

Creating Central Bedfordshire

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Chief Executive
Jaki Salisbury

TO EACH MEMBER OF THE CENTRAL BEDFORDSHIRE SHADOW EXECUTIVE

26 September 2008

Dear Councillor

CENTRAL BEDFORDSHIRE SHADOW EXECUTIVE - Tuesday 30 September 2008

Further to the Agenda and papers for the above meeting, previously circulated, please find attached the following supplementary report(s).

Agenda Item	Description
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SC1	BEDFORDSHIRE ENERGY AND RECYCLING (BEaR) PROJECT: PFI OUTLINE BUSINESS CASE AND JOINT WORKING AGREEMENT
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To ensure clarity and openness, the previously exempt report has been revised to enable public viewing. All previously exempt information has been relocated to Appendix E.

Please find attached the public version of the report and Appendices A to D (inclusive).

In addition, please find attached Appendix E which discloses information which is not for publication under paragraph 3 of Part 1 of Schedule 12A of the Local Government Act 1972.

Should you have any queries regarding the above please contact Democratic Services on Tel: 01462 611032.

Yours sincerely

Martha Clampitt
Committee Administrator
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<p>SHADOW EXECUTIVE</p>
<p>30 SEPTEMBER 2008</p>

SUBJECT	<p>Bedfordshire Energy and Recycling (BEaR) Project: PFI Outline Business Case and Joint Working Agreement (This report summarises the key aspects of the Outline Business Case (OBC) and recommends the sign-off of the final OBC document is delegated to the Interim Head of Paid Service in consultation with the Portfolio Holder (Safer and Stronger Communities) and Portfolio Holder (Corporate Resources).)</p>
REPORT OF	Director of Sustainable Communities
<i>Contact Officer: Gary Alderson (01462 611 391)</i>	

IMPLICATIONS

SUSTAINABILITY	<p>The preparation of the Outline Business Case has considered a number of sustainable criteria, including The Environment Agency tool for sustainable waste management – WRATE (the Waste and Resources Assessment Tool for the Environment) and the Corporate policies and priorities of the Bedfordshire County Council. The proposal delivers on a proposal in the Central Bedfordshire submission document, supports Central Bedfordshire’s Vision, and Corporate Priority 3, Managing Growth Effectively. Further sustainability implications are detailed in section 5.5 of this report.</p>
FINANCIAL	<p>The preparatory work for the OBC has carefully reviewed and modelled selected options recognising the potential for partnership working and a Private Finance Initiative (PFI) supported residual waste treatment solution. The results of the options appraisal have confirmed that the Reference Project, Energy from Waste with Combined Heat and Power (EfW with CHP) for a shared treatment facility with increased recycling and PFI credit support is the most cost effective and environmentally friendly</p>

	<p>solution for the partnership. All cost projections and analysis have been prepared in accordance with the Department of the Environment, Food and Rural Affairs (Defra) and HM Treasury PFI guidelines and in align with good practice. Further details on the financial implications can be found in section 8 of the accompanying background report (Appendix A).</p>
LEGAL	<p>Concerns over the impact on the environment and decreasing landfill void space have resulted in European and National legislation driving rapid change to existing waste management practices. These laws have resulted in escalating costs for continuing to landfill through the Landfill Allowance Trading Scheme (LATS) which levies heavy financial penalties for Authorities that exceed strict landfill limits. Other legal implications include: The Environmental Protection Act 1990, the Local Government and Public Involvement in Health Bill and the Freedom of Information Act. Further details can be found under section 5.2 of this report.</p>
PERSONNEL/EQUAL OPPORTUNITIES	None
COMMUNITY DEV/SAFETY	None
TRADES UNION	None
HUMAN RIGHTS	None
KEY ISSUE	Yes
BUDGET/POLICY FRAMEWORK	No

OTHER DOCUMENTS RELEVANT TO REPORT	
<p>The OBC is being completed using Defra and HM Treasury PFI guidelines. Other guidance documents used include: The Environment Agency tool for sustainable waste management – WRATE and EU and UK legislation and policy.</p>	

RECOMMENDATION(S):

That the Shadow Executive:

- 1. Agree the Outline Business Case's (OBC) Reference Project of a Private Finance Initiative (PFI) supported energy from waste with combined heat and power waste disposal solution located in Bedfordshire.**
- 2. Approve the Joint Working Agreement between Bedfordshire County Council, Central Bedfordshire Council, Bedford Borough Council and Luton Borough Council and the associated Governance Structure as set out in Appendix C.**
- 3. Gives the Interim Head of Paid Service delegated authority in consultation with the Portfolio Holder (Safer and Stronger Communities) and Portfolio Holder (Corporate Services) to amend and agree for submission the final Outline Business Case document and the Joint Working Agreement.**
- 4. Commits Central Bedfordshire to**
 - (a) their division of the Reference Project cost over the period between 2016 and 2041, in the total sum set out in the exempt Appendix (not for publication by virtue of paragraph 3 of Part 1 of Schedule 12A of the Local Government Act 1972); and**
 - (b) The contribution of bridging the affordability gap in the sum indicated in the exempt Appendix (not for publication by virtue of paragraph 3 of Part 1 of Schedule 12A of the Local Government Act 1972.) based on the reference project assumptions and affordability envelope as outlined in the Section 8 of exempt Appendix – Future Waste Treatment – Outline Business Case and Joint Working Agreement Background Report.**
- 5. Confirms that Central Bedfordshire will aim to achieve the recycling/composting targets laid down in the Waste Strategy 2007 and where possible exceed the targets set with the aim of achieving 60% recycling in the long-term future. These targets are detailed in the supporting background report set out in Appendix A, section 3.**

*Reason for
Recommendation:*

Recommendation (1): Detailed modelling has shown that the Reference Project offers the most advantageous option for the future waste management of Bedfordshire County Council's municipal waste (and that of the partner authorities) when evaluated against other options using a range of environmental, economic, technical and planning delivery criteria.

Recommendation (2): Given the high value and lengthy nature of this joint procurement and the potentially severe financial consequences of partner authorities withdrawing from the process, a legally binding Joint Working Agreement which sets out the responsibilities and liabilities of partner Authorities is required. This will provide security to all parties involved and also detail responsibilities.

Recommendation (3): The Outline Business Case document is a large and complex document currently being prepared to tight timescales. Due to the amount of work involved the document is not yet finalised, however a draft can be made available on request. It is envisaged that the completed OBC will be ready for submission by the target date of the 31st October 2008 and will be made publicly available after its submission with the possible exception of specific commercial appendices. This report to the Shadow Executive along with the attached background report summarises the key OBC information for approval which will not change in the final document.

Recommendation (4): The Reference Project has been identified as the most economically advantageous solution for Bedfordshire although additional revenue will be required to deliver this solution. Without a firm commitment from the Council that this revenue funding will be made available, the envisaged solution will not be deliverable and DEFRA will not support the Partnership's proposals with the required PFI credit support. This would increase the envisaged affordability gap and future financial liabilities for the Authority in delivering its Waste Management Strategy.

The identified affordability gap represents a significant challenge for the Council although the early adoption and use of a balancing fund is a prudent method to reduce the impact on resources in future years. The proposed balancing fund allows an annual budget to be set aside so in early years a reserve is accumulated including interest earned which will, in later years, be drawn down to support the funding of the new initiatives, contract operating costs and thereby meet the affordability gap. The provision of a balancing fund budget allocation will need to be sustained throughout the length of the operating contract until 2041 although the exact scale of contribution to this fund will be periodically reviewed.

Recommendation (5): Bedfordshire and Luton need to strive to increase recycling and composting to maximum levels prior to any major waste treatment taking place as defined in the waste hierarchy. National targets have been set in WS2007 that need to be met by all waste disposal authorities. Meeting these targets is also a requirement of DEFRA in their PFI award. The authorities should aim towards 60% recycling/composting as a long term goal.

1 SUMMARY

- 1.1 The BEaR Project is following a process that requires a series of outputs to be produced and approved in order to take part in the Department for the Environment, Food and Rural Affairs (DEFRA) Private Finance Initiative (PFI) process. In March 2008, Bedfordshire County Council approved the submission of an Expression of Interest (EoI) to DEFRA. The EoI sought confirmation from DEFRA as to whether a partnership approach to securing a long term waste treatment solution would be suitable for PFI credit support.
- 1.2 In May 2008, DEFRA confirmed that the EoI submission had met the Government's eligibility criteria for PFI support, and that the Authorities could now submit a joint Outline Business Case (OBC) to DEFRA by 31st October 2008 seeking formal PFI credit support.
- 1.3 This report and the associated OBC sets out the detailed proposals to deliver the Options Appraisal's recommended solution – that is essentially to minimise waste, optimise recycling and recover energy from the residual waste using an energy from waste/combined heat and power (EfW/CHP) type technology.

1.4 Bedfordshire County Council has worked up the proposals with the partner Authorities, through the BEaR Project Partnership consisting of Bedfordshire County Council, Central Bedfordshire Council, Bedford Borough Council and Luton Borough Council.

2. REASON FOR REPORT

2.1 Concerns over the impact on the environment and decreasing landfill void space have resulted in European and National legislation driving rapid change to existing waste management practices. These laws have resulted in escalating costs for continuing to landfill through the Landfill Allowance Trading Scheme (LATS) which levies in heavy financial penalties on Authorities that exceed strict landfill limits and the escalating Landfill Tax.

2.2 Bedfordshire County Council in conjunction with its financial advisers and in consultation with the Shadow Authorities and Luton Borough Council has investigated several funding routes. Work to date suggests that private sector funded procurement would be most appropriate and leveraging in PFI credits should deliver a more affordable project. It has been shown that the potential value of PFI support will reduce the affordability gap.

2.3 The BEaR project is moving at a fast pace with an urgency to meet DEFRA submission deadlines to keep all financing options open. In particular, if the County wishes to be considered for PFI credits, then an Outline Business Case (OBC) must be submitted to DEFRA by the end of October 2008. DEFRA currently have no plans for another round for allocating PFI credits to local authorities, hence the urgency to meet DEFRA's submission deadline of 31st October 2008.

2.4 As the current Waste Disposal Authority (WDA), Bedfordshire County Council has a responsibility ahead of the establishment of the new unitary authorities to provide the best future options for waste disposal at the lowest cost to taxpayers. The OBC will be completed during October, so delegated authority is requested from the Executive to finalise the OBC to enable a timely and complete submission to be made.

3. **ALTERNATIVES CONSIDERED**

- 3.1 Alternative funding options have been considered during the development of the OBC. A value for money assessment was undertaken for the OBC in accordance with HM Treasury's requirements, and assesses the residual treatment infrastructure included within the reference project and determines whether the use of PFI offers potentially better value for money over a solution that is procured conventionally. The assessment considered both qualitative and quantitative factors. The qualitative appraisal considers the viability, desirability and achievability of PFI. The quantitative analysis uses a prescribed methodology and electronic spreadsheet provided by Treasury to determine whether PFI represents indicative value for money compared to conventional procurement. Full details of this assessment can be found in the OBC, but in summary, the qualitative assessment produced a clear indication that the partnership is well positioned to deliver a PFI procurement. The quantitative assessment produced an indicative PFI value for money percentage of 9.47% on the base case scenario, the robustness of which has been demonstrated through sensitivity testing. Both assessments have provided a clear indication that confirms the outcome of the programme level assessment that PFI can deliver value for money for the partnership's waste.
- 3.2 In 2005 an Options Appraisal process was undertaken as part of the Bedfordshire Authorities Municipal Waste Management Strategy (BAMWMS) to find the best treatment option for Bedfordshire's residual waste in the future. In the intervening time (March 2005 to December 2007) there have been considerable developments in Government waste policy, and the best practice requirements for Option Appraisal modelling have also been reviewed nationally. The Waste Strategy 2007 considers the requirement for the adoption of a life cycle approach within the decision making process and in particular stresses the importance of considering the impact of changes to services in relation to the Global Warming Potential (GWP). The DEFRA funded Waste Infrastructure Delivery Programme (WIDP) has also issued a formal OBC template and guidance, with reporting requirements on the Options Appraisal and bankability of technologies. The Partnership believes that work should be compliant with current WIDP OBC guidance, as well as the draft guidance on the completion of Options Appraisals, issued by WIDP in April 2008. It should not be forgotten that the waste industry itself has also moved on considerably in this period.

- 3.3 In early 2008, the original process was updated by undertaking an Options Review. The updated review took new information into account and also incorporated use of the recently released Environment Agency Waste and Resource Assessment Tool for the Environment (WRATE). The review initially assessed a long list of technology options before focussing in more detail on a short list. Both technical (environmental impact, risk, robustness) and financial elements were assessed. A range of evaluation criteria was used that was weighted according to its importance to Bedfordshire. The full methodology and appraisal process can be found in the Options Appraisal Report (Appendix B).

The preferred technology option that emerged from the process was waste minimisation, increased recycling to at least 50% followed by treatment using energy from waste with Combined Heat and Power technology. This technology came first in both the technical and financial appraisal of the options.

- 3.4 The affordability analysis performed indicates that the Reference Project is the most affordable solution based on current assumptions. The Reference Project costs £80m less from the period April 2016 to March 2041 than the 'Do Minimum' alternative, further details on the affordability of the PFI project can be found in the attached background report (section 8).

- 3.5 There are significant benefits of a joint working approach for this PFI Project. The procurement costs over the next 2-3 years will be shared across each Council. It is important to note that the costs of the procurement, including the costs of consultants and the Project Board, shall be split 2/3 to Bedfordshire County Council, 1/3 to Luton Borough Council up until 1st April 2009, and thereafter 1/3 to each of the three unitary authorities. The procurement costs have already been identified and approved by the partnership and will be monitored and reported to the BEaR Project Board and the Executive throughout the procurement phase. Another significant benefit of a joint procurement project is the substantial economies of scale that will result from combining the partner Authorities' residual waste treatment needs. This will also result in a project which holds greater appeal to the market and should attract high quality bidders.

4. **CONSULTATION**

- 4.1 These reports will also be considered by Bedford Borough Transition Executive (7th October 2008), Luton Council (6th October 2008) and Bedfordshire County Council (21st October 2008).

4.2 Consultation with elected members has taken place through the Bedfordshire Authorities Waste Partnership and the BEaR Project Board. Regular engagement has also taken place with the BCC Environment Services Overview and Scrutiny Committee. Full support and backing of the Project was given at the 21st December 2004 County Council Executive. The proposed sites were reported to the County Council Executive on the 30th October 2007, when members approved the site selection process, with Rookery Pit being the preferred location for the waste treatment facility.

A briefing to which Members of the Central Bedfordshire Shadow Executive, Safer and Stronger Communities and Sustainable Development Transition Task Forces were invited was held on 8th September 2008. This covered the whole of the project but with a focus on understanding the issues of affordability. This report was considered at a joint meeting of the Safer and Stronger Communities and Sustainable Development Transition Task Forces held on 24 September 2008. An invitation to that meeting was extended to all Members of Central Bedfordshire Council. An update on any recommendations arising from that meeting will be given at this Executive meeting. Briefings will continue to be provided to Members via information bulletins, seminars and further visits to waste treatment facilities.

4.3 The Communications Strategy provides a comprehensive approach to informing all stakeholders on the BEaR Project. The key aims of the strategy include:

- Identify key stakeholders and plan the most effective channels for communicating with them
- Identify how appropriate consultation shall be carried out
- Ensure that communication activities are carried out in a co-ordinated and consistent way
- Develop ways of responding to enquiries and information that may arise during the project's lifetime
- Identify the roles and responsibilities of people tasked with delivering effective communications
- Ensure that communications activity is appropriately planned, resourced and any associated risks and issues are managed
- Ensure that any reactive communications are properly managed and in line with the overall strategy.

4.4 Market testing events have taken place with a variety of potential bidders, in order to maximise competition and maintain a strong focus on market attractiveness. Companies expressed a significant amount of interest and were comfortable with the procurement approach, contract length and funding route. Two final market testing events are planned with prospective bidders prior to and during procurement.

- 4.5 A full public consultation, including road shows was launched in January 2006 to ascertain the public's views on how Bedfordshire should manage its waste in the future. When respondents were asked whether they thought rubbish remaining after increased recycling should be thermally treated to produce electricity, 98% of people agreed that residual waste should be converted into energy. A project specific micro-website was also launched in 2006 and several press releases relating to the project have been issued and related articles have been placed in the BCC magazine delivered to all households.
- 4.6 In February 2008 a letter and information sheet was sent to all residents and businesses in the vicinity of the preferred site advising them of the BEaR Project. These were supported by presentations to the local Parish Councils in May 2008. Additionally, in October 2008 the Bedfordshire Authorities plan to organise further visits to EfW facilities, inviting members and residents from Parish Councils close to the proposed site.
- 4.7 Continued open and honest stakeholder engagement and involvement will strengthen support for the project and contribute to successful project delivery. Communications will ensure stakeholders are kept informed and updated with reliable information and will reinforce widespread support from the residents of Bedfordshire and Luton.

5. **IMPLICATIONS/RISK ASSESSMENT**

- 5.1 Financial implications/risks including value for money:
- Financial impact modelling and the Options Review provide the financial outputs and form part of the OBC and are summarised in the supporting background report in sections 8 and 5 respectively.
 - The Project Risk Register has been finalised and is a key part of the OBC. The BEaR Project has held a number of Risk Workshops with the Project Board who have agreed all the risks and their owners. The assessment of risks and the scoring system was based on the County Council's corporate approach to risk management. The risk register is a live document and is updated and reviewed regularly throughout the project. A full copy of the Risk Register is available on request.
 - Appropriate funding provision has been made for the resources needed to develop the OBC. In addition, provision has been made through to the end of 2008/09. The costs of the procurement, including the costs of consultants and the Project Board, shall be split 2/3 to Bedfordshire County Council, 1/3 to Luton Borough Council up until 1st April 2009, and thereafter 1/3 to each of the three unitary authorities.

5.2 Legal implications/risks:

- Landfill has long been relied upon as the primary method of waste disposal in Bedfordshire. The objective of BCC and LBC is to ensure that waste in the county is managed in a more sustainable manner in the future. EU and UK legislation and policy have set stringent targets for reducing the amount of biodegradable municipal waste (BMW) being sent to landfill. To achieve these targets higher levels of waste minimisation, recycling and composting will be required whilst at the same time providing value for money waste disposal services.
- The Environmental Protection Act 1990, under section 51, details the functions of waste disposal authorities, stating that it shall be the duty of each waste disposal authority to arrange for the disposal of the controlled waste collected in its area and for places to be provided at which people within the area may deposit their household waste and for the disposal of waste to be deposited.
- The process of procuring an Energy from Waste Facility will be subject to the EU procurement rules.
- The project has already been subject to the Freedom of Information Act (FoIA) and The Environmental Information Regulations (EIR). This will continue. As such the project could consider proactive release of certain documentation and information through the Councils' publications scheme.

5.3 Human Resources implications/risks:

- A key risk is that key members of the BEaR Project Board will leave due to the re-structuring of local government, with an additional risk of not being able to recruit due to the transition. This is being mitigated through active engagement of the Shadow Authorities on the project Board and agreement of the OBC and Joint Working Agreement.

5.4 Equality & Diversity implications/risks:

- An inclusive public communication phase with local and surrounding communities using a variety of media has been an integral part of the project.

5.5 Sustainability implications/risks:

- The preparation of the Outline Business Case has considered:
 - a) The requirements of Waste Strategy 2007
 - b) DEFRA guidance on the submission of OBCs.
 - c) The Corporate policies and priorities of Bedfordshire County Council.
 - d) Sustainability of feedstocks
 - e) The Environment Agency tool for sustainable waste management – WRATE (the Waste and Resources Assessment Tool for the Environment).
 - f) The Bedfordshire Authorities Joint Municipal Waste Management Strategy 2006.
 - g) Bedfordshire and Luton Minerals and Waste Local Plan, adopted 2005.
- Recycling will not be compromised at the expense of Energy from Waste. Waste Strategy 2007 has clear targets of 50% recycling / composting by 2020. It is the Council's intention to meet or even exceed these targets at a point before the 2020 target year.
- Energy from Waste processes are able to provide heat and power. This reduces the amount of fossil fuels required through displacement. In addition, the emissions involved with landfill disposal for the same tonnage are avoided.
- The preferred option was the most sustainable (i.e. beneficial carbon impact compared to landfill).
- If the waste is not used to create energy it is likely to end up in landfill which is considered the least environmentally friendly option.

6. **CONCLUSION**

6.1 For years, Councils as Waste Disposal Authorities have relied on landfill as a primary method of disposing of the municipal waste. In order to satisfy the requirements of the national, regional and Bedfordshire waste management strategies together with the European Landfill Directive, it is essential that new waste management facilities are delivered to provide an alternative to landfill disposal.

6.2 Bedfordshire County Council in conjunction with its financial advisers and in consultation with the Shadow Authorities and Luton Borough Council has investigated several funding routes. Work to date suggests that private sector funded procurement would be most appropriate and leveraging in PFI credits should deliver a more affordable project.

- 6.3 The preferred technology option that emerged from the options appraisal process was increased recycling to at least 50% followed by treatment using Energy from Waste with Combined Heat and Power technology. This technology came first in both the technical and financial appraisal of the options.
- 6.4 There are significant benefits of a joint working approach for this PFI Project. The procurement costs over the next 2-3 years will be shared across each Council. Another significant benefit of a joint procurement project is the substantial economies of scale that will result from combining the partner Authorities' residual waste treatment needs. This will also result in an appealing project for the market, which should attract high quality bidders.

Background Papers: Future Waste Treatment – Outline Business Case and Options Appraisal Final report – Appendix A

Options Appraisal – Appendix B

Joint Working Agreement - Appendix C

Glossary – Appendix D

Location of Papers: Attached

File Reference:

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Appendix A

Future Waste Treatment – Outline Business Case and Joint Working Agreement Background Report.

