

**PLANNING APPLICATION FOR DETERMINATION BY THE LTGDC
 REPORT OF THE DIRECTOR OF PLANNING**

UDC CASE NUMBER:	LTGDC-07-169-FUL	DATE MADE VALID:	21/08/2007
APPLICATION NUMBER:	07/00755/FUL/LBBD	TARGET DATE:	20/11/2007

APPLICANT:	Hunt's Heat & Power Ltd.
AGENT:	Bioflame Ltd.
PROPOSAL:	Erection of an extension in connection with the part conversion of the premises into a biomass renewable energy turbine house
LOCATION:	75 - 77 Chequers Lane, Dagenham, Essex, RM9 6QT

1. SUMMARY

1.1 The application was submitted by Hunt's Heat and Power Ltd on 2 July 2007 and validated on 21 August 2007. Hunt's Heat and Power Ltd is a joint venture between Hunt's Waste Recycling Limited and Bioflame Limited. Hunt's Waste Recycling Ltd. operates a licensed waste recovery facility in Dagenham Dock. Bioflame Ltd is a North Yorkshire based company who has developed a system for converting waste into energy.

1.2 On 18 June 2008 the applicant submitted an appeal to the Secretary of State against the Corporation's failure to determine the application within thirteen weeks. The submission of an appeal prevents the Corporation from being able to determine the application. The purpose of the report is to resolve how the Committee would have determined the application had an appeal not been lodged. The Committee resolution will inform the Corporation's Statement of Case and evidence it will present at a public inquiry. The deadline for submitting the Corporation's Statement of Case is 18 July 2008.

1.3 The application proposes the installation of a biomass renewable energy turbine house within an existing waste management facility. The fuel source will be waste wood transferred to the waste recovery facility by lorry. The waste wood is currently being disposed of at landfill. Direct combustion is used to raise steam to drive a turbine to generate electricity. The electricity will be supplied via a connection to the National Grid.

1.4 The applicant has submitted a "Combined Supporting Planning Statement and Sustainability and Renewables Appraisal" in support of the application. The proposed

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technology and process has been described in this statement, and through discussions with the applicant as “advanced combustion technology”, “advanced combustion thermal treatment”, “co-incineration” and “gasification”. The process is considered to be thermal treatment or incineration. The applicant has not submitted a full Transport Assessment, Air Quality Impact Assessment or Noise Impact Assessment to enable a consideration of the environmental impact of the development.

1.5 The principle of installing plant to recover waste to generate renewable energy at an existing waste recovery facility within an established industrial area is supported by planning policies that promote the consolidation of waste related facilities on a single site without giving rise to any adverse environmental impacts.

1.6 To qualify as renewable energy, the energy content of the waste wood is required to achieve 90% or the plant is required to operate efficiently in Combined Heat and Power (CHP) mode. As the application does not demonstrate that the fuel source will achieve this energy content or operate in CHP mode there is uncertainty whether the process qualifies as a renewable energy source.

1.7 While the application is not referable to the Mayor of London, the advice of GLA officers in the planning, waste and energy teams was initially sought on the 25 October 2007 given the need to correctly interpret and implement relevant London Plan policy. A GLA officer opinion was received on 15 April 2008 (see Appendix 3) and recommended that the application is refused on the grounds that the proposed technology:

- does not make the fullest contribution to the mitigation of, and adaptation to, climate change, and the reduction of carbon dioxide emissions, when compared to new and emerging advanced conversion technologies such as gasification, plasma gasification, pyrolysis and anaerobic digestion;
- proposes an increase in conventional incineration at the expense of new and emerging advanced conversion technologies and, as such, undermines the priority to reduce and recycle waste and use advanced technologies to convert waste into clean and efficient fuels such as biogas and hydrogen;
- proposes a technology that achieves only 20% electrical efficiency and does not provide for the distribution of heat to achieve a higher overall electrical and thermal efficiency;
- does not capture the long terms advantages that preferred technologies achieve, particularly in relation to the generation of hydrogen generation and carbon reduction targets.

1.8 On this basis, the application is considered to be contrary to Policies 4A.1, 4A.2, 4A.21, 4A.22 and 4A.23 of the London Plan. On 17 June 2008, the GLA confirmed that it would provide, if necessary, a witness to appear on behalf of the Corporation in the event that the deemed reasons for refusal identified at paragraph 1.12 are agreed.

