the amount of waste landfilled in England and the East Midlands/ Yorkshire and Humber regions in 2018. Of this total, only non-hazardous waste would be potentially suitable fuel for the Proposed Development.

¹ <https://data.gov.uk/dataset/312ace0a-ff0a-4f6f-a7ea-f757164cc488/waste-data-interrogator-2018>

Table 3.1: Landfilled waste by category of landfill, 2018 ('000 tonnes)

CATEGORY	ENGLAND	YORKS & HUMBER	EAST MIDLANDS
Hazardous Merchant	563	96	121
Hazardous Restricted	23	-	-
Non Hazardous with SNRHW* cell	7,245	543	751
Non Hazardous	19,543	2,288	1,592
Non Hazardous Restricted	436	285	1
Inert	16,268	959	2,166
Total (Non Hazardous, not Restricted)	26,788	5,173	

*SNRHW = stable non-reactive hazardous waste

3.3.3 In practice, not all of the waste disposed to landfill will be combustible.

3.3.4 Whilst the Waste Data Interrogator does not specifically identify combustible waste as a category, data is available for the category of 'household, industrial and commercial', a large proportion of which is expected to be combustible. The relevant data for 2018 is shown in Table 3.2 below.

Table 3.2: Landfilled waste, 2018 (household, industrial and commercial, '000 tonnes)

	ENGLAND	YORKS & HUMBER + EAST MIDLANDS
Landfill	14,045	3,079

3.3.5 The amount of potentially combustible waste sent to landfill can be further refined by selecting only waste of certain European Waste Category (EWC) codes. The following EWC codes represent common types of waste that are likely to be combustible:

- 19 12 10 - combustible waste (refuse derived fuel);
- 19 12 12 - other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11;
- 20 03 01 - mixed municipal waste; and
- 20 03 07 - bulky waste.

3.3.6 The quantities of these specific waste types landfilled in 2018 are as shown in Table 3.3 below.

Table 3.3: Landfilled waste, 2018 (specified EWC codes, '000 tonnes)

	ENGLAND	YORKS & HUMBER AND EAST MIDLANDS
Landfill	10,855	2,230

3.3.7 The data therefore shows that in 2018 there was approximately 10.9 million tonnes of combustible waste sent to landfill in England, of which just over 2.2 million tonnes was landfilled in Yorkshire and Humber or the East Midlands.

3.4 Refuse Derived Fuel Export

3.4.1 Data on the quantities of RDF and solid recovered fuel (SRF) exported from the UK is published by DEFRA² and summarised in Table 3.4 below.

Table 3.4: UK RDF exports ('000 tonnes)

UK RDF & SRF EXPORTS	2017	2018	2019
Annual Total:	3,201	2,899	2,622

3.4.2 The last three years' data shows a change from 3.2 million tonnes in 2017 to 2.6 million tonnes in 2019, still a substantial quantity.

3.4.3 The proportion of these RDF exports that leave from the Humber Ports is estimated by some sources³ to be around one third (although supporting data for this estimate is not available in the public domain); a report published by the Chartered Institute of Waste Management (CIWM) in 2018⁴ provided data for RDF exports from English ports in 2017, and the Humber Ports accounted for 24% of the total exported. This would correspond to 768,000 tpa in 2017.

3.4.4 The future of RDF exports is unclear, even in the short term, given the potential additional administrative and financial burdens that may come into place following Brexit, and also the implications of taxes to be levied on imports of RDF in the Netherlands and potentially also other countries. However, projections indicate that even with higher recycling rates, waste will continue to be generated and will still need to be either processed into RDF and combusted or exported, or landfilled, whether in the UK or overseas.

² <https://data.gov.uk/dataset/5ffdf701-05c2-43b8-ba1e-e65580bbcc08/international-waste-shipments-exported-from-england>

³ <https://www.southhumber.co.uk/innovative-waste-to-energy-and-waste-to-fuel-companies-are-investing-in-south-humber-heres-why/>

⁴ <https://www.circularonline.co.uk/wp-content/uploads/downloads/Presidential-Report-2018-RDF-Trading-in-a-Modern-World.pdf>

3.5 Other Energy from Waste Facilities

- 3.5.1 This section sets out the position on available and consented EfW capacity, which is then summarised in Table 3.5 below.
- 3.5.2 Recent data on current EfW capacity in the UK, both operational and under commissioning or construction, is provided in a report prepared by Tolvik⁵ in 2019. This data excludes facilities combusting hazardous waste or biomass.
- 3.5.3 In England in 2018, a total of 10,792,000 tonnes of waste was combusted in operational EfW. The reported annual capacity of these facilities was 11,834,000 tonnes, giving a utilisation of 91%.
- 3.5.4 Additional EfW facilities with a capacity of 3,699,000 tonnes were either under construction, commissioning, or have become operational since publication of the Tolvik report, and an additional 330,000 tonnes of capacity was consented for operational EfW facilities. Assuming these facilities achieve the same 91% utilisation as existing facilities, it can be expected that they will combust an additional 3,674,000 tonnes of waste when in operation, of which the sub-total for the East Midlands and Yorkshire and Humber is 1,012,000 tonnes of waste.
- 3.5.5 Taking existing operational EfW facilities, and those which are in active development (i.e. which are either in commissioning or construction phases) implies that the EfW plants in England are likely to combust approximately 15.3 million tonnes of waste when they are all in operation.
- 3.5.6 There are further sites which have been identified for potential EfW facilities, and which have progressed to various stages in the planning and permitting process. It is reasonable to exercise caution in evaluating how much capacity may potentially be provided by these facilities, since in many cases the facilities are unlikely to be built for financial or technical reasons.
- 3.5.7 The Environment Agency provides information on EfW facilities which are classified as 'pre-operational'⁶. This includes biomass facilities and some facilities which are in construction and therefore included in the Tolvik data quoted above. There are a variety of other schemes which are in various stages of development.
- 3.5.8 For the purposes of this assessment, only those pre-operational EfWs that have publicly announced financial close at the time of writing this report (March 2020) have been included as currently having a realistic potential of coming into operation.
- 3.5.9 The pre-operational EfWs which have confirmed financial close would provide a further 0.89 million tonnes of capacity and applying the same utilisation as existing facilities would be expected to combust 0.81 million tonnes of waste, of

