

LOCAL IMPACT REPORT

Application by Boston Alternative Use Boston Projects for a Development Consent Order granting Development Consent for The Boston Alternative Energy Facility at Riverside Industrial Estate, Boston – EN010095

Produced by Lincolnshire County Council (LCC)

October 2021

1. Introduction

- 1.1 This report has been prepared by Lincolnshire County Council (LCC) as a statutory consultee, in accordance with advice and requirements set out in the Planning Act 2008, the Localism Act 2011 and Advice Note One: Local Impact Reports (Version 2, April 2012, The Planning Inspectorate).
- 1.2 The Advice Note states that a Local Impact Report (LIR) is a 'report in writing giving details of the likely impact of the proposed development on the authority's area'.
- 1.3 The Advice Note states that when the Examining Authority decides to accept an application, it will ask the relevant local authorities to prepare a LIR and this should centre around whether the local authority considers the development would have a positive, negative or neutral effect on the area.
- 1.4 The Report may include any topics that the local authority considers to be relevant to the impact of the development on their area and may be used as a means by which their existing body of knowledge and evidence on local issues can be fully and robustly reported to the Examining Authority.
- 1.5 This LIR has been written to incorporate some of the subject areas suggested in the Advice Note and in light of the application material submitted.
- 1.6 The LIR covers areas where the County Council has a statutory function or expertise. The County Council defers to Boston Borough Council on other matters, as set out within this LIR.

2. Location

- 2.1 The 25.3ha Principal Application Site is located at the Riverside Industrial Estate, Boston, Lincolnshire. The site is next to the tidal River Witham and downriver from the Port of Boston.
- 2.2 The Application Site for the Facility is located approximately 2 km to the south east of Boston town centre and comprises two components:
 - Principal Application Site, covering 25.3ha and will contain all of the operational infrastructure;
 - Habitat Mitigation Site, which will be 1.5ha and located approximately 170 m to the southeast of the Principal Application Site, encompassing an area of saltmarsh and small creeks at the margins of The Haven that will be enhanced.

- 2.3 The Principal Application Site is neighboured to the west by the Riverside Industrial Estate and to the east by The Haven, a tidal waterway of the River Witham between The Wash and the town of Boston. The A16 highway is approximately 1.3km to the west.
- 2.4 The Principal Application Site is accessed by road via the Riverside Industrial Estate's existing road network from Nursery Road. Access to the site from the west to Marsh Lane is gained from Bittern Way.
- 2.5 The Principal Application Site comprises undeveloped and previously developed land enclosed by a network of drainage ditches and forms part of a wider emerging industrial/commercial area.
- 2.6 The eastern margins of the Principal Application Site are defined, in part, by a primary flood defence bank along The Haven. Large and small industrial business units are located to the north, west and south of this site.

3. Description of Proposed Development

- 3.1 A development consent order is sought to construct an energy from waste facility that would have an annual throughput of 1.2 million tonnes of RDF transported to the Riverside Industrial Estate, Boston by boat. The Application Site covers 26.8ha and is split in to two components: the Principle Facility Site, containing operational infrastructure, (25.3ha) and an area containing habitat mitigation works (1.5ha) for wading birds.
- 3.2 The Applicant 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 104 megawatts electric ('MWe') (delivering 80 MWe of renewable energy to the National Grid). The Facility includes a lightweight aggregate manufacturing plant, a new wharf and a feeding stock checking, processing and storage facility, two carbon dioxide recovery plants, and electrical export infrastructure to support the operational phase of the development on land at the Riverside Industrial Estate, located on the bank of The Haven in Boston. A separate Habitat Mitigation Area is also included as part of the Facility, located approximately 170 m south east of the Principal Application Site.
- 3.3 The development, if allowed, would be known as the 'Boston Alternative Energy Facility' with the following key themes:-
- Generating reliable low carbon/renewable energy for Lincolnshire and the UK
 - Bridging the infrastructure gap in Lincolnshire and the UK
 - Replacing landfill - not recycling – and moving waste up the Waste Hierarchy
 - Maximising movement of waste by water and minimising traffic congestion
 - Tackling air quality and delivering carbon positive objectives
 - Facilitating private investment in Lincolnshire and the UK, avoiding the need for public subsidy and boosting the labour market and economy.
- 3.4 The Facility proposed to generate power from Refuse Derived Fuel (RDF) 1.2 million tonnes per annum transported by boat from various points across the UK in comparison to its existing shipment abroad or landfill. The facility would have a total gross generating capacity of 102 MWe and it would deliver approximately 80 MWe to the National Grid.
- 3.5 The 'thermal treatment' process for generating power converts the solid fuel into steam, which is then used to generate power using steam turbine generators.

