

## **Braintree District Council**

### **LOCAL IMPACT REPORT**

#### **Application by Indaver Rivenhall Ltd for an Order Granting Development Consent for the Rivenhall IWMF and Energy Centre scheme**

**[Ref: EN010138]**

## **1. Introduction**

- 1.1 This report comprises the Local Impact Report (LIR) of Braintree District Council (BDC)
- 1.2 The Council has had regard to the purpose of LIRs as set out in s60(3) of the Planning Act 2008 (as amended), DLUHC (then DCLG) Guidance for the Examination of Applications for Development Consent, the Planning Inspectorate's Advice Note One - Local Impact Reports and the Planning Inspectorates 'Example Documents', in preparing this LIR.
- 1.3 The purpose of the LIR is set out in s60(3) of the 2008 Planning Act as 'a report in writing giving details of the likely impact of the proposed development on the authority's area (or any part of that area). The LIR's primary purpose is to identify the policies in Local Plans in so far as they are relevant to the proposed development and the extent to which the development accords with these policies. It does this under topic-based headings.

## **2. The Proposal**

- 2.2 The description of development is set out below and is taken directly from the Applicant's Application Documents, (submission APP-003 Navigation Document), Paragraph 1.2 "Non technical description of the proposed development":
- 2.3 "The Applicant is seeking a DCO to increase the generating capacity of the Energy from Waste ('EfW') plant that forms part of the consented Rivenhall IWMF to more than 50MW. The greater generating capacity would be achieved by carrying out engineering operations which would optimise the design and operation of the boiler, steam turbine and generator to provide a greater rate of energy recovery. It would not require an increase in waste throughput or physical changes to the consented building envelope or external layout. The Proposed Development involves the carrying out of engineering operations to either: i) remove and replace the steam turbine inlet control valves; or ii) install unrestricted turbine inlet control valves. Development consent is sought for both

options. Which option would be carried out depends upon the timing of a DCO being granted and the stage of construction the consented IWMF

- 2.4 The applicant has commenced development consented by ECC ref: ESS/34/15/BTE which allows generation of up to 49.9MW. This development has not been completed and structural elements are in progress.
- 2.5 Consent is sought for one of two alternative works.
- 2.6 (If the generating station has been completed and commenced operation by the time the DCO is granted). **Work No.1** – an extension to the existing generating station comprising mechanical modifications to the actuated steam turbine inlet control valves to allow steam capacity to be increased, with the effect that the extended generating station will have a gross installed generating capacity of over 50MW; and
- 2.7 (If the existing generating station has not been completed or commenced operations by the time the Order is made). **Work No.2** – an extension to the existing generating station comprising the installation and commissioning of unrestricted actuated steam turbine inlet control valves with a capacity of over 50MW, with the effect that the extended generating station will have a gross installed generating capacity of over 50MW.

### 3. Description of the Area surrounding the site

- 3.1 The site is located east of Braintree at the former Rivenhall Airfield, a former World War II site north west of Kelvedon. This lies south of Bradfield Quarry which has a collection of former and future sand and gravel extraction sites. This area lies south and east of Bradwell village, north east of Silver End village (approximately 1km) and west of Coggeshall.
- 3.2 The area for development of the Waste Management Facility lies on the southern part of the former airfield located approximately 1.7km south of Coggeshall Road and includes Woodhouse Farm.
- 3.3 The site is set within a predominantly rural character area, large fields with an open landscape with blocks of woodland. The landform around the site forms a flat plateau at about 50m above sea level with the wider landscape as gently undulating countryside. The site itself lies amidst an area of woodland.
- 3.4 Development has commenced on the site, and a large sunken area has been excavated with buildings and engineering works in the process of construction within this area. The visitor's centre has been constructed.
- 3.5 The nearest residential properties not including Woodhouse Farm (not occupied), include The Lodge and Allshots Farm located to the east of the site at 400m and 450m respectively from the proposed waste management facility. To the north east on Cuthedge Lane lies Haywards 950m from the proposed waste management facility, Deeks Cottage at 860m and Herron's Farm at