1.9 On 21 May the Corporation appointed a consultant team to provide an independent assessment of the application. The advice recommends refusal in that the application does not include sufficient information to justify the technology proposed, fully assess its impact on the environment or demonstrate that it makes the fullest contribution to the mitigation of and adaptation to climate change.

1.10 While it is acknowledged that the application has the potential to reduce landfill

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disposal, reduce vehicle movements and operate with greater efficiencies, the process is considered to be contrary to the policy objectives of (a) prioritising the re-use, recycling and composting of waste, (b) encouraging the generation of energy from new and emerging advanced conversion technologies, (c) preventing an increase in conventional incineration capacity and (d) promoting efficient forms of renewable energy generation, as promoted by Policies 4A.1, 4A.2, 4A.21 and 4A.23 of the London Plan. The benefits of the application are considered to be outweighed by the areas of policy conflict.

1.11 It is recognised that the technical expertise required to defend a deemed refusal of planning permission would need to be provided by GLA officers or consultants with the relevant technical skills and experience.

1.12 It is recommended that, subject to consultation with Counsel, the Corporation submit a Statement of Case to the Planning Inspectorate based on the following reasons for refusal:

1. The application fails to demonstrate that the proposed development would (a) make the fullest contribution to the mitigation of and adaptation to climate change and reduction of carbon dioxide emissions, (b) not give rise to unacceptable harm to the environment and (c) not give rise to unacceptable local traffic impacts contrary to Policies 4A.1, 4A.2, 4A.21, 4A.22 and 4A.23 of the London Plan and Policy G29, G39 and T21 of the Unitary Development Plan.

2. The application fails to demonstrate that (a) the waste cannot be reused or recycled before being considered for energy recovery and (b) the feasibility of using new and emerging advanced energy recovery or conversion technologies have been considered before thermal treatment and (c) the proposed technology will not lead to an increase in conventional incineration capacity contrary to Policies 4A.1, 4A.2, 4A.21, 4A.22 and 4A.23 of the London Plan

3. The application, by virtue of the proposed technology, does not promote an efficient form of renewable energy generation by operating with below average efficiencies and without Combined Heat and Power mode contrary to Policy 4A.1, 4A.2 and 4A.23 of the London Plan.

2. SITE AND PROPOSAL

2.1 Description of Site and Surroundings

2.1.1 The application site is located within the Dagenham Dock industrial area (see Appendix 1). The site measures 1.6 hectares and is bounded by Chequers Lane to the east, TDG Pinnacle (chemical storage and distribution) to the south, Dagenham First Bus depot to the north and vacant London Development Agency (LDA) land to the west. Barking Power Station is located opposite the site beyond Chequers Lane. Vehicle access to the strategic road network is achieved via Chequers Lane, Choats Road and Choats Manor Way.

2.1.2 The site is currently occupied by Hunt's Waste Recycling Ltd. The site accommodates a large metal frame shed clad in corrugated iron and areas of open storage. Waste enters the site via a weighbridge before being sorted for wood, plastic, hardcore, ferrous and non-ferrous metals, aggregates, paper and soil before being graded into categories for recycling. The remaining waste is dispatched to landfill. It is

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estimated that 70% of waste is recycled. The applicant has advised that the facility is licensed to deal with non-hazardous waste only.

2.1.3 Dagenham Dock is being promoted by the Corporation and the LDA as a Sustainable Industrial Park. The Corporation is working with the LDA to provide a spatial masterplan and business case for developing this concept on the LDA's Dagenham Dock landholdings.

2.2 Description of Proposal

2.2.1 The application proposes the installation of a small scale biomass renewable energy turbine house that will convert waste wood to energy and is supported by a "Combined Supporting Planning Statement and Sustainability Renewables Appraisal". The biomass fuelled turbine is proposed to generate 2.75MWe/Hr of electricity and save 2,580m³ tonnes of carbon based on a throughput of 30,000 tonnes of waste wood per annum (see Appendix 2). The electricity generated will be supplied through a connection to the National Grid and it is estimated that it can provide power to 2,111 homes per annum.

2.2.2 The plant will be housed within an existing building whose floorspace will be extended by creating a new mezzanine level. A 21.0m tall chimney will project 9.0m above the ridge level of the existing building.