Contents

- 1. Background**
- 2. Outline Business Case**
- 3. Overview of Waste Strategy 2007**
- 4. Procurement Strategy and Approach**
- 5. Appraisal of Future Waste Treatment Options**
- 6. Reference Project**
- 7. Planning/Sites**
- 8. Financial Implications**
- 9. Joint Working Agreement and Project Governance**
- 10. Risk Management**
- 11. Communication and Consultation Strategy**



1. Background

- 1.1 Bedfordshire and Luton have a clear vision for sustainable waste management and resource use, setting out to reduce waste, re-use waste, increase recycling and composting, recover value from non-recycled waste and significantly reduce the amount of waste going to landfill.
- 1.2 Concerns over the impact on the environment and decreasing landfill void space have resulted in new European and National legislation driving rapid change to existing waste management practices. These new laws have resulted in escalating costs for continuing to landfill through the Landfill Allowance Trading Scheme (LATS) which levies heavy financial penalties for Authorities that exceed strict landfill limits.
- 1.3 Bedfordshire County Council's Options Appraisal (see Appendix B for full document) recommends an Energy from Waste with Combined Heat and Power facility as the preferred reference technology for dealing with its long term residual waste treatment needs, alongside increased efforts to minimise waste and optimise recycling.
- 1.4 Luton Borough Council's Strategic Waste Management Options Appraisal concluded that Luton will need to send all of its residual waste for treatment from the end of its current Private Public Partnership waste contract with WRG Ltd in 2016.
- 1.5 Bedfordshire County Council will move from the current two tier local authority structure to one with two unitary councils: one for Bedford and one for Central Bedfordshire effective from 1st April 2009. The transition to this new structure will have a significant impact on all services provided by local authorities in Bedfordshire, including the management of waste.
- 1.6 Bedfordshire County Council has secured in-principle support for the development of the project from the District Councils of Central Bedfordshire, Bedford Borough Council and Luton Borough Council as the existing Unitary Authority. Significant joint working is necessary to ensure a means to delivering a long-term waste management solution.
- 1.7 In March 2008, Bedfordshire County Council approved the submission of an Expression of Interest (EoI) to the Department for the Environment, Food and Rural Affairs (DEFRA). The EoI sought confirmation from DEFRA as to whether a partnership approach to securing a long term waste treatment solution would be suitable for Private Finance Initiative (PFI) credit support.
- 1.8 In May 2008, DEFRA confirmed that the EoI submission had met the Government's eligibility criteria for PFI support, and that all the Authorities



could now submit an Outline Business Case (OBC) to DEFRA by 31st October 2008 seeking formal PFI credit support.

- 1.9 Bedfordshire County Council invited Luton Borough Council to join the BEaR project in May 2008, and to participate in the Project to the stage of modelling the financial outcomes for the Project, and then making a decision as to whether or not to go forward to the Outline Business Case stage of procurement.

2. Outline Business Case

- 2.1 The Outline Business Case (OBC) must be finalised and submitted to DEFRA by the end of October 2008 to meet the deadlines of this PFI credit round allocation. The OBC is being completed using DEFRA guidelines and is formatted under the following headings:

1. Executive Summary
2. Background
3. Strategic Waste Management Objectives
4. Procurement Strategy and Reference Project
5. Risk Management, Risk Allocation and Contractual Structure
6. Project Team and Governance
7. Sites, Planning and Design
8. Costs, Budgets and Finance
9. Stakeholder Communications
10. Timetable

- 2.2 This report summarises the key aspects of the OBC and recommends the sign-off of the final OBC document is delegated to the authorised Chief Officers, in consultation with the relevant Executive Members for each Authority. Once it is approved by all authorities involved, the OBC becomes a public document, with the exception of some commercially sensitive information which will be removed and is exempt from the Freedom of Information Act 2000.

- 2.3 DEFRA will review the OBC once submitted with the potential of final adjustments being made before a further review undertaken by Partnerships UK. The Treasury Project Review Group (PRG) will then carry out a final review before a decision is made on the eligibility for PFI credit.

- 2.4 The table below indicates the outline Programme Timetable which estimates the issue of OJEU (Official Journal of the European Union) notice in June 2009 in accordance with advice from Government on estimated timescales to be included in PFI projects.



Planned Procurement Timetable

Procurement Milestone	Target Date (TBC)
Outline Business Case Submission	31 st October 2008
Approval from PRG of OBC for PFI	February/March 2009
OJEU notice published	June 2009
Selection of Preferred Bidder	April 2011
Planning Application Submitted	Early October 2011
Planning permission granted	October 2012
Financial Close	June 2011
Construction start on site	April 2013
Commencement of Operations	April 2016

3 Overview of Waste Strategy 2007

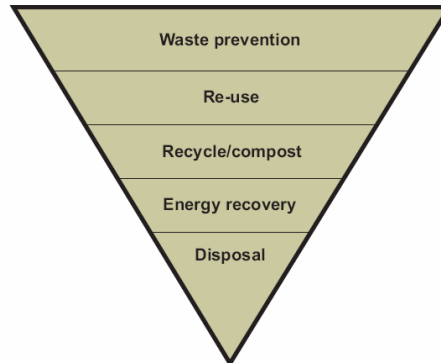
3.1 The Waste Strategy for England 2007 (WS2007) builds on the work of the Waste Strategy 2000 (WS2000) but includes more ambitious targets for recycling, waste minimisation and diverting waste from landfill. The WS2007 is briefly outlined below.

Main Aims:

- Decouple waste growth from economic growth and put more emphasis on waste prevention and reuse
- Meet and exceed Landfill Directive diversion targets for Biodegradable Municipal Waste (BMW) in 2010, 2013 and 2020
- Increase diversion from landfill of non municipal waste and secure a better integration of treatment for municipal and non municipal waste
- Secure the investment in infrastructure needed to divert waste from landfill and for the management of hazardous waste
- Get the most environmental benefit from that investment, through increased recycling of resources and recovery of energy from residual waste using a mix of technologies

Figure 3.1 Waste Strategy 2007 Waste Hierarchy

The waste hierarchy



3.2 The main elements of the new strategy are to:

- Incentivise efforts to reduce, re-use, recycle waste and recover energy from waste
- Reform regulation to drive the reduction of waste and diversion from landfill while reducing cost to compliant businesses and the regulator
- Target action on materials, products and sectors with the greatest scope for improving environmental and economic outcomes
- Stimulate investment in collection, recycling and recovery infrastructure, and markets for recovered materials that will maximise the value of materials and energy recovered
- Improve national, regional and local governance, with a clearer performance and institutional framework to deliver better coordination action and services on the ground

3.3 Incentives - The aim is to create incentives that reflect the waste hierarchy and create opportunities for the reduction, reuse and recycling of waste, and recovery of energy from waste. The Government is therefore:

- Increasing the landfill tax escalator so that the standard rate of tax will increase by £8 per year from 2008 until 2010/2011 to give greater financial incentives to businesses to reduce, re-use and recycle waste.
- Consulting on removing the ban on local authorities introducing household financial incentives for waste reduction and recycling.

3.4 Main Targets - Higher national targets than 2000 have been set for:

- Recycling and composting of household waste (figures outlined in the table below)



- Recovery of municipal waste through increased recycling of resources and energy recovery – 53% by 2010, 67% by 2015 and 75% by 2020.
- The reduction in the amount of household waste not re-used, recycled or composted. From over 22.2 million tonnes in 2010 with an aspiration to reduce it to 12.2 million tonnes in 2020 – a reduction of 45%. This is equivalent to a fall of 50% per person (from 450kg per person in 2000 to 225kg in 2020).

3.5 The waste strategy for England sits within wider EU policies that the UK are committed to achieving, particularly the EU Landfill Directive which sets targets for reducing the amount of municipal waste being sent to landfill.

3.6 **Bedfordshire and Luton Waste Strategy.**

The Bedfordshire and Luton Waste Strategy 2001 set targets for achieving 33% recycling and composting by 2015 in line with the WS2000. In 2006 the Bedfordshire Authorities Municipal Waste Management Strategy (BAMWMS) ¹ was published and Luton published a LATS Strategy together with an Options Appraisal. As WS2000 had not been revised at this point, none of the documents increased the recycling/composting targets that were set in the Bedfordshire and Luton Waste Strategy 2001. Whilst the 33% target for 2015 was in line with the WS2000, the publication of the WS2007 resulted in the Bedfordshire targets being below those set nationally. This is outlined in table 3.1 below. Table 3.2 presents the modelled recycling and composting performance of the three Unitary Authorities in selected years.

Table 3.1 Bedfordshire & Luton Recycling/Composting Targets Compared to WS2007 Targets

Year	National Waste Strategy 2007	Bedfordshire & Luton Waste Strategy 2001
2010	40%	30%
2015	45%	33%
2020	50%	33%

¹ Produced in partnership between Bedfordshire County Council, Bedford Borough Council, Mid Beds District Council and South Beds District Council.



Table 3.2 Modelled Recycling and Composting Figures

Year	National Waste Strategy 2007 Targets	Luton Borough Council	Bedford Borough Council	Central Bedfordshire Borough
2009/10	40%	36.20%	38.26%	49.24%
20014/15	45%	44.91%	50.62%	54.04%
2019/20	50%	50.42%	53.21%	55.44%

The Bedfordshire Authorities will be aiming to achieve the highest rates of recycling / composting possible both up to 2020 and following this target year. As the contract period is likely to run to around 2040, the authorities should aim to continue increasing rates towards or in excess of 60% during the contract period.

3.7 BAMWMS Review

A review of the BAMWMS was planned to take place in-between the submission of the EOI and OBC, to capture the revised recycling targets detailed in WS2007 along with stretch targets in the new LAA Agreement (2008/09-2014). A review of the BAMWMS was not conducted at this point because as of March 2009 it would become invalid as the new unitary authorities of Bedford Borough and Central Bedfordshire will look to develop their own strategies. A time line for the production of new waste strategies has not yet been formalised, but both Councils are expecting to utilise the BAMWMS until 2010, at which point new strategies will be written taking into account the WS2007 and the new aims and priorities of the authorities, as well as the Joint Working Agreement (see Section 9) and the BEaR project.

3.8 The intention will be to create a new waste partnership between the two new Unitary Authorities of Bedford Borough and Central Bedfordshire and Luton as the existing Unitary Authority.

4 Procurement Strategy and Approach

4.1 The BAMWMS identifies the need for future waste treatment infrastructure for Bedfordshire. Luton has also identified this requirement and undertaken its own options appraisal. There are no Bedfordshire and Luton policies or appraisals that are inconsistent to the use of the reference technology selected through the Options Appraisal process. (Reference technology is to manage municipal waste that cannot be reused, recovered, recycled or composted).



- 4.2 Nationally EfW as a residual waste treatment solution remains the most attractive to councils given that it is a proven technology that has been tried and tested where risk is known and can be managed. Many of the councils currently seeking government PFI support are using EfW within their identified Reference Projects.
- 4.3 Work undertaken to date by Bedfordshire County Council as the current WDA and as part of the development of the OBC, demonstrates that there are significant economic, practical and environmental benefits of procuring a long-term waste management solution jointly with Luton. Joint working is also favoured by Defra.
- 4.4 To deliver a joint solution, it will be necessary to procure new treatment infrastructure along with an operational service contract. Given the high capital cost associated with waste treatment facilities, it is necessary to let a long-term contract so as to spread the capital cost repayments over many years. It is proposed that at least a 25-year operational contract is procured to provide certainty to Authorities and the bidders. Periodic contract review points about every 5 years may provide flexibility in the arrangements.
- 4.5 A comparison of the various procurement and funding options has been undertaken as part of the development of the EoI and also in more detail for the OBC. The results of a high-level funding option review clearly shows the financial benefits of procuring facilities jointly with the addition of Private Finance Initiative (PFI) credit support from central government, over conventional funding methods such as Public Private Partnership (PPP) or Prudential Borrowing (PB). The OBC therefore demonstrates that the PFI route provides better value for money over conventional procurement.
- 4.6 Due to the legislative drivers to divert waste from landfill many councils are currently reviewing their long-term waste treatment solutions. Given the lengthy procurement timescales and high capital cost of new waste facilities, many authorities are seeking support in the form of PFI credit funding. Defra indicates that although PFI financial support is available for the current PFI round (October 2008), its availability thereafter is not certain and competition for this funding is therefore likely to be fierce.
- 4.7 It should be recognised that in order to secure PFI credit financial support, the Partnership must adhere to standardised PFI procurement requirements and rigid timescales. This includes following the PFI rules, deadlines and guidelines laid down by central government and using a standardised form of contract and procurement process.
- 4.8 The aim of the BEaR Project procurement is to secure a long term waste treatment contract to mitigate the risk of both LATS and increasing Landfill



tax in the most environmentally sustainable and value for money way possible.

- 4.9 The partnership acknowledge that the procurement process, build, and commissioning periods for the residual treatment facility will take some time and are aware that the county is likely to face LATS fines before a facility comes online. The individual members of the partnership plan to mitigate the impact of these fines through several methods including; trading LATS allowances at a lower cost than fines, procuring an interim disposal contract and driving up the recycling and composting levels as high as possible to remove BMW from the waste stream.

Procurement of Interim Waste Treatment Capacity

- 4.10 With the current landfill contract due to end in October this year, the Council has completed the procurement of an 'interim' disposal contract. This contract, being let for an interim period of around 4 years, has potential impacts and opportunities for the BEaR project. The contract was let as a disposal rather than landfill contract allowing bidders flexibility to provide a solution to the LATS deficit in the interim period prior to the long term treatment contract. This procurement also offers the possibility of further waste disposal flexibility in the light of any possible slippage of the BEaR Project due to the transition to a unitary local government structure, although regard must be had to the existing and on-going contact for recycling through the material recycling facility at Elstow.

Summary of Wider Procurement Activities

- 4.11 As well as continuing with existing obligations, the partner authorities will be looking to their future obligations and procuring contracts to meet these requirements. One such requirement is that of Waste Strategy 2007 seeking 50% recycling and composting by 2020. Each authority will require additional recycling and composting schemes to be introduced to meet these targets and these will be procured via the normal methods. The costs of these contracts have been factored in to the whole system costs calculated for the OBC.
- 4.12 These contracts are however outside the scope of the Project and are the responsibility of each future authority.



Procurement of the long term contract

- 4.13 The long term contract will focus on residual (black bag) waste disposal only and will not involve the collection or recycling elements of the waste service. It is envisaged that waste will be delivered to an in-county facility using existing collection contracts; from this point the waste becomes the responsibility of the contractor.
- 4.14 The chosen procurement methodology to secure the required facilities is the competitive dialogue process. This follows Office of Government Commerce (OGC) best practice guidance and is the preferred DEFRA procurement method for PFI projects of this type. Although this methodology is new, a library of procurement documentation is available from DEFRA to assist in the process.
- 4.15 As the partnership do not know exactly what technology would best suit the contract, an output specification will be issued to bidders to provide them with the opportunity to come forward with innovative solutions.

Output Specification

- 4.16 The Output Specification is the part of the Contract through which the Authority defines the outputs that it requires from the Contractor over the term of the Contract. Fundamentally, the Output Specification specifies the outcomes that are required to be achieved not how they are achieved.
- 4.17 An effective Output Specification is clear, concise and unambiguous and identifies all aspects of the service that are critical to the Authority.

Together the Output Specification and the Payment Mechanism provide the means by which the Contractor's actual performance is measured against the contracted performance and the payment of the Unitary Charge for the services performed is calculated.

- 4.18 The component parts of the Output Specification are:

The Performance Requirements for each phase of the project i.e.:

- the Works Requirements;
- the Commissioning Requirements;
- the Service Requirements;
- the Handover Requirements; and
- the Performance Measurement Framework.



- 4.19 An outline draft of the Output Specification has been produced for the Outline Business Case (OBC) to inform the financial modelling of the project and procurement options. The outline draft Output Specification has, where relevant, utilised information arising from market-sounding.

5 Appraisal of Future Waste Treatment Options

- 5.1 In 2005 Bedfordshire County Council undertook an Options Appraisal, including a Best Practical Environmental Option (BPEO) study to determine the most appropriate technology to divert waste from landfill in Bedfordshire. However, in the intervening time (March 2005 to December 2007) there have been considerable developments in government waste policy, and within the waste management industry. In early 2008 this process was updated by undertaking an Options Review. The updated review took new information in to account and also incorporated use of the recently released Environment Agency Waste and Resource Assessment Tool for the Environment (WRATE) tool.
- 5.2 The best practice requirements for Option Appraisal modelling have been reviewed nationally. The Waste Strategy 2007 considers the requirement for the adoption of a life cycle approach within the decision making process and in particular stresses the importance of considering the impact of changes to services in relation to the Global Warming Potential (GWP).
- 5.3 The DEFRA funded Waste Infrastructure Delivery Programme (WIDP) has also issued a formal OBC template and guidance, with reporting requirements on the Options Appraisal and bankability of technologies. The Partnership believes that work should be compliant with current WIDP OBC guidance, as well as the draft guidance on the completion of Options Appraisals, issued by WIDP in April 2008.
- 5.4 The Options Appraisal is split in to two sections, a technical review and a financial review. The technical review identifies which technology will deliver Bedfordshire's required performance whilst also taking in to account the environmental and socio-economic impacts of the technology. It is further split in to two parts; a long list evaluation and a short list evaluation. The shortlist is effectively created during the evaluation of the long list (a full copy of the Options Appraisal and a detailed methodology is attached at Appendix B).
- 5.5.1 The financial appraisal takes in to account the total costs of the technology over the contract period and allows the options to be compared against each other, the Do-minimum and also the current budget.

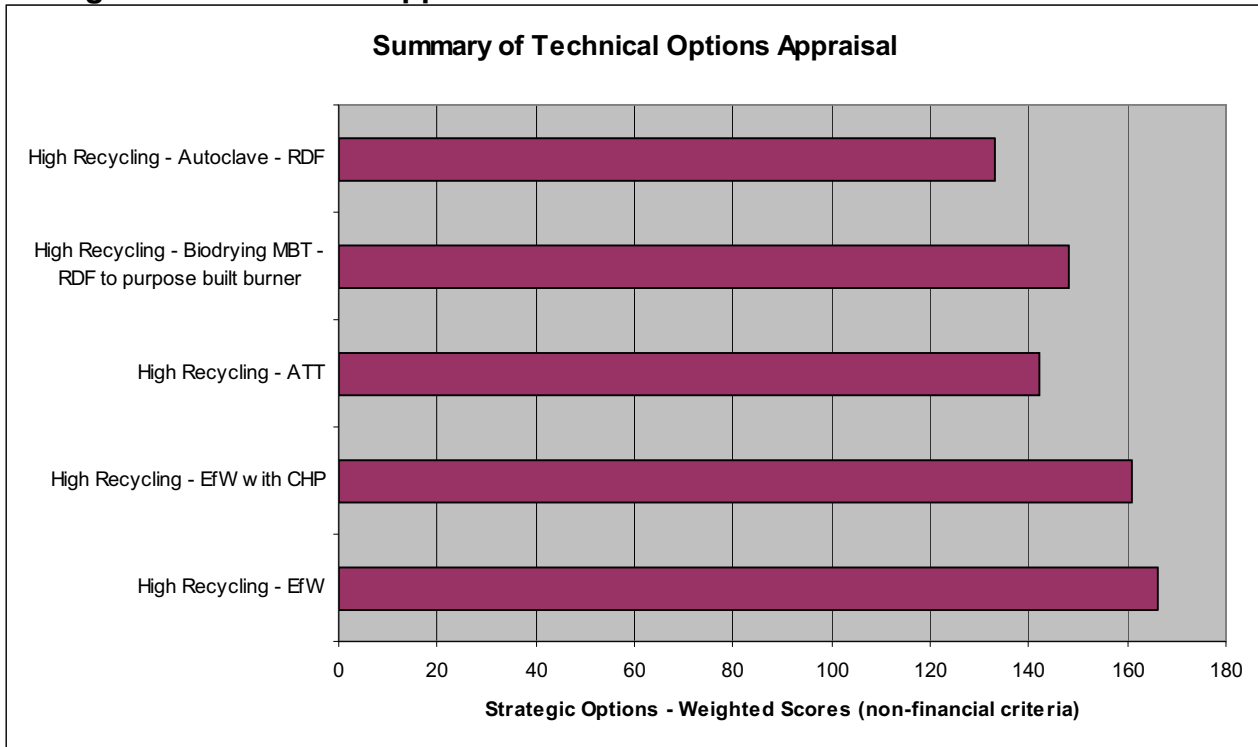
The shortlisted options are described in table 5.1.

Table 5.1 – The shortlisted technology options.

Technology	Description
Energy from Waste (EfW)	Suitable waste is sent to incineration with the recovery of electrical energy. The air pollution control residues are sent to hazardous landfill and the bottom ash is sent to landfill or recycled.
EfW CHP	Suitable waste is sent to incineration with the recovery of electrical energy and the harnessing of the heat that is produced by its combustion. The heat is used in a district heating network. The air pollution control residues are sent to hazardous landfill and the bottom ash is sent to landfill or recycled.
Pre-treatment to Advanced thermal treatment (gasification or pyrolysis)	The pre-treatment of the residual waste removes bulky items that are unsuitable for this type of facility and non combustible materials such as glass and metals. The waste is then combusted to produce a synthetic gas that is used to generate electricity.
Biodrying MBT to RDF Burner	Recyclables are mechanically removed prior to aerobic composting and production of a refuse derived fuel. The RDF is then burnt in a dedicated burner. Residues are sent to landfill.
Autoclave to RDF Burner	Rotating Autoclave drums pulp and prepare residual MSW for further sorting. Recyclables are extracted and two other waste streams are produced – a fibre which is sent to a dedicated burner and a residue that is sent to landfill.

5.6 Once selected, the shortlisted options were evaluated against a set of technical criteria which were weighted according to their importance to Bedfordshire. The results of this technical appraisal are shown in figure 5.2.

Figure 5.2: Technical appraisal of the shortlist – results



5.7 Alongside the technical appraisal, a financial appraisal was undertaken on the shortlisted options. This took in to account the Shadow Cost of Carbon (SPC) which was added to the cost of each option, as required by DEFRA. The results of the financial appraisal can be seen in table 5.3, it should be noted that the financial appraisal was undertaken before Luton had signed up to the project and is therefore only based on Bedfordshire County Council tonnages. Decreasing costs upon inclusion of the SPC indicate that the option emits less carbon than the current treatment methods.

Table 5.3 – Financial appraisal results

Option	NPV* of Costs	Total NPV* including SPC
EfW	£196,650,676	£195,553,230
EfW CHP	£196,650,676	£186,677,154
ATT	£283,592,491	£285,409,485
MBT RDF to EfW	£283,379,203	£280,093,347
Autoclave & RDF to EfW	£314,371,288	£300,246,575

* NPV = Net Present Value = The present value of an investment's future net cash flows minus the initial investment. If positive, the investment should be made (unless an even better investment exists), otherwise it should not.

5.8 The outcomes of the technical and financial appraisals of the shortlist were then combined to provide an overall score for each option. The weighting for the technical and financial elements was 40 / 60 respectively. The final results of the options appraisal are shown in table 5.4.

Table 5.4 – Final Results of the Appraisal

Option	Technical marks	Financial Marks	Total marks
EfW	40.0	57.0	97.0
EfW CHP	38.8	60.0	98.8
ATT	34.2	39.0	73.2
MBT RDF to EfW	35.7	40.0	75.7
Autoclave & RDF to EfW	32.0	37.0	69.0

Conclusion

5.9 The highest scoring option in the Options Appraisal is increased recycling/composting to at least 50% followed by treatment of residual waste by EfW with CHP with 98.8 marks. EfW without CHP is the second highest scoring option with 97 marks. Only 1.8 marks separate the top two scoring options. The third highest scoring option is MBT producing an RDF which is treated in an EfW. There is over a 21 point difference between the MBT option and the EfW option. Only 5 marks separate the bottom three options.