720m from the proposed waste management facility and 460m from the site access road. To the west of the site on Sheepcotes Lane lies Sheepcotes Farm 470m from the site boundary, Gosling's Cottage at 900m from the site boundary, Gosling's Farm 900m north west of the site boundary, Goslings Barn 880m from the site boundary and Greenpastures 470m north west of the site boundary. Properties to the southwest within Silver End village lie over 1km from the site boundary. Parkgate Farm lies south of the site approximately 1km from the site boundary. 200m to the east of the haul road lies Bradwell Hall.

- 3.6 The access road serving Bradwell Quarry crosses Church Road and Ash Lane (a Protected Lane as defined in the Braintree Local Plan). The access road is two lane from the A120 to Church Road, then single lane with passing bays between Church Road and Ash Lane and then two lane south of Ash Lane. The crossing points on Church Road and Ash Lane are both single width only.
- 3.7 There are three County Wildlife Sites within 3 km of the site at Maxeys Spring, Storeys Wood and Blackwater Plantation. There are a seven Grade II Listed properties in the vicinity of the site, including, Allshots Farm (400m away) and Sheepcotes Farm (470m away) located to the east and west of the airfield respectively. To the south west Bower Hall (1.2km away) and to the south east Porter's Farm (1.3km away) and to the north west Goslings Farm (900m away), to the north east Curd Hall (1.3km away) and finally to the east of the haul road Bradwell Hall (200m away from haul road). Three footpaths (FP's 19, 57, 58), including the Essex Way, are crossed by the existing quarry access road and the extended access route would cross the FP35 (both on its definitive and temporary diverted due to quarry operations). There is also a public footpath No. 8 routed through the eastern part of Woodhouse Farm.

#### **4. Planning History and Background**

- 4.1 The applicant has consent under the Town and Country Planning Act 1990 (the "TCPA 1990") for an integrated waste management facility in Rivenhall. Planning permission was granted at appeal by ESS/37/08/BTE, [APP/Z1585/V/09/2104804] on 22<sup>nd</sup> December 2009 with a description as follows
- 4.2 "Integrated Waste Management Facility comprising: Anaerobic Digestion Plant treating mixed organic waste, producing biogas converted to electricity through biogas generators; Materials Recovery Facility for mixed dry recyclable waste to recover materials e.g. paper, plastic, metals; Mechanical Biological Treatment facility for the treatment of residual municipal and residual commercial and industrial wastes to produce a solid recovered fuel; De-inking and pulping paper recycling facility to reclaim paper; Combined Heat and Power Plant utilising solid recovered fuel to produce electricity, heat and steam; Extraction of minerals to enable buildings to be partially sunken below ground level within the resulting void; Visitor / Education Centre; Extension to existing access road; Provision of offices and vehicle parking; and associated engineering works and storage tanks."