- 3.6 The main features of the proposal would be:
- wharf and associated infrastructure (including re-baling facility, workshop, transformer pen and welfare facilities);
 - RDF bale storage area, including sealed drainage with automated crane system for transferring bales;
 - conveyor system between the RDF storage area and the RDF bale shredding plant, part of which is open and part of which is under cover;
 - bale shredding plant;
 - RDF bunker building;
 - Thermal Treatment Plant comprising three separate 34 MWe combustion lines and three stacks;
 - turbine plant comprising three steam turbine generators and make-up water facility;
 - air-cooled condenser structure, transformer pen and associated piping and ductwork;
 - lightweight aggregate (LWA) manufacturing plant comprising four kiln lines, two filter banks with stacks, storage silos, a dedicated berthing point at the wharf, and storage (and drainage) facilities for silt and clay;
 - electrical export infrastructure;
 - two carbon dioxide (CO₂) recovery plants and associated infrastructure;
 - associated site infrastructure, including site roads and car parking, site workshop and storage, security gate, and control room with visitor centre.
- 3.7 The design process has been iterative with the design evolving over the preapplication stage. The design process has been shaped by stakeholder input, consultation events and changes in technology, that have evolved from gasification to a conventional combustion-based thermal treatment EfW. Good design of the facility has been applied to ensure robustness, durability, usefulness and aesthetically pleasing appearance. The facility has been designed so as to ensure air quality considerations in terms of emissions, odour and dust are controlled through design, and operational control. Noise and vibration are controlled through the design of the facility and its cladding. The type of cladding, and colour will ensure durability and good appearance.
- 3.8 The Principal Application Site shape has dictated the arrangement of the main thermal treatment units. The site layout has been optimised for the Facility to enable the movement of waste throughout the facility to the thermal treatment plant. The aggregate facility is positioned next to The Haven to facilitate export of lightweight aggregate and import of the clay for use in the lightweight aggregate manufacturing process. The approximate location of the thermal treatment facility; the lightweight aggregate facility and the proposed wharf have been essentially fixed by the site boundary.

4. Relevant Planning History

B\0477\09 - To construct a gasification power station comprising: gasification plant; turbine house; air cooled condenser; waste timber delivery, storage and preparation building; sewage sludge delivery, drying and storage building; combined two-storey office, control room and workshop building; weigh bridge and site security building; site security fence; surfaced vehicle manoeuvring and parking area; and construction of access at Riverside Industrial Estate, Marsh Lane, Boston

B\0203\16 - To vary conditions 2 and 5 of planning permission B/0387/14 - To allow changes to the gasification plant and buildings and to allow deliveries on Saturdays at Riverside Industrial Estate, Marsh Lane, Boston

B/0495/03 - To use land as a waste transfer and recycling centre on land at Nursery Road, Marsh Lane, Boston

B/0706/07 - To continue to use land as a waste transfer and recycling centre without complying with condition 2 of planning permission B/0495/03 dated 23 October 2003 on land at Nursery Road, Marsh Lane, Boston

B/18/0254 - To vary condition 2 of planning permission B/0708/07 to allow for the delivery of waste during night time hours at Mick George Ltd, Nursery Road Industrial Estate, Nursery Road, Boston, PE21 7TN

B/18/0255 - To vary condition 3 of planning permission B/0706/07 to allow for the delivery of waste in night time hours at Mick George Ltd, Nursery Road Industrial Estate, Nursery Road, Boston, PE21 7TN

5. Relevant Lincolnshire County Council Policy Documents

5.1 Lincolnshire Minerals and Waste Local Plan Core Strategy and Development Management Policies (CSDMP)

Policy W1: Future requirements for new waste facilities.

The County Council through the site location document identify locations for a range of new or extended waste management facilities within Lincolnshire where they are necessary to meet the predicted capacity gaps for waste arisings in the County up to and including 2031 as presented in Table 9, subject to any new forecasts published in the Council's Annual Monitoring Reports.

Policy W3: Spatial Strategy for New Waste Facilities

Proposals for new waste facilities, including extensions to existing waste facilities will be permitted in and around the following main areas...subject to the criteria of Policy W4.