⁵ <https://www.tolvik.com/published-reports/view/uk-energy-from-waste-statistics-2018/>

⁶ <https://data.gov.uk/dataset/312ace0a-ff0a-4f6f-a7ea-f757164cc488/waste-data-interrogator-2018>

which the sub-total for the East Midlands and Yorkshire and Humber is 0.27 million tonnes of waste.

3.5.10 This information is presented in Appendix 1 and summarised in Table 3.5 below.

Table 3.5: Current and future EfW inputs (million tonnes per year)

FACILITY STATUS	ANNUAL INPUTS ('000 TONNES/ YEAR)
Operational	10,792
In-Commissioning and Construction/ Newly Operational	3,699
<i>Total operational or in active development</i>	<i>14,491</i>
Pre-Operational	885
Total in Operation, Active Development and Potential	15,376

3.6 Future Residential Waste Generation

- 3.6.1 The Government's waste strategy⁷ commits to achieving municipal waste recycling rates of 65% by 2035, and it is therefore necessary to allow for the effect that this will have on the quantities of residual waste available as feedstock for the Proposed Development. Data on household waste generation and recycling rate is based on the most recent published Defra statistics⁸.
- 3.6.2 For waste from households, the recycling rate was 44.7% in 2018. The total amount of waste generated from households has declined from 22.36 to 22.03 million tonnes between 2014 and 2018, although this overall decline masks increases during certain years in the period.
- 3.6.3 The impacts of future increases in recycling rate have been modelled based on the assumption that the Circular Economy Package target recycling rate of 55% (by 2025) will be achieved for household waste by 2023. This is a conservative scenario (in terms of estimating residual waste quantities) given that it assumes considerable improvement in household recycling rates over a short period of time, whereas UK household recycling rates have plateaued in recent years.
- 3.6.4 Considering the low level of variation in waste generation (increases and decreases, rather than uniform decreases as might have been expected if policies were working) between 2014 and 2018, it is assumed that overall household waste generation will remain at 2018 levels for the foreseeable future (declines in per capita waste generation may be balanced out by population growth).

⁷https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/765914/resources-waste-strategy-dec-2018.pdf

⁸<https://www.gov.uk/government/statistics/local-authority-collected-waste-management-annual-results>

3.6.5 Given the uncertainty over Commercial & Industrial (C&I) waste generation trends over time and recycling rates (both current and future), potential increases in C&I waste recycling and reductions in residual C&I waste have not been considered.

3.6.6 Table 3.6 shows the impacts of increases in the household waste recycling rate between now and 2023 and estimates that the amount of residual household waste may decline by approximately 2.3 million tonnes.

Table 3.6: Estimated impact on residual waste from households of increases in recycling rates ('000 tonnes)

	2018		2023	
	ENGLAND	E. MIDS + Y&H	ENGLAND	E. MIDS + Y&H
Household waste generation	22,033	4,777	22,033	4,777
Recycling rate	44.7%	42.8%	55%	55%
Residual waste quantities	12,184	2,734	9,915	2,150
Reduction in residual waste			2,269	584

3.7 Summary

3.7.1 Taking into account the data and trends discussed above, Table 3.7 below summarises:

- the amount of fuel currently available, calculated as combustible waste currently being landfilled and RDF currently exported;
- the amount of fuel likely to be available taking into account other EfW facilities which are either in commissioning/ construction or likely to be built; and
- the amount of fuel likely to be available taking into account both existing and future EfW facilities and also an increase in LACW recycling rate from 44.7% to 55% by 2023.

Table 3.7: Summary of fuel availability (million tonnes) (numbers in brackets are negative)

	ENGLAND	E MIDS + YORKS & HUMBER
Combustible waste landfilled	10.9	2.2
RDF exported	2.6	0.6
Currently available fuel	13.5	2.8
Additional EfW capacity in commissioning/ construction or newly operational	(3.7)	(1.0)
Potential additional EfW capacity	(0.8)	(0.3)
Available fuel (accounting for active development/potential additional EfW capacity)	9.0	1.6
Reduction in residual waste due to increased household waste recycling by 2023	(2.3)	(0.6)
Available fuel (accounting for additional EfW capacity and increased recycling)	6.7	0.9

3.7.2 This analysis indicates that a total of 0.9 million tonnes (at a regional level) and 6.7 million tonnes (nationally) of combustible waste is likely to be available as fuel for the Proposed Development in 2023, even taking into account likely new EfW facilities and increases in recycling rates. This is well in excess of the actual capacity of the Proposed Development and demonstrates that there is likely to be sufficient fuel available for the Proposed Development.

4.0 WASTE HIERARCHY ASSESSMENT

4.1 Legislative and Policy Basis

4.1.1 The United Kingdom (UK) left the European Union (EU) on 31 January 2020 under the terms set out in the European Union (Withdrawal Agreement) Act 2020 ('the Withdrawal Act'). This established a transition period, which is currently set to end on 31 December 2020, although it can be extended once by either one or two years if both the UK and EU agree to an extension by 1 July 2020. The Withdrawal Act also retains the body of existing EU-derived law within our domestic law.