- 4.3 Consent subject to S106 agreement and since consent there have been a number of applications to discharge conditions.
- 4.4 management facility on the site was granted in February 2009. The consent relates to the development of a facility for the recovery of recyclable materials such as paper, card, plastic, metals, and fine sand and gravels from residual municipal waste. It includes a waste treatment centre utilising Anaerobic Digestion (AD) technology and Enclosed Composting for the treatment of residual municipal waste. It is intended to have an approximate eventual input of up to 510,000 tonnes per annum (tpa).
- 4.5 ESS/07/08/BTE - extraction of sand and gravel at Bradwell Quarry, together with processing plant, and access via an improved existing junction on the A120. Subject to S106. In addition, there are a number of other planning permissions with respect to the processing plant at Bradwell Quarry.
- 4.6 Planning permission was granted at appeal for 350 houses at land off Western Road, Silver End by application 15/00280/OUT. This lies south west of the site and a plan showing the location of this site is at Appendix 1. Condition 15 of this consent required a noise assessment to be submitted with reserved matters in order to protect the living conditions of future occupiers.
- 4.7 The later Reserved Matters Application 18/01751/REM was accompanied by a noise assessment and noise impacts were reported to Planning Committee on the 27<sup>th</sup> September 2018 in the following terms:
- 4.8 *“A noise impact assessment has been submitted with the application and this has been reviewed by the Council’s Environmental Health Officer. The report includes data and analysis of noise levels produced by others in connection with Bradwell Quarry and the Rivenhall Airfield Integrated Waste Management Facility and data produced by the consultants in respect of road traffic on Western Road.*
- 4.9 *The reports identifies parts of the development and dwellings that will require specific measures to achieve the target internal noise levels and external noise levels within gardens. The required measures include the provision of 1.8 m high brick walls or other solid construction around various garden areas and the installation of standard double glazing and window ventilation systems. The Environmental Health officer accepts the report’s conclusion which is that acceptable internal and external noise levels can be achieved. A condition should be applied which requires compliance with the report recommendations.”* Amendments were later made to this consent and the approved scheme is at an advanced stage of implementation.

## **5 Braintree District Council Earlier Correspondance**

- 5,1 Braintree District Council, in its relevant representation response dated 19<sup>th</sup> February 2024 to the Planning Inspectorate stated the main issues at this stage

to be

- Climate Change
  - Noise levels at Silver End and Park Gate Road
- 5.2 The issues of noise and climate change will be the principle areas of concern unless further information or questions emerge from this process..
- 5.3 Braintree district response to the Preliminary Environmental Information Report (PEIR) Consultation dated 22<sup>nd</sup> August 23 states the following:
- Notes that the Planning Inspectorate scoped out most issues except Climate Change, Greenhouse, Gases, and noise.
  - Climate Change – applicant state no increase in direct green house gas emissions it doesn't cite the scope 1, scope 2 or scope 3, emissions of the plant despite the fact it will be overall positive from a carbon emissions point of view
  - Climate Change - paragraph 7.3 it is suggested that it should state that carbon emissions shall be recorded and published and offset against the positive carbon impact for the environment and that these would be nominal in relative to the positive effects of the site upon carbon emissions.
  - Noise - It is considered that that is it unclear how the facility will generate a greater output of electricity and what the impactions of that would be.
  - Noise - it is unclear whether a new survey has been undertaken, or if it was just for new noise receptors in Silver End or a more extensive survey was, undertaken.
  - information is needed to substantiate the claim that the 2005 measurements are still relevant as reference in the 2015 survey, as such the baseline data needs to be robustly demonstrated that it is justified.
  - the facility needs to be treated as one noise source, and not the additional components of that facility, as such combined noise levels needs to be considered.
- 5.4 Braintree District Council notes the relevant representations submitted by Essex County Council and its concerns as to the planning application boundary being tightly drawn around the Combined Heat Power (CHP) element of the IWMF when the IWMF is a relatively small part of the site.

## **6. Statutory Development Plan**

- 6.1 The Council's statutory Development Plan consists of the Braintree District Local Plan 2013 – 2033 (herein referred to as the 'Adopted Local Plan'). Part 1 of the Local Plan was adopted on 22<sup>nd</sup> February 2021, and Part 2 of the Local Plan was adopted on 25<sup>th</sup> July 2022. As such, the Local Plan is therefore considered to be up to date.
- 6.2 There are no Supplementary Planning Documents relevant to this project.
- 6.3 The Local Plan includes 'made' neighbourhood plans for the following parishes
- Coggeshall Neighbourhood Plan (Appendix )

- Bradwell with Pattleswick Neighbourhood Plan
- Kelvedon Neighbourhood Plan
- There are no Neighbourhood Plans for Silver End or Rivenhall