Policy W4: Locational Criteria for New Waste Facilities in and around main urban areas.

Proposals for new waste facilities, including extensions to existing waste facilities in and around the main urban areas set out in Policy W3 will be permitted provided that they would be located on:

- Previously developed and/or contaminated land; or
- Existing or planned industrial/employment land and buildings; or
- Land already in waste management use; or
- Sites allocated in the Site Location Document; or
- In the case of biological treatment, the land identified in Policy W5. Proposals must accord with all relevant Development Management Policies set out in the Plan.

Policy DM2: Climate Change

Proposals for minerals and waste management developments should address the following matters where appropriate:

Minerals and Waste

- Identify locations which reduce distances travelled by HGVs in the supply of minerals and the treatment of waste unless other environmental/sustainability and, for minerals, geological considerations override this aim
- Implement the Waste Hierarchy, and in particular reduce waste to landfill
- Identify locations suitable for renewable energy generation
- Encourage carbon reduction/capture measures to be implemented where appropriate.

Lincolnshire Minerals and Waste Local Plan: Site Location (2017) – the policies contained therein should be given great weight in the determination of planning applications. The key policy of relevance from this document is (summarised):

Policy SL3: Waste Site and Area Allocations

Future requirements for new waste facilities in order to meet capacity gaps, in accordance with Policy W1 of the Core Strategy and Development Management Policies document will be provided through:

... the granting of planning permission for waste uses within the following areas where the applicant can demonstrate that the proposal is in accordance with the development plan:

Of relevance to this proposal is Area WA22-80 Riverside Industrial Estate, Boston which is where this application is located.

5.2 Waste Needs Assessment 2021 – Overview Report¹

Summarises there only being a modest need for additional capacity for energy recovery from waste within Lincolnshire.

5.3 Lincolnshire Extensive Urban Survey 2019 – Boston²

Showing a record of the development and historic character of Lincolnshire's towns to be used within the planning system.

6. Likely Significant Effects of the Proposed Development

- Minerals and Waste Policy Team - as Minerals and Waste Planning Authority for Lincolnshire
- Highways and Transportation – as Local Highways Authority for Lincolnshire;
- Waste – as Waste Disposal Authority;
- Public Rights of Way – as Local Highways Authority;
- Surface Water Flooding and Drainage – as Lead Local Flood Authority for Lincolnshire;
- Sustainability; and
- Cultural Heritage

6.1 Waste Policy Impacts

- 6.1.1 The application is being promoted as energy from waste facility and whilst it is asserted that the facility will be a form of energy recovery it will still involve approximately 1.2 million tonnes of additional waste recovery capacity being constructed in Lincolnshire.



- 6.1.2 The County Council draws the Inspectors attention to its concern that no information has been provided on the need for this facility other than the assumption that there is a national need for additional recovery capacity to deal with RDF but little detail is then provided to consider the impact on the objectives of the Lincolnshire Minerals and Waste Local Plan or national waste policies. What detail is provided appears to be based on data from south-east England but it is not clear about the composition of the RDF to be brought to the facility. For instance, what proportion of the RDF will be of materials that could be treated higher up the waste hierarchy and how much of the RDF will constitute biomass.
- 6.1.3 The 2016 Minerals and Waste Local Plan sets out that there is only a modest need for additional capacity for energy recovery from waste and the latest Lincolnshire Waste Needs Assessment (July 2021)³ confirms that there is no requirement for additional energy recovery in Lincolnshire until at least 2045. However, there is a national need for such facilities and Lincolnshire County Council accepts that the proposal does not compromise the policies of the Minerals and Waste Local Plan in terms of need and location.
- 6.1.4 Policy W1 of the Minerals and Waste Local Plan sets out that the Site Locations document will identify locations for a range of facilities to meet the predicted capacity gaps. In the supporting text to this policy, table 10 converts the capacity gaps into the predicted requirements for new facilities. This envisaged a new energy recovery facility would be required for LACW and C&I waste with an annual capacity of 200,000 tonnes. The latest Authority Monitoring Report indicates such a facility is still needed although with a reduced annual capacity of around 100,000 tonnes. A new EfW facility of that size that deals only with imported waste would not necessarily undermine that policy as it could still help to achieve overall net self-sufficiency.
- 6.1.5 In the case of this project, however, the capacity is of an order of magnitude greater – so is far bigger than what was planned. Furthermore, during the preparation of the LMWLP no need was identified for a major strategic site of this nature to deal with imported waste (either through consultation on the draft plan or through the statutory Duty to Cooperate).
- 6.1.6 The recently completed Lincolnshire Waste Needs Assessment has reassessed the waste management needs of the County and confirms no new facilities will be required for LACW/C&I waste, which negates the need altogether for a new facility. However, the proposal does not compromise future requirements as set out in Policy W1 and therefore is not contrary with the plan. Policy SL3 of the Site Location which promotes the site as amongst other waste uses as a Energy from Waste facility is in line with the proposed development although it was not envisaged to support a development of this size.
- 6.1.7 The project will use an area of land identified for the provision of waste facilities to deal primarily with Lincolnshire waste and this proposal is not promoting receiving any waste arising from Lincolnshire. RDF produced in Lincolnshire will need to be sent out of the County to be processed whilst the facility is drawing in RDF from other parts of the country conflicting with the "proximity principle". However it is recognised that waste will be brought to the site by barge and therefore this conflict is not as significant if the waste was being brought by road. For that reason, it is not considered that the proposal conflicts with Policy DM2 Climate Change of the Minerals and Waste Local Plan.