5.10 It is noted that EfW alone achieves a higher technical score than EfW CHP. This is due to the deliverability issues associated with the CHP element. The overall score of EfW CHP is higher due to the significant reduction in carbon and subsequent cost reduction compared to the EfW alone.

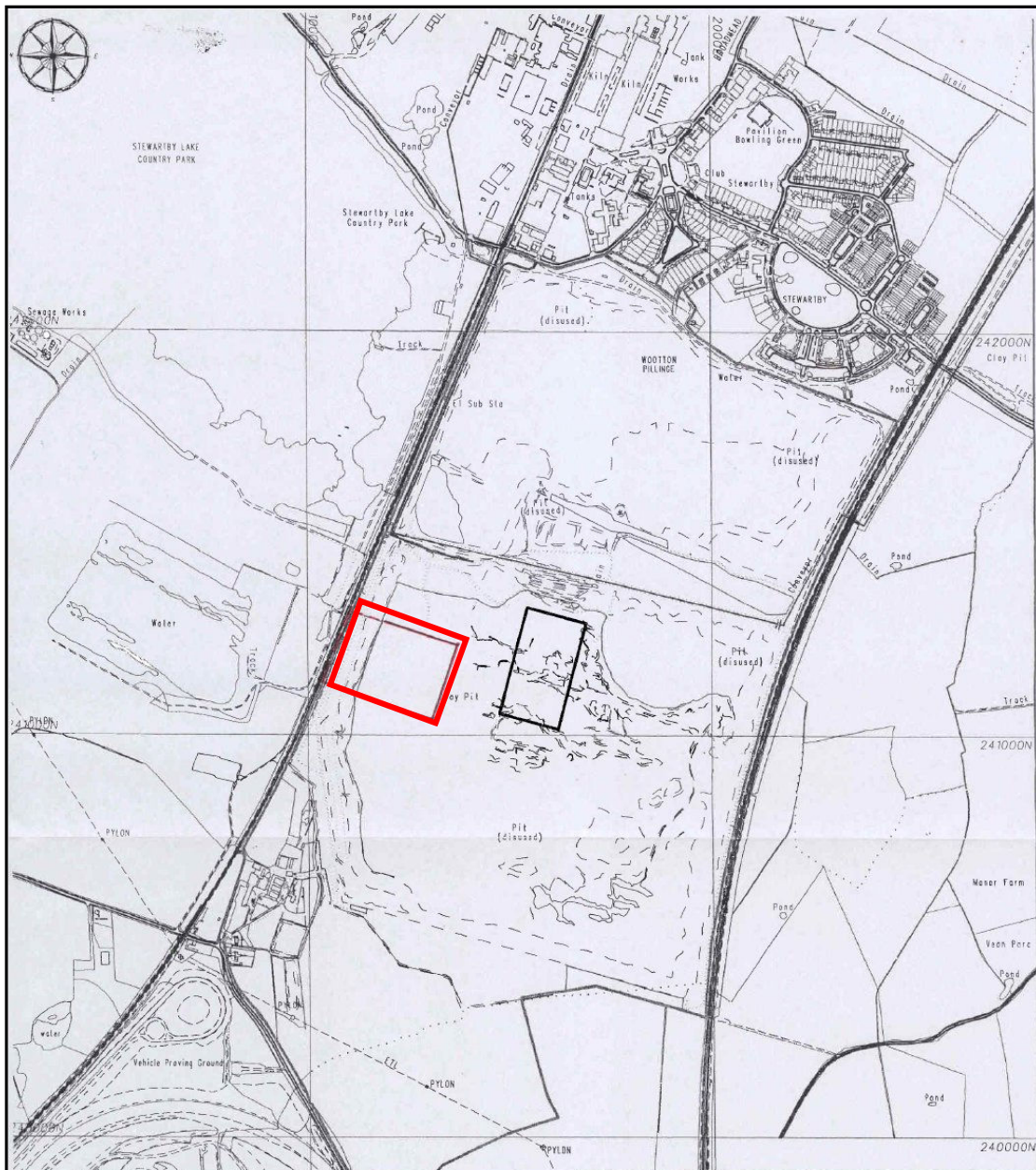
5.11 Given the weightings and scores applied to the evaluation criteria, the highest scoring option for the Partnership is EfW with CHP. As detailed previously, the Partnership will seek to exploit the additional benefits that EfW CHP provide, but are aware of the possible heat off-take risks and practical deliverability issues associated with this option. Even with a significant change to the weighting of the technical and financial elements of the appraisal the top selection (CHP) does not change. The CHP approach is consistent with DEFRA and Ministers views. This option is explained in more detail in the preferred option section below, it should however be noted that the option includes a requirement to increase recycling rates in line with Waste Strategy 2007.



6 Reference Project

- 6.1 As part of the OBC, Defra requires that the partnership Authorities present a chosen solution that meets the partnership's needs and that is deliverable, bankable and affordable. This solution which is fully costed and selected through the Options Appraisal process is called the Reference Project and is based on comparable facilities and services already in operation around the country. The modelling allows the facility to be tailored to the local area and based on a known potential site for the facility. Defra stress that, and members should be aware that, in presenting the Reference Project, authorities are not committed to the specified treatment technology (or site), as this will be determined as part of the procurement process.
- 6.2 The Reference Project selected through the Options Appraisal has been used to determine the high-level cost estimates, evaluate project risks and will also be used to inform the development of procurement documentation. As detailed in the Options Appraisal section, it assumes an Energy from Waste treatment facility with Combined Heat and Power, dealing with around 194,524 tonnes of residual waste per year which is sited at Rookery South Pit near Stewartby.
- 6.3 The Rookery South Pit site has been used for the Reference Project solution as it has been identified within Bedfordshire's Local Development Framework, which is currently working towards the preferred options stage and is deemed, following a lengthy site selection process, to be the most deliverable site. Should the Rookery site not be taken forward or prove not to be deliverable then another site would be required. Two contingency sites are currently secured under lockout to help to mitigate this risk.
- 6.4 In addition to the major waste infrastructure identified in the Reference Project, the authorities will also require a range of recycling, composting and waste minimisation initiatives to take place to ensure at least 50% recycling is achieved. The costs associated with delivering these new initiatives and their improvements have been included in the whole system costs. These additional costs must be recognised and accepted by each Authority as part of the overall project delivery and affordability assessment.
- 6.5 The scope and timing of these additional initiatives varies for each of the partnership Authorities to reflect the different requirements, approaches and the differences in demographics, geography and current recycling and waste minimisation performance.

Figure 6.1 Rookery South Pit Site – Site boundary in red.



- 6.6 Implementation of new initiatives, along with improvements to the existing service arrangements will allow the partnership authorities to recycle and compost over 50% of their household waste by 2020. Failure to deliver these initiatives may result in the Partnership not meeting the National Waste Strategy 2007 targets, which in turn will result in the requested PFI credit support not being awarded by Defra.
- 6.7 The facility will be sized to treat all suitable residual waste based on the tonnage projected for the final contract year. This tonnage is estimated to



be approximately 194,524t per annum in 2041/42; the assumptions for this figure have been identified and approved by the Project Board.

- 6.8 Bedfordshire County Council does not intend to enter in to a long term contract that would restrict future recycling initiatives. The Council therefore plans to size the minimum contracted tonnage to be treated at the plant at a level that allows future diversion to take place without financial penalty.

CHP Feasibility Study

- 6.9 Bedfordshire County Council appreciates the issues surrounding deliverability of a CHP solution and has worked hard to investigate the potential for a CHP plant in Bedfordshire. A CHP feasibility study has been completed based on the preferred site location of Rookery South Pit, this study identified potential heat users, any limitations and the costs involved.
- 6.10 Bedfordshire County Council plan to maximise the opportunities to deliver a CHP solution, but appreciate that should an agreement with a heat sink² fall through, the plant may resort to being a standard EfW plant with potential for future heat delivery.

7 Planning/Sites

- 7.1 One of the biggest risks in delivering a waste treatment solution is associated with identifying and securing suitable sites and subsequently obtaining planning permission on the identified site. As such the Authorities are seeking to reduce such risk by:

- Negotiating an option for 4 hectares of land on its preferred site - Rookery South Pit (additional land is available should bidders solution require this).
- Continuing discussions with land owners on a further two sites (4 hectares) – Stewartby and Brogborough
- Submitting a Scoping report to planning authority for reference facility and carrying out EIA baseline studies at the preferred site to provide to bidders

- 7.2 In October 2007 Bedfordshire CC Executive voted to accept the recommendation of the Environmental Services Overview and Scrutiny Committee to:

² Definition of Heat Sink = An environment capable of absorbing heat from an object with which it is in thermal contact without a phase change or an appreciable change in temperature



- a) Agree the Rookery South Clay Pit as the preferred site for the location of an energy from waste facility (based on site selection process detailed below)
- b) Allow the Director of Environment be authorised to:
 - i. Acquire an option on the site to enable the planning application to be made
 - ii. To purchase the site on the basis of a successful planning application
 - iii. Commence the procurement process to deliver a long term contract to provide the Energy from Waste facility.

7.3 Sites

A comprehensive site appraisal selection process was carried out to identify suitable sites for major waste management facilities. This was carried out in two phases.

- Phase 1 (carried out by Terrance O'Rouke) – This consisted initially of a comprehensive spatial analysis of Bedfordshire to identify potential planning and environmental constraints and opportunities (constraints included green belt land, landscape and visual impact and nature conservation amongst others.). This produced a list of 95 sites. Sites were then reassessed against a further 14 criteria including size, proximity to sensitive receptors, accessibility, potential opportunities for CHP and Local Plan Policy W7. This process produced a short list of 10 sites.
- Phase 2 (carried out by Entec) – Entec took the 10 short listed sites and carried out a site ranking exercise based on the government guidance - Sustainability Appraisal of Regional Spatial Strategies and Local Government Documents – Guidance for Regional Planning Bodies and Local Planning Permission.

Rookery South Clay pit was identified as the most suitable site.

- 7.4 Following the BCC's Executive decision in October 2007 the BEaR project team commenced negotiations with O&H for the land at Rookery South Clay Pit. Draft Heads of Terms are being discussed and the Authorities aim to secure an Option by January 2009. The purchase of the land will take place once planning permission has been granted.

Figure 6.1 identifies the preferred site

7.5 Planning

After discussions with the Defra and analysis of the advantages and disadvantages of the Lead Authority submitting a planning



application for the reference facility the Project Board took the decision that it would not be best placed to proceed with a planning application. The main reasons for this were:

- If applications are submitted by the LA (in its capacity as WDA), there is no right of appeal against refusal of an application (see Town & Planning General Regs. 1992 Reg 5).
- By submitting a planning application for the reference facility it may deter certain bidders with alternative technology solutions
- The local authority planning application would not have final design details, so it would not be possible to address the visual impact issues which are of public concern.
- The WDA is less well placed to develop and apply for a planning permission than a Contractor that will have previous experience and a financial incentive to deliver
- The site for which the WDA has planning approval may not be the most economically advantageous once bids for submission have been evaluated. This permission may adversely affect the chances of obtaining permission elsewhere.
- Should the application be refused the contractor cannot make a subsequent application on the same site for the same facility.
- Risk that the planning application gained by the Authorities would not suit the preferred bidder and as such a second application would have to be made.

Design

7.6 The Authorities recognise the importance of good design in all building and infrastructure projects and will provide strong client leadership that sets and communicates achievable quality objectives, and enables the different specialists to work together to develop optimal design concepts and solutions, and to maximise the opportunities for increased sustainability in building design and facility management.

7.7 It will do this by communicating a series of design quality and sustainability criteria and objectives: a) to the architects during the planning stages of the project, and: b) to bidders in the second stage of the project, and assessing architectural proposals against a number of key criteria, which will include:

- deliverability;
- affordability in terms of initial design and construction and life cycle cost (including cost of cleaning, maintenance and repair of the building and its associated technologies);
- minimisation of design risk, including reducing the risk of accidents related to facility operation, maintenance and repair; and
- sustainability in design solutions, including



- choice and source(s) of materials,
- optimising the use of natural light,
- energy efficiency in the building and in the design and specification of equipment,
- maximising the potential for heat and power recovery from the thermal process and thereby also minimising the need for imported energy,
- using and re-using roof, yard and process water within the process to minimise water usage and discharges to sewer.

Waste Development Framework

- 7.8 County and Unitary Authorities have a statutory requirement to prepare a Waste Development Framework under the Planning and Compulsory Purchase Act 2004 and in accordance with the Town and County Planning Act (Local Development) (England) Regulations 2004. Bedfordshire County Council and Luton Borough Council are preparing a joint framework and will cover the period until either 2021 or 2026.
- 7.9 The Waste Development Documents (WDD's) consist of a Waste Core Strategy and Waste Sites Allocations Plan. The revision and publication of PPS12 – 'Creating strong, safe and prosperous communities through local spatial planning' includes the option for core strategies to allocate within them strategic sites for development and as such it has been proposed that the BCC/LBC Waste Core Strategy include the strategic sites for development.
- 7.10 Issues and Options Papers have been prepared and consulted on for both the Waste Core Strategy and Waste Site Allocations Plan and it is expected that the Core Strategy containing the strategic sites will be complete in January 2009 with adoption February 2010.
- 7.11 The Authorities preferred site, Rookery South Pit plus its two back up options Stewartby and Brogborough have all been put forward to be included within the Waste Core Strategy and Waste Sites Allocations Plan. These sites are also contained within the Bedfordshire and Luton Minerals and Waste Local Plan 2000 – 2015 for which the Core Strategy and Waste Site Allocations Plan will replace.

8 Financial Implications

Section 8 has been removed from this document and is exempt under paragraph 3 of Part 1 of Schedule 12A of the Local Government Act 1972.



9 Joint Working Agreement and Project Governance

9.1 In view of the high value and strategic importance of the BEaR Project, each of the four authorities is required to formally approve a legally binding Joint Working Agreement, a full copy of which can be seen in Appendix C. The agreement has been drafted with input from officers from each Authority. A summary of this agreement is set out below:

- For the management of the procurement, certain key decisions shall be reserved to members (in practice, the Executive) of each authority. A Joint Officer Project Board shall be established with powers delegated by each authority's Executive to implement the project. The Head of Service for Waste in each authority shall act as champion of the project within each authority and be responsible for keeping the Executive of each authority informed of progress, securing the authority's support and input into the project and answering for the project to the appropriate Scrutiny Committee. The Project Board shall comprise a full-time Project Manager, the Heads of Service for Waste in each of the four authorities, and a Financial and a Legal Adviser seconded part-time from one or other of the authorities. The Project Board shall be able to co-opt other officers as required, and each authority's Chief Finance Officer and Monitoring Officer shall have a right to attend its meetings.
- Decisions of the Project Board shall be taken unanimously between the three Heads of Service for Waste and the Project Manager. In the event of disagreement, there shall be a procedure to escalate a dispute to a meeting of the three Chief Executives, with mediation during the procurement phase and arbitration during the 25-year service phase.
- The Project Board shall only have powers to take those decisions which fall within the Budget and Strategic Plan Framework of each authority. "Reserved decisions" shall not be delegated to the Project Board but shall be reserved for the approval of the Executive of each authority
- The costs of the procurement, including the costs of consultants and the Project Board, shall be split 2/3 to Bedfordshire County Council, 1/3 to Luton Borough Council up until 1st April 2009, and thereafter 1/3 to each of the three unitary authorities.
- The Contractor shall define a maximum and a minimum volume of waste which must be delivered to the facility, and shall make a standard charge per tonne of waste delivered. Each authority shall bear the costs of delivering its own waste to the facility, and shall then pay the Contractor's standard charge (and the costs of managing the contract on behalf of the three authorities) according to the actual tonnage of waste which it delivers. If the Contractor fails to perform and causes loss to a particular authority, for example by delaying the unloading of that authority's vehicles, any

penalty in the form of a reduction in the unitary tonnage charges will accrue to the particular authority which suffered the loss.

- Each authority shall be required to continue to deliver a proportion of the minimum contract volume, and must not deliver more than a proportion of the maximum contract volume. That proportion shall be determined by the respective populations of each authority, so that it adjusts to take account of new development.
- The “reserved decisions” protect the ability of each authority to withdraw from the project without penalty during the procurement process, if the project is simply unaffordable or the intended contractor’s proposals are unacceptable on location or technology grounds. However, if an authority withdraws or takes an “independent decision” (where the authority takes its own decision on a matter which it has previously delegated to the Project Board) during the procurement phase, it is likely to require the remaining authorities to re-start procuring their own smaller facility, which might lead to a higher price per tonne and would not be available as soon. This in turn may mean that the remaining authorities cannot reduce their landfill requirement sufficiently until the new facilities are available, and so exceed their Landfill Allowances (“LATS Allowances”) and so have to buy spare LATS Allowances from other authorities or pay a financial penalty. If an authority withdraws or takes an “independent” decision during the 25-year service phase, the worst case scenario is that it causes the contractor to terminate the contract, claiming damages on the basis of loss of anticipated profit for the balance of the contract, and causing the other authorities to incur the costs of a new procurement and LATS penalties. To cover against these unlikely eventualities, each authority will enter into a binding Joint Working Agreement in which it agrees to deliver waste as required by the main PFI contract, pay its share of the costs, and to indemnify the other authorities against any losses which it causes by withdrawing or taking an independent decision, other than on the “reserved decisions”.
- Each authority shall be required to make any land which it currently uses for waste disposal functions, such as depots, available to the contractor on commercial rental terms. This ensures that the individual authority gets a fair return for its assets, and in turn the contractor’s tonnage charges reflect the true cost of providing the service, and enable the authorities to reclaim full PFI credits from DEFRA.
- The Joint Working Agreement does not cover the possibility of the authorities acquiring and preparing a site, including seeking planning permission for a typical plant, so that prospective contractors know that there will be a site available and that the principle planning issues have already been addressed. This is a separate decision. In practice it would be for the authority in whose area the site fell to decide whether to acquire a site, but they would

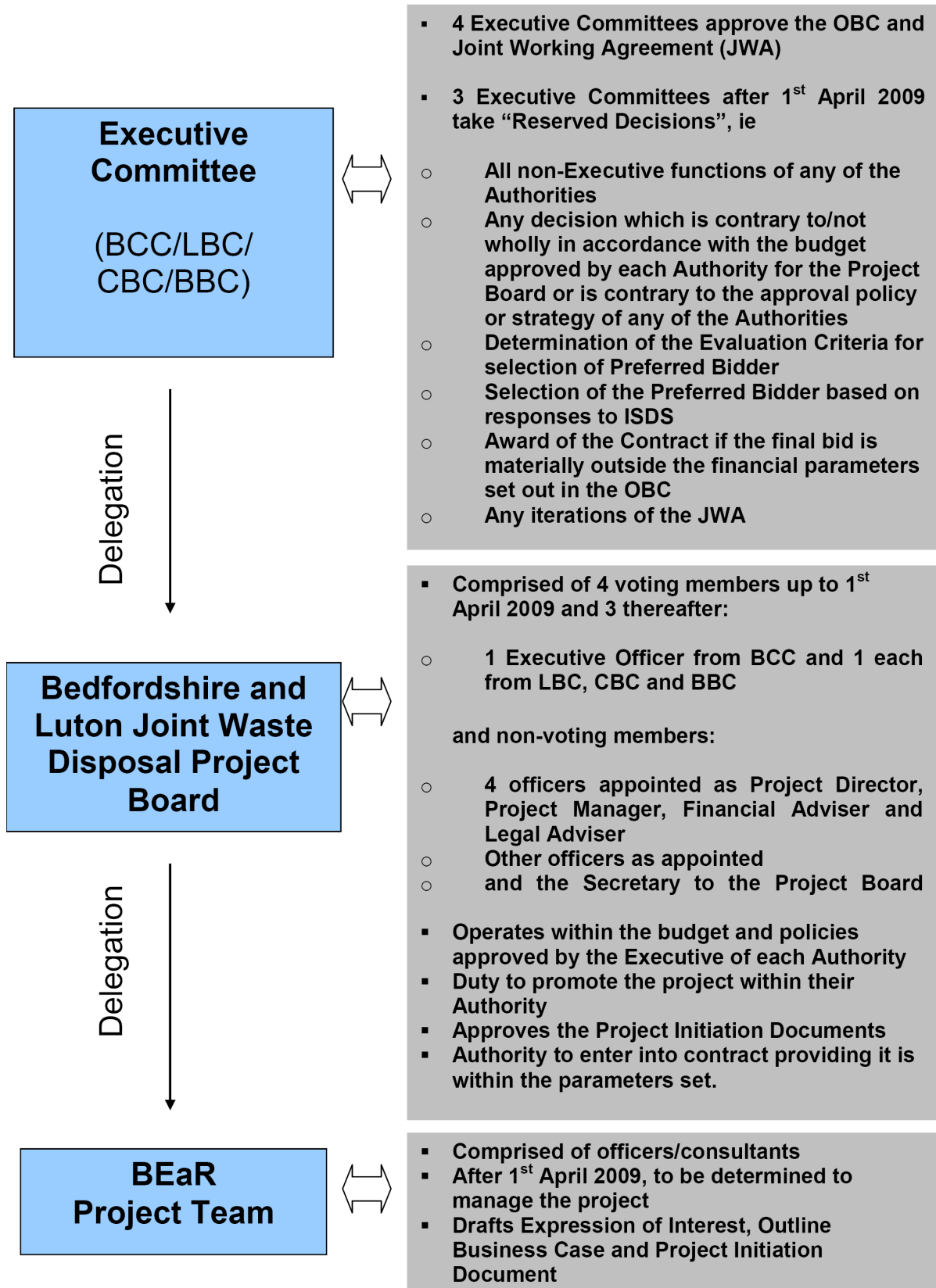


want to ensure the agreement of the other authorities to the purchase and site preparation costs, perhaps to be funded by the authorities on a 1/3:1/3:1/3 basis, with appropriate provisions to cover a sale on if the site was ultimately not required for the project. However, that would be for a separate agreement if and when the time came.

- 9.2 In recognition of the financial risk, the Joint Working Agreement requires any Authority withdrawing from the partnership to be liable for any consequential additional costs resulting from this action. Such costs could include any procurement costs accrued and any costs resulting from a delay to the service commencement, e.g. LATS fines.
- 9.3 The management structure developed under the terms of the JWA to take this project forward after submission of the OBC is shown in the below diagram 9.1.

The BEaR Project has obtained member approval to progress at key stages in the project so far and intends to continue this approach to enable members to remain informed and in control throughout procurement.