6.4 Also forming part of the Statutory Plan for the District but falling under the jurisdiction of Essex County Council.

- The Essex Minerals Local Plan 2014, and
- The Essex and Southend-on-Sea Waste Local Plan 2017

## **7 Other Braintree Council strategy**

### **7.1 Climate emergency, Strategy and Action Plan**

7.2 In July 2019 the Council declared a Climate Emergency with the aim to make Braintree District Council activities, as far as practical, carbon neutral by 2030. In September 2021 at full council the Climate Change Strategy and its associated Action Plan was adopted. The Climate Action Plan was updated in March 2023. It includes short, medium and long term goals. The proposal is likely to have an impact on the Authority's greenhouse gas emissions.

## **8. Assessment of Impacts and Adequacy of Response**

### **8.1 Introduction**

8.2 With no external changes to the facility there are no significant landscape and visual effects arising from the present application. The principal of development has already been established through the original planning application, and this matter will not be re-examined.

8.3 Braintree District Council, in its relevant representation response dated 19<sup>th</sup> February 2024 to the Planning Inspectorate stated the main issues at this stage to be

- Noise levels at Silver End and Park Gate Road
- Climate Change

8.4 The issues of noise more generally and climate change will be the focus although it further information or questions emerge from this process at a later stage, the Council reserve the right to make comment as appropriate.

8.5 The following sections relate to noise and identify policies and commentary relevant to those areas scoped within the Development Plan and other local policy, the key issues raised by the proposed development and the extent to which the applicant addresses them and thus the proposal complies with local policy.

## **8.6 Noise Related Issues**

- 8.7 Braintree District Council in its relevant representation, dated 19<sup>th</sup> February 2024 considered one of the main issues arising which need to be weighed in the planning balance to be related to noise. The letter specifically mentioned noise levels at Silver End and Park Gate Road.
- 8.8 The original IWMP consent imposed noise related restrictions in conditions 38, 39, 40, 41 and 42. Condition 38 included a list of noise receptors and Braintree District in its letter of 19<sup>th</sup> February sought to add to this list Silver End and Park Gate Road. Not hitherto specifically mentioned in relation to Silver End is application 18/01751/REM which received consent on 21<sup>st</sup> June 2019, (relating to 15/00280/OUT approved at appeal) and which has been designed to include mitigation measures against noise. This site is located on Western Road south west of the IWMP site. This consent is at a late stage of implementation. It should be made clear by the applicant that noise impacts on this part of Silver End are considered.
- 8.9 The applicant in ENVIRONMENTAL STATEMENT [PINS Ref: EN0101038] ES CHAPTER 8: NOISE AND VIBRATION, Document Reference: EN0101038/APP/6.1, Revision Number 1.0 November 2023 – has included these as receptors and this is noted in table 8 (paragraph 8.3.1). Braintree District are pleased also that the noise impacts on nearby sites of ecological importance are being considered.
- 8.10 Braintree District Council does not have jurisdiction over noise related matters for this form of development, other than for investigating, but not taking enforcement action on, possible cases of statutory nuisance. Essex County Council states that no specific noise limits have been set within the Environmental Permit issued by the Environment Agency. This means that it is important that noise issues are carefully considered.
- 8.11 Essex County Council undertook a noise study as part of their assessment of the consented planning application as the determining authority, and are assessing noise impacts and methodology as part of their Local Impact Report. Braintree District will not seek to duplicate this area of study and refer to Essex County Council on this matter.
- 8.12 Provided the Noise assessment is acceptable, the following Braintree Local Plan Policies, as they relate to noise will be satisfied. Commentary is provided in some cases where clarification is beneficial.

## **8.13 Part 1. Policy SP 7 Place Shaping Principles**

All new development must meet high standards of urban and architectural design. Development frameworks, masterplans, design codes, and other design guidance documents will be prepared in consultation with stakeholders where they are needed to support this objective.

All new development should reflect the following place shaping principles, where applicable:....