6.2 Highways and Transportation

³ IBID

- 6.2.1 The County Council (as Local Highway Authority) has been involved in several meetings with the developer pre-submission. The submitted highway details both faithfully record and update the pre-application discussions and meeting that have taken place.
- 6.2.2 As recorded within the submission, the single most beneficial aspect of this project, in transportation terms, is the intention to convey all the fuel, most of the residual, post combustion waste and a large proportion of the bulk of the construction materials to and from the site by boat, rather than by road transport.
- 6.2.3. The principal 'product' from the process will of course leave the site along electricity supply cables. In those respects, the vehicle movements associated with the operation of the proposed facility would be likely to be considerably fewer than those of a B2 or B8 use on the same footprint within this allocated Employment site.
- 6.2.4 The initial plans for the construction phase have been refined and improved so that now the first part of the wharf is constructed at the beginning of the programme specifically to allow aggregate and reinforcement materials, to also be conveyed to the site by boat, and thereby further reduce road transport to probably less than that which would be required for the construction of an equivalent sized B2 or B8 commercial facility on the site. The Transport Assessment element of the Environmental Statement examines the conventional road transportation impacts of the proposed development, both during the construction phase – which will be the most impactful – and the operational phase. It finds that the proposed development would not be expected to result in an unacceptable impact upon highway safety or a severe residual cumulative impact upon the capacity of the existing local highway network. The Highway Authority concurs with that conclusion and do not consider that any off-site highway improvements would be required, through Planning Obligations, to make the proposal acceptable in planning terms.
- 6.2.5 The access into the Application Site would be formed onto what is a privately maintained road – the Public Highway ends at Nursery Road and at Bittern Way – so the details of that site access will be agreed with the owner of the private road, rather than with the Highway Authority.
- 6.2.6 The site is within the Allocated Employment area of Riverside Industrial Estate which enjoys close proximity, and relatively good quality road connection, to the Principal Highway Network via the A16. However, the submission includes an Outline Construction Traffic Management Plan that seeks to mitigate, as much as is possible, the adverse impacts of the construction phase of the development on the highway network. This includes prohibiting the use of the A52 corridor through Boston for construction and delivery vehicles, a strategy for construction staff parking and a joint pre-commencement inspection of the local highway network with Highway Authority Officers and a commitment to repair any highway damage that occurs as a direct consequence of the construction process.
- 6.2.7 In terms of surface water flood risk, a detailed surface water drainage strategy for both the construction phase and the operation of the proposed facility has yet to be prepared, so this detail would need to be covered by a suitably worded requirement.
- 6.2.8 In transportation terms, this is massively reliant on the facility being fed by a sea-borne fuel supply and that the Highway Authority would not be supportive of an operation of the scale proposed if, for example, the cost of transportation of feedstock by boat should become prohibitively costly and a switch to road-borne transportation of feedstock was to be

proposed in order to keep the facility running. The local highway network here would simply not be suitable for that scenario and therefore it is necessary to ensure that there is no possibility of this taking place using a suitably worded requirement or Planning Obligation.