Diagram 9.1 – Governance Structure determined by Joint Working Agreement





10 Risk Management

- 10.1 The Partnership has taken a rigorous approach to identifying, mitigating where possible and reducing likely risks associated with the project. The Partnership agreed and implemented a robust risk management strategy to ensure a proactive and consistent approach to risk management across the project.
- 10.2 A series of workshops have been carried out involving key representatives from the Partnership (Bedfordshire County Council, Bedford Borough Council, Mid Bedfordshire District Council, and South Bedfordshire District Council) along with the Council's technical, legal, financial and planning advisers to identify and categorise potential risks associated with the project.
- 10.3 Current, emerging and anticipated risk are documented on a project risk register and classified by risk category, probability, impact and effect on the project counter measures to reduce the risk. 11 risk categories have been identified, including Procurement, Financial, Planning/Sites, Regulatory, Governance, Technology, Construction and Operational and risks have been assigned to Risk Owners, those people best positioned to manage the risk. The assessment of risks and the scoring system was based on the corporate approach to risk management. The risk register is a live document and is updated and reviewed regularly throughout the project. A full copy of the Risk Register is available on request from the Bear Project Manager.
- 10.4 The risk register is reviewed monthly by the BEaR Project Team and agreed by the Project Board. The current risk register was agreed by the board and the Partnership at a risk workshop on the 4th July 2008. The register was uploaded onto an electronic system which automatically sends risk owners their risks on a monthly basis for monitoring, reviewing and updating of scores and mitigation measures. The risk management procedure is a standard agenda item on the BEaR Project Board meetings and the regular internal BEaR Project Team's meetings.

11 Communication and Consultation Strategy

- 11.1 Bedfordshire Authorities have placed Stakeholder Communications at the heart of the Bedfordshire Energy and Recycling (BEaR) project. An active and robust Communications Strategy and Plan have been produced to ensure successful project delivery.



- 11.2 Consultation with elected members has taken place through the 'Bedfordshire Authorities Waste Partnership' (BAWP), comprising the four main authorities within Bedfordshire (excluding Luton). The BEaR Project Board is clearly represented by elected members, including BCC and more recently Central Bedfordshire, Bedford Borough Council (BBC) and Luton Borough Council (LBC).
- 11.3 Regular consultation with elected County members has also taken place via the BCC Environment Services Overview and Scrutiny Committee and similar committees at Bedford Borough and Central Bedfordshire have also been given briefings to ensure key stakeholders are involved in the BEaR Project.

11.3 Communications Strategy

11.3.1 The Communications Strategy provides a comprehensive approach to informing all stakeholders on the BEaR project. The key aims of the strategy include:

- Identify key stakeholders and plan the most effective channels for communicating with them
- Identify how appropriate consultation shall be carried out
- Ensure that communication activities are carried out in a co-ordinated and consistent way
- Develop ways of responding to enquiries and information that may arise during the project's lifetime
- Identify the roles and responsibilities of people tasked with delivering effective communications
- Ensure that communications activity is appropriately planned, resourced and any associated risks and issues are managed
- Ensure that any reactive communications are properly managed and in line with the overall strategy.

The Strategy is based on the principles that all communications are:

- Open, honest, transparent and unambiguous
- Relevant and responsive
- Easy to access
- Inclusive
- Timely



- Consistent, accurate and cohesive

11.3.2 The following key target audiences and stakeholders have been identified:

Table 11.1 – Stakeholder Identification

Stakeholder Group	Methods of Past, Present and Future Communications
Local Residents in Bedfordshire & Luton	Contact will continue to be made through the Council's magazine, <i>We Love Bedfordshire</i> , distributed on a bi-monthly basis, <i>Lutonline</i> monthly magazine and via appropriate press releases/adverts in local media, dedicated web pages and exhibition trailer roadshows.
Residents in vicinity of proposed service	Contact will continue be made through relevant Community Liaison Forums such as Parish Councils, direct mail shot letters giving updates of the project, followed by contact with individual households during formal planning consultations, visits to existing facilities, project briefings at Parish Council Meetings
Internal audiences, both staff and councillors in Bedfordshire & Luton Councils	Including the County Council, Central Bedfordshire, Bedford Borough Council, Luton Borough Council, Bedfordshire Town and Parish Councils, all elected politicians, relevant Officers and Staff. Contact made through Members Bulletins, Briefings, newsletters, workshops and seminars, and visits to existing facilities.
Government Department, Regulators, Local MP's and MEP's	Including MPs, MEPs, Defra, East of England Regional Assembly (EERA), 4Ps, PUK, the EA and Go East. Contact to be made through written correspondence and meetings.
Media	'Own' media such as, <i>We Love Bedfordshire</i> and <i>Lutonline</i> and Bedfordshire County Council's website (links to be set up from Luton Borough Council website). External media such as Local Newspapers, Trade Press Local radio and TV. Press releases, press briefings and media interviews.
Pressure, Environmental Groups & Community sector	Relevant pressure and environmental groups, including; Marston Vale Forest, Marston Vale Millennium Country Park, Greenpeace, Friends of the Earth, Bedfordshire Climate Change Forum, Wildlife Trust, Natural England, Reuse charities Contact to be made through briefing packs, dedicated web pages and individual written correspondence.
External Advisers	External legal, technical and financial advisers have been appointed to support Bedfordshire County Council in its procurement process.



Professional & Trade Associations	Including CIWM, CBI, Chamber of Commerce & CHPA Contact made through written correspondence and meetings.
Neighbouring Landowners, Tenants and Businesses	Including Stewartby Landfill WRG, Broadmead Business Park, Marston Vale Forest Centre, Cranfield University & School of Management, Millbrook Testing ground. Contact through Parish Council liaison, direct mail shot letters giving updates of the project, followed by contact with individuals during formal planning consultations.
Potential Service Providers	Potential waste solution providers have been approached via soft marketing events and shall continue to be contacted at appropriate stages. A notice shall be published in the Official Journal of the European Union when the procurement stage of the project formally goes to market. A further soft market testing event and bidder's days are planned for 2009.
Neighbouring Authorities	Milton Keynes Council, Northamptonshire County Council, Hertfordshire County Council, Cambridgeshire County Council, Buckinghamshire County Council. Contact made through meetings, liaison Forums and direct contact.

11.4 Market Interest

11.4.1 The BEaR project team have undertaken market testing events (October 2004 and December 2005) with a variety of potential bidders, in order to maximise competition and maintain a strong focus on market attractiveness. Companies expressed a significant amount of interest in the project and were comfortable with the procurement approach, contract length and funding route.

11.4.2 A final soft market testing event is planned early 2009 to maintain a high profile of the project with prospective bidders, to inform them and seek their views on how the procurement should be structured.

11.5 Other Relevant Authorities

11.5.1 Extensive consultation has taken place between all the local authorities in Bedfordshire, both at officer and elected member level. Luton Borough Council's Executive Committee confirmed they would like to join the BEaR project at the Executive meeting held on 15 July 2008. This has been a significant accomplishment towards achieving a sustainable long-term waste management strategy for Bedfordshire Authorities and Luton in Partnership. The BEaR Project team also engages with other neighbouring



authorities both directly and through forums such as the East of England Regional Assembly (EERA).

11.6 Public Engagement

11.6.1 A full consultation was launched in January 2006 to ascertain the public's views on how Bedfordshire should manage its waste in the future. The consultation included an article in the Bedfordshire Magazine, accompanied by a pull-out questionnaire. Press releases related to the consultation were supported through the local press. A series of roadshows were also conducted in support of the consultation. When residents were asked whether they thought rubbish remaining after increased recycling should be thermally treated to produce electricity, 98% of people agreed that residual waste should be converted into energy.

11.6.2 A project specific micro-website was also launched in 2006 to provide background information about the project, contact information and a Frequently Asked Questions page. Several press releases relating to the project have been issued and related articles have been placed in the BCC magazine delivered to all households.

11.6.3 Extensive community sector engagement has also been identified as a vital element that will strengthen and improve service delivery, ultimately leading to a more sustainable waste solution for Bedfordshire and Luton. Bedfordshire Authorities recognise that third sector organisations will continue to play a key role assisting authorities in waste minimisation, ultimately contributing towards waste strategy objectives being accomplished. Projects with the third sector have included a Recycling Credits scheme, direct financial and officer support and publicity.

11.6.4 In February 2008 a letter and information sheet was sent to all residents and businesses in the vicinity of the preferred site advising them of the BEaR Project and the plans that Bedfordshire Authorities have for future consultation with residents. This has been supported by presentations to the local Parish Councils, which were held in May 2008.

11.6.5 Bedfordshire Authorities plan to organise further visits to EfW facilities, inviting members and residents from Parish Councils close to the proposed site.

11.7 Summary

11.7.1 Bedfordshire Authorities strongly believe that continued open and honest stakeholder engagement and involvement will strengthen support for the project and contribute to successful project delivery. Many of the communication techniques mentioned above are ongoing, particularly when key project milestones are achieved. Continued communications via internal and external channels will ensure stakeholders are kept informed



and updated with reliable information and will reinforce the widespread support from the residents of Bedfordshire and Luton.

Bedfordshire County Council

Waste PFI

Options Appraisal Final Report

September 2008

Entec UK Limited


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Bedfordshire County Council

Waste PFI

Options Appraisal Final Report

September 2008

Entec UK Limited



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Document Revisions

No.	Details	Date
1	Draft Report	3/06/08
08356i1	Final Report	20/06/08
08356i2	Final Report (Issue 2)	06/08/08
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08356i4	Final Report (Issue 4)	01/09/08
08356i5	Final Report (Issue 5)	05/09/08

Executive Summary

Bedfordshire County Council (BCC), as a Waste Disposal Authority (WDA) has a statutory duty to dispose of waste delivered by the collection authorities of Bedfordshire, in addition to arisings collected at the Household Waste Recycling Centres (HWRCs). BCC, like many WDAs in England, dispose of residual waste arisings to landfill. To implement the landfill diversion and waste recovery aspects of their municipal waste management strategy, together with managing fiscal measures such as Landfill Tax and the Landfill Allowance Trading Scheme, BCC needs to identify and procure a residual treatment alternative to landfill.

In 2004/05 Entec completed a Residual Waste Treatment Options Appraisal study for the Bedfordshire Authorities Waste Partnership (BAWP). This work supported the initial development of an Expression of Interest (EOI), which was submitted by BCC to the Department of Food and Rural Affairs (DEFRA). Due to conditions placed on the EOI approval by Defra, BCC decided to re-consider the options for securing residual waste treatment services.

BCC are now in a position to continue with their work in securing residual treatment capacity. However, in the intervening time (March 2005 to December 2007) there have been considerable developments in government waste policy, and within the waste management industry. In addition a new life-cycle assessment tool has been released by the Environment Agency.

The Defra funded Waste Infrastructure Delivery Programme (WIDP) has also issued a formal OBC template and guidance, with reporting requirements on the Options Appraisal and bankability of technologies. Although Bedfordshire is yet to determine its procurement route, it is appropriate that work undertaken at this stage should be compliant with current WIDP OBC guidance.

Whilst BCC were completing their Options Appraisal, Defra issued draft guidance on the Options Appraisal and the determination of the Reference Project for the Outline Business Case. This introduced the concept of the Full Economic Cost, including the Shadow Price of Carbon. BCC subsequently progressed their Options Appraisal in accordance with the new draft guidance.

The Options Appraisal first identified and weighted the appraisal criteria, and then defined the long list of options which were to be appraised. The appraisal processes produced a short-list of options taken forward for detailed modelling and financial appraisal. The short listed options for the treatment of residual waste were:

1. Energy from Waste- power only (EfW)
2. Energy from Waste, combined Heat and Power (EfW CHP)
3. Advance Thermal Treatment (gasification)
4. Mechanical Biological Treatment generating a Refuse Derived Fuel (RDF) for thermal treatment
5. Autoclave technology generating a RDF for thermal treatment.

In the appraisal of the short-listed options some of the appraisal criteria were amended either due to progress that the BCC had made elsewhere (site identification) or to reflect the new Defra draft guidance. The majority of the evaluation criteria and weightings remained the same as in the long-list evaluation.

The highest scoring option in this Options Appraisal is EfW with CHP with 98.8 marks. EfW is the second highest scoring option with 97 marks. Only 1.8 marks separate the top two scoring options. The third highest scoring option is MBT producing an RDF which is treated in an EfW. There is over a 21 point difference between the MBT option and the EfW option. Only 5 marks separate the bottom three options.

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1. Introduction

1.1 Background

Bedfordshire County Council (BCC), together with the Waste Collection Authorities of Bedfordshire comprises the Bedfordshire Authorities Waste Partnership (BAWP). The BAWP published their Municipal Waste Management Strategy (MWMS) in 2006. The MWMS, adhered to the targets, policies and principals in Waste Strategy 2000¹ (England and Wales) and presented policies for waste reduction, recycling and composting, and waste recovery and landfill diversion.

The Landfill Allowance Trading Scheme (LATS), implemented under The Waste and Emissions Trading Act 2003, introduced a tradable permit system for the landfilling of Biodegradable Municipal Waste (BMW). This system aims to limit the amount of BMW that is sent to landfill by waste disposal authorities, thereby implementing the requirements of the Landfill Directive. Waste Disposal Authorities (WDA's) are issued with a set amount of allowances annually. Authorities can then either ensure that they do not exceed their annual limits each year or, if they intend to landfill more than their allowance, buy more permits from other authorities who may have a surplus. Whilst trading will deliver short-term benefits, the LATS system, combined with the increases in Landfill Tax will significantly increase the cost of landfilling.

BCC, as a Waste Disposal Authority (WDA) has a statutory duty to dispose of waste delivered by the collection authorities of Bedfordshire, in addition to arisings collected at the Household Waste Recycling Centres (HWRCs). BCC, like many WDAs in England, dispose of residual waste arisings to landfill. To implement the landfill diversion and waste recovery aspects of the MWMS, together with managing fiscal measures such as Landfill Tax and the Landfill Allowance Trading Scheme, BCC needs to identify and procure a residual treatment alternative to landfill.

In 2004/05 Entec completed a Residual Waste Treatment Options Appraisal study for the Bedfordshire Authorities Waste Partnership (BAWP). This included the identification of a long list of options and evaluation criteria. The criteria were weighted and the options scored to give a weighted score for each option. The top five ranking options were taken forward for detailed modelling, together with a WISARD Assessment. Details of option performance, scoring, and weighted scores were reported in Entec Report 05073 March 2005. This work supported the initial development of an Expression of Interest (EoI), this was subsequently submitted by BCC to the Department of Food and Rural Affairs (DEFRA) for potential support under the Project Finance Initiative (PFI). Due to conditions placed on the EOI approval by Defra, BCC decided to re-consider the options for securing residual waste treatment services.

BCC are now in a position to continue with their work in securing residual treatment capacity. However, in the intervening time (March 2005 to December 2007) there have been considerable developments in government waste policy, and within the waste management

¹ DETR, 2000. Waste Strategy 200 for England and Wales

industry. The Waste Strategy for England, published in May 2007², includes a new set of targets and indicators, including a new carbon indicator.

In addition a new life-cycle assessment tool has been released by the Environment Agency. Unlike WISARD, this tool is capable of modelling numerous residual treatment technologies, including several different types of Mechanical Biological Treatment (MBT) plant, gasification and pyrolysis plants as well as a range of Energy from Waste (EfW) facilities.

The Defra funded Waste Infrastructure Delivery Programme (WIDP) has also issued a formal OBC template and guidance, with reporting requirements on the Options Appraisal and bankability of technologies. Although Bedfordshire is yet to determine its procurement route, it is appropriate that work undertaken at this stage should be compliant with current WIDP OBC guidance.

1.2 Methodology

The initial long-listing and evaluation was completed in January 2005. This process identified a short list of options for detailed modelling, including financial modelling. Once this modelling was completed, it was the intention to re-evaluate the short-listed options in light of the additional information arising from the detailed modelling.

During the intervening period, Defra issued draft guidance on the Options Appraisal and the determination of the Reference Project for the Outline Business Case³. This introduced several key concepts:

- Appraisal criteria used in the options appraisal should also be used in the evaluation of solutions during the procurement process,
- price should not be scored: and
- the Full Economic Cost (FEC) should be considered.

The Full Economic Cost is to include not only the cost of the contractors charges (capital expenditure, operation expenditure and the cost of disposal of any residues (gate fee)) but also the cost of greenhouse gas emissions. These emissions are expressed as “a tonnage of carbon dioxide equivalents (CO₂e)” and “should be converted into a monetary value by applying the Shadow Price of Carbon (SPC)”. The Defra guidance provides links to climate change pages on the Defra website which provides background information and further information. The draft guidance also states that as the cost of carbon emissions is included in the FEC, the impact of greenhouse gas emissions should not be included in the technical evaluation.

BCC wished to progress the Options Appraisal in accordance with the new draft guidance. Consequently, the evaluation of the WRATE output on global warming was removed from the technical evaluation. The WRATE output for greenhouse gas emissions was used to calculate the SPC, as defined in the Defra draft guidance, and used in determining the FEC.

² Defra, 2007. Waste Strategy for England 2007.

³ Defra, 2008. Waste Infrastructure Delivery Programme Residual Waste Procurement Pack Module [] Part []. Options Appraisal and the Determination of the Reference Project for the Outline Business Case.

1.3 This Report

Section 2 of this report presents the appraisal of the long list of options. Section 3 of this report presents the appraisal of the short list of options. Section 4 of this report presents the sum of the technical and financial scores and discussion of the results.

2. Long-list Appraisal

2.1 Long-list of Options

The options considered relate not only to the type of technologies to be adopted, but also to the mass of material to be managed. In defining the list of options, a matrix, based on the principals of the waste hierarchy, was used. The matrix generates options based on all available residual treatment technologies but also in relation to waste minimisation initiatives, and recycling and composting levels. The matrix is presented in Table 2.1.

The BAWP is committed to waste minimisation and will work in partnership with the Waste Collection Authorities to promote waste awareness and minimisation. Their approach is to promote and implement waste minimisation measures and initiatives. Therefore the section of the matrix that relates to current waste minimisation activity is not relevant, and the Council will only consider options which have inherent waste minimisation within them.

Strategy 2007 sets an objective of achieving 50% recycling and composting by 2020. BCC wishes to see higher recycling rates delivered through public interfacing services (kerbside collections, bring schemes, HWRC services) and therefore only those options that included higher recycling were taken forward for consideration.

With regard to the residual treatment options, no potential technologies were excluded. Therefore the long-list of options is defined as the bottom row of the matrix presented in Table 2.1.

Additional permutations around the thermal treatment plants were also identified as options. This related to the size of the potential facilities and their capacity to deliver combined heat and power. As thermal treatment will divert all of the input biodegradable waste from landfill the facilities can either be sized to receive all available residual waste, or sufficient to meet the Landfill Allowance Trading Scheme allocations only.

Current recycling levels were incorporated in Option 1 “Do Nothing”. Options 2 to 14 include high (50%+) recycling and composting levels.

The options considered in this report are:

- | | |
|----------|---|
| Option 1 | Landfill – no increase in recycling “Do Nothing”; |
| Option 2 | Landfill; |
| Option 3 | Biodrying MBT - RDF to 3rd party burner; |
| Option 4 | Biodrying MBT - RDF to purpose built burner; |
| Option 5 | Bio-stabilise MBT - Residue to landfill; |
| Option 6 | Autoclave – IVC; |
| Option 7 | Autoclave – AD; |
| Option 8 | Autoclave – RDF; |
| Option 9 | EfW (capacity to meet LATS allocation); |

- Option 10: EfW (capacity to receive all residual waste, minimise landfill);
- Option 11 EfW with CHP (capacity to meet LATS allocation);
- Option 12 EfW with CHP (capacity to receive all residual waste, minimise landfill);
- Option 13 ATT - (capacity to meet LATS allocation); and
- Option 14 ATT (capacity to receive all residual waste, minimise landfill).

2.2 Defining and Weighting Technical Evaluation Criteria

An initial list of technical evaluation criteria was prepared by Entec and presented to the Project Board for discussion. The initial list of criteria were considered and, in consultation criteria added, removed and amended. The final list of criteria is presented in Table 2.2.

The evaluation criteria were identified as being the most important criteria against which the options would be evaluated. The criteria were chosen to reflect the environmental and social impacts of the options.

The individual criteria used for the options appraisal were weighted. The weighting exercise was undertaken in consultation with Project Board. This was designed to ensure that those criteria considered more important to Project Board and the local circumstances of Bedfordshire were properly reflected in the appraisal.

Criteria scores are multiplied by these weightings to provide a weighted score. Weightings are:

- 6 - Very highly important
- 5 – Highly Important
- 4 – High Medium Importance
- 3 – Medium importance
- 2 – Low Medium importance
- 1 - Less important

Each criterion was discussed separately and assigned a weighting. To ensure the effectiveness of this process there needs to be a reasonable spread of weightings, for example the weightings become in-effective if every criterion is rated either 5 or 6; highly important or very highly important.

Criterion 1 Recycling and Composting: Performance of Residual Treatment Technology. The Bedfordshire Waste Partnership is aiming to achieve a 50% recycling rate or higher prior to residual treatment. This recycling rate will be delivered in partnership between the Bedfordshire Authorities through the provision of services by the waste collection authorities at the kerbside and at bring sites and also by the County Council through recycling and composting provisions at the Household Waste and Recycling Centres. Given the high recycling and composting rates to be achieved through the front end services this particular indicator was considered less important in terms of delivering a residual waste treatment solution and was given a weighting of 1.

Criterion 2 Reliance of Residual Treatment Technology on Landfill: This criterion is not only about diversion of BMW from landfill, but about a technology's landfill requirements for all process residues. It is an assumption of this initial screening exercise that all biological treatment options will provide a compliant LATS solution. However some technologies will have higher diversion rates than others. Diversion from landfill (not only BMW) is an essential element of the residual treatment solution, and for this reason it was given a weighting of 6.

Criterion 3 Transport impact: The exact transport impacts of solutions are not quantifiable at this stage. This is because neither the site nor the destination of products and residues are known. For this analysis it is assumed that any solution will be a single site solution, and therefore transport into the facility will be the same across all options (the same tonnage is delivered to each facility from the same sources). However the tonnage of residues requiring disposal will vary and this can be used as a proxy for this indicator. Whilst transport impacts were deemed to be important, because they are unquantifiable and tonnage is to be used as a proxy, a weighting of 3 was agreed.

Criterion 4 Robustness and track record of the technology: The range of technology options assessed has increased over that available to be considered in 2005. It is important that the Council has a deliverable solution, and one aspect of deliverability is the proven track record of technologies. This proven track record needs to address not only size, i.e. the technology has been proven on a scale required by the BAWP, but also that the technology has operated with similar feed-stocks. Waste is very heterogeneous, and some technologies used to treat homogenous waste streams can experience operational difficulties with feed-stocks of a very heterogeneous nature. Robustness and track record was considered an essential element of the residual treatment solution and was weighted 6.

Criterion 5 Footprint and landtake: The different technologies have different footprints and land requirements. This indicator was given a weighting of three as BCC would need to purchase a site for the procurement process. The smaller the land take of the technology option then there is the possibility that more sites would be available for the development. As land costs may be lower (purchase of less land) the cost to the authority would subsequently be lower. This criterion was weighted 3.