- Protect the amenity of existing and future residents and users with regard to noise, vibration, smell, loss of light, overbearing and overlooking

#### **8.14 Part 2. Policy LPP1 Development Boundaries** part 2 sets out an approach to development inside and outside the development boundary.

“Development outside development boundaries will be confined to uses appropriate to the countryside whilst also protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils to protect the intrinsic character and beauty of the countryside”.

#### **8.15 Commentary**

The intrinsic character of the countryside is however affected by noise levels and characteristics. It is important that development which may increase noise levels or alter its characteristics are accompanied with sufficient information to understand the nature of such changes and that the proposal does not result in noise levels which harm countryside character of its surroundings. It is accepted that the principle of development for an installation below 50MW has been established and its impacts found acceptable in relation to this policy by planning permission noise related conditions.

#### **8.16 Policy LPP52 Layout and Design of Development**

The Council will seek a high standard of layout and design in all developments in the District and encourage innovative design where appropriate. Planning permission will be granted where the relevant following criteria are met: .....

q. Developments should avoid single aspect dwellings that are: North facing; exposed to noise categories C or D; or contain three or more bedrooms. Where single aspect dwellings are proposed, the designer should demonstrate how good levels of ventilation, daylight and privacy will be provided to each habitable room

#### **8.17 Paragraph 5.32 which supports policy LPP52 states**

Noise category C and D in the policy below, refers to noise situations such as development adjacent to trunk roads or railway lines, and is noise level which would not permit the opening of windows.

#### **8.18 Policy LPP 63 Natural Environment and Green Infrastructure**

Development proposals must take available measures to ensure the protection and enhancement of the natural environment, habitats, biodiversity and geodiversity of the District and to be acceptable, also taking climate change and water scarcity into account in their design. This will include protection from



pollution. Proposals inside the District which are likely to adversely affect, either individually or cumulatively, International or Nationally designated nature conservation sites within and outside the District will not normally be acceptable.

### **8.19 Policy LPP 70 Protecting and Enhancing Natural Resources, Minimising Pollution and Safeguarding from Hazards**

8.20 Proposals for all new developments should prevent unacceptable risks from all emissions and other forms of pollution (including light and noise pollution) and ensure no deterioration to either air or water quality. All applications for development where the existence of, or potential for creation of, pollution is suspected must contain sufficient information to enable the Local Planning Authority to make a full assessment of potential hazards. Development will not be permitted where, individually or cumulatively and after mitigation, there are likely to be unacceptable impacts arising from the development on:

The natural environment, general amenity and the tranquillity of the wider rural area....

## **8.21 Climate Change**

8.22 The Climate Change Act 2008 sets legally binding targets for reducing emissions by 80% from 1990 levels by 2050. Britain's Renewable Energy Strategy sets out to achieve 15% of energy to be generated from renewable energy sources by 2020. In 2015 the UK government joined 195 others from around the world and signed the Paris Agreement. The Agreement legally ratified a commitment to prevent average global temperature increasing by no more than 1.5 °C. In June 2019, parliament passed legislation requiring the government to reduce the UK's net emissions of greenhouse gases by 100% relative to 1990 levels by 2050. (Braintree Local Plan Paragraphs 6.49 – 6.50).

### **8.23 Braintree District Local Plan Policies**

#### **8.24 Part 1 Policy SP 1 Presumption in Favour of Sustainable Development**

When considering development proposals the Local Planning Authorities will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. They will always work pro-actively with applicants to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area.

Development that complies with the Plan will be approved without delay, unless material considerations indicate otherwise.

## 8.25 Commentary

Proposals which meet local plan requirements and without material considerations to indicate otherwise will be considered acceptable against this policy. There are some issues which need to be addressed as explained elsewhere in this, and Essex County Council LIRs.