2.2.3 The proposed technology has been described by the applicant as an "advanced combustion technology", "advanced combustion thermal treatment", "co-incineration" and "gasification", and designed to beat the strictest environmental control legislation. To operate the proposed technology, the Environment Agency will be required to issue an Integrated Pollution Protection and Control (IPPC) permit. This licence will set standards for clean burning, in accordance with the Waste Incineration Directive (WID) and air quality. The applicant states that the process achieves complete burn out based on a chamber residence of 3.9 seconds at 1000°C compared to the WID requirement of 2 seconds at a minimum of 850 °C.

2.2.4 The proposed technology includes the potential to utilise waste heat via a connection to a district heating system to enable the process to operate in Combined Heat and Power mode. There is no district heating system currently available.

2.2.5 The process will involve the throughput of 30,000 tonnes of waste wood per annum. The waste wood will be in the form of chipped tree parts, root balls and large wood particles left over from the composting of green waste collections and other waste wood that qualifies as biomass under the Renewables Obligation Order 2006. The current disposal route for this waste is landfill, land-spread, composting and storage.

2.2.6 The process begins by removing any non-ferrous material from the waste wood. The waste wood is then shredded before being transported on a walking floor/bulk feeder unit positioned outside the building. A variable speed controller is used to maintain the required discharge rate of waste wood to the fuel transfer system. The waste wood is then combusted to raise steam to drive a turbine to generate electricity. The technology is designed to achieve complete combustion so that gases are fully oxidized before they leave the combustion chamber. A filter system is proposed to remove all residual smoke particulates to within permitted levels. The combustion process produces ash, which represents 1% to 5% of the total fuel, which is proposed to be mixed back into topsoil for land spread.

2.2.7 The applicant states that the proposed development will result in the net reduction

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of 1875 lorry movements per annum. The application states that deliveries or loading of the fuel source will take place during normal working hours but that provision should be made for 24 hour emergency loading during long holiday period when the site is closed.

2.2.8 The proposed development will create at least two full time jobs and two part time jobs.

2.2.9 Bioflame Ltd. has secured planning permission for a 2.5MWe/hr electrical biomass turbine in Caythorpe, Lincolnshire and operates a demonstration project in Pickering, North Yorkshire.

2.2.10 A screening opinion was adopted on 26 October 2007 that concluded that the proposed development does not constitute EIA (Environmental Impact Assessment) development and require the submission of an Environmental Statement

3. MAIN ISSUES

- Land Use
- Waste Management
- Renewable Energy
- Air Quality
- Traffic Generation
- Visual Impact

4. RELEVANT SITE HISTORY

4.1 In 2001 a complaint was received that the site was being used as a waste transfer station without planning permission (ref: 01/00158/DIFFAP). An application was requested and submitted following a site inspection.

4.2 In October 2004 planning permission was granted for the use of the site for waste recycling with associated buildings subject to conditions and a Section 106 legal agreement (ref: DC/01/00603/FUL). The discharge of conditions remains outstanding.

4.3 In September 2005 planning permission was granted for use of an additional strip of land adjacent to the southern boundary of the site for use as vehicular access, car and lorry parking, skip storage and other amendments to the approved layout of the site subject to conditions (ref: DC/05/00457/FUL). The discharge of conditions remains outstanding.

4.4 LBBB advises that the conditions pursuant to the 2004 and 2005 applications have not been discharged. LBBB advises that following the threat of enforcement action the applicant's verbal response was that site was being operated in compliance with conditions and that a site meeting would be arranged to confirm this. LBBB advises that a site visit has not yet taken place.

5. CONSULTATIONS/NOTIFICATIONS

Greater London Authority (GLA)

5.1 The London Plan (February 2008) provides the most up-to-date policy context on matters relating to waste management and energy. While the application is not referable to the Mayor of London, GLA opinion was sought given the relevance of

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London Plan policies to the consideration of the application.

5.2 The GLA were first consulted on the application on 25 October 2007. Following a meeting between the GLA, LTGDC and the applicant on the 17 January 2008, the GLA provided an officer opinion on the 15 April 2008. GLA officers object to the application on grounds that it is contrary to Policies 4A.1, 4A.2, 4A.21 and 4A.23 of the London Plan for the following reasons:

- The application proposes a technology that does not make the fullest contribution to the mitigation of, and adaptation to, climate change and to minimise carbon dioxide emissions when compared to new and emerging advanced conversion technologies such as gasification, plasma gasification and anaerobic digestion;
- The application proposes an increase in conventional incineration at the expense of new and emerging advanced conversion technologies and, as such, undermines the priority to reduce and recycle waste and use advanced technologies to convert waste into clean and efficient fuels such as biogas and hydrogen;
- The application proposes a technology that achieves only 20% electrical efficiency and does not provide for the distribution of heat to achieve a higher overall electrical and thermal efficiency;
- The application does not capture the long terms advantages that preferred technologies achieve, particularly in relation to the generation of hydrogen generation and carbon reduction targets.