Criterion 6 Planning risk for project timescales: All waste facilities are going to encounter planning issues, as, in general, the location of any waste facility within an area generates concerns and opposition from potential neighbours. The requirement to be able to secure planning permission within the project timescales is therefore highly important to the delivery of a residual waste treatment facility and consequently a weighting of 5 was agreed.

Criterion 7 Alignment to the BCC Carbon Agenda (Priority 10): The Council has a new long term carbon agenda, know as Priority 10 to “reduce the Council's carbon footprint and lead the County's response to climate change”. This is a high priority for the Council, as it is for the UK national government. The impacts of global warming, and the widespread publicity of targets to decrease carbon dioxide emissions led the group to allocate a high weighting (5) to this criterion.

Criterion 8 Technology Market: This criterion pertains to the capacity within the market to provide the technology and also the ability of contractors to bring these technologies to the table. This criterion, although important was not seen as highly important as it is recognised that the technology market is expanding and the capacity within the market is increasing. That said, some providers and technologies will experience greater capacity constraints than others, and as this capacity directly impacts the deliverability of the project a weighting of 3 was allocated to this criterion.

Criterion 9 Overall Off- take risk: The different technologies will all have different outputs which require management to ensure a complete solution is delivered. To deliver an affordable and deliverable solution the Council will wish to minimise the off-take risk of these products and residues, consequently this criterion was given a weighting of 4: High/Medium importance.

Criterion 10 Delivery of local socio-economic improvements: Any new development brings with it the prospect of new jobs. However it is not the primary purpose of BCC acting as the WDA, to create employment opportunities. BCCs main objective for this project is to procure a long term sustainable residual treatment facility for the management of residual wastes. Therefore this criterion was allocated a weighting of 2.

Criterion 11 Bankability: Most contractors will not be able to fund new developments “on balance sheet” (internal transfer of capital to the project). Instead they seek to secure loans from banks for the senior debt required to fund the project (project finance). Banks are generally risk adverse, and tend only to fund projects that guarantee a secure return on their investment. Banks are generally concerned about the reliability and performance of the technology to deliver the requirements of the contract, the potential for financial defaults and the ability to recover their investments in the event the contract terminates early. Generally public sector contractors are attractive to financial institutions, and the majority of waste technologies are bankable provided the contract structure is appropriate. This criterion was weighted 4.

Criterion 12 Consistent with local and national waste strategies: The options appraisal is for the management of residual waste in an environmentally and economically sustainable way. Considerable investment is already being provided by the BAWP towards waste minimisation initiatives and recycling and composting. The approach of the BAWP to this options appraisal is already consistent with local and national waste strategies and therefore this criterion was not weighted heavily with respect to the other criteria but given a weighting of 1.

Criterion 13 Maximise recovery value from waste: This indicator was weighted highly (5) with regard to the other indicators as the BAWP wish to ensure that the residual treatment solution maximises recovery of value from waste.

Criterion 14 Robustness of residual treatment technology to changes in feedstock: With a long term residual treatment contract it is important to try and ensure that the chosen technology would be able to adapt to changes in the material content, the physical form and chemical composition of the residual waste. As BCC is considering a long term contract, this indicator was deemed quite important and therefore given a weighting of 4.

2.3 Scoring

The scoring for each criterion was on a scale of 1 to 4, with 4 generally representing a good performance and 1 representing a poor performance.

The allocated weighting and scoring guidelines are provided in Table 2.2.

All criteria were deemed to be equally relevant to all Councils and the score allocated to each technology was determined by consensus between the Council representatives.

To maintain consistency when marking against each criterion, the evaluation team marked each solution in turn against the first criterion, each solution in turn against the second criterion and so on.

Criterion 1 Recycling and Composting Performance of Residual Treatment Technology: MBT and the autoclave technologies are designed to recover materials for recycling unlike thermal treatment options. However, given the improved recycling and composting rate

through kerbside, bring and HWRC service it is envisaged that this will be a moderate increase in the overall recycling and composting performance. It is important to recognise that in order to count toward recycling figures the materials need to be segregated and sent for recycling. For some materials, for example plastic film, the claim of technology providers to recycle these materials are not always deliverable, as no market exists to recycle these materials. In some instances the quality of material recovered within the processes is below a minimum market standard.

Criterion 2 Reliance of Residual Treatment Technology on Landfill: Technologies that have significant residue streams requiring landfill will score less than those options that have a lower landfill requirement. Thermal treatment scored higher than other treatment processes as the mass of process residues requiring landfill is typically low; furthermore any residues that are landfilled will have zero BMW content. Of the thermal treatment options, those that meet LATS scored lower than the options that diverted all the waste. Options that may have some waste or process outputs going to landfill (such as IVC and AD) were scored higher than options with a complete reliance on landfill. It was agreed that the disposal of compost like products from composting MBTs is still an issue, and there is high risk that such a product would need to be landfilled.

Criterion 3 Transport impact: This impact is was determined using process outputs as a proxy. Options that will completely divert waste from landfill (i.e. those options that would require no travel to landfill out of the County) scored higher than those that would need some travel to landfill (i.e. options that only meet LATS) and these options scored higher than those that didn't divert much waste from landfill; i.e. those producing a compost like product (CLP).

Criterion 4 Robustness and track record of the technology: Options that are less proven, scored lower against this criterion. The more proven the technology the higher the score. EfW and EfW CHP is a well proven technology in the UK, with several plants operating at capacities likely to be required for Bedfordshire. There are many MBT plants operational across the continent but the technology is not so well proven in the UK, with a limited number of plants. Although ATT is a proven technology on homogenous feedstocks, the very heterogeneous nature of MSW has provided technological difficulties in technology transfer into the municipal waste sector. The application of ATT within the municipal waste sector is generally confined to receipt of a product i.e. an RDF/SRF from a pre-treatment technology such as MBT or Autoclave. Similarly, as there are no large scale autoclave plants operational in the UK the ATT and autoclave options scored lower than MBT.

Criterion 5 Footprint and landtake: In general a thermal treatment plant will have a lower footprint than an MBT. A composting MBT will have a much greater land take due to the substantial area needed for composting and also maturation. MBT options scored the same as landfill (1) due to the large amount of space that is required to store the waste and process it through the various treatment options. Thermal treatment options scored highest although where only LATS diversion is sought the score decreases as land take for landfill would also be required.

Criterion 6 Planning risk for project timescales: As detailed above, all new waste facilities generally encounter planning issues. Therefore it was agreed that any new facilities were given the same scoring. Any option with a large amount of waste going to landfill (options 1 and 2 and MBT to landfill) were scored below the new facilities due to the requirement to secure increasingly scarce landfill capacity. Option 3 (Biodrying MBT to third party RDF

burner) scored the highest as the thermal treatment element of facility would already exist and consequently this option could incur the lowest planning risk.

Criterion 7 Alignment to the BCC Carbon Agenda (Priority 10): Scoring at this initial stage was completed using professional judgement as no WRATE modelling had been completed. At this stage in the process the Defra draft guidance had not been issued, and this criterion remained within the technical evaluation. Those technologies that retained a large element of landfill scored lower than technologies that treated all residual wastes. The Autoclave scored the highest due to the greater quantity of material recycling from this solution. EfW CHP scored higher than EfW due to the greater efficiencies achieved through the use of heat.

Criterion 8 Technology Market: Scoring this criterion relates not only to how many providers of a particular technology there are, but also the capacity the providers have in supplying the particular technologies. There are many established EfW providers within the existing markets; several of the large waste management companies operating within the UK have experience of bidding contracts with EfW solutions and also delivering these solutions. The number of MBT providers has been increasing, and the number of waste management companies offering this as a solution has also developed, however the market for MBT within the UK is not as advanced and therefore may not have the same capacity as EfW. There are fewer providers of ATT and Autoclave technologies and due to their smaller size it is reasonable to assume the capacity of these providers is below those of MBT and EfW.

Criterion 9 Overall Off- take risk: As landfill does not have any residues, and therefore no off-take risk this scored highest of all the options. All other options, except EfW CHP, MBT RDF to 3rd Party and Autoclave IVC scored the same as the relative risks associated with the products were deemed equivalent. EfW CHP scored lower than EfW as, while there is a market for electricity through the national grid; any heat off-take needs to be local. It can be difficult to find a major heat user whose heat requirements dovetail with the development and operation of EfW facilities. Similarly 3rd party risks for the thermal treatment of the RDF output from an MBT exist where no dedicated thermal treatment plant is developed. The Autoclave IVC was scored lower than the other Autoclave solutions because of the volume and nature of the product. Even though the Autoclave would sterilise the biogenic output sent for composting, the Animal By-Product Regulations (ABPR) regulations would restrict the Compost Like Product (CLP) application to land because it was not source segregated. It was agreed that at present the routes for disposal would be limited and therefore carried greater risk.

Criterion 10 Delivery of local socio-economic improvements: With the exception of landfill which scores 1, all other options scored the same (2) because at this stage it is difficult to assess how one option will differ to another without knowing sizes and economies of scale.

Criterion 11 Bankability: Proven options for dealing with residual waste are more likely to attract project finance (landfill and EfW) as they provide a lower financial risk. EfW scores the highest because it is the most understood technology that has been applied world wide on many different waste streams. The same technology can receive a relatively wide range of feedstocks and still operate reliably making the technology generally bankable. Autoclave and ATT score the lowest because these technologies have a very limited or reliable track record and consequently banks will have greater concern with over performance and potential for Contract default.

Criterion 12 Consistent with local and national waste strategies: Any option that doesn't fully divert the total available residual waste from landfill was scored low at a 2, with landfill

receiving the lowest score. Autoclave to AD and RDF scored the highest because it was agreed that there could be a greater element of recycling and recovery in these options compared with the others. EfW to CHP also receive a high score due to the high thermal efficiency of this option.

Criterion 13 Maximise recovery value from waste: EfW and EfW CHP that maximise diversion scored highest as there would be more use of the total residual waste. All the thermal treatments, Autoclave to AD and Autoclave to RDF burner and MBT to RDF burners scored higher than the remaining options as energy in the waste can be captured.

Criterion 14 Robustness of residual treatment technology to changes in feedstock: Some technologies have broader windows of operation than others. Landfill is probably the most robust, and scores highest (4). Apart from acceptance criteria laid down by law, there is physically, biologically and chemically few constraints on the landfill of materials (provided it is conducted in a safe manner). Autoclave with an RDF burner also scored a 4. This is due to the ability of the two components to treat a range of waste types (i.e. wet waste and high calorific waste). The biostabilising MBT scored lower (2) than the other MBT options (3) as the process purely reduces the BMW content of the waste, where as biodrying produces an RDF suitable for burning and is not as sensitive to composition changes. ATT was also scored at 2 as these are technologies are more sensitive to the physical form of the feedstock and already requires an element of pre-treatment. All other options were scored equally at 3.

Table 2.2 Weighting and Scoring Mechanism for Assessment Criteria

Criteria		Weighting	Scoring
1	Recycling and compost performance of residual treatment technology	1	1: No additional recycling/composting 2: Low Increase of recycling/composting performance 3: Moderate improvement of recycling/composting performance 4: High Improvement of recycling/composting performance
2	Reliance on Landfill	6	1: High Landfill 2: Moderate Landfill- Uncertainty over ability to meet LATS targets 3: Moderate landfill - Meets LATS in the medium to long term 4: Minimise landfill- Likely to have significant LATS surplus
3	Transport Impact	3	1: Significant haulage of products and residues 2: High haulage of products and residues 3: Moderate haulage 4: Limited haulage
4	Robustness and 'track record' of technology	6	1: Solution includes unproven technology 2: Solution includes technology only proven at pilot scale 3: Solution includes limited proven technology (e.g. limited track record) 4: Solution includes proven technology with good track record.
5	Footprint and Landtake	3	1: Large footprint, major land take required 2: Large footprint, high land-take required 3: Moderate footprint, moderate land-take required 4: Moderate footprint, minimal land-take required
6	Planning risk for project timescales	5	1: Likely to encounter significant planning delay 2: Probably encounter planning delay 3: Potential planning delay 4: Minimal planning delay
7	Alignment to the BCC Carbon Agenda (Priority 10)	5	1: No alignment, no carbon reduction 2: Moderate alignment, carbon reduction 3: Good alignment, carbon savings 4: Excellent alignment, significant carbon savings
8	Technology Market	3	1: Minimal, no market: poor competition 2: Poor market appetite: moderate to low competition 3: Reasonable market appetite: reasonable competition 4: Excellent market appetite: good competition
9	Overall Off-take risk	4	1: Very poor / no market for products/residues: significant risk 2: Poor market for products/residues: moderate risk 3: Reasonable market for products/residues: low risk 4: Excellent Market for products/residues; minimal risk
10	Delivery of local socio- economic improvements	2	1: No socio-economic benefits 2: Limited jobs, limited opportunities for expanding markets 3: New jobs & markets 4: New jobs & stimulates secondary markets
11	Bankability (Contractor Funding)	4	1: Unlikely to get project finance, poor bankability 2: Difficult to get project finance, poor bankability 3: Can get project finance, moderate bankability 4: Readily bankable,
12	Consistent with local and national waste strategies	1	1: Solution conflicts with local and national waste strategies 2: Solution not in line with local and national waste strategies 3: Solution in line with local and national waste strategies 4: Solution fully supports local and national waste strategies
13	Maximise recovery value from waste	5	1: No additional recovery 2: Limited additional recovery of materials 3: Moderate additional recovery of materials 4: Maximises recovery
14	Robustness of residual treatment technology to changes in feedstock	4	1: Unable to manage changes in feedstock 2: Limited scope to manage changes in feedstock 3: Moderate scope to manage changes in feedstock 4: Good scope to manage changes in feedstock

Table 2.4 presents the marks allocated for each waste management option (as identified in Table 2.3) against the various evaluation criteria. Table 2.5 and Figure 2.1 present the weighted scores for each option against evaluation criteria. Table 2.6 presents the totalled overall scores and ranking for each option considered.

Table 2.3 The Long List of Technology Options

Option	Treatment Type
1	Landfill – no increase in recycling “Do Nothing”;
2	Landfill;
3	Biodrying MBT - RDF to 3rd party burner;
4	Biodrying MBT - RDF to purpose built burner;
5	Bio-stabilise MBT - Residue to landfill;
6	Autoclave – IVC;
7	Autoclave – AD;
8	Autoclave – RDF;
9	EfW (capacity to meet LATS allocation);
10	EfW (capacity to receive all residual waste, minimise landfill);
11	EfW with CHP (capacity to meet LATS allocation);
12	EfW with CHP (capacity to receive all residual waste, minimise landfill);
13	ATT - (capacity to meet LATS allocation); and
14	ATT (capacity to receive all residual waste, minimise landfill).

Table 2.4 Scores for each Waste Management Option

Criteria	Weighting	Criteria	Options															
			1	2	3	4	5	6	7	8	9	10	11	12	13	14		
1	1	Recycling and compost performance or residual treatment technology	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
2	6	Reliance on Landfill	1	1	3	3	2	2	3	3	3	3	3	3	3	3	3	3
3	3	Transport Impact	1	1	2	3	1	1	3	2	1	1	3	2	2	2	2	2
4	6	Robustness and 'track record' of technology	4	4	3	3	3	3	2	2	2	2	2	2	2	2	2	2
5	3	Footprint and Landtake	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2
6	5	Planning risk for project timescales	1	1	3	2	1	1	2	2	2	2	2	2	2	2	2	2
7	5	Alignment to the BCC Carbon Agenda (Priority 10)	1	1	2	2	2	3	2	4	4	4	4	4	4	4	4	4
8	3	Technology Market	1	1	3	3	3	3	2	2	2	2	2	2	2	2	2	2
9	4	Overall Off-take risk	4	4	2	3	3	3	4	3	3	3	3	3	3	3	3	3
10	2	Delivery of local socio- economic improvements	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
11	4	Bankability (Project Finance)	4	4	2	3	3	3	2	2	2	2	2	2	2	2	2	2
12	1	Consistent with local and national waste strategies	1	1	3	3	2	2	3	3	3	3	3	3	3	3	3	3
13	5	Maximise recovery value from waste	1	1	3	3	2	2	3	3	3	3	3	3	3	3	3	3
14	4	Robustness of residual treatment technology to changes in feedstock	4	4	3	3	3	2	3	3	3	3	3	3	3	3	3	3

Table 2.5 Weighted Scoring for each Waste Management Option

Criteria	Weighting	Criteria	Options															
			1	2	3	4	5	6	7	8	9	10	11	12	13	14		
1	1	Recycling and compost performance or residual treatment technology	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
2	6	Reliance on Landfill	6	6	18	18	12	12	12	12	12	12	18	18	24	18	24	24
3	3	Transport Impact	3	3	6	9	3	3	3	3	3	3	9	6	6	12	6	12
4	6	Robustness and 'track record' of technology	24	24	18	18	12	12	12	12	12	12	24	24	24	18	18	12
5	3	Footprint and Landtake	3	3	3	3	3	3	6	6	6	6	9	6	9	12	9	12
6	5	Planning risk for project timescales	5	5	15	10	10	5	10	10	10	10	10	10	10	10	10	10
7	5	Alignment to the BCC Carbon Agenda (Priority 10)	5	5	15	15	15	10	15	15	20	20	15	15	15	20	20	15
8	3	Technology Market	3	3	9	9	9	9	6	6	6	6	12	6	12	12	6	6
9	4	Overall Off-take risk	16	16	8	12	12	12	8	8	12	12	12	12	12	8	8	12
10	2	Delivery of local socio- economic improvements	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4
11	4	Bankability (Project Finance)	16	16	8	12	12	12	8	8	8	8	16	8	16	8	8	8
12	1	Consistent with local and national waste strategies	1	1	3	3	3	2	3	3	3	3	4	2	3	2	3	2
13	5	Maximise recovery value from waste	5	5	15	15	10	10	10	10	15	15	15	15	20	15	20	15
14	4	Robustness of residual treatment technology to changes in feedstock	16	16	12	12	12	8	12	12	12	12	16	12	12	12	8	8
Total Weighted Score			106	106	136	142	110	111	125	142	157	178	144	165	127	143	143	

Figure 2.1 Weighted Scoring for each Waste Management Option

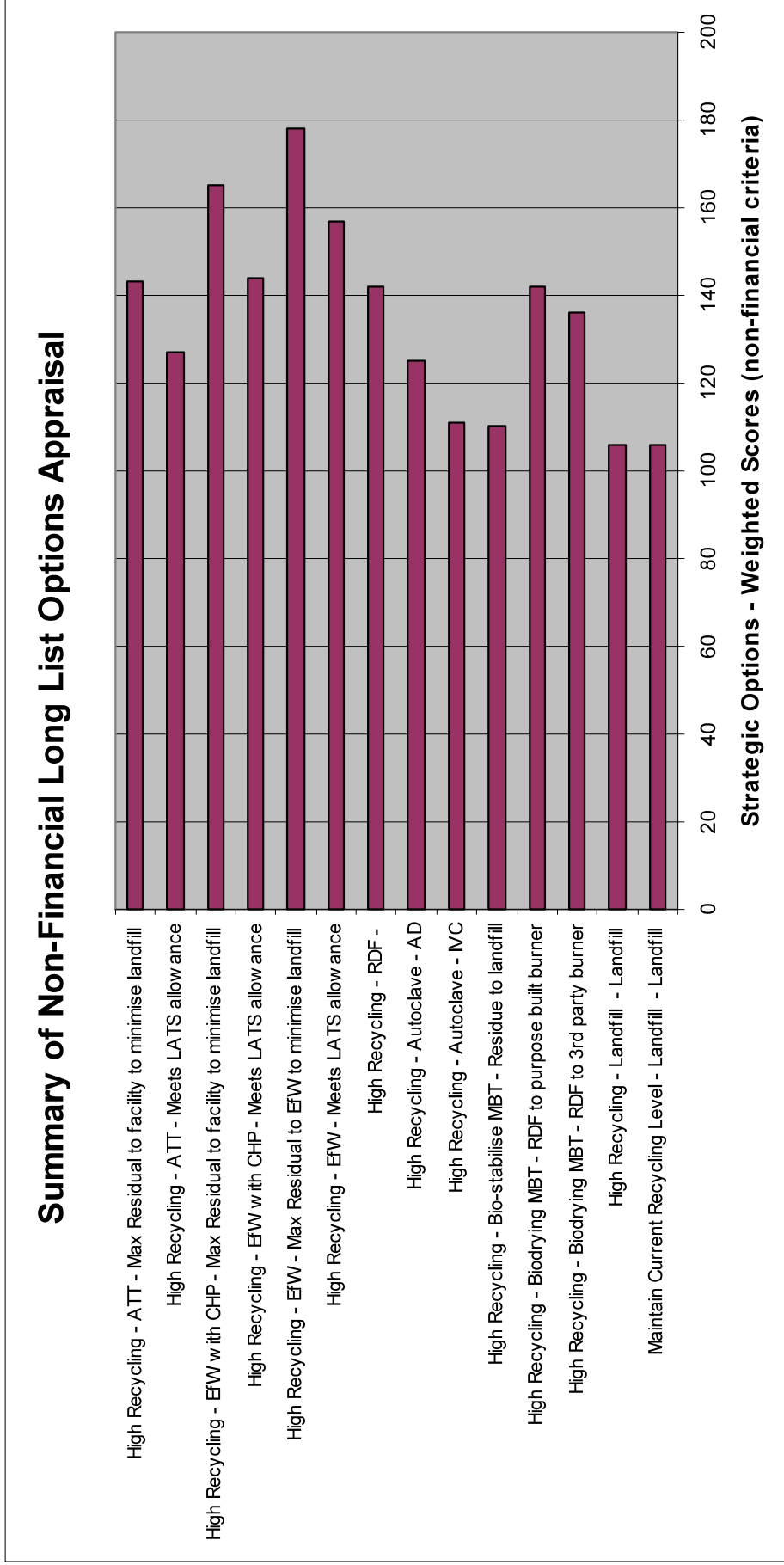


Table 2.6 Total Weighted Scores and Rankings

Strategic Option	Weighted Score
High Recycling - EfW - Max Residual to EfW to minimise landfill	178
High Recycling - EfW with CHP - Max Residual to facility to minimise landfill	172
High Recycling - EfW - Meets LATS allowance	157
High Recycling - EfW with CHP - Meets LATS allowance	154
High Recycling - ATT - Max Residual to facility to minimise landfill	143
High Recycling - Biodrying MBT - RDF to purpose built burner	142
High Recycling - Autoclave - RDF	142
High Recycling - Biodrying MBT - RDF to 3rd party burner	136
High Recycling - Autoclave - AD	132
High Recycling - ATT - Meets LATS allowance	130
High Recycling - Autoclave - IVC	114
High Recycling - Bio-stabilise MBT - Residue to landfill	110
Maintain Current Recycling Level - Landfill - Landfill	106
High Recycling - Landfill - Landfill	106

2.4 Discussion of Rankings

The best performing options differed by 6 points and were high recycling with residual waste to EfW to minimise landfill and high recycling with residual waste to an EfW CHP facility to minimise landfill. With a gap of 15 points between the 2nd and 3rd options, the 3rd and 4th options only differed by 3 points. These were residual to EfW and EfW CHP sufficient to meet LATS. Another gap of 11 points separated 3rd and 4th ranked options from the next grouping of three options, which were themselves separated by only 1 point. These were residual waste to an ATT, residual waste to a MBT producing a RDF, and residual waste to an Autoclave producing a RDF.