## 8.26 Policy LPP 71 Climate Change

The Council will adopt strategies to mitigate and adapt to climate change. In addressing the move to a low carbon future for Braintree District, the Council will plan for new development in locations and ways that reduce greenhouse gas emissions.

Applicants will be expected to demonstrate that measures to lower carbon emissions, increase renewable energy provision and adapt to the expected impacts of climate change have been incorporated into their schemes, other than for very minor development. Planning permission will only be granted for proposals that demonstrate the principles of climate change mitigation and adaptation into the development. Guidance will be made available by the Council on the contents to be included in the Sustainability Statement. The Council intends the District to meet part of its future energy needs through renewable and low carbon energy sources and will therefore encourage and support the provision of these technologies subject to their impacts on landscape and visual amenity, residential amenities including noise, pollution, heritage assets and their settings, biodiversity and designated nature conservation sites, soils, and impact on the highway, being acceptable.

## 8.27 Commentary

Policy LPP 71 Climate Change states that “In addressing the move to a low carbon future for Braintree District, the Council will plan for new development in locations and ways that reduce greenhouse gas emissions”. It also states that “Applicants will be expected to demonstrate that measures to lower carbon emissions, increase renewable energy provision and adapt to the expected impacts of climate change have been incorporated into their schemes....”,

- 8.28 This is an important facility which will be in operation for a considerable period and given its nature, has the potential to result in considerable greenhouse gas emissions. Unfortunately, the submission is not clear on what effect the new equipment proposed in this application will have on greenhouse gas emissions locally and some questions are raised relating to the methodology used.

### **ES Chapter 7 : Climate Change Document Reference: EN0101038/APP/6.1**

- 8.29 Braintree District Council (BDC) notes that the IEMA’s Environmental Impact Assessment Guide to Assessing Greenhouse Gas Emission and Evaluating their Significance has been used as a principle of guidance relating to the

submission and acknowledges that the methodology in 5.3 of this best practice guidance has been followed. Braintree District Council also recognises that this Project is of National Importance.

8.30 However BDC would like to highlight concerns relating to the following points made within the submission and would ask for consideration, clarification and further information on the following points:-

8.31 **Point 1**

**Assessment Scope and Methodology of Displacement**

8.32 BDC seeks clarification and further information on the following points raised in relation to the Assessment Scope and Methodology of Displacement used to evaluate the likely significant effect of the Proposed Development within the Environmental Statement.

8.33 *“Summary of Assessment Scope*

7.4.1 The scope of the assessment within this chapter is limited to the following assessment of effects:

(i) change in direct and indirect emissions of greenhouse gas emissions; and

(ii) change in displacement of greenhouse gas emissions from other forms of power generation”.

8.34 BDC would like to comment that the IEMA Environment Impact Assessment Guide to Assessing Greenhouse Gas Emissions and Evaluating their Significance and its associated Appendix B Methods for CHG Emissions Assessment List of Standards does not specify that displacement need be considered as part of a Greenhouse Gas Emission evaluation.

8.35 The Environment Statement references: (using ES paragraph numbering)

*7.4.19 The net GHG emissions from the Proposed Development compared to the Future Baseline were calculated in line with the methodology presented in both the IEMA Guidance and UK Government guidance 'Energy recovery for residual waste - a carbon based modelling approach'<sup>23</sup>. In particular, the IEMA Guidance states: "*

*8.36 When evaluating significance, all new GHG emissions contribute to a negative environmental impact; however; some projects will replace existing development or baseline activity that has a higher GHG profile. The significance of a project's emissions should therefore be based on its net impact over its life time, which may be positive, negative or negligible".*

8.37 The 2014 “Energy Recovery for residual waste – a carbon based modelling approach” was specifically written as a comparator of EfW to **Landfill comparison.**

8.38 The assumptions of the 2014 Energy Recovery For Residual Waste – a carbon based modelling approach was based on a carbon comparison of :-

8.39 “The carbon case for energy from waste being superior to landfill is based on the premise that the climate change impact, in terms of CO<sub>2</sub> equivalents, of producing energy from the waste is less than the potential impact from methane emitted if the waste were to go to landfill. The model can therefore be thought of as being in two parts:

- the potential carbon impact of producing energy from waste
- the potential carbon impact of landfilling that same waste”

8.40 BDC questions the relevance of this 2014 Document to the evaluation of likely impact to the Proposed Development in that the Environment Statement and the use of this to argue displacement by CCGT as CCGT is not a municipal waste based carbon equivalent.