5.3 The GLA recommend that the Corporation refuse the application for the following reason:

The use of the site as a waste wood thermal treatment facility is not in accordance with London Plan policies 4A.1, 4A.2, 4A.21 and 4A.23 in that it does not minimise carbon dioxide emissions, is not a new and emerging technology, and does not include Combined Heat and Power/Combined Cooling Heat and Power. Therefore it does not maximise energy generation and minimise carbon emission directly or indirectly. In therefore undermines the achievement of London's carbon dioxide reduction targets.

5.4 On 17 June the GLA confirmed that it would provide, if necessary, a witness to appear on behalf of the Corporation.

London Borough of Barking and Dagenham

5.5 The following provides a summary of the comments received from internal consultations:

Environmental Health

5.6 Advise that the proposed development will lead to an increase in emissions, degradation in air quality or increase in fine particulates which will have a detrimental effect on the health of those who work and live in the borough. It is recommended that in the event that planning permission is granted planning conditions are imposed that require (1) the submission of a scheme for air quality monitoring of nitrogen oxide and fine particulates and (2) noise generated by the operation shall not exceed or increase the existing background level of La90 – 10dB at the boundary of the site.

Highways

5.7 Raise no objection subject to the imposition of conditions are imposed requiring the submission of details of (1) wheel washing facilities, (2) an appropriately sized silt trap, (3) a new, safer and modern diesel tank including petrol interceptor, (4) a green travel plan (5) a revised site layout and (6) foul and surface water drainage.

5.8 It recommended that in the event that planning permission is granted the application be required to enter into a S106 agreement to contribute £20,000 towards highway improvements within the vicinity of the site.

Regeneration

5.9 Raise no objection to the principle of providing a waste to energy installation but raise concern about the visual impact of open storage given Hunt's Waste Recycling Ltd's non-compliance with planning conditions pursuant to previous planning permissions.

5.10 Recommend the imposition of planning conditions that (1) prohibit any additional open storage on the site and (2) require the implementation of mechanisms for monitoring the adequacy of the waste wood fuel and associated emission levels. Condition (2) is considered particularly relevant given the Environment Agency's limited resources for monitoring.

Environmental Sustainability

5.11 Acknowledge that the proposed development has the potential to generate renewable energy from waste wood and contribute to the Borough's renewable energy targets. Note that during discussions with the applicant the development of a combined heat and power plant would increase the environmental benefits.

Environment Agency

5.12 Raise no objection to the impact of the propose development on flood risk.

5.13 Emails have been exchanged with officers from the Environment Management and Licensing teams responsible for issuing, and monitoring compliance with, permits under the Pollution Prevention and Control Regulations 2000. They have confirmed that the process will require an IPPC permit and will be subject to the stringent requirements of the Waste Incineration Directive (WID). An application for an IPPC permit will be considered against the use of Best Available Technology (BAT), compliance with the requirements of the WID and the environmental impact in terms of air quality and nuisance.

5.14 The Environment Agency has confirmed that the Bioflame Ltd. demonstration project in Pickering, North Yorkshire has been issued with an IPPC permit.

6. APPLICATION PUBLICITY

6.1 Site Notice Expiry: 02.10.07

6.2 Press Notice Expiry: N/A

6.3 Neighbour Notification:

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24 neighbouring occupiers were consulted. The deadline for submitting representations was 3.10.07.