6.3 Public Right of Way

- 6.3.1 The application documents contend that the "PROW appear infrequently used". . Recent pandemic related recreational and health-based access walking has significantly increased usage of many paths across the country and is widely recognised. This is especially likely to be the case in urban and urban-fringe locations such as the proposal area. The relevant paths have been closed for some time by the Environment Agency to enable the barrage construction and bank raising works and so usage was likely to be considerably less than in normal times.
- 6.3.2 There is a net loss of approximately 1 km of public rights of way across the scheme with no indication of any specific mitigation to offset this loss. It is suggested that it may be a prudent opportunity to undertake improving the rights of way from London Road to Lealand Way (Boston PF14/1 and 14/2) for them to be created as cycleway /footway and appropriately surfaced to provide safer commuting access to the Industrial Estate and recreation purposes which could be secured by an appropriately worded requirement or Planning Obligation.
- 6.3.3 Clearly there will be need to appropriately programme the temporary closure orders and subsequently required extensions for the works proposed that will affect the old sea bank including the installation of a temporary footbridge to keep walkers away from construction traffic.

6.4 Waste Management of Lincolnshire Wastes

- 6.4.1 Lincolnshire County Council as the Waste Disposal Authority (WDA) has a statutory duty to seek provision for dealing with domestic waste disposal arisings in Lincolnshire.
- 6.4.2 Although the proposal offers greater disposal capacity it is unlikely that this will be made available to LCC, this is not required by LCC and nor does the authority expect there to be a need for this beyond current arrangements and long-term contracts. Also, the residual waste material deposited at the Boston Waste Transfer Station will not meet the specification of RDF that is set out in the application documents. The acceptance of such residual waste would conflict with the waste hierarchy measures the applicant is putting in place to ensure recyclable materials are not brought to the facility. Consequently, it is concluded that the proposed facility treatment facility will not be able to receive untreated waste from the Boston Waste Transfer Station and therefore no weight can be given to this option.
- 6.4.3 In addition, RDF waste from Lincolnshire would only appear to be able to be accepted at the facility if it was taken out of Lincolnshire to a port serving this facility and put on a boat for transportation which would not be commercially viable or sustainable.
- 6.4.4 Around 180,000 tonnes of this domestic waste are handled and converted to energy through the energy from waste plant at North Hykeham and the County Council only expects the amount of waste being taken to North Hykeham to fall in the future once mandatory food waste collections are introduced from 2024. Therefore, the WDA does not need additional waste capacity now or expected to in the medium to long-term period.

6.5 Sustainability of the Project

6.5.1 Carbon Dioxide Emissions

- 6.5.1.1 The main concern about this application is around the carbon emissions produced from the burning of Refuse Derived Fuel and the impact of this on the ability to reach the Net Zero Carbon target by 2050. If this plant is developed it could impact on Lincolnshire's ability to reach a net zero carbon status by 2050.
- 6.5.1.2 The Committee on Climate Change report on the 6th Carbon Budget in 2020 concluded that "the growth in EfW plants could see the waste sector's emissions rise if they continue to be built without the option of Carbon Capture and Storage."
- 6.5.1.3 This proposal is for exactly that - an EfW plant with uncertainty about the viability of the proposed Carbon Capture and Storage.
- 6.5.1.4 Although the application presents the combustion of RDF as a renewable energy source – the fact is that carbon dioxide will be produced from the burning of RDF and it will be emitted to the atmosphere and will therefore contribute towards climate change.
- 6.5.1.5 A study for Zero Waste Scotland in 2020, ("The climate change impact of burning municipal waste in Scotland", October 2020) found that burning residual municipal waste in Energy from Waste plants in Scotland in 2018 had an average carbon intensity of 509 gCO₂/kWh. This rate is nearly twice as high as the carbon intensity of the UK marginal electricity grid average, which was 270 gCO₂/kWh in 2018. Since 2018 the carbon intensity of the electricity grid has fallen again and the 2020 figure was just 181 grams of CO₂ per kilowatt-hour. This carbon intensity rate will continue falling in the coming years as the amount of renewable energy increases and the Hinckley Point nuclear plant comes online.
- 6.5.1.6 Therefore, it is highly likely that the electricity produced from the proposed plant will be a high carbon option and will have a carbon intensity well above the national electricity grid.
- 6.5.1.7 The Zero Waste Scotland report concludes that "Energy from Waste carbon intensities would remain above the grid average even if the plants were converted to Combined Heat and Power systems, demonstrating that EfW can no longer be considered a low carbon technology in the UK." It should be noted that while the proposed plant will have the capability of providing waste heat (Combined Heat and Power) there are no plans for it to do so currently there are no sites nearby that have a high enough heat demand to connect to a heat network and unlikely that any recipient for this heat will be available in the foreseeable future. Therefore, the waste heat will be vented to the atmosphere.