4.1.2 During the transition period:

- EU law applies to and in the UK, including all EU Directives referenced within the DCO Application documents. If new EU legislation enters into force, it will become part of the EU 'acquis' with which the UK is expected to comply;
- it will remain possible for UK courts and tribunals to hear and decide on cases involving EU law principles and for UK courts and tribunals to seek a preliminary ruling from the Court of Justice of the EU on a point of EU law interpretation.

4.1.3 After the transition period:

- if an agreement on the future relationship is negotiated between the UK and the EU, trade will take place subject to the terms of that agreement. The extent to which new EU legislative proposals will be considered by the UK will largely depend on the terms of the agreement but continuity of law would be ensured by the Withdrawal Act;
- if the UK and EU have not concluded an agreement on the future relationship, then trade will take place subject to world trade organisation (WTO) rules. Continuity of law in the UK will be provided by the Withdrawal Act unless, and subject to the provisions of the Northern Ireland Protocol, the UK legislates to diverge from EU law.

4.1.4 The Application's examination is likely to span the latter part of the transition period. The Applicant will therefore provide updates to documents, in respect of legal references, during examination should it become necessary.

Directive 2008/98/EC on Waste (Waste Framework Directive)

4.1.5 Directive 2008/98/EC requires that waste legislation and policy of the EU Member States shall apply as a priority order the following waste management hierarchy:

Plate 2.1: Waste Management Hierarchy



- 'preparing for re-use' means checking, cleaning or repairing recovery operations, by which products or components of products that have become waste are prepared so that they can be re-used without any other pre-processing;
- 'recycling' means any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations;
- 'other recovery' means any operation the principal result of which is that the waste serves a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function. Annex II sets out a non-exhaustive list of recovery operations;
- 'disposal' means any operation which is not recovery, even where the operation has as a secondary consequence the reclamation of substances or energy. Annex I sets out a non-exhaustive list of disposal operations.

4.1.6 Annex II includes the recovery category 'R1 - Use principally as a fuel or other means to generate energy', which includes incineration facilities dedicated to the processing of municipal solid waste only where their energy efficiency is equal to or above:

- 0.60 for installations in operation and permitted in accordance with applicable Community legislation before 1 January 2009, and
- 0.65 for installations permitted after 31 December 2008, such as the Proposed Development.

4.1.7 This is calculated using the following formula:

$$\text{Energy efficiency} = (E_p - (E_f + E_i)) / (0.97 \times (E_w + E_f))$$

4.1.8 These respectively mean as follows:

- **Ep** means annual energy produced as heat or electricity. It is calculated with energy in the form of electricity being multiplied by 2.6 and heat produced for commercial use multiplied by 1.1 (GJ/year);
- **Ef** means annual energy input to the system from fuels contributing to the production of steam (GJ/year);
- **Ew** means annual energy contained in the treated waste calculated using the net calorific value of the waste (GJ/year);
- **Ei** means annual energy imported excluding *Ew* and *Ef* (GJ/year);
- 0.97 is a factor accounting for energy losses due to bottom ash and radiation.

4.2 The Waste (England and Wales) Regulations 2011

4.2.1 The Waste (England and Wales) Regulations 2011 ('the Regulations') implement the WFD and Schedule 1 to the Regulations includes a requirement:

"2. (1) To apply the following waste hierarchy as a priority order in waste prevention and management policy—

(a) prevention;

(b) preparing for re-use;

(c) recycling;

(d) other recovery (for example energy recovery);

(e) disposal.

(2) When applying the waste hierarchy in sub-paragraph (1), the appropriate authority must ensure that it—

(a) encourages the options that deliver the best overall environmental outcome, which may require specific waste streams to depart from the hierarchy where this is justified by life-cycle thinking on the overall impacts of the generation and management of such waste;

(b) takes into account—

(i) the general environmental protection principles of precaution and sustainability,

(ii) technical feasibility and economic viability,

(iii) protection of resources, and

(iv) the overall environmental, human health, economic and social impacts."

4.3 Application of Waste Hierarchy

- 4.3.1 The Proposed Development will be an ‘R1’ rated energy recovery facility.
- 4.3.2 The Proposed Development will conform with the waste hierarchy if the waste combusted in the facility would otherwise be managed by a disposal operation which is lower down the waste hierarchy (which in the case of the wastes under consideration would most likely be landfill).
- 4.3.3 Furthermore, if the Proposed Development utilises waste that would otherwise be landfilled but is to undergo R1 recovery outside the UK, this will also conform with the waste hierarchy, since it is not prejudicial to those activities which have greater priority than ‘other recovery’ in the hierarchy and has the added benefit of reducing transport distances and contributing to the UK’s energy generation.

4.4 Waste Management Costs

- 4.4.1 The costs of various waste management options, as set out in the Waste and Resources Action Programme (WRAP’s) annual Gate Fee Report (latest available edition of 2019⁹) are shown in Table 4.1 below. This data refers to gate fees paid by local authorities.