7. REPRESENTATIONS

7.1 No letters of support or objection were received following public consultation.

8. RELEVANT PLANNING POLICY

8.1 Planning Policy Statement/Guidance

PPS1	Delivering Sustainable Development
PPS 1	Planning and Climate Change (Supplement to Planning Policy Statement 1)
PPS10	Planning for Sustainable Waste Management
PPS13	Transport
PPS22	Renewable Energy
PPS23	Planning and Pollution Control

8.2 The London Plan (Feb 2008)

2A.1	Sustainability criteria
2A.10	Strategic Industrial Locations
3B.4	Industrial Locations
3C.17	Tackling congestion and reducing traffic
4A.1	Tackling climate change
4A.2	Mitigating climate change
4A.5	Provision of heating and cooling networks
4A.21	Waste management strategic policy and targets
4A.22	Spatial policies for waste management
4A.23	Criteria for the selection of site for waste management and disposal

8.3 LB Barking and Dagenham UDP

	Strategic Policy E
	Strategic Policy F
	Strategic Policy Q
	Strategic Policy Y
E1	Employment Development within Employment Areas
E4	Access for People with Disabilities
E5	Access for People with Disabilities
E6	Employment Promotion
BR4	Dagenham Dock Employment Area
BR5	Dagenham Dock Riverside Area
T12	Pedestrian Accessibility
T13	Development Standards
G38	Water Pollution
G29	Waste
G31	Waste Re-use and Recycling
G36	Noise and Vibration
G39	Air Pollution
G40	Energy
DE1	Urban Design

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DE36 Development on Sites of Archaeological Significance
DE37 Protection of Archaeological Sites
C15 Access

8.4 Other Relevant Planning Policies & SPG's

Joint Waste Development Plan Document for the East London Waste Authority (ELWA) Boroughs: Preferred Options Report (April 2008)

8.4.2 The purpose of the Joint Waste DPD is to set out a planning strategy to 2020 for sustainable waste management which enables the adequate provision of waste management facilities in appropriate locations having regard to the London Plan. The Joint Waste DPD will form part of the Local Development Framework.

8.4.3 The Joint Waste DPD refers to the European Union Waste Framework Directive as the principal legislation for waste. A key principle of the directive is the waste hierarchy - reduce, re-use, recycling and composting, energy recovery and disposal – and the objective to manage waste as near to the top of the hierarchy as possible. This approach is consistent with Policy 4A.21, 4A.22 and 4A.23 of the London Plan.

8.4.4 Preferred Policy W2: Waste Management Capacity, Apportionment and Site Allocation states that the ELWA boroughs will meet their apportionment of municipal and commercial waste by:

- (i) safeguarding the capacity of existing waste management facilities listed in Schedule 1 and supporting increased operational efficiency at these facilities; and
- (ii) approving waste management facilities where it will contribute to the ELWA boroughs meeting the London Plan apportionment on sites within the location listed in Schedule 2.

8.4.5 Hunt's Waste Recycling is listed in Schedule 1 as a waste management facility capable of increased operational efficiency and Chequers Lane is identified in Schedule 2 as an appropriate location for in-vessel composting and anaerobic digestion facilities.

8.4.6 Furthermore, Preferred Policy W2 states that applications for thermal treatment facilities (excluding conventional incineration) will only be allowed where the waste to be treated cannot be practically and reasonably reused, recycled or reprocessed, and that provision is made for energy recovery.

8.4.7 The Joint Waste DPD defines incineration as “the controlled thermal treatment of waste by burning, either to reduce its volume or toxicity“, but acknowledges that energy recovery can be made to produce heat and/or power. Thermal treatment is defined as “the general term used for waste management technologies that are designed to generate power, and often recover heat, through the combustion of waste.

Dagenham Dock Interim Planning Guidance for a Sustainable Industrial Park (April 2003)

8.4.1 The Interim Planning Guidance sets out the planning policy context for the regeneration of Dagenham Dock as a Sustainable Industrial Park. The policy objectives include (1) encouraging manufacturing industries in the environmental business sector, (2) supporting proposals that establish recycling and reprocessing activities (3) and promoting high standards of design and environmental management. The application site is located with an area identified as appropriate for recycling industries. Policy DD3

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states that the recycling industries zone is reserved for appropriate environmental industries and facilities for the recycling and reprocessing of waste. Furthermore, the policy states that some open storage maybe permitted in circumstances where it is not visible from the highway, contained within solid retaining walls and not stockpiled for excessive periods.

9. ASSESSMENT OF MAIN ISSUES

Land Use

9.1 The application site is located within a Preferred Industrial Location (PIL) and Designated Employment Area in the London Plan and Unitary Development Plan. The Preferred Options Joint Waste Development Plan Document for the East London Waste Authority boroughs identifies Hunt's Recycling Ltd. as an existing waste management facility and Chequers Lane as an appropriate location for new in-vessel composting and anaerobic digestion facilities.

9.2 In selecting sites for waste management and disposal, Policy 4A.23 of the London Plan encourages using sites located in PILs or existing waste management locations.