6.5.2 Changes to the Waste Composition

- 6.5.2.1 One of the main environmental drivers for choosing Energy from Waste facilities over landfill disposal is that EfW plants have lower emissions of greenhouse gases. However, the Zero Waste Scotland report compared the carbon impacts of sending one tonne of residual municipal waste to either EfW or landfill. It found that average EfW impacts were 15% lower than landfill in 2018. However, changes in waste

composition mean that EfW impacts are expected to rise. Small changes in the waste composition could push EfW impacts above landfill, leading to unnecessary climate change emissions.

6.5.2.2 In terms of waste composition, the study found that if the proportion of plastic in residual municipal waste increases from 15% to 17%, greenhouse emissions per tonne for incinerators rises to the same level as landfill. There are likely to be extensive changes in the household waste composition as the government is planning to mandate local councils to separately collect food waste from 2024. This will significantly reduce the amount of organic matter in the refuse derived fuel produced in the UK. As a result the proportion of plastic in the RDF will be higher meaning that Energy from Waste plants are likely to become the worst environmental option for disposing of municipal waste. A report for Tolvik Consulting in 2019 " UK Energy from Waste Statistics – 2019" highlighted that there is currently limited consistency in the way in which the carbon impact of EfW is calculated both in the UK and Europe. Whilst it is acknowledged that setting the basis for calculation is potentially complex, it appears that analysis is currently being used more as an exercise to promote a particular project or theme, rather than as a robust assessment of environmental performance.

6.5.2.3 The overall issue with carbon dioxide emissions is that there does not appear to be any basis to claim that the proposed RDF facility will have any benefit in terms of reducing carbon emissions. In fact it is likely to become the worst environmental option for dealing with residual municipal waste.

6.5.3 Carbon Capture and Storage

6.5.3.1 One way of reducing the carbon emissions from industrial processes is to use a carbon capture and storage system. These types of system have been talked about for many years but producing a commercial system that can capture and store carbon economically has proved to be problematic. There are planned to be large scale carbon capture systems around the Humber Estuary and on Teesside. These are large scale facilities that have a density of heavy industry nearby and government financial support. It is unlikely that there will be the density of heavy industry around Boston to justify a carbon capture system. As a result, it is likely that the carbon emissions from the plant will be emitted into the atmosphere.

6.5.3.2 The Sixth Carbon Budget Report from the Climate Change Committee specifically states that carbon emission reduction targets from the waste sector will not be met if EfW plants are built without carbon capture and storage systems.

6.5.4 Is it Really Renewable Energy?

6.5.4.1 The application describes the plant as generating renewable energy. The application states "The Facility is an EfW plant that would generate approximately 102 MWe (gross) of renewable energy". However, a report from the Government department DEFRA ("Energy from waste - A guide to the debate", February 2014) states that "Energy from residual waste is only partially renewable due to the presence of fossil-based carbon in the waste, and only the energy contribution from the biogenic portion is counted towards renewable energy targets and only this element is eligible for renewable financial incentives".

6.5.4.2 As a result, only the biogenic proportion of the waste can be counted as contributing to renewable energy targets. Plus, as established above the organic/biogenic content of UK produced RDF is likely to fall considerably when separate collections for food waste are introduced in 2024 and that the plant will be burning RDF comprising contaminated material from materials recycling facilities. It seems disingenuous to state that the plant is producing renewable energy.

6.5.5 Combined Heat and Power

6.5.5.1 One way of reducing the environmental impact of EfW systems is to use the waste heat from the process in an energy network. Adding an energy network/combined heat and power system to the EfW plant reduces the carbon intensity significantly. However, as noted above this reduction in carbon intensity is not below the UK average for marginal grid electricity. The proposed plant would have the capability of feeding a CHP system but the application notes that "based on the low heat demand in the surrounding area and taking into account the distance and sparse nature of heat users resulting in technical and commercial challenges for proposed routes, the Facility will be designed as CHP ready and will not be developed as a CHP scheme until such loads become available that running with CHP is considered economically feasible".