Table 4.1 Summary of the UK gate fees reported by local authorities, 2018 (cost per tonne)

TREATMENT	MATERIALS/ TYPE OF FACILITY/ GRADE	2018 (MEDIAN)	2017 (MEDIAN)
Material Recovery Facility (MRF)	All contracts (all wastes)	£25	£22
	Contracts beginning in 2018	£35	£35
In-Vessel Composting (IVC)	Mixed food & green	£50	£49
	All feedstock types	£46	£46
Anaerobic Digestion (AD)	All gate fees	£27	£26
	UK (contracts started between 2016 - 2018)	£19	
Energy from waste (EfW)	All	£89	£86
	Pre-2000 facilities	£65	£57
	Post-2000 facilities	£93	£89
Landfill	Non-hazardous waste including landfill tax	£113	£106
	Non-hazardous waste excluding landfill tax	£24	£20

⁹ <http://www.wrap.org.uk/sites/files/wrap/WRAP%20gate%20fees%20report%202019.pdf>

- 4.4.2 A separate report on commercial waste¹⁰ has been produced by WRAP, which does not consider EfW and focuses solely on AD, IVC and MRFs. The report notes that in 2018 the median gate fees were:
- AD £3 to £10 per tonne (depending on waste type);
 - IVC £43 per tonne; and
 - MRF £55 to £70 per tonne (although reported to be lower, at £45 to £60/tonne, in the Midlands and North).
- 4.4.3 The report noted that the MRF gate fee for commercial waste is higher compared to waste delivered under local authority contracts, which can guarantee regular volumes over a long-term period.
- 4.4.4 The WRAP reports do not include gate fee returns for RDF export. A report prepared for CIWM on the RDF export market¹¹ in 2018 estimated that RDF export gate fees fall between the gate fees for EfW and landfill disposal – i.e. the market is driven by the high cost of landfill disposal and the limited EfW capacity in the UK.
- 4.4.5 The data shows that EfW remains relatively more expensive than the main available recycling options. As recycling is less costly than EfW, this confirms that there is no financial incentive for waste producers to preferentially send waste for recovery to the Proposed Development that could more economically be recycled.

4.5 Waste Contracts

- 4.5.1 The Proposed Development will operate on a merchant basis, contracting with a range of waste suppliers. The Proposed Development is not financed by Government or any local authority and therefore there is no financial or long-term contractual requirement for a local authority to send waste to the facility in preference to recycling.
- 4.5.2 The landfill tax and the relatively high cost of sending waste to an EfW, as well as Government policy, will maintain the strong incentives for local authorities to prioritise recycling where it is technically and economically feasible to do so.

4.6 Availability of Waste

- 4.6.1 The fuel availability study presented in Section 3 of this document demonstrates that there is sufficient availability of waste which is currently either landfilled in the UK or exported for energy recovery. By utilising this waste as a fuel supply, the Proposed Development will conform with the waste hierarchy by providing a preferable environmental solution (energy recovery in the UK rather than disposal or energy recovery overseas).

¹⁰ <http://www.wrap.org.uk/sites/files/wrap/WRAP%20Commercial%20Gate%20Fees%202019.pdf>

¹¹ <https://www.circularonline.co.uk/wp-content/uploads/downloads/Presidential-Report-2018-RDF-Trading-in-a-Modern-World.pdf>

4.7 Conclusions

4.7.1 Operation of the Proposed Development conforms with the waste hierarchy since:

- generation of energy from waste at the Site will be an R1 recovery operation, and therefore preferable to disposal operations such as landfill;
- there is no financial incentive for waste producers to send waste to the Proposed Development that could otherwise be reused or recycled;
- there is no long-term financial commitment by local authorities to the construction of the Proposed Development, and therefore no proposal that their waste is 'tied in' to the Proposed Development for its lifespan; and
- the waste that will be utilised by the Proposed Development is currently being managed at lower levels in the waste hierarchy (or at a similar level, but at overseas facilities), such that energy recovery at the Proposed Development will represent a preferable option.

5.0 EFFECT ON WASTE PLANS AND POLICIES

5.1 Introduction

5.1.1 This section focuses solely on the waste management aspects of relevant plans and policies and does not include other planning aspects which are considered elsewhere in the DCO Application documents.

5.2 Overarching National Policy Statement for Energy (EN-1) and National Policy Statement for Renewable Energy Infrastructure (EN-3)

Summary of Relevant Policies

5.2.1 NPS EN-1 sets out national policy for energy infrastructure which constitutes nationally significant infrastructure projects pursuant to the Planning Act 2008 (PA2008). It has effect, in combination with the relevant technology-specific NPS, on the decisions by the Secretary of State on applications for energy developments that fall within the scope of the NPSs, such as the Proposed Development. For such applications, the NPSs provide the primary basis for decisions by the Secretary of State (pursuant to section 104(3) of the PA 2008). Should a decision be made under section 105(2) PA 2008 the NPSs may still be important and relevant.

5.2.2 NPS EN-3 is the relevant technology-specific energy NPS for renewable energy infrastructure which includes energy-from-waste infrastructure generating more than 50MW of electricity, such as the Proposed Development.

5.2.3 NPS EN-3 states:

“2.5.2 The recovery of energy from the combustion of waste, where in accordance with the waste hierarchy, will play an increasingly important role in meeting the UK’s energy needs. Where the waste burned is deemed renewable, this can also contribute to meeting the UK’s renewable energy targets. Further, the recovery of energy from the combustion of waste forms an important element of waste management strategies in both England and Wales.”

“2.5.64 Waste combustion generating stations need not disadvantage reuse or recycling initiatives where the proposed development accords with the waste hierarchy”.

Effect of the Proposed Development

5.2.4 The Proposed Development complies with NPS EN-3’s statement that EfW has a role to play in terms of both waste management and energy generation and NPS EN-3 confirms that EfW development is not inconsistent in principle with recycling and reuse initiatives.

5.3 National Planning Policy for Waste (Department for Communities and Local Government, 2014)

Summary of Relevant Policies

5.3.1 This document sets out detailed waste planning policies. All local planning authorities should have regard to its policies when discharging their responsibilities to the extent that they are appropriate to waste management.