9.3 The principle of installing a waste to energy plant at an existing waste recovery facility within an established industrial area is encouraged by planning policies that promote the consolidation of waste related facilities on a single site and seek to limit the environmental impact of such uses.

Waste Management

9.4 National, regional and local planning policies refer to the European Union Waste Framework Directive as providing the principal legislation and framework for waste management. A key principle of the directive is the waste hierarchy - reduce, re-use, recycling and composting, energy recovery and disposal – and the objective to manage waste as near to the top of the hierarchy as possible.

9.5 PPS10: Planning for Sustainable Waste Management requires the regional planning bodies (GLA) to prepare regional spatial strategies (RSS) (London Plan) to meet the needs for the management of all waste streams, and for local authorities (East London Waste Authority) to produce local development documents (Joint Waste Development Plan Document for the East London Waste Authority Boroughs) that reflect their contribution to delivering the RSS.

9.6 The London Plan (2008) supersedes the Unitary Development Plan (1995) on matters relating to energy and waste. The GLA is ideally placed to provide advice on the interpretation and implementation of London Plan policy relating to waste management. The application is not statutorily referable to the Mayor of London because it does not propose an installation with capacity for a throughput of more than 50,000 tonnes of waste per annum.

9.7 The GLA were asked to provide an opinion on the application on 25 October 2007. Following a meeting between the GLA, LTGDC and Bioflame Ltd. on the 17 January 2008, the GLA provided an officer opinion on the 15 April 2008. GLA officers object to the application on grounds that it is contrary to Policies 4A.1, 4A.2, 4A.21 and 4A.23 of the London Plan for the following reasons:

- The application proposes a technology that does not make the fullest contribution to the mitigation of, and adaptation to, climate change and to the reduction of carbon

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dioxide emissions when compared to new and emerging advanced conversion technologies such as gasification, plasma gasification and anaerobic digestion;

- The application proposes an increase in conventional incineration at the expense of new and emerging advanced conversion technologies and, as such, undermines the priority to reduce and recycle waste and use advanced technologies to convert waste into clean and efficient fuels such as biogas and hydrogen;
- The application proposes a technology that achieves only 20% electrical efficiency and does not provide for the distribution of heat to achieve a higher overall electrical and thermal efficiency by operating in combined heat and power mode;
- The application does not capture the long terms advantages that preferred technologies achieve, particularly in relation to the generation of hydrogen generation and carbon reduction targets.

On 17 June the GLA formalised this approach and confirmed that it would provide, if necessary, a witness to appear on behalf of the Corporation.

9.8 Policy 4A.1 of the London Plan requires development to make the fullest contribution to the mitigation of, and adaptation to, climate change, and to minimise emissions of carbon dioxide, based on a hierarchy that promotes reduced energy use, supplying energy efficiently and using renewable energy. Policy 4A.2 of the London Plan sets long terms targets for reducing carbon dioxide emissions.

9.9 The GLA advice states that alternative technologies to incineration exist that emit lower levels of carbon dioxide and make a more positive contribution towards mitigating climate change. The applicant estimates that the process will save 2580 tonnes³ of carbon per annum. The GLA consider that given the choice of technology, the application fails to make the fullest contribution to the mitigation of, and adaptation to, climate change and does not demonstrate why processes and technologies higher up the waste hierarchy have not been considered. It should be noted that the Preferred Options Joint Waste DPD for the ELWA boroughs identifies in-vessel composting and anaerobic digestion as the preferred facilities to be located in Chequers Lane.

9.10 London Plan Policy 4A.21 requires adequate capacity for waste management and treatment to be provided by 2020 and requires this capacity to be provided by (1) minimising the level of waste generated, (2) increasing re-use, recycling and composting of waste and reduce landfill disposal, (3) minimising the amount of energy used from the collection, treatment and disposal of waste in line with reducing carbon dioxide emissions and (4) promoting the generation of renewable energy and renewable hydrogen energy from waste. The Policy also states that where waste cannot be recycled, the production of energy from waste using new and emerging technologies (gasification, plasma gasification and anaerobic digestion) should be encouraged, especially where the products of waste treatment could be used as fuels (e.g. biofuels and hydrogen).

9.11 While the application will reduce landfill disposal and its associated carbon dioxide emissions and has the potential to generate renewable energy, the proposed technology does not encourage waste minimisation or contribute to an increase in the re-use, recycling and composting of waste or promote the generation of renewable energy from waste using a new and emerging technology.