6.5.5.2 Therefore, this option of significantly reducing the environmental impact of the EfW facility by using a heat network has been lost.

6.5.5.3 Experience from other EfW plants shows that once a facility has been constructed without a heat network connection it is very unlikely to have one installed at a later date. It would be much cheaper to install the necessary pipework connections during the initial construction of the plant. This is illustrated by the Council's EfW plant at North Hykeham which when becoming operational in 2012 had a similar arrangement. Despite extensive attempts to find a recipient for this heat to date nothing suitable has been found and unlikely any opportunity to use this heat will be identified during the lifetime of the plant. So, whilst this is a possibility the likelihood of such a user being identified is so low that very little if any weight should be attached to this commitment.

6.5.6 Carbon Tax and Incineration Tax

6.5.6.1 Over the last decade there have been significant falls in the carbon intensity of electricity but many other parts of the economy have only made limited progress in making the carbon reductions necessary to tackle climate change. In order to meet the 2050 zero carbon targets the government is increasingly likely to introduce financial measures to encourage businesses to reduce their environmental impacts.

6.5.6.2 Potential financial drivers include carbon taxes and an incineration tax. The 2018 Waste Strategy for England suggested that "Should wider policies not deliver the Government's waste ambitions in the long-term, we will consider the introduction of a tax on the incineration of waste. Incineration currently plays a significant role in waste management in the UK, and the Government expects this to continue. However, Budget 2018 set out the Government's long term ambition to maximise the amount of waste sent to recycling instead of incineration and landfill."

6.5.7 Habitat Loss

- 6.5.7.1 The construction of the facility will require the loss of habitat areas alongside the River Witham/Boston Haven. Although the scheme includes an option to enhance existing habitat areas there will still be the loss of an important wetland site. It is welcomed that the principle of biodiversity net gain is being used.

6.6 Cultural Heritage (Lincolnshire County Council)

- 6.6.1 Following the Council's response in 2019, geophysical survey of specific areas covering 12.7ha of the 26.8ha site has been undertaken which identified areas of potential interest, the conclusion of which states:
- 6.6.2 It would be expected that the geophysical survey be followed by a programme of trial trenching including those parts of the site not covered by the survey. These results are required to provide an evidence base sufficient to produce a reasonable, appropriate and fit for purpose mitigation strategy to deal with the archaeological impacts of the development. Given the nature of the site this should also include detailed provision for dealing with the paleoenvironmental remains.
- 6.6.3 There is no basis to justify this as an appropriate level of archaeological mitigation and this is not in accordance with NPPF or EIA regulations as laid out below.
- 6.6.4 The Outline Written Scheme of Investigation specifically states that "With the exception of the geophysical survey carried out in August 2020 the delivery of the archaeological mitigation and further investigations will be undertaken post-consent. This approach has been consulted on with the cultural heritage stakeholders" (1.1.17). This is not the case, the Council's Historic Environment Team have not been consulted and would not support such an approach as it is contrary to both the NPPF and EIA regulations. The archaeological advisor to Boston Borough Council, was consulted by telephone regarding the desk-based assessment and, after providing initial advice, has not seen any further information.
- 6.6.5 This site has not been subject to evaluation and the site-specific archaeological potential has not been determined, therefore there is currently insufficient information to allow for an informed planning recommendation to be made.
- 6.6.6 It is expected the Environmental Statement (ES) to contain sufficient information on the archaeological potential to inform a reasonable evaluation strategy to identify the depth, extent and significance of the archaeological deposits which will be impacted by the development. The results of these are required in order to inform mitigation in a meaningful way to produce a fit for purpose strategy which will identify what measures are to be taken to minimise the impact of the proposal on archaeological remains.
- 6.7.1 As it stands the supporting documents are not in accordance with the requirements of the NPPF or EIA Regulations.
- 6.7.2 The ES should include a reasonable and appropriate level of evaluation to allow sufficient understanding of the archaeological potential which will be impacted by the proposal in order to allow for an informed planning recommendation to be made which is not currently the case."

7. Other Matters

7.1 The County Council will defer to Boston Borough Council on the following matters:

- Economic development
- Landscape and visual impact
- Noise
- Air quality
- Ground contamination

8. Summary and Conclusion

8.1 LCC will continue to engage positively with the applicant and the Examining Authority as the application progresses and examination commences.