- 5.3.2 Waste planning authorities should identify, in their Local Plans, sites and/ or areas for new or enhanced waste management facilities in appropriate locations. In preparing their plans, waste planning authorities should:

“plan for the disposal of waste and the recovery of mixed municipal waste in line with the proximity principle, recognising that new facilities will need to serve catchment areas large enough to secure the economic viability of the plant”.

- 5.3.3 In addition, at Paragraph 7 it is identified that when determining waste planning applications, waste planning authorities should only expect applicants to demonstrate the quantitative or market need for new or enhanced waste management facilities, and demonstrate that the waste hierarchy is not undermined, waste management proposals are not consistent with an up-to-date Local Plan.

Effect of the Proposed Development

- 5.3.4 As demonstrated in this report, there is a market need for the facility, and the National Planning Policy explicitly recognises the fact that new facilities such as the Proposed Development serve catchment areas wider than just the waste planning authority in which they are located. The Proposed Development is also consistent with the Local Plan (see further below). The Proposed Development is therefore consistent with the policies set out in the National Planning Policy for Waste.

5.4 Our Waste, Our Resources: A Strategy for England

Summary of Relevant Policies

- 5.4.1 This Strategy is the first significant government statement in this area since the 2011 Waste Review and the subsequent Waste Prevention Programme 2013 for England. It builds on this earlier work but also sets out fresh approaches to long-standing issues like waste crime, and to challenging problems such as packaging waste and plastic pollution.
- 5.4.2 The Strategy is framed by natural capital thinking¹² and guided by two overarching objectives:
- to maximise the value of resource use; and
 - to minimise waste and its impact on the environment.
- 5.4.3 The Strategy complements and helps deliver other government strategies which relate to the environment. The Strategy will contribute to the delivery of five strategic ambitions:

¹² ‘natural capital’ is defined in the Strategy as “the elements of nature that directly or indirectly produce value for people, including resources, ecosystems and species, the land, air and oceans, as well as the natural processes and functions that link them together and sustain life”

- to work towards all plastic packaging placed on the market being recyclable, reusable or compostable by 2025;
- to work towards eliminating food waste to landfill by 2030;
- to eliminate avoidable plastic waste over the lifetime of the 25 Year Environment Plan;
- to double resource productivity by 2050; and
- to eliminate avoidable waste of all kinds by 2050.

5.4.4 Chapter 3 of the Strategy, entitled ‘Recovering Resources and Managing Waste’ states that:

“Our goal is for at least 65% of municipal waste by weight to be recycled by 2035, with no more than 10% ending up in landfill.

Currently England generates around 29 million tonnes of municipal residual waste per annum (Mtpa). We manage this waste in three main ways: sending it for energy recovery, exporting it as a refuse-derived fuel (RDF), and landfilling it. We also attempt to extract recyclables from this waste where the technology exists to do it, although the quality of this material tends to be poor. Landfill is the least preferred option given its environmental impact and long-lasting nature.

The proportion of local authority collected waste going to Energy from Waste (EfW) plants increased from 9% in 2000/01 to 41% in 2017/18. In 2017 incineration of biodegradable waste produced about 3.4% of the UK’s renewable energy, offsetting the use of virgin resources...

In addition, we will work closely with industry to secure a substantial increase in the number of EfW plants that are formally recognised as achieving recovery status, and will ensure that all future EfW plants achieve recovery status.

England has approximately 10.5Mt of EfW operational capacity dedicated to treating municipal and/or industrial and commercial waste, enough to treat around 36% of municipal residual waste at current levels. We expect an additional 2.0Mt of EfW capacity to come on stream by 2020 from plants which are in construction. Greater waste prevention, reuse and a 65% municipal waste recycling rate, delivered through policies in this Strategy, will mean that municipal residual waste is expected to decrease to around 20.0 Mtpa by 2035.

Given our projections we continue to welcome further market investment in residual waste treatment infrastructure”.

Effect of the Proposed Development

5.4.5 The Proposed Development is supportive of the waste strategy insofar as it provides further R1 rated residual waste treatment infrastructure required by the strategy.

5.5 Energy from Waste: A Guide to the Debate (Defra, 2014)

Summary of Relevant Guidance

- 5.5.1 The purpose of this guide is to provide a starting point for discussions about the role EfW might have in managing waste. This role will always be dependent on specific circumstances and therefore this guide does not attempt to provide all the answers. However, it does highlight questions that should be asked, options that are available, and the process for making decisions and influencing them.
- 5.5.2 With respect to the proximity principle, the guide states that:
- “Councils have a duty to cooperate to ensure that waste needs across their respective areas are handled properly and appropriately. They need to have regard for the proximity principle, which requires all waste for disposal and mixed municipal waste (i.e. waste from households) to be recovered in one of the nearest appropriate facilities. However, this principle must not be over-interpreted. It does not require using the absolute closest facility to the exclusion of all other considerations. There is nothing in the legislation or the proximity principle that says accepting waste from another council, city or region 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. 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”.*
- 5.5.3 The guide sets out a number of key principles which Government encourages developers to consider as a key part of the decision-making process around future development of new projects and operation of existing plant. This means that from a sector viewpoint infrastructure proposals, technologies and services that are aligned with these principles should be on a much firmer footing and more robust to future policy than those which are not.
- 5.5.4 The principles underpinning policy are:
- 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; and
 - IV. Government will remain technology neutral except where there is a clear market failure preventing a technology competing on a level footing.
- 5.5.5 In terms of the potential for EfW to compete with other more preferable management options on the waste hierarchy (i.e. conformance with Principle I), the guide states that:

“226. The Government sees a long term role for energy from waste. To be consistent with the first principle this long term role needs to be based on energy from waste that at least constitutes recovery not disposal. This should therefore be a key consideration for both new and existing projects. To be classed as recovery, energy from waste facilities must meet the requirements set out in the waste framework directive, for example through attainment of R1 status.