9.12 Furthermore, Policy 4A.21 states that with regard to incineration capacity, the Mayor will consider an increase in waste minimisation, recycling, composting and the

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development of new and emerging advanced conversion technologies in favour of proposals to increase conventional incineration capacity. While each case is required to be treated on its merits, the Policy states that, over the lifetime of the plan, the aim is for current incinerator capacity to become oriented towards non-recyclable residual waste.

9.13 While the application has the potential to provide renewable energy, the proposed technology is considered to constitute an increase in conventional incineration capacity as it relies on the direct combustion of waste. The application is therefore considered to undermine the Mayor of London's aim to orientate current incineration capacity towards non recyclable waste and failing to demonstrate that the waste wood is non-recyclable.

9.14 Paragraph 4.62 of the London Plan states that performance should improve for all forms of waste in London in terms of greater efficiency of use, a reduction in amounts generated and an increase in recycling. The paragraph refers to the Mayor's Municipal Waste Minimisation Management Strategy (MMWMS) as identifying opportunities for waste minimisation, reuse, recycling, composting and other forms of energy recovery such as new and emerging advanced conversion technologies. The paragraph states that the latter should be considered in preference to conventional incineration on the basis that opportunities for recycling and composting are maximised before energy recovery is considered.

9.15 Paragraph 4.64 of the London Plan states that London has significant incineration capacity and defines conventional incineration as "the controlled burning of waste in the presence of air to achieve complete combustion". The paragraph refers to the Mayor of London's concern that opportunities to develop recycling and composting and to produce renewable hydrogen should not be crowded out by conventional incinerator use and will consider, in preference, other forms of new and emerging technology – including mechanical and biological treatment – before new conventional incineration capacity.

9.16 While the proposed technology and process is described by the applicant as "advanced combustion technology", "advanced combustion thermal treatment", "co-incineration" and "gasification", it is considered that, despite its ability to recover energy from waste wood, it is a thermal treatment process that will contribute to an increase in conventional incineration capacity and conflicts with the Mayor of London's objectives for waste management.

9.17 While the application may contribute to achieving the policy objectives of (1) promoting the generation of renewable energy, (2) limiting landfill disposal and (3) reducing the transport impacts of waste disposal, the proposed technology is considered to be contrary to the policy objectives of (a) prioritising the re-use, recycling and composting of waste, (b) encouraging the generation of energy from new and emerging advanced conversion technologies, (c) preventing an increase in conventional incineration capacity and (d) promoting efficient forms of renewable energy generation that include Combine Heat and Power, as required by Policies 4A.1, 4A.2, 4A.1 and 4A.23 of the London Plan.

Renewable Energy

9.18 Policy 4A.21 of the London Plan promotes the generation of renewable energy and renewable hydrogen from waste. Policy 4A.23 of the London Plan states that wherever possible, opportunities should be taken to include provision for Combined Heat and Power and Combined Cooling Heat and Power and to accommodate various related facilities on a single site.

9.19 PPS1 refers to the Renewable Obligations 2002 as stating that only electricity derived from 'biomass' will be eligible from Renewable Obligation Certificates. Biomass is defined as a fuel of which at least 90% of the energy content is derived from plant or animal matter and including wood waste. The application proposes biomass fuelled energy generation but does not demonstrate that the waste wood will have an energy content that enables it to qualify as a renewable source.

9.20 The applicant states that the technology has the potential to operate in Combined Heat and Power mode but cannot be achieved in the absence of a local distribution network. The application does not provide a robust assessment of the potential for the technology to work efficiently in CHP mode.

9.21 The Corporation has received independent advice that concludes that the proposed facility is likely to operate with efficiencies that are below average for electricity generation and that this is accentuated by the fact that there is no provision for heat recovery. The proposed technology is expected to operate at an 18% efficiency compared to 28% (Wilton 10) and 35% (Slough Heat and Power) for existing biomass plants.

9.22 The GLA question the thermal efficiency of using a steam turbine to generate electricity through the combustion of waste and identify alternative conversion technologies as achieving a combination of increased thermal efficiency, especially where the products of treatment can be used as fuels (e.g. biofuels and hydrogen).

Air Quality

9.23 The applicant has submitted supplementary information on the typical emissions levels and states that a combination of complete combustion and a sophisticated filtration system will ensure that the process complies with WID requirements and IPPC targets on emissions. The application is not supported by an Air Quality Assessment.