BCC reviewed the results and it was agreed to take the following 5 options forward for detailed modelling and financial appraisal. They all have high recycling delivered through kerbside schemes, bring banks and HWRCs, but differ in the manner of residual waste treatment. The short listed options for the treatment of residual waste were:

1. Energy from Waste- power only (EfW)
2. Energy from Waste, combined Heat and Power (EfW CHP)
3. Advance Thermal Treatment (gasification)
4. Mechanical Biological Treatment generating a RDF for thermal treatment

5. Autoclave technology generating a RDF for thermal treatment.

Of the top seven performing options two were dismissed prior to short listing. They were the EfW and EfW to CHP sufficient to meet LATS. These were not regarded as technically discrete options and their selection could restrict choice even though they performed well in the options appraisal. By excluding these two options BCC were not eliminating any particular technologies; indeed by eliminating these two the technology field was broadened to include the three following options, each of which was a different technology option. It was felt that this would afford a more robust second evaluation than comparing fundamentally one technology, EfW, around a range of parameters; tonnage and heat/power off-take.

The five options were modelled technically, using Entec's mass flow model. The options were also modelled in WRATE and the financial outputs modelled by BCC's financial consultants Grant Thornton.

ATT technologies will, in general, require an element of pre-treatment. This need not be as advanced as MBT or Autoclaving, but to ensure good combustion in the gasification and pyrolysis technologies, waste requires pre-treatment and homogenisation. To allow this option to be modelled in WRATE, the ATT option included mechanical pre-treatment to remove metals and inerts for recycling and shredding of the remaining waste. These elements were also costed in the mass flow model and financial modelling.

2.5 Technical, WRATE and Financial Modelling

2.5.1 Technical Modelling

To complete the technical modelling a series of assumptions were necessary. The main assumptions driving the modelling are:

- Waste composition;
- Waste growth; and
- Recycling scheme performance.

Together these three assumptions determine how much residual waste requires treatment.

Other assumptions include facility operational parameters, facility costs, landfill tax assumptions and LATS assumptions.

To accompany the model Entec produced a Modelling Report (Entec Report 08397i1).

2.5.2 WRATE Modelling

WRATE measures all impacts and benefits associated with each stage of the overall waste solution. Environmental Impacts are measured in terms of emissions from individual processes, including emissions to air, land and the water environment. Environmental benefits are realised where materials or energy are recovered through a process and thereby off-set the requirements to use virgin resources, these benefits are measured in terms of emission savings to the environment.

Default Impacts show the Environmental Impact of a service in terms of six key impacts. These impacts are calculated using WRATE through the use of equivalents, whereby identified emissions are converted into the relative impact of a known substance. The use of equivalents may be familiar to the reader in terms of Global Warming Potential, where all individual greenhouse gas emissions are measured in relation to their potential impact in terms of carbon dioxide emissions. Default Impacts utilised in WRATE have been chosen by the Environment Agency. The following default impacts are measured within the WRATE LCA software.

Abiotic Resource Depletion (kg antimony equivalent) – Use of non-renewable and renewable resources. Abiotic resources are non-living things, including land, water, air and minerals.

Global Warming Potential (kg carbon dioxide equivalent) – Measure of what mass of Greenhouse Gases are estimated to contribute to global warming, a relative scale that compares emissions to Carbon Dioxide.

Human Toxicity (kg 1,4-dichlorobenzene equivalent) – This covers a number of different effects: acute toxicity, irritation/corrosive effects, allergenic effects, irreversible damage/organ damage, genotoxicity, carcinogenic effects, toxicity to reproductive system/teratogenic effects, and neurotoxicity. The equivalence factors are determined for emissions to different compartments: air, water, and soil and exposure via different media: air water, and soil. This impact has a high level of uncertainty associated with it due to differences in available scientific data.

Freshwater Aquatic Ecotoxicity (kg 1,4-dichlorobenzene equivalent) – Toxicity towards ecosystems can be regarded as either chronic (causing long lasting illness) or acute (short term/immediate effects).

Acidification (kg Sulphur Dioxide equivalent) – Emissions of acidifying compounds such as sulphur dioxide and nitrous oxides that attack leaves and acidify the soil which can result to changes in the ecosystem.

Eutrophication (kg Phosphate equivalent) - is caused by the increase of chemical nutrients, typically compounds containing nitrogen or phosphorus.

WRATE includes a 'Normalisation' function which allows the Default Impacts to be presented on the same graph and, potentially, also allows an impact to be assessed within an accessible context. Normalisation is the number of 'average' European people who would cause the same impact over the course of a year.

Outputs from the technical modelling on mass flows etc. were used in the WRATE modelling.

Further details of the WRATE software and modelling are reported in Entec WRATE Final Report 08378i1.

2.5.3 Financial Modelling

Financial modelling was completed by Grant Thornton LLP and reported separately.

3. Short-list Options Evaluation

3.1 Evaluation Methodology

The Evaluation methodology was agreed with BCC prior to re-visiting the scoring exercise.

At this stage of the options appraisal an assessment of the financial implications of each of the options was included. The evaluation was divided into two sections and weighted as follows;

Technical Performance criteria	40%
Financial criteria.	60%

The weightings were selected by the Project Board based on current standard procurement weightings.

The option that has the highest mark allocation (technical marks plus financial marks) will be identified as the preferred option. This option will be worked up into the Reference Project for the purposes of developing an Outline Business Case.

Subsequent to this agreement the Defra draft guidance on Options Appraisals was issued. This required a re-evaluation of the adopted methodology.

BCC wished to adhere to current Defra guidance, albeit draft guidance. Consequently the criterion that related to greenhouse gas emissions was removed from the technical scoring matrix.

Financial consultants, Grant Thornton, calculated the FEC, using the WRATE output data and SPC methodology. The FEC was adopted as the financial assessment.

3.2 Technical Performance Criteria

3.2.1 Review of Technical Criteria and weighting

Subsequent to the long list evaluation Defra published a Draft Guidance for Options Appraisal and the Determination of the Reference Project for the Outline Business Case. The technical areas proposed in this draft guidance document can be broadly mapped to BCCs identified technical evaluation criteria.

Prior to the commencement of the evaluation of the short-listed options, the technical criteria and their weightings were debated in light of the draft guidance, the development of the mass flow modelling and WRATE assessment.

The WRATE software provides a calculation of greenhouse gas emissions derived from a particular solution. It was agreed that the criterion “Alignment of BCCs Carbon Agenda” be re-phrased to read “WRATE Greenhouse Gas potential as this would allow the indicator to be quantifiable (in WRATE terms). There was not another criterion that could be “mapped” to the remaining environmental indicators provided by WRATE. Therefore a new criterion “Other

WRATE indicators” was added. It was agreed that this criterion should have the same weighting as for greenhouse gases, and was therefore weighted five.

Since the previous long list evaluation BCC had made some advances in identifying and acquiring a site. As all the technology options would be able to deliver a solution on this site a discussion on the relevance of the criterion “Footprint and landtake” was held. It was agreed that for consistency this criterion would not be removed, but as all options could be delivered on the identified site, all options would score equal for this criterion.

It was also agreed that, as this stage of the evaluation was to concentrate on the residual treatment element, and not on the whole solution, the weighting for recycling and composting performance should be increased.

As none of the residual treatment options included composting, the wording of the “Recycling and compost performance of residual treatment technology” indicator was changed to “Recycling performance of residual treatment technology”.

The revised criteria wording and weightings are presented in Table 3.1.

Table 3.1 Revised Assessment Criteria and Weightings

Criteria		Weighting	Scoring
1	Recycling performance of residual treatment technology	3	Scored between 1 and 4 using mathematical formula
2	Reliance on landfill	6	Scored between 1 and 4 using mathematical formula
3	Transport Impact	3	Scored between 1 and 4 using mathematical formula
4	Robustness and 'track record' of technology	6	1: Solution includes unproven technology 2: Solution includes technology only proven at pilot scale 3: Solution includes limited proven technology (e.g. limited track record) 4: Solution includes proven technology with good track record
5	Footprint and Landtake	3	4: Proposed site large enough to accommodate all technologies
6	Planning risk for project timescales	5	1: Likely to encounter significant planning delay 2: Probably encounter planning delay 3: Potential planning delay 4: Minimal planning delay
7	Greenhouse Gas Emissions- No Longer a technical evaluation criterion; moved to calculated FEC		
8	Technology Market	3	1: Few providers low capacity 2: Few providers: moderate capacity 3: Several providers ; moderate capacity 4: Several providers; good capacity
9	Overall off-take risk	4	1: Very poor / no market for products/residues: significant risk 2: Poor market for products/residues: moderate risk 3: Reasonable market for products/residues: low risk 4: Excellent Market for products/residues; minimal risk
10	Delivery of local socio- economic improvements	2	1: No socio-economic benefits 2: Limited jobs, limited opportunities for expanding markets 3: New jobs & markets 4: New jobs & stimulates secondary markets
11	Bankability (Contractor Funding)	4	1: Unlikely to get project finance, poor bankability 2: Difficult to get project finance, poor bankability 3: Can get project finance, moderate bankability 4: Readily bankable,
12	Consistent with local and national waste strategies	1	1: Solution conflicts with local and national waste 2: Solution not in line with local and national waste 3: Solution in line with local and national waste 4: Solution fully supports local and national waste
13	Maximise recovery value from waste	5	Scored between 1 and 4 using mathematical formula
14	Robustness of residual treatment technology to changes in feedstock	4	1: Unable to manage changes in feedstock 2: Limited scope to manage changes in feedstock 3: Moderate scope to manage changes in feedstock 4: Good scope to manage changes in feedstock
15	Other WRATE indicators	5	Scored between 1 and 4 using mathematical formula

3.2.2 Review of Scoring Methodology

The scoring matrix used a scoring system between 1 and 4, with 1 being the lowest mark available and 4 being the highest. This second stage of the technical evaluation was based on the evaluation of the five short-listed technologies to treat residual waste.

The modelled data has provided outputs that can be scored relative to one another through a formula that allows the best performing option to score 4. The formula is as follows:

$$4 \times (\text{option score}/\text{best option score})$$

The only issue with this approach was with the WRATE Greenhouse Gas criterion, as this had both negative and positive results. This was resolved by adopting the following formula:

$$4 \times ((\text{option score}/\text{highest score})/(\text{lowest score} - \text{highest score}))$$

where negative is a benefit and therefore the highest score, and where a positive is an impact and therefore the lowest score.

3.3 Technical Scoring of Short-listed Options

The detailed modelling and WRATE assessment provided data which allowed for some of the criteria to be quantified. Where this was a case the scoring was completed using a mathematical formula. The criteria scored using modelled data were:

- Recycling performance of residual treatment technology;
- Reliance on landfill;
- Transport impact;
- WRATE-other indicators; and
- Maximise recovery value from waste.

All criteria scores were reviewed. Criteria scores not changed from the long-list evaluation were:

- Robustness and 'track record' of technology;
- Planning risk for project timescales;
- Technology market;
- Delivery of local socio- economic improvements;
- Bankability (project finance); and
- Robustness of residual treatment technology to changes in feedstock.

Two criteria scores were amended:

- Overall off-take risk; and
- Consistent with local and national waste strategies.

Recycling performance of residual treatment technology

The modelled recycling tonnages from each option were taken from the mass flow model. A discussion was held on the inclusion of metal recycling from the EfW and EfW CHP. BCC determined that metal recycling from EfW should be included because while it did not count towards BVPI 82a performance, the metal was still recycled. If it was not included in this indicator, then its inclusion would not be assessed anywhere else in this appraisal. Incinerator bottom ash (IBA) can be recycled as a secondary aggregate. However whereas there is an established, guaranteed market for the metals, the same is not true for IBA. Therefore a prudent assumption was adopted that IBA should not count towards recycling, as there is no certainty that it will be recycled.

The modelled data for recycling for each of the technologies were:

Option	Tonnes	Score
EfW	3,153	1
EfW CHP	3,153	1
ATT	10,684	2
MBT RDF to EfW	13,538	2
Autoclave & RDF to EfW	23,128	4

The EfW recycling data is derived from the assumption that 3% of the input tonnage is recoverable metals. The recovery of metals for recycling in modern plants is well established. The ATT recyclable tonnage is calculated on the basis that metals are recovered, 50% of glass is recycled and inert materials are recovered for recycling. The MBT recycling tonnage is based on the recycling of metals, glass and fines, and the Autoclave tonnage is based on the recycling of metals, glass, plastics and fines.

Reliance on landfill

This was quantified by the material sent to landfill, and included bottom ashes, fly ashes and residues from any MBT or Autoclave process. The modelled data and associated scores were:

Option	Tonnes	Score
EfW	29,425	3
EfW CHP	29,425	3
ATT	18,980	4
MBT RDF to EfW	34,120	2
Autoclave & RDF to EfW	31,373	2

Transport impact

As in the initial assessment the exact transport impacts of solutions are not quantifiable at this stage. Although progress has been made on site identification and therefore transport impacts

into the facility could be estimated, these would be the same for all the options (except the Do Nothing option of landfill). However, what is quantifiable is the tonnage of material (either recyclables or residues) requiring transport. BCC recognise that some products and residues will be transported different distances, but again this is unquantifiable; some residues such as bottom ashes may only be transported short distances, some recyclable material may even be exported. As it is impossible to predict how far products and residues will be transported BCC opted for the simple proxy of total tonnage requiring transporting.

Option	Tonnes	Score
EfW	32,425	4
EfW CHP	32,425	4
ATT	28,980	4
MBT RDF to EfW	47,120	3
Autoclave & RDF to EfW	54,373	2

WRATE-other indicators:

WRATE includes a 'Normalisation' function which allows the Default Impacts to be presented on the same graph and, potentially, also allows an impact to be assessed within an accessible context. Normalisation is the number of 'average' European people who would cause the same impact over the course of a year. BCC discussed how this criterion should be assessed, and agreed that the European Person Equivalent function within WRATE would be used. The outputs for the other standard indicators (Abiotic Resource Depletion (kg antimony equivalent) Measure of Human Toxicity (kg 1,4-dichlorobenzene equivalent) –Freshwater Aquatic Ecotoxicity (kg 1,4-dichlorobenzene equivalent) Acidification (kg Sulphur Dioxide equivalent), Eutrophication (kg Phosphate equivalent)) were converted to their European Person Equivalents and summed. The results are presented below together with the scores.

Option	European Person Equivalent	Score
EfW	-13,809	3
EfW CHP	-14,399	3
ATT	-19,487	3
MBT RDF to EfW	-31,769	4
Autoclave & RDF to EfW	-33,728	4

Maximise recovery value from waste:

The mass flow model provided outputs for energy recovery, expressed in MegaWatt hours. These outputs were calculated based on Calorific Value (CV), tonnage and efficiencies within

the combustion processes modelled (EfW, gasification etc). This information is presented in Entec modelling report 08397i1. In this modelling a conservative view of CHP was taken and no income was assigned to the potential heat/steam recovery. However for this options appraisal exercise it was important to have an understanding of the improved efficiencies from an EfW CHP option. To enable this assessment an assumption of the ratio of steam to power was made. This ratio will be a function of several different parameters, not least of which will be the market availability for the heat off take (a domestic heating system will have heat demand fluctuations, an industrial application may not). For this exercise a ratio of approximately 50:50 was assumed, as this is similar to ratios at existing facilities, for example the Sheffield CHP facility.

Option	MWh	Score
EfW	59,900	2
EfW CHP	106,194	4
ATT	52,721	2
MBT RDF to EfW	27,766	1
Autoclave & RDF to EfW	21,867	1

Overall off-take risk: EfW scored high as there is minimal risk in the off-take of electrical generation. Therefore EfW was increased from a three to a four. All other options remained the same.

Consistent with local and national waste strategies: The highest scoring options were EfW-CHP, and autoclave, with MBT, ATT, and EfW scoring three. However it was felt that the additional recycling of the ATT compared to the EfW and, the additional energy recovery of the ATT compared to the MBT should mean that the ATT should score higher than these other two options. The ATT score was consequently increased from a three to a four.

Table 3.2 presents the option scores together with the total weighted score.

Table 3.2 Scores for each Waste Management Option

No.	Weighting	Criterion	1	2	3	4	5
1	3	Recycling performance of residual treatment technology	1	1	2	2	4
2	6	Reliance on landfill	3	3	4	2	2
3	3	Transport impact	4	4	4	3	2
4	6	Robustness and 'track record' of technology	4	4	2	3	2
5	3	Footprint and landtake	4	4	4	4	4
6	5	Planning risk for project timescales	2	2	2	2	2
7		WRATE GHG Emissions- No longer assessed here					
8	3	Technology market	4	4	2	3	2
9	4	Overall off-take risk	4	2	3	3	3
10	2	Delivery of local socio- economic improvements	2	2	2	2	2
11	4	Bankability (project finance)	4	2	2	3	2
12	1	Consistent with local and national waste strategies	3	4	4	3	4
13	5	Maximise recovery value from waste	2	4	2	1	1
14	4	Robustness of residual treatment technology to changes in feedstock	3	3	2	3	4
15	5	Other WRATE indicators	2	2	2	4	2
Total Weighted Score			166	161	142	148	133
As a percentage of total weighted score available			77%	75%	66%	69%	62%

3.4 Technical Results and Discussion

EfW scored the highest with 166 or 77% of the total weighted score. EfW CHP was the second highest technical score with 161 or 75% of the total weighted score. The next best performing option was MBT RDF with a total weighted score of 148, and 69% of the total weighted score. The lowest performing technology option was Autoclave with a weighted score of 133.

The difference between EfW and EfW CHP score is marginal. Where possible BCC should seek to exploit the additional benefits of EfW CHP, however they need to understand the possible off-take risks and practical deliverability issues associated with this option.

3.5 WRATE GHG Emissions

WRATE GHG emissions:

The Greenhouse Gas emissions are calculated using WRATE. Below are the emissions of Greenhouse gases expressed as kilogram equivalents of carbon dioxide and the associated

scores for the options. These values were used by Grant Thornton in the evaluation of the Shadow Price of Carbon.

Option	tonnes CO2 eq	NPV of the Shadow Price of Carbon
EfW	-3,183	-£1,097,445
EfW CHP	-28,924	-£9,973,521
ATT	5,269	£1,816,993
MBT RDF to EfW	-9,529	-£3,285,856
Autoclave & RDF to EfW	-40,962	-£14,124,713

3.6 Financial Analysis

Financial modelling was completed by Grant Thornton LLP and has been reported separately.

The results of the financial assessment are provided below together with the total net present value of costs including the shadow price of carbon.

Option	NPV of Costs	Total NPV including SPC
EfW	£196,650,676	£195,553,230
EfW CHP	£196,650,676	£186,677,154
ATT	£283,592,491	£285,409,485
MBT RDF to EfW	£283,379,203	£280,093,347
Autoclave & RDF to EfW	£314,371,288	£300,246,575

4. Evaluation Results

4.1.1 Marking Methodology

Once the scoring exercise was complete the scores were translated into marks. The BCC Project Board agreed a weight between technical and financial of:

Technical	40%
Financial	60%

4.1.2 Technical Marks

The technical score therefore has to be translated into marks out of 40, where 40 marks are allocated to the best performing options technically. The formula used was:

$$40 \times (\text{option score}/\text{highest option score})$$

Table 4.1 Technical Scores and Marks for Options

Option	Weighted Score	Marks
EfW	166	40
EfW CHP	161	38.8
ATT	142	34.2
MBT RDF to EfW	148	35.7
Autoclave & RDF to EfW	133	32.0

4.1.3 Financial Marks

The financial costs of each option have to be translated into marks out of 60, where 60 marks are allocated to the best performing options.

The formula used was:

$$60 \times (\text{lowest option cost}/\text{option cost})$$

Table 4.2 presents the financial costs including SPC of each option as calculated by Grant Thornton LLP.

Table 4.2 Financial Scores and Marks for Options

Option	£ (Inc SPC)	Marks
EfW	195,553,230	57
EfW CHP	186,677,154	60
ATT	285,409,485	39
MBT RDF to EfW	280,093,347	40
Autoclave & RDF to EfW	300,246,575	37

4.1.4 Combined Marks

The combined marks are presented in Table 4.3.

Table 4.3 Combined technical and financial Marks for Options

Option	Technical Marks	Financial Marks	Total Marks
EfW	40	57	97.0
EfW CHP	38.8	60	98.8
ATT	34.2	39	73.2
MBT RDF to EfW	35.7	40	75.7
Autoclave & RDF to EfW	32.0	37	69.0

5. Conclusion

The highest scoring option in this Options Appraisal is EfW with CHP with 98.8 marks. EfW is the second highest scoring option with 97 marks. Only 1.8 marks separate the top two scoring options. The third highest scoring option is MBT producing an RDF which is treated in an EfW. There is over a 21 point difference between the MBT option and the EfW option. Only 5 marks separate the bottom three options.

It should be noted that if the overall weighting between Finance and Technology (40/60) was changed to 50/50 or even 60/40, the number one solution would not change.

Given the weightings and scores applied to the evaluation criteria, the highest scoring option for BCC is EfW with CHP. As detailed previously, BCC should seek to exploit the additional benefits of EfW CHP provide, but should be aware of the possible off-take risks and practical deliverability issues associated with this option.