8.41 BDC further questions this displacement methodology by highlighting that the 0.371t CO<sub>2</sub>e/MWh Referenced below is incorrectly used.

*“7.4.9 Any additional power generated would reduce the need for power to be generated elsewhere in the UK. In the case of an EfW plant, such as the part of the Consented Scheme affected by the Proposed Development, the displaced electricity would be the marginal source which is currently gas-fired power stations. DEFRA’s ‘Energy from Waste – A Guide to the Debate 2014’21 states that, ‘A gas fired power station (Combined Cycle Gas Turbine – CCGT) is a reasonable comparator as this is the most likely technology if you wanted to build a new power station today’ (footnote 29, page 21). Therefore, the assessment of grid offset uses the current marginal technology (i.e. CCGT) as a comparator. The displacement factor used is 0.371t CO<sub>2</sub>e/MWh, which is taken from the DEFRA publication “Fuel Mix Disclosure Table – 01/04/2022 - 31/03/3023 22”*

8.42 Similar to the above reference to the 2014 DEFRA - Energy from Waste A guide to the debate and reference to the footnote 29 on page 21 and the use of the 0.371t CO<sub>2</sub>e/MWh is misleading when you consider the use of this figure in its entire context within this document. This 2014 document again relates to a comparison on Landfill and the entire reference is as follows:-

*39. A typical black bag of residual waste will contain a mixture of different things, such as paper, food, plastic, clothes, glass and metal. Some of these wastes, e.g. food, will originally have come from biological sources, i.e. plants, and the carbon stored in them is known as biogenic carbon. Some of the waste materials, e.g. plastics, will have been made from fossil fuels such as oil and the carbon stored in them is known as ‘fossil carbon’. Some of the wastes, e.g. clothes, will contain a mixture of biogenic and fossil carbon (e.g. cotton/polyester mixes) while other wastes will contain little or no actual carbon (e.g. metals). We need to understand if the carbon in the waste is biogenic or*

*fossil in origin for two reasons: (i) they behave differently in landfill (plastic does not generally decompose) and (ii) biogenic and fossil carbon are counted differently in terms of how they are calculated to contribute to global warming<sup>26</sup>. Of the waste in our typical black bag, currently<sup>27</sup> somewhere between one half and t thirds will contain biogenic carbon.*

*40. Considering the energy from waste route, if our black bag of waste were to go to a typical combustion-based energy from waste plant, nearly all of the carbon in the waste would be converted to carbon dioxide<sup>28</sup> and be released immediately into the atmosphere. Conventionally the biogenic carbon dioxide released is ignored in this type of carbon comparison as it is considered ‘short cycle’, i.e. it was only relatively recently absorbed by growing matter. In contrast, the carbon dioxide released by fossil-carbon containing waste was absorbed millions of years ago and would be newly released into the atmosphere if combusted in an energy from waste plant.*

*41. The energy from waste plant will generate some energy (in addition to whatever it uses to run itself). This energy substitutes for energy that would otherwise need to be generated by a conventional gas-fired power station<sup>29</sup>, thereby saving the fossil carbon dioxide that would have been released by that power station. This means that in our comparison **some of the fossil carbon dioxide** released by the energy from waste plant can be offset by the saving from the gas fired power station, reducing the overall impact. The more efficiently the energy from waste plant converts the waste to useful energy, the greater the carbon dioxide being offset and the lower the net emissions.”*