....

229. Increased prevention, reuse and recycling, does not necessarily mean less waste feedstock for energy recovery. There is a large amount of potentially combustible residual waste still going to landfill that could be utilised in energy recovery. The Government considers there is potential room for growth in both recycling and energy recovery – at the expense of landfill.

230. This consideration is particularly pertinent at the local level where the presence or plan for an energy from waste facility is often perceived as a potential brake on initiatives to optimise local recycling. However, local waste successfully diverted to more beneficial processing higher up the hierarchy can be replaced by participation in the wider waste market through further diversion of other sources from landfill. Thus, the need to “feed the beast” to maintain economic energy from waste operation should not impede continuing improvements in prevention, reuse and recycling of the host community.

233. Changes in composition due to enhanced recycling will alter the properties of the residual stream in ways such as calorific value and biogenic content. Energy from waste needs to ensure that its requirements do not act as a brake on such positive changes. Approaches need to be flexible enough to cope with such change or to seek out routes to further manipulate the waste stream to rebalance properties, ideally, we should be minimising the fossil content of waste going to energy recovery. This could be through seeking necessary streams from landfill or supporting recycling of other components that redress the balance e.g. removing a greater proportion of fossil plastics to make up for a loss of biogenic material.

234. As discussed below the composition of waste going to energy recovery is key to its environmental benefits and much greater consideration needs to be given to it. In considering waste composition the environmental requirements should be given as much weight as the technical plant requirements. Having a higher calorie fuel may make sense from an energy production viewpoint but if it is due to a higher plastic content creating fossil emissions it may be environmentally detrimental. This consideration needs to extend beyond the plant to the pre-processing and collection regimes that ultimately dictate waste composition and quality.”

5.5.6 The guide summarises the key considerations arising from the first principle as follows:

“235. To be consistent with the principle of energy from waste supporting waste management in line with the hierarchy, key considerations for the long-term development or operation of an energy from waste solution are:

- *The ability to at least qualify as recovery in the waste hierarchy*
- *To support and not compete with effective prevention, reuse and recycling and not be a brake on their growth*
- *Meeting the requirements of the hierarchy will be an important test for any policy or project aiming to increase the energy produced from waste*
- *The energy from waste sector needs to think beyond its own boundaries working with partners along the supply chain. It must be flexible to changing waste composition or drive recycling and/or collection processes that allow it to manipulate the composition of residual waste (the energy from waste feedstock) without compromising the above”.*

5.5.7 For principles II, III and IV, the guide states that:

“250. To address these changes and meet the second principle of minimising environmental impacts key considerations for both new and existing plants going forwards will be:

- *maximising the efficiency of existing plants to delay reaching, and avoid going beyond, any balance point*
- *the sustainable lifetime of an electricity only plant will be limited and extending it beyond that originally envisaged may not be beneficial*
- *focus on development of energy outputs beyond electricity, both for new plants and ensuring existing plants that are ‘CHP ready’ becoming ‘CHP in use’*
- *avoiding the use of waste in energy recovery with insufficient biogenic content to deliver environmental benefits, or capturing the environmental cost of doing so*

295. For a number of years the primary purpose and driver for energy from waste in the UK has been to divert biodegradable waste from landfill. However, over time both the sector and the policy which steers it have evolved. The overall hierarchy has become much more important, with waste being pushed up to higher uses such as reuse and recycling and with energy from waste itself needing to cement itself more firmly as recovery. Equally the drive for renewable energy and energy security has increased the importance of energy from waste to the energy sector. This has come together in the approach set out in the 2011 Waste Review of more energy out of waste rather than just more waste into energy recovery.

296. The first two principles set out above recognise energy from waste’s fundamental role in the waste hierarchy. They also recognise that as application of the hierarchy succeeds the volumes and composition of waste going to energy from waste from current sources will reduce and change. The sector will need to ensure more waste is pulled out of landfill or new sectors such as commercial and industrial waste are better exploited to maintain feedstocks. With diminished or changing feedstock energy from waste must evolve both to deliver its potential as a partially renewable energy source and as demonstrated by recent modelling, to maintain its environmental benefits

over landfill. This will require much wider utilisation of heat or other higher energy outputs both for new and existing plants.

297. The third and fourth principles highlight that direct Government support for energy from waste, be that infrastructure, communications or energy incentives, will be driven by the need to correct market failures, where those failures are preventing government from reaching its stated goals. The support will be focussed to enable those goals to be reached but achieving beyond them, while often desirable, will be left to the market. As energy from waste bridges a number of different markets the level of intervention may be different across the markets.

298. Energy from waste developments and operations need to give proper consideration to the principles set out above and recognise some of the limitations they imply. By doing so they are likely to be much more robust to any future policy changes than those which are not consistent with delivery of these principles.”

Effect of the Proposed Development

- 5.5.8 The Proposed Development is consistent with principle I of the guide since it is a recovery operation which will not compete with recycling and which has flexibility in terms of the calorific value and composition of the waste it receives.
- 5.5.9 The Proposed Development is also consistent with principle II of the guide since the facility will produce both power and heat; and principles III and IV do not apply since the Proposed Development is not reliant on Government support.