Draft Joint Working Agreement (Version 6) 17/9/2008

Bedford Borough Council
and
Bedfordshire County Council
and
Central Bedfordshire Council
and
Luton Borough Council

Joint Working Agreement
For the Procurement and Management of
Residual Waste Treatment

THIS AGREEMENT is made the

day of

2008

BETWEEN

BEDFORD BOROUGH COUNCIL of

AND

BEDFORDSHIRE COUNTY COUNCIL of

AND

CENTRAL BEDFORDSHIRE COUNCIL of

AND

LUTON BOROUGH COUNCIL

WHEREAS

- 1 Bedfordshire County Council and Luton Borough Council are each Waste Disposal Authorities under Section 30(2) of the Environmental Protection Act 1990 and is under a duty to dispose of controlled waste within the areas of the County of Bedfordshire and the Borough of Luton respectively under Section 51 of the Environmental Protection Act 1990
- 2 The Bedfordshire (Structural Changes) Order 2008 provides for a re-structuring of local government in Bedfordshire
- 3 Under that Order, the function of Waste Disposal Authority within the area of Bedford Borough will be transferred to Bedford Borough Council as at 1st April 2009, and the Bedford Borough Council has been given a new “main transitional function” of preparing for and facilitating the economic, effective, efficient and timely transfer of Bedfordshire County Council’s functions, property, rights and liabilities so far as they relate to Bedford and the inhabitants of Bedford from Bedfordshire County Council to Bedford Borough Council., which function is exercisable by Bedford Borough Council during the transitional period which runs up to 1st April 2009.
- 4 Under that Order, the Central Bedfordshire Council has been established as a District Council, to operate as a shadow authority until 1st April 2009 and thereafter to be the waste disposal authority for the area of Central Bedfordshire, and has been given the duty by Clause 20 of that Order to prepare for the assumption of local government functions and powers on 1st April 2009, and to liaise with the County Council for the purpose of securing continuity of the delivery of public services on and after 1st April 2009, and for that purpose has been given all the powers of a non-Metropolitan County Council and a non-Metropolitan District Council.
5. The powers of waste disposal are “executive functions” under Section 13 of the Local Government Act 2000
- 6 For the purpose of the discharge of its functions, each of the above-mentioned authorities has the power under Section 101 and 102 of the Local Government Act 1972, as applied to executive functions by the Local Authorities (Arrangements for the Discharge of Functions) Regulations 2000 made under Section of the Local Government Act 2000, to establish an advisory Project Board of the Executives of each authority, to make their staff available to each of the other Authorities under Section 113 of the Local Government Act 1972 and to

delegate their respective waste disposal functions to officers of their own and seconded staff of the other authorities, and to enter a contract under Section 1 of the Local Government (Contracts) Act 1997 for securing the discharge of their functions.

7. The four Authorities have resolved to work together to seek a long term solution to their current and future duties for the treatment of residual controlled waste by procuring a Contractor who will construct, provide and operate facilities for the treatment and disposal of such residual waste and for managing the resulting Contract on behalf of the Authorities.
8. The process of procurement of such a long term contract will go beyond 1st April 2009. Accordingly, it is expedient for the process to be commenced under the existing powers of the Bedfordshire County Council, but the final contract will have to be awarded and managed jointly by Bedford Borough Council, Central Bedfordshire Council and Luton Borough Council. It is therefore expedient for Bedford Borough Council and Central Bedfordshire Council to be involved in the process of procurement prior to 1st April 2009, but for the two authorities now to enter into a binding agreement with Luton Borough Council and Bedfordshire County Council under which they determine the arrangements for completing the procurement and undertaking the management of that long-term contract on and after 1st April 2009.

IT IS HEREBY agreed as follows –

1 Interpretation

- 1.1 In this Agreement unless the context otherwise requires the following expressions have the following meanings –

“The Agreement” means this Agreement comprising the terms and conditions together with the Schedules attached hereto.

References to **“the Authorities”** shall be taken for the period from the date of this Agreement until 1st April 2009 as comprising references to Bedfordshire County Council, Bedford Borough Council, Central Bedfordshire Council and Luton Borough Council and for the period commencing on 1st April 2009 and extending thereafter as comprising references to Bedford Borough Council, Central Bedfordshire Council and Luton Borough Council, and “an authority” shall mean one of the Authorities.

“The Authority Lead Officer” shall mean the officer of each Authority appointed by that Authority in accordance with Clause 7 of this Agreement to ensure that that Authority provide sufficient support to secure the effective performance of the Project.

“The Bidders” means those organisations who have expressed an interest in, and pre-qualified for, carrying out the Contract and as may be reduced through the competitive dialogue process.

“The Commencement Date” means the date on which this Agreement is executed by the Authorities.

“The Constitution” means the constitution of the Project Board as set out in Schedule C to this Agreement.

“The Contract” means the contract for the provision of facilities for, and the treatment or the treatment and disposal of residual waste on behalf of the Authorities which is procured under this Agreement.

“The Contractor” means the contractor appointed by the Authorities to the Contract in accordance with this Agreement.

“The Direct Contract” means a contract between the Contractor, the Authorities and a funder for the provision of funding for the Project from the funder to the Contractor

“The Lead Authority” means the Authority which, in accordance with this Agreement, the Project Board has appointed to carry out a particular function on behalf of the Project Board.

“Loss” includes any loss and liability directly or indirectly suffered by the Authority, including any loss of anticipated income, together with any damage, expense, liability or costs reasonably incurred in contesting any claim to liability and quantifying such Loss and liability.

“The Officers” means the officers of the Authorities who are engaged upon the Project.

“The Preferred Bidder” means the Bidder selected by the Project Board as preferred bidder.

“The Procurement” means the procurement of the Contract, and “the Procurement Phase” means that phase of the Project which relates to the procurement of the Contract.

“The Procurement Cost Sharing Scheme” mean the principles and arrangements set out in Schedule A for determining the allocation of costs of the procurement of the Project as between the three Authorities.

“The Project” means the shared object of the Authorities to secure the procurement of a Contractor who will construct, provide and operate facilities for the treatment (and, should the Authorities agree, the disposal) of residual waste for the Authorities and such other waste as the Authorities may determine and to manage the Contract to secure the continuing improvement in the effective discharge of the Authorities’ functions in respect of the treatment and disposal of residual waste.

“The Project Board” means the officer Project Board established by the Authorities in accordance with the Constitution as set out in Schedule C.

“The Project Director” means an officer appointed by the Lead Authority on the instruction of the Authority Lead Officers to direct the Project and to lead the Authorities’ negotiating team in any negotiations with tenderers.

“The Project Manager” means an officer or consultant appointed by the Lead Authority on the instruction of the Authority Lead Officers to manage the Project on behalf of the Authorities

“The Reserved Matters” means the decisions specified in Paragraph 8.3 of Schedule C which are outside the powers delegated by each of the Authorities to the Project Board.

“Senior Responsible Owner” means the Officer appointed by the Authorities under Clause 7.6 to take on a role in respect of the Project in line with the role of

Senior Responsible Owner in relevant Guidance issued by the Department for Environment, Food and Rural Affairs and appropriate project management models.

“The Service Cost Allocation Scheme” mean the principles and arrangements set out in Schedule B for determining the allocation of costs arising in managing the Contract and arising under the Contract as between the three Authorities.

“The Service Phase” means the phase of the Project commencing at the completion of the Procurement Phase and related to the management of the Contract.

“Unitary Charge” means the charge made by the contractor to the Authorities in respect of the availability of the Facility and the provision of the Service

“Working Day” in respect to an Authority, means any day other than weekends and Bank Holidays.

- 1.2 Reference to any statute or statutory provision includes a reference to that statute or statutory provision as from time to time amended extended or re-enacted.
- 1.3 Words importing the singular include the plural words importing any gender include every gender, the words importing persons include bodies corporate and unincorporated; and (in each case) vice versa.
- 1.4 Reference to Clauses and Schedules are references to clauses and schedules of this Agreement and any reference to a sub provision is unless otherwise stated a reference to a sub provision of the provision in which the reference appears.
- 1.5 The Clause and paragraph headings and titles appearing in this Agreement are for reference only and shall not affect its construction or interpretation.

2 Term

This Agreement shall come into effect on the Commencement Date and shall continue in force in respect of the Authorities until one year after the earlier of –

- 2.1 the expiry or termination of the Contract or
- 2.2 one year after the withdrawal of any Party in accordance with this Agreement, unless the remaining Authorities have by that time agreed that the Agreement shall continue in force, but only in respect of the remaining Authorities.

3 General Principles

- 3.1 This Agreement has been entered into by the Authorities to establish and effect provisions for performance of the Project and to clarify the Authorities' responsibilities in respect thereof and to each other.
- 3.2 The Authorities will work together in good faith and in an open, co-operative and collaborative manner for the duration of this Agreement. The Authorities' members and officers will work together in the spirit of mutual trust in order to endeavour to procure the successful implementation of the Project and will respond in a timely manner to all relevant requests from another Authority/ies.

- 3.3 Each of the Authorities hereby represents to the others that it has obtained all necessary consents sufficient to ensure the delegation of functions provided for by this Agreement for the purposes of the Project
- 3.4 The Authorities shall use all reasonable endeavours to procure that their respective members and officers who are involved in the Project shall at all times act in the best interests of the Project. The Authorities expressly acknowledge that their members and officers involved in carrying out activities under this Agreement or otherwise in connection with the Project will have regard to the benefits to the Authorities and accordingly may be required to act in conflict with their duty to their own Authority, and the Authorities hereby authorise them to act in such a manner.
- 3.5 The Authorities commit to share data and knowledge relevant to the Project where appropriate.
- 3.6 Whilst this Agreement details the arrangements between the Authorities for the Procurement Phase, the Authorities agree to work together in good faith to agree such amendments and amplification of this Agreement as may be necessary to enable the Authorities to work together throughout the Service Phase of the Project.

4 Status of this Agreement

The Authorities agree that this Agreement shall take the form of a legally binding relationship and mutual commitments between them created by this Agreement shall from the date hereof be construed accordingly.

5 The Project Board

- 5.1 The Authorities agree to constitute the Project Board as an executive officer team on the terms set out in the Constitution and hereby delegate to the Project Board the powers set out in the Constitution.
- 5.2 The Project Board shall not by virtue of this Agreement have any power to determine any Reserved Matter, but shall make common recommendations to each of the Authorities where a Reserved Matter comes to be considered by that Authority.

6 Overview and Scrutiny

- 6.1 Each Authority shall use its reasonable endeavours to secure the co-ordination of the overview and scrutiny functions of that authority in respect of the functions and actions of the Project Board with the discharge of similar overview and scrutiny functions in each of the other Authorities.
- 6.2 Where an Overview and Scrutiny Committee of any Authority considers calling in or conducting a review of a decision by or on behalf of the Project Board, consideration shall be given to inviting the appropriate Overview and Scrutiny Committee of the other Authorities to share in such call-in or review.

7 Authority Lead Officers

- 7.1 Each of the Authorities shall appoint an officer from its to be its Authority Lead Officer
- 7.2 An Authority shall, unless there are over-riding reasons to the contrary, appoint as its Authority Lead Officer the officer at Strategic Director level whose responsibilities include the waste functions within that Authority
- 7.3 The Authority Lead Officer may, where appropriate, arrange for all or any of his/her responsibilities to be undertaken by the officer of the Authority at Head of Service Level who is responsible within that Authority for waste functions
- 7.4 Each Authority Lead Officer shall be responsible for ensuring that his/her Authority provides the support necessary to secure the effective achievement of the Project. In this context, "support" shall include the involvement and time of capable officers, the provision of information and the prompt consideration of matters referred to his/her Authority for determination
- 7.5 Each Authority Lead Officer shall be responsible for ensuring that the Executive of that Authority is kept informed of progress of the Project and shall be accountable for the Project to the appropriate Scrutiny Committee of that Authority.
- 7.6 The Authorities shall appoint an Officer to take the role of "Senior Responsible Owner".

8 Authority to Enter Contracts, etc.

- 8.1 The Contract and the Direct Contract shall only be entered into by the Authorities on the instruction of all of the Authorities, or of the Project Board where that instruction is within the powers delegated to the Project Board
- 8.2 The Project Board, and only the Project Board, shall have the power to authorise entry into, variation, extension or termination of contracts (including consultancy contracts entered into by Bedfordshire County Council) other than the Contract and the Direct Contract on behalf of the Authorities where such contracts would be incidental or conducive to or calculated to facilitate the performance of the Project
- 8.3 Where any person enters any contract, or communicates with any prospective Bidder, Bidder or the Contractor, on behalf of the Project he/she shall make it clear in any such contract or communication that he/she does so on behalf of the Authorities.

9 Liabilities, Immunity and Indemnities

- 9.1 Member and Officer Liability
 - 9.1.1 When working on the Project, Officers shall be deemed to be working on behalf of their employing Authority, and made available and working on behalf of the other Authority/ies under Section 113 of the Local Government Act 1972.
 - 9.1.2 In consequence of the above, the Officers shall be treated as falling within the statutory immunity provided by Section 265 of the Public

Health Act 1875, as amended, in respect of their actions or omissions in respect of the Project.

9.2 Losses to each Authority

- 9.2.1 Where an Officer is working on the Project, he/she shall be considered to be working on behalf of all the Authorities, and accordingly, in the event that any Loss results to an Authority as the result of any action or omission by any Officer, whilst working on the Project on behalf of the Authorities, that Officer's employing Authority shall not have liability to the other Authorities in respect of that Loss..

10 Lead Authority

- 10.1 The Lead Authority for any function shall act on behalf of the Authorities in respect of that function.
- 10.2 The Lead Authority shall act under the direction of and upon the instruction of the Project Board.
- 10.3 Where the Lead Authority for any function incurs any costs or liability in discharging this function, the officer of the Lead Authority discharging that function shall, as far as possible secure the agreement of the Project Board to the costs or liability in advance of incurring it, but in any case shall inform the Project Board promptly of that cost or liability and such cost or liability shall be apportioned between the Authorities pursuant to Clause 12
- 10.4 It is recorded that the intention of the Authorities is that Bedfordshire County Council shall be the Lead Authority up to 31st March 2009; that Central Bedfordshire Council shall be the Lead Authority for the remainder of the Procurement Phase, and that the Authority within whose area the main waste treatment facilities which are to be provided under the Contract will be located.
- 10.5 Clause 10.5 is save to the extent that any Lead Authority functions should, for reasons of governance and probity, be provided by another Authority.

11 Intellectual Property

- 11.1 All intellectual property in any material created by or on behalf of the Project shall be owned jointly by the Authorities and shall be available equally to each Authority.
- 11.2 Each Authority warrants that any intellectual property created by its officers for the purposes of the Project will not infringe any third party's intellectual property rights.
- 11.3 Each Authority shall indemnify the other Authority/ies against any Loss arising out of any dispute or proceedings brought by a third party alleging infringement of its intellectual property rights by use of the first Authority's intellectual property for the purpose of the Project.
- 11.4 Where existing intellectual property of an Authority has been used for the purpose of the Project, that Authority agrees that, if the Project does not proceed, it will if requested licence the other Authority/ies on Commercial Terms to use that intellectual property for the purpose of its waste disposal functions.

12 Cost Allocation

- 12.1 The Authorities shall share the income arising from and the costs reasonably incurred by any Authority in respect of the Procurement Phase in accordance with the Procurement Costs Allocation Scheme set out in Schedule A.
- 12.2 For clarity, it is recorded that the acquisition of land as a potential site for the facilities to be provided by the Contractor, works for the preparation of that land for development and application for any consents (including planning permission) necessary for the use of that land for the Project do not constitute Procurement Costs, and that any such acquisition, etc., would need to be the subject of a separate agreement between the Authorities.
- 12.3 The Authorities shall share the Unitary Charge and any costs reasonably incurred by any Authority in respect of the Service Phase of the Project in accordance with a Service Cost Allocation Scheme to be agreed by the Authorities giving effect to the Principles set out in Schedule B.

13 Remediation and Dispute Resolution

- 13.1 Where the Project Board fail to agree on any matter, any Authority Lead Officer may require the matter to be “escalated”, in which case the Senior Responsible Owner shall prepare a report on the matter and shall arrange for the matter to be considered at a meeting of the Chief Executives of the Authorities within 14 days of such failure to agree, and any decision which is agreed by each of the Chief Executives within that time shall be deemed to be a decision of the Project Board.
- 13.2 Where an Authority is of the opinion that another Authority/ies is failing to comply with the provisions of this Agreement in respect of any matter, including the provisions of Clause 3.2 to work together in good faith and in an open, co-operative and collaborative manner, the Authorities shall use their best endeavours to resolve any such matter amicably without resort to the formal remediation and dispute resolution procedures set out below.
- 13.3 Notwithstanding Clause 13.2, above, at any time the Chief Executive of an Authority (“the first Authority”) may serve on the Chief Executive of an other Authority/ies (“the second Authority”) a “Default Notice”, alleging that that Authority has failed to comply with its obligations under this Agreement, setting out any suggested remedial action and any damage which the first Authority has or is likely to suffer as a result of the alleged failure.
- 13.4 An Authority in receipt of a Default Notice shall have 14 days within which to serve on the Chief Executive of the first Authority who served the Default Notice a “Counternotice”, setting out in respect of every matter contained in the Default Notice proposals for the remediation of the alleged failure and making good any Loss which the first Authority may have suffered or may suffer as a result of the failure or the reasons why that alleged failure is disputed.
- 13.5 Within 14 days of receipt of a Counter notice, the Chief Executive of the first Authority shall send to the Chief Executive of the second Authority a “Notice of Acceptance” of any proposals contained in the Counternotice in so far as those proposals are accepted by the first Authority, and may send a “Notice of

Dispute” in so far as no proposal satisfactory to the first Authority is contained in the Counternotice, setting out in respect of each proposal which is not accepted by the first Authority why it is considered to be unacceptable.

- 13.6 Where any proposal in a Counternotice is accepted in a Notice of Acceptance, the second Authority shall implement that proposal.
- 13.7 Where any authority serves any notice upon another Authority/ies under this procedure, they shall also copy such notice to any other Authority/ies.
- 13.8 Where any matter is contained in a Notice of Dispute, it shall fall to be dealt with under the Disputes Procedure set out in Clause 18.

14 Withdrawal and Indemnity for Consequences of Withdrawal

- 14.1 Each Authority acknowledges that, if it withdraws from this Agreement or takes a decision on its own which is within the powers delegated to the Project Board during the Procurement Phase of the Project, that withdrawal or decision is likely to cause additional cost to the other Authority/ies including, but not limited to, the cost of undertaking a separate procurement and the costs attendant upon the delayed availability of the facilities which would enable it to secure the effective treatment and disposal of residual waste, thereby reducing its liability for Landfill Tax and minimising its need to purchase additional LATS (Landfill Allowance Trading Scheme) allowances and the costs of disposing of waste by other means.
- 14.2 Each Authority acknowledges that, if it withdraws from this Agreement or takes a decision on its own which is within the powers delegated to the Project Board during the Service Phase of the Project, that withdrawal or decision is likely to cause additional cost to the other Authority/ies including, but not limited to, any claims which the Contractor may have against the Authorities as a result of the failure on the part of the Authorities to comply with the Contract, the cost to the other Authority/ies of procuring a new contract with a third party or of negotiating a new or renegotiated contract with the Contractor, higher contract costs associated with the smaller scale of the replacement contract, the Loss to the other Authority/ies of the use of the Contractor’s facilities during this process, with the result that the other Authority/ies may incur additional Landfill Tax costs and need to purchase additional LATS (Landfill Allowance Trading Scheme) allowances and any third party claims against the Authorities.
- 14.3 Any Authority may withdraw from this Agreement by giving notice in writing of its intention to withdraw to the other Authority/ies. Such notice shall be no less than three month’s notice in respect of any withdrawal to take place prior to entry into the Contract, and no less than six months’ notice in respect of any withdrawal to take place upon or after entry into the Contract.
- 14.4 In the event that one Authority declines to approve any of the Reserved Matters, or if the final tenders for the Contract materially exceed the financial parameters set out in the Outline Business Case, as amended with the approval of the Authorities, on selection of Preferred Bidder or otherwise, any of the Authorities shall be entitled to withdraw from this Agreement without liability.
- 14.5 Subject to Clause 14.4, each Authority agrees that in the event that it gives notice of withdrawal to the other Authority/ies, or takes its own decision in respect of matter which is within the powers delegated to the Project Board, it

will use its reasonable endeavours to minimise, and will indemnify the other Authority/ies against, any Loss which that other Authority/ies may suffer as a result of its withdrawal from this Agreement or independent decision.

14.6 Where any Authority withdraws from this Agreement –

- 14.6.1 The obligations of each Authority in respect of the furtherance of the Project shall cease on such withdrawal;
- 14.6.2 The Agreement shall continue in force as respect any financial liabilities which have or may arise out of the performance of this Agreement and the Contract;
- 14.6.3 The Agreement shall remain in force in respect of any liability of any Authority to indemnify the other Authority/ies under this Clause of the Agreement;
- 14.6.4 Clause 14 of this Agreement shall continue without limit of time and shall survive the termination of this Agreement;
- 14.6.5 The Authorities may agree that all or any parts of this Agreement shall continue in force for such period thereafter as may be agreed in order to secure continuity of service and to minimise the Loss which any Authority may suffer as a result of an Authority withdrawing from this Agreement; and
- 14.6.6 The Disputes Procedure set out in Clause 18 of this Agreement shall remain in force in respect of any of the matters arising from the performance of or withdrawal of any Authority under this Agreement.

15 Confidential Information

- 15.1 Subject to Clause 16, the Authorities shall at all times use their reasonable endeavours to keep confidential and ensure that such information is used only for the purpose of the Project (and to procure that their respective employees agents consultants contractors and sub-contractors shall keep confidential and shall use such information only for the purpose of the Project) all Confidential Information concerning the Project or the business and affairs of the other Authority/ies which may now or at any time hereafter be in its possession and shall not disclose it except with the consent of the other Authority/ies, such consent not to be unreasonably withheld.
- 15.2 For the purpose of this Agreement “Confidential Information” means any information imparted to any Authority or their employees agents consultants contractors or sub-contractors (“the Receiving Party”) which was imparted to the Receiving Party on the basis that it is to be kept confidential or would by its nature normally be regarded as being confidential or to the knowledge of the Receiving Party was obtained by the other Authority/ies on the basis that it was to be kept confidential or is of commercial value in relation to the Project but shall not include any information which is for the time being in the public domain otherwise than by reason of its wrongful disclosure by the Receiving Party.
- 15.3 This Clause 19 shall not prevent the disclosure of any Confidential Information relating to the Project which is reasonably disclosed for the furtherance of the Project or the promotion of the Project provided that the Authority or person

disclosing the information takes all steps that are commercially practicable to preserve the confidentiality of the information and shall not prevent the disclosure of any Confidential Information where required by law.

16 Compliance with Laws

- 16.1 The Authorities shall at all times comply with all laws including but not limited to the Data Protection Act 1998 and will, where appropriate maintain a valid and up to date registration or notification under such laws.
- 16.2 Each Authority shall indemnify and keep indemnified the other Authority/ies against all Losses, claims, damages, liabilities, costs and expense (including reasonable legal costs) incurred by the other Authority/ies in respect of any breach of this Clause by the Authority and/or any act or omission of any employee, agent, consultant, contractor or sub-contractor.
- 16.3 Each Authority shall grant to the other Authority/ies the right of reasonable access to all records of Personal Data relevant to the Project, as defined in the Data Protection Act 1998, and shall provide reasonable assistance at all times during the currency of this Agreement to ensure the quality and security of data collected.