Noise

9.24 The application states that the turbine house will be housed within an acoustic box inside a closed building to prevent a noise impact and claims that there will be no detectable sound beyond the site boundary other than the noise levels associated with the existing site operations. The application states that deliveries or loading of the fuel source will take place during normal working hours but that provision should be made for 24 hour emergency loading during long holiday period when the site is closed. The application is not supported by a Noise Impact Assessment.

Traffic Generation

9.25 The applicant has submitted a Transport Impact Assessment (TIA) that concludes that the proposed development will result in "significant reduction in vehicle movements" by creating a net reduction of approximately 1875 lorry movements per annum. This equates to approximately 6 lorry movements a day. The TIA provides no information about the geographic source of the waste wood, existing vehicle movements to and from the site or whether the installation of a biomass renewable energy turbine house will increase the number of lorry movements to the site. While it is accepted that the proposed development has the potential to result in a net reduction in lorry movements transporting waste to landfill, the credibility of this assumption has not been demonstrated in the TIA.

9.26 The proposed biomass renewable energy turbine house will be accommodated within an existing steel frame shed extended through the creation of an internal mezzanine level. A 21.0m high, 1.4m diameter stack will rise 9.0m above the ridge level of the existing building. Given the industrial characteristics of the surrounding area, the application is not considered to result in any adverse visual impact.

CONCLUSION AND REASONS FOR REFUSAL

10.1 While the application is not referable to the Mayor of London, the advice of GLA officers in the planning, waste and energy teams has been sought given the need to correctly interpret and implement relevant London Plan policy. GLA officers consider the application to be contrary to Policies 4A.1, 4A.2, 4A.21, and 4A.23 of the London Plan. The GLA has confirmed that, if necessary, it will, provide a witness to appear on behalf of the Corporation in the event that the reasons for refusal identified below are agreed.

10.2 The Corporation appointed a consultant team to provide an independent assessment of the application. The advice recommends that the application fails to demonstrate that alternative technologies have been considered given the comparatively poor efficiency of the proposed technology or fully assess the scope to secure good quality CHP or consider the development's impact on the environment by virtue of air quality, noise or traffic. The advice recommends that the Corporation adopt reasons for refusal that the application does not include sufficient information to justify the technology proposed, assess its impact on the environment or demonstrate that it makes the fullest contribution to the mitigation of and adaptation to climate change.

10.2 While it is acknowledged that the application has the potential to reduce landfill disposal, reduce vehicle movements and operate with greater efficiencies, the process is considered to be contrary to the policy objectives of (a) prioritising the re-use, recycling and composting of waste, (b) encouraging the generation of energy from new and emerging advanced conversion technologies, (c) preventing an increase in conventional incineration capacity and (d) promoting efficient forms of renewable energy generation, as promoted by Policies 4A.1, 4A.2, 4A.21 and 4A.23 of the London Plan. The benefits of the application are considered to be outweighed by the areas of policy conflict.

11. RECOMMENDATION

11.1 It is recommended that, subject to consultation with Counsel, the Corporation submit a Statement of Case to the Planning Inspectorate based on the following reasons for refusal

1. The application fails to demonstrate that the proposed development would (a) make the fullest contribution to the mitigation of and adaptation to climate change and reduction of carbon dioxide emissions, (b) not give rise to unacceptable harm to the environment and (c) not give rise to unacceptable local traffic impacts contrary to Policies 4A.1, 4A.2, 4A.21, 4A.22 and 4A.23 of the London Plan.

2. The application fails to demonstrate that (a) the waste cannot be reused or recycled before being considered for energy recovery and (b) the feasibility of using new and emerging advanced energy recovery or conversion technologies have been considered before thermal treatment and (c) the proposed technology will not lead to an increase in

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conventional incineration capacity contrary to Policies 4A.1, 4A.2, 4A.21, 4A.22 and 4A.23 of the London Plan

3. The application, by virtue of the proposed technology, does not promote an efficient form of renewable energy generation by operating with below average efficiencies and without Combined Heat and Power mode contrary to Policy 4A.1 4A.2 and 4A.23 of the London Plan.

CASE OFFICER: Will Steadman

Appendix 1: Site Location Plan

Appendix 2: Site Layout Plan and Process Flow Diagram

Appendix 3: GLA letter dated 15 April 2008