5.6 Yorkshire and Humber Waste Position Statement 2016

Summary of Relevant Policies

- 5.6.1 This Statement has been produced to assist with coordination in strategic planning for waste by waste planning authorities (WPAs) in the Yorkshire and Humber (Y&H) area. It represents an update to a first version of the Statement produced in July 2014 and subsequently endorsed by Waste Planning Authorities (WPAs) in the area, including North East Lincolnshire Council.
- 5.6.2 The Statement sets out some key background information about waste and waste planning in the area and, in particular, identifies some of the key information that is likely to be relevant to preparation and review of waste local plans and which may affect more than one local authority area. To this extent the Statement is also intended to assist WPAs in the area to fulfil their statutory requirements under the ‘Duty to Cooperate’ obligation in line with the regulations and paragraphs 178 and 182 of the National Planning Policy Framework.
- 5.6.3 The position statement notes that:

“Strategic planning for waste has an important role to play in helping to deliver such coordination and move waste up the hierarchy, as well as ensuring that an appropriate pattern of facilities is available, taking into account the needs of the area as well as other spatial planning objectives. In particular there is a need to help ensure that an integrated and adequate network of waste management facilities can be delivered in order to reduce the environmental impacts of managing waste”.

5.6.4 It also notes that:

“As well as being a generator of substantial volumes of waste, the area also hosts a wide range of waste management facilities. In 2012 the Y&H region had the second highest number of sites with environmental permits of any region in England. These include a number of waste management facilities which are likely to be of strategic significance, in terms of meeting waste management needs arising both in and outside the area.

At a regional level key interactions (both imports and exports) were with East Midlands, North East and North West regions. This is not surprising given the proximity of these areas to Y&H. However, significant imports from London were also noted in 2014 data. The majority of exports were waste for treatment, mainly to the North East and East Midlands but as overall imports exceeded exports it is likely that this is a result of market factors rather than significant shortages of capacity within Y&H”.

Effect of the Proposed Development

5.6.5 The Position Statement does not include any criteria against which to assess the need for new waste management facilities and does not include any presumption against certain types of facility. The Proposed Development is therefore consistent with the Position Statement.

5.6.6 The Position Statement recognises the strategic national importance of the region’s waste management facilities and that there are considerable flows of waste into and out of the region. The Proposed Development and its potential to source fuel both regionally and nationally is therefore consistent with the situation described in the Position Statement.

5.7 North East Lincolnshire Local Plan 2013 to 2032 (adopted 2018)

Summary of Relevant Policies

5.7.1 The Plan sets out the Council's vision and strategy for development, including why, where and how the Borough will grow. Since North East Lincolnshire is a unitary authority with responsibility for both the collection and disposal of municipal waste, the Local Plan includes policies for waste management.

5.7.2 The Plan states that:

“The role of the Council is not to manage all of the waste generated in North East Lincolnshire, though the Council does hold contacts with operators to manage the waste that it collects from households, street sweepings, bins, and community recycling centres. The role of the planning system is to ensure that appropriate waste management facilities can come forward to provide capacity sufficient to meet the area's need for waste management capacity, when it is required, to ensure waste is managed in a sustainable manner”.

5.7.3 The Plan also states that:

“However, extensive movements of waste occur between waste planning authority areas, due to commercial contracts and the location of facilities. Many types of waste require specialist treatment, and it is not viable for every local authority area to be able to manage all of the waste it generates”.

5.7.4 With respect to management of waste arising from within NELC itself, the Plan states that:

“The Council's draft Waste Needs Assessment (2015) suggests that no additional capacity is required to meet North East Lincolnshire's waste management needs”.

5.7.5 Notwithstanding this, the Plan implicitly recognises the potential for developing new waste management capacity by setting out, in Policy 47, a series of requirements for new waste facilities, including locational criteria which prioritise existing employment land and allocated employment sites. Paragraph 16.23 explains that this is due to their distance from residential areas and proximity to the A180 trunk road.

5.7.6 Policy 47 also supports co-location of waste management facilities, to maximise efficiency and minimise adverse impacts, and promotes co-location where use of the output of a waste facility, such as a district-heating scheme, or industrial process.

5.7.7 Policy 48 safeguards existing waste facilities such as the NEWLINCS development from ‘the encroachment of incompatible development’ unless it is no longer operational or required.

Effect of the Proposed Development

5.7.8 Although the Proposed Development is not provided to meet the local authority's waste needs, the Local Plan recognises and plans for facilities to serve other areas and the Proposed Development complies with the aims of Policy 47 by being located on employment land away from residential areas and in proximity to the A180 trunk road, and is co-located with an existing energy generation use and in reasonable proximity to some potential industrial users of heat. The Proposed Development also generally minimises impacts, consistent with the wider aims of the Local Plan.

5.7.9 The Proposed Development does not represent an encroachment of incompatible development upon the NEWLINCS development and is therefore compliant with and does not affect Policy 48.

5.7.10 The officer's report for the Consented Development is consistent with the above analysis, stating that the proposals were “*suitable against Policies (...) 47 of the NELLP and would not affect sites safeguarded under Policy 48*”¹³. The Proposed Development is the same type of development, and with the same maximum throughput and built dimensions, as the Consented Development.

¹³ Delegated Powers Report dated 12 April 2019 retrieved from <http://planninganddevelopment.nelincs.gov.uk/online-applications/applicationDetails.do?keyVal=PJIY2WLJFGE00&activeTab=summary>

6.0 SUMMARY AND CONCLUSIONS

6.1 Fuel Availability

6.1.1 An assessment has been carried out which considers:

- the amount of fuel currently available, calculated as combustible waste currently being landfilled and RDF currently exported;
- the amount of fuel likely to be available taking into account other EfW facilities which are either in commissioning/ construction or likely to be built; and
- the amount of fuel likely to be available taking into account both existing and future EfW facilities and also an increase in LACW recycling rate from 44.7% to 55% by 2023.