8.43 BDC references Eunomia’s Greenhouse Gas and Air Quality Impacts of Incineration and Landfill 2020 report “Defra’s “Energy from waste: A Guide to the Debate”, which states that there is “a good carbon case for continuing to include EfW as a key part of the [waste] hierarchy,” is still being used to guide infrastructure decisions related to EfW technology but was published in 2014. 2

8.44 *The national discourse on carbon emissions and climate change has shifted significantly since then, and the need to make substantial reductions in carbon emissions in the next decade has become clearer. This is evidenced, for example, by the 300 (74%) Councils that have declared a ‘Climate Emergency’ to date, with 200 of those setting net-zero target dates of 2040 or earlier.<sup>3</sup>”*

8.45 BDC notes that the Environment Statement has not commented on the efficiency of the plant and has made an assumption that **ALL** of the carbon dioxide can be offset by taking the footnote comparator out of context from the entire report. BDC therefore believes that the Environment Statement and use of displacement and the specific use of the 0.371t CO<sub>2</sub>e/MWH is out of date and incorrect.

## 8.46 Point 2

### Lack of Transparency

- 8.47 The Environment Statement Climate Change submitted does not at any point include/detail or quote the Proposed Development anticipated total annual GHG emission figure or the accumulative annual GHG emission from the accumulative Proposed and Consented Development combined.
- 8.48 Rather the Environmental Statement deducts offset from an unquoted figure and uses this determination to evaluate the likely significant effects. BDC considers that the document is not at all transparent in its GHG calculations and formally requests that this is addressed.
- 8.49 BDC asks that the Proposed Development anticipated annual GHG emission and the accumulative total annual GHG emission from the Proposed and Consented Development is included within the Environmental Statement Climate Impact and considers that these figures to be fundamental to the Environment Statement. Without the anticipated annual GHG emission figures the Environment Statement appears non transparent.
- 8.50 The site will be subject to regulation and CO2 reporting to the Environment Agency. The Environment Agency in their published 2020 "Pollution Inventory report – Incinerating activities guidance note" states that " You can use the methodology shown in our general guidance to estimate carbon dioxide emissions from incinerators." All incinerators have to report their Global Warming Potential (GWP). It is disappointing to note that this Environmental Statement does not include any reference to the incinerators anticipated permitted GWP within this Environment Statement. As a consultee BDC does not consider the Environmental Statement on Climate Change to be transparent enough for the Authority to fully evaluate the impact and therefore feels that the evaluation of "negligible significance" needs to be more fully and more clearly explained and evidenced.

8.51 **Point 3**

*"Study Area*

*7.4.3 GHG Emissions have a global impact, rather than a national or local impact. Therefore, the GHG assessment considered the impact of the Proposed Development on net global emissions, including the displacement of other power generation plants."*

- 8.52 BDC disagrees with this statement and considers that there should be consideration within the report of the local and regional GHG emissions.
- 8.53 Local impacts of the global levels of GHG can be evidenced in Essex and in Braintree District and whilst the Climate Change assessment refers to both Essex County Council's and Braintree District Council's Climate Strategies no consideration and/or mitigation to the local impact of the additional or accumulative GHG Emissions from the Proposed and Consented development has been included.

8.54 The report references electricity offset “elsewhere” in the UK. As Euomina has commented on the Climate Change discourse has changed substantially and local concern around climate impact is much heightened BDC therefore requests that the Statement recognises the local impact of the Proposed Development and considers local mitigation.

8.55 The Government’s 2005 to 2021 UK local and regional greenhouse gas emissions – data tables (Excel) (updated 6 July 2023) advises that in 2021 the Braintree District area emitted a total of 679kt of CO2. From the report submitted BDC is unable to understand the accumulative impact of the Proposed and Consented Development’s Annual GHG emission on the districts reportable emissions.

## Appendix 1

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Planning Committee Site Plan for Planning application 15/00280/OUT