6.1.2 This analysis indicates that a total of 0.9 million tonnes a year (at a regional level) and 6.7 million tonnes a year (nationally) of combustible waste is likely to be available as fuel for the Proposed Development in 2023, even taking into account likely new EfW facilities and increases in recycling rates. This is well in excess of the actual capacity of the Proposed Development and demonstrates that there is likely to be sufficient fuel available for the Proposed Development.

6.2 Waste Hierarchy Assessment

6.2.1 The operation of the Proposed Development has been assessed in terms of the waste hierarchy and found to be in conformity with the hierarchy since:

- **the Proposed Development** will be an R1 recovery operation, and therefore preferable to disposal operations such as landfill;
- there is no financial incentive for waste producers to send waste to **the Proposed Development** that could otherwise be reused or recycled;
- there is no long-term financial commitment by local authorities to the construction of **the Proposed Development**, and therefore no proposal that their waste is 'tied in' to **the Proposed Development** for its lifespan; and
- the waste that will be utilised by **the Proposed Development** is currently being managed at lower levels in the waste hierarchy (or at a similar level, but at overseas facilities), such that energy recovery at **the Proposed Development** will represent a preferable option.

6.3 Effect on Waste Plans and Policies

6.3.1 The effect of the Proposed Development on the following plans, policies, guidance, and strategies has been assessed:

- Overarching NPS for Energy (EN-1) and NPS for Renewable Energy Infrastructure (EN-3);
- National Planning Policy for Waste (Department for Communities and Local Government, 2014);
- Our Waste, Our Resources: A Strategy for England (Defra, 2018);
- Energy from Waste: A Guide to the Debate (Defra, 2014);

- Yorkshire and Humber Waste Position Statement 2016; and
- North East Lincolnshire Local Plan 2013 to 2032 (adopted 2018).

6.3.2 In each case, the Proposed Development is considered to be consistent with the relevant plans and policies.

APPENDIX 1 – ENERGY FROM WASTE CAPACITY

NAME	CAPACITY ('000 TONNES)	2018 THROUGHPUT ('000 TONNES)
OPERATIONAL EfW (2018)		
Runcorn EfW Facility	850	884
Riverside Resource Recovery Facility	785	740
Tees Valley - EfW Facility	756	637
Ferrybridge Multifuel 1	675	647
EcoPark Energy Centre	620	518
Allington Waste Management Facility	560	492
SELCHP ERF	488	441
Lakeside EfW	450	431
Wilton 11 EfW	500	467
Tyseley ERF	400	343
Severnside Energy Recovery Centre	400	377
Greatmoor EfW	345	308
Staffordshire ERF	340	336
Ardley EfW Facility	326	290
Allerton Waste Recovery Park	320	244
CSWDC Waste to Energy Plant	315	289
SUEZ Suffolk - EfW Facility	269	264
Devonport EfW CHP Facility	265	255
Cornwall Energy Recovery Centre	240	221
Sheffield ERF	245	234
Newhaven ERF	242	224
Integra South West ERF	210	199
Integra South East ERF	210	207
Stoke EfW Facility	210	186
EnviRecover EfW Facility	200	200
Eastcroft EfW Facility	180	177
Leeds Recycling and ERF	180	187
Lincolnshire EfW Facility	190	171
Kirklees EfW Facility	150	124
Bolton ERF (3)	127	29
Wolverhampton EfW Facility	118	110
Integra North ERF	110	93
Dudley EfW Facility	105	94
Battlefield EfW Facility	102	96
Milton Keynes Waste Recovery Park	90	27
Peterborough EfW Facility	85	81
Enviropower Ltd, Lancing	60	60

NAME	CAPACITY (‘000 TONNES)	2018 THROUGHPUT (‘000 TONNES)
Exeter ERF	60	58
NewLincs Integrated Waste Management Facility	56	51
TOTAL OPERATIONAL	11,834	10,792
ADDITIONAL EfW UNDER ACTIVE DEVELOPMENT (IN COMMISSIONING, IN CONSTRUCTION OR NEWLY OPERATIONAL)		
<i>* = located in East Midlands or Yorkshire & Humber regions</i>		
Additional Capacity Permitted		
Runcorn	250	
<i>Ferrybridge FM1 *</i>	50	
Hartlebury	30	
Late Stage Commissioning/ Newly Operational		
Beddington ERF	303	80
<i>Sinfin IWTC *</i>	158	50
In Construction/ Newly Operational		
<i>Ferrybridge Multifuel 2 *</i>	675	
Lostock Sustainable Energy Plant Limited	600	
Kemsley Park EfW	550	
Severn Road RRC	350	
Hooton Park Sustainable Energy	266	
<i>Hull Energy Works *</i>	227	
Javelin Park ERF	190	
Baddersley EfW	100	
Bridgwater Resource Recovery	100	
Hoddesdon EfW Plant	90	
Charlton Lane Eco Park	60	
Isle of Wight EfW	30	
TOTAL ADDITIONAL EfW UNDER ACTIVE DEVELOPMENT	4,029	3,674
PRE-OPERATIONAL EfW THAT HAVE CONFIRMED FINANCIAL CLOSE		
<i>* = located in East Midlands or Yorkshire & Humber regions</i>		
Rookery Pit Energy Recovery Facility	585	
<i>Newhurst Energy Recovery Facility *</i>	300	
TOTAL PRE-OPERATIONAL ADDITIONAL FUTURE EFW	885	807