17 Freedom of Information Act 2000 and Environmental Information Regulations 2004

- 17.1 Each Authority acknowledges that the other Authority/ies subject to the requirements of the Freedom of Information Act 2000 ("FoIA") and the Environmental Information Regulations 2004 ("EIR") and each Authority shall where reasonable assist and co-operate with the other Authority/ies (at their own expense) to enable the other Authority/ies to comply with these information disclosure obligations.
- 17.2 Where an Authority receives a request for information under either the Freedom of information Act 2000 or the Environmental Information Regulations 2004 in relation to information which it is holding on behalf of any of the other Authority/ies in relation to the Project, it shall (and shall procure that its sub-contractors shall):
 - 17.2.1 Transfer the request for information to the other Authority/ies as soon as practicable after receipt and in any event within two Working Days of receiving a request for information;
 - 17.2.2 Provide the other Authority/ies with a copy of all information in its possession or power in the form that the Authority requires within ten Working Days (or such longer period as the Authority may specify) of the Authority requesting that information; and
 - 17.2.3 Provide all necessary assistance as reasonably requested by the other Authority/ies to enable the Authority to respond to a request for information within the time for compliance set out in the FOIA or the EIR.
- 17.3 Where an Authority receives a request for information under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004 which relates to the Agreement or the Project, it shall inform the other Authority/ies of

the request for information as soon as practicable after receipt and in any event at least two Working Days before disclosure and shall use all reasonable endeavours to consult with the other Authority/ies prior to disclosure and shall consider all representations made by the other Authority/ies in relation to the decision whether or not to disclose the information requested.

17.4 The Authorities shall be responsible for determining in their absolute discretion whether any information requested under the Freedom of Information Act 2004 or the Environmental Information Regulations 2004:

17.4.1 Is exempt from disclosure under the FOIA or the EIR;

17.4.2 Is to be disclosed in response to a request for information.

17.5 Each Authority acknowledges that the other Authority/ies may be obliged under the FOIA or the EIR to disclose information:

17.5.1 Without consulting with the other Authority/ies where it has not been practicable to achieve such consultation; or

17.5.2 Following consultation with the other Authority/ies and having taken their views into account.

18 Dispute Resolution

18.1 Upon service of a Notice of Dispute the Authorities will attempt to settle the issue in dispute ("Dispute") by mediation in accordance with the Centre for Dispute Resolution ("CEDR") Model Mediation Procedure or any other model mediation procedure as agreed by the Authorities. To initiate a mediation, any Authority may give notice in writing (a "Mediation Notice") to the other requesting mediation of the Dispute and shall send a copy thereof to CEDR or an equivalent mediation organisation as agreed by the Authorities, asking them to nominate a mediator. The mediation shall commence within twenty (20) Working Days of the Mediation Notice being served. If there is any point in respect of the conduct of the mediation upon which the Authorities are unable to agree within ten (10) Working Days from the date of the Mediation Notice, CEDR will, at the request of any Authority, decide that point for the Authorities, having consulted with them. The Authorities will co-operate with any person appointed as mediator providing him with such information and other assistance as he shall require and will pay his costs as he shall determine or, in the absence of such determination, such costs will be shared equally.

18.2 No Authority may commence any court proceedings in relation to any Dispute until they have attempted to settle it by mediation under Clause 18.1 and/or such mediation has terminated. The Authorities will take no further steps in the court proceedings until any such mediation commenced under Clause 18.1 has terminated. Nothing in this Clause 18 shall prevent an Authority from having recourse to a court of competent jurisdiction for the sole purpose of seeking a preliminary injunction or such other provisional judicial relief as it considers necessary to avoid irreparable damage.

18.3 If the Dispute has not been resolved by the mediation procedure detailed in Clause 18.1 within one (1) month of the initiation of such procedure, the Dispute shall be referred to the courts for resolution.

19 Severance

- 19.1 If any condition, provision or Clause of this Agreement shall become or shall be declared by any court of competent jurisdiction to be void, invalid, illegal or unenforceable in any way, such invalidity or unenforceability shall in no way impair or affect any other provision all of which shall remain in full force and effect.

20 Entire Agreement

- 20.1 This Agreement constitutes the entire agreement and understanding of the Authorities and supersedes any previous agreement between the Authorities relating to the subject matter of this Agreement.

21 Waiver

- 21.1 The failure to exercise or delay in exercising a right or remedy provided by this Agreement or by law does not constitute a waiver of the right or remedy or a waiver of other rights or remedies.
- 21.2 A waiver of a breach of any of the terms of this Agreement or of a default under this Agreement does not constitute a waiver of any other breach or default and shall not affect the other terms of this Agreement.
- 21.3 A waiver of a breach of any of the terms of this Agreement or of a default under this Agreement will not prevent an Authority from subsequently requiring compliance with the waived obligation.

22 General

- 22.1 Nothing contained or implied herein shall prejudice or affect the Authorities' rights and powers duties and obligations in the exercise of their functions as local authorities and/or in any other capacity and all rights powers discretions duties and obligations of the Authorities under all laws may at all times be fully and effectually exercised as if the Authorities were not party to this Agreement and as if this Agreement had not been made.
- 22.2 The Authorities shall only represent themselves as being an agent partner or employee of the other Authority/ies to the extent specified by this Agreement and shall not hold themselves out as such nor as having any power or authority to incur any obligation of any nature express or implied on behalf of the other Authority/ies except to the extent specified in this Agreement.
- 22.3 This Agreement shall be governed by and construed in accordance with English Law and shall be subject to the jurisdiction of the Courts of England and Wales.
- 22.4 This Agreement is personal to the Authorities and no authority shall assign transfer or purport to assign or transfer to any other persons any of its rights or sub-contract any of its obligations under this Agreement.
- 22.5 No person other than the Authorities shall be entitled to enforce any of its terms under the Contracts (Rights of Third Parties) Act 1999.

22.6 Any notice required or permitted to be given by an Authority to the other Authority/ies under this Agreement shall be in writing and addressed to the Chief Executive of the other Authority/ies at its principal office.

IN WITNESS hereof the parties hereto have executed this Agreement as a Deed the day and year first written

The Common Seal of **Bedfordshire County Council** was affixed hereto in the presence of the undersigned authorised signatory for and on behalf of **Bedfordshire County Council**

.....Authorised Signatory

The Common Seal of **Bedford Borough Council** was affixed hereto in the presence of the undersigned authorised signatory for and on behalf of **Bedford Borough Council**

.....Authorised Signatory

The Common Seal of **Central Bedfordshire Council** was affixed hereto in the presence of the undersigned authorised signatory for and on behalf of **Central Bedfordshire Council**

.....Authorised Signatory

The Common Seal of **Luton Borough Council** was affixed hereto in the presence of the undersigned authorised signatory for and on behalf of **Luton Borough Council**

.....Authorised Signatory

Schedule A

Procurement Cost Allocation

- 1 The costs of undertaking the Procurement Phase shall be borne by Bedfordshire County Council (two thirds) and Luton Borough Council (one third) up to 1st April 2009. Thereafter, the costs shall be borne equally between the remaining three Authorities.
- 2 For this purpose the costs of undertaking the Procurement Phase” (“Procurement Costs”) shall comprise:
 - 2.1 The salary and on-costs reasonably incurred by the Lead Authority in employing any officers specified for this purpose by the Project Board.
 - 2.2 The salary and on-costs reasonably incurred by the Authorities in employing and supporting any officers specified for this purpose by the Project Board calculated pro rata in respect of the time which they actually spend working on the Project on behalf of the Project Board.
 - 2.3 “On costs” shall include, but not be limited to, National Insurance, employers’ pension contributions, costs of providing working tools, telephones, computers and ICT services and facilities, costs of providing office accommodation, and travel and subsistence costs.
 - 2.4 Costs incurred for the purposes of the Project on the instruction of the Project Board including, but not limited to –
 - 2.4.1 consultant’s fees;
 - 2.4.2 advertising costs; and
 - 2.4.3 costs of holding meetings of the Project Board;
 - 2.5 Redundancy costs reasonably incurred by any Authority in respect of Officers who are employed principally for the purpose of the Project where those costs arise as a result of the transition to the Contract and the implementation of new arrangements for managing the Contract, and
 - 2.6 Such other costs as may be agreed by the Project Board for this purpose and which do not come within Paragraph 3 (below).
- 3 For this purpose, the Procurement Costs shall not include:
 - 3.1 The salary and on-costs incurred by the Authorities in employing any officer in so far as that officer actually spend time working on the Project on behalf of their employing Authority.
 - 3.2 The salary and on-costs incurred by any officer of any Authority when not working on the Project.
 - 3.3 Costs incurred by the Authorities in preparing the schedule of the Authority’s property and securing valuations thereof for the purpose of the Project, or in making

such property or information in respect of such property available to prospective Bidders, Bidders or the Contractor.

3.4 Costs incurred by any Authority in undertaking any remedial action arising under Clause 14 of the Agreement.

4 Where any Authority receives any payment from the Contractor or a third party in consequence of the procurement process (such as reimbursement of any of the Procurement Costs by the Contractor, that Authority shall arrange for such income to be shared between the Authorities in exactly the same manner as the Procurement Costs.

5 Each Authority shall be responsible for securing that any Procurement Costs incurred by that Authority are notified to the Project Board.

6 The Project Board shall arrange for –

6.1 Receipt of all notifications of claimed Procurement Costs and confirming that such Costs have been properly incurred for the purpose of this Schedule.

6.2 Maintaining a record of all such accepted claims for Procurement Costs and calculating on a quarterly basis any payment required from one Authority to the other to achieve the principle set out in Paragraph 1 above.

6.3 Providing the Project Board and each Authority with a monthly statement of Procurement Cost expenditure against the Budget approved for the Procurement Phase of the Project by the Project Board, including a statement of the payment (“Equalisation Payment”) required to be made by any Authority to achieve the Principle set out in Paragraph 1 above.

7 Within 30 days of receipt of a quarterly statement from the Project Board to the Project Board, each Authority shall make any Equalisation Payment to the other Authority/ies as set out in that statement.

Schedule B

Service Cost Allocation

The Authorities will use all reasonable endeavours to agree, prior to entry into the Contract, a supplementary agreement applying the following Principles in the allocation between the Authorities of the costs arising from the Contract on behalf of the Authorities (“the Contract Management Costs”), unless the Authorities agree otherwise –

- 1 Service Management Costs
 - 1.1 That such costs for any period shall be met by each Authority in proportion to that Authority’s tonnage of residual domestic waste delivered to the Contractor as a proportion of the aggregate tonnage of residual domestic waste delivered to the Contractor by the Authorities over the same period.
 - 1.2 For this purpose, the Contract Management Costs shall comprise –
 - 1.2.1 the salary and on-costs reasonably incurred by the Lead Authority in employing and supporting any officers specified for this purpose by the Project Board;
 - 1.2.2 the salary and on-costs reasonably incurred by the Authorities in employing and supporting any officers specified for this purpose by the Project Board calculated pro rata in respect of the time which they actually spend working on the Project on behalf of the Project Board;
 - 1.2.3 costs incurred for the purposes of the Project on the instruction of the Project Board, including, but not limited to –
 - 1.2.3.1 consultant’s fees
 - 1.2.3.2 advertising costs
 - 1.2.3.3 costs of holding meetings of the Project Board
 - 1.2.3.4 members’ allowances in respect of attendance at meetings of the Project Board by members of the Project Board
 - 1.3 For this purpose, the Contract Management Costs shall not include:
 - 1.3.1 The salary and on-costs incurred by the Authorities in employing any officers specified for this purpose by the Project Board in so far as they actually spend time working on the Project on behalf of their employing Authority.
 - 1.3.2 The salary and on-costs incurred by any officer of any Authority when not working on the Project.
 - 1.3.3 Costs incurred by the Authorities in making the Authority’s property or information in respect of such property available to the Contractor.

- 1.3.4 Costs incurred by any Authority in undertaking any remedial action arising under Clause 14 of the Agreement.

2 Contract Costs

- 2.1 The exact formula for cost allocation between the Authorities of the charges from the Contractor to the Authorities cannot be determined until the terms of the Contract are ascertained, at which time the Project Board will recommend to each Authority for approval an amendment to this Schedule which applies the following principles to the terms of the Contract.
- 2.2 The principles which the Authorities will seek to apply to the allocation between the Authorities of the charges by the Contractor to the Authorities under the Contract (“the Contract Costs”) are as follows –
 - 2.2.1 that each Authority shall be solely responsible for the cost of delivering or securing the delivery of waste arising within its own area to the facilities provided by the Contractor under the Contract.
 - 2.2.2 that each Authority shall meet that proportion of these costs which is proportional in any period to the proportion of the total tonnage of residual domestic waste delivered to the Contractor by or on behalf of the three Authorities which is delivered by or on behalf of that Authority in the same period (“the tonnage proportion”);
 - 2.2.3 that each Authority shall be responsible for any extra charges which arise from the fact that its own delivery of residual domestic waste to the Contractor in any period exceeds that proportion of the specified maximum tonnage which equates to the population of that Authority’s area as a proportion of the population of the Authorities’ areas at the commencement of the same period (“the population proportion”), and
 - 2.2.4 that each Authority shall have an obligation to deliver to the Contractor that proportion of the specified minimum tonnage which equates to the population of that Authority’s area as a proportion of the population of the Authorities’ areas at the commencement of the same period.
 - 2.2.5 Where the contractor makes an extra charge because a delivery of waste for or on behalf of one Authority is not in accordance with the standard required by the Contract that Authority shall be responsible for any extra charge arising as a consequence of that non-conformity.
- 2.3 For the purpose of illustrating how the Authorities understand that the principle will be applied to the actual terms of the Contract, it is assumed –
 - 2.3.1 that the Contract will be entered by the Authorities and that each Authority shall be jointly and severally liable for the entire Service Costs arising under the Contract;
 - 2.3.2 that the Contract Management Costs will exclude the costs set out in Paragraph 3, below;

2.3.3 that the Contract will specify a charge to the Authorities per tonne of residual waste delivered to the Contractor, and that this charge will be constant where the aggregate tonnage of residual waste delivered by the Authorities in a defined period is no more than a specified maximum tonnage and no less than a specified minimum tonnage (“the standard charge”), but that a higher charge per tonne will be specified in respect of any residual waste delivered in excess of the specified maximum tonnage in any period (“the excess tonnage charge”), and that a higher (but not necessarily the same) charge per tonne for all residual waste delivered and/or a minimum total charge irrespective of tonnage will be specified where the aggregate tonnage falls below the specified minimum tonnage in any period.

2.4 On the basis of the assumptions set out in Paragraph 2.3 –

2.4.1 Where the aggregate tonnage delivered to the Contractor in a period falls between the specified maximum and the specified minimum tonnages, each Authority shall meet the tonnage proportion of the Contract Costs arising at the standard charge rate in respect of the actual tonnage delivered to the Contractor in that period.

2.4.2 Where the aggregate tonnage delivered to the Contractor in a period exceeds the specified maximum tonnage –

2.4.2.1 Where one Authority has delivered no more than that Authority’s population proportion of the specified maximum tonnage in that period, that Authority shall be liable only for the standard charge on the tonnage which that Authority has actually delivered to the Contractor in the period and the other Authority/ies shall be liable for all other contract costs including all charges arising at the excess tonnage charge rate.

2.4.2.2 Where each Authority has delivered more than that Authority’s population proportion of the specified maximum tonnage in that period, each Authority shall be liable for the standard charge in respect of that tonnage which it has delivered to the Contractor and which does not exceed the Authority’s population proportion of the specified maximum tonnage, and shall be liable for the excess tonnage charge in respect of that tonnage which the Authority has delivered to the Contractor in excess of the Authority’s population proportion of the specified maximum tonnage in that period.

2.4.3 Where the aggregate tonnage delivered by the Authorities to the Contractor in a period is less than the specified minimum tonnage –

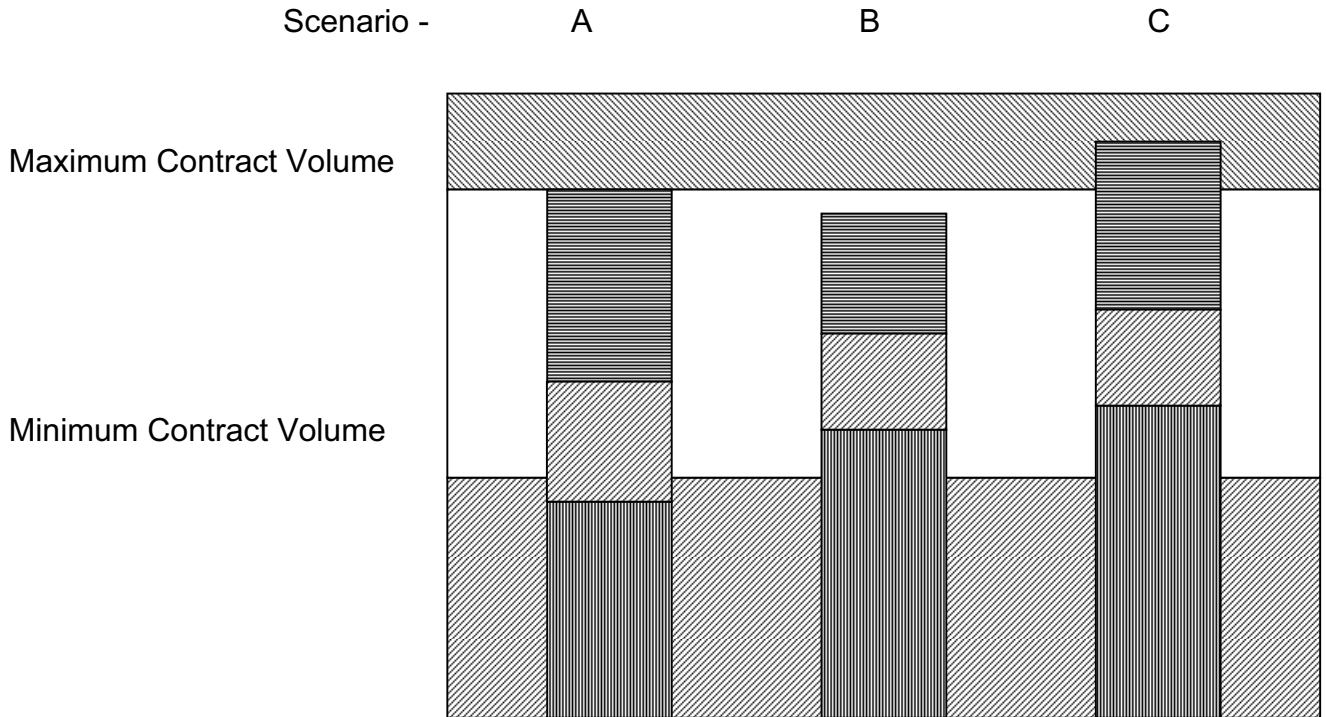
2.4.3.1 Where one Authority has delivered to the Contractor a volume equal to or greater than the Authority’s population proportion of the specified minimum tonnage, that Authority shall be liable only for the standard charge on the tonnage which that Authority has actually delivered to the Contractor in the period

and the other Authority/ies shall be liable for all other contract costs arising in that period.

2.4.3.2

Where any Authority has delivered to the Contractor that Authority's population proportion of the specified minimum tonnage in that period, each Authority shall be liable for the population proportion of the total contract costs arising in that period.

Table One - Illustration of Contract Cost Allocation



The diagonally striped areas represent volumes in excess of the maximum contract volume and below the minimum contract volume. The assumption is that for aggregate volumes within the un-striped area, there will be a contract price per tonne of waste delivered.

In Scenario A, Authority A (vertical lines), Authority B (diagonal lines) and Authority C (horizontal lines) are the delivering waste in proportion to their respective current populations, and the total waste delivered does not exceed the maximum contract volume. Accordingly, each authority pays per tonne at the ordinary contract price per tonne.

In Scenario B, Authority A has increased its tonnage above the proportion of the total contract capacity to which it is entitled by reason of its current population. But because Authorities B and C have reduced their tonnages and the aggregate tonnage delivered does not exceed the maximum contract tonnage, Authority A continues to pay per tonne at the ordinary price per tonne.

In Scenario C, Authority A is still delivering more than the proportion of the total contract capacity to which it is entitled by reason of its current population. However, because Authority B and Authority C are continuing to deliver at or near their full population entitlement, the aggregate tonnage delivered exceeds the maximum contract tonnage. As it

is Authority A's over-production which is responsible for the excess tonnage charges which the contractor will make, it is Authority A which is responsible for meeting any such excess tonnage charges.

3 Contract Damages

3.1 For this purpose, "Contract Costs" shall not include any damages, penalties or other payments which the Contractor may be entitled to receive as a result of any breach of the Contract by any or all Authority/ies ("Contract Damages").

3.2 The Principles to be applied in respect of Contract Damages are –

3.2.1 that each Authority shall be liable for any Contract Damages arising from its own failure to comply with the Contract, and

3.2.2 that each Authority shall be liable for the population proportion applicable to that Authority of any Contract Damages arising from the failure of the Authorities to comply with the Contract, unless the Authorities agree an alternative division of liability in any particular case to reflect the relative responsibility of each Authority for the events giving rise to the Contract Damages.

4 Contract Income

4.1 The intention is that income arising under the Contract shall be dealt with similarly, as follows.

4.1.1 Where income arises to the Authorities together, as may be the case for proceeds from the sale of waste derived energy that income shall be allocated between the Authorities in proportion to each Authority's current tonnage.

4.1.2 Where income arises in relation to a particular Authority, for example in compensation from the Contractor for delay to vehicles operating on behalf of a particular Authority, the income thus arising shall accrue to the individual Authority.

5 Application of the Principles

5.1 The Authorities may need to vary the Principles set out in this Schedule to reflect the provisions agreed with respect to the Contract charges prior to completion of the Contract.

5.2 Such supplemental agreement shall include:

5.2.1 drafting based on the Principles; and

5.2.2 such other provisions as the Authorities agree (or as may be determined by the dispute resolution procedure in Clause 19) as a consequence of the terms of the Contract.

- 5.3 The Authorities shall use all reasonable endeavours to negotiate and agree such supplemental agreement prior to and in conjunction with the negotiation and agreement of the Contract.
- 5.4 The reference to “all reasonable endeavours” in paragraph 5.3 shall include a requirement on all Authorities to:
- 5.4.1 (without prejudice to paragraph 5.3) at all times act in good faith;
 - 5.4.2 acknowledge that the Authorities have agreed the Principles but accept that they may need to be expanded to reflect the Contract and, accordingly, no Authority shall attempt to move significantly away from their intention or purpose;
 - 5.4.3 ensure that sufficient time is set aside to conduct the negotiations on the terms of the Principles either through correspondence or by holding meetings or a combination of both to ensure that the terms of such supplemental agreement are agreed in accordance with the timetable envisaged in paragraph 5.3;
 - 5.4.4 If a dispute or difference arises between the Authorities in relation to a proposed provision of such supplemental agreement and such dispute or difference cannot be settled by the Authorities within ten (10) Working Days of it first arising, any Authority may refer such dispute or difference for determination in accordance with clause 19.

Schedule C

The Bedfordshire County Council, Bedford Borough Council, Central Bedfordshire Council and Luton Borough Council

Joint Waste Disposal Project Board

Constitution

This Constitution has been approved by Executives of Bedfordshire County Council, Central Bedfordshire Council and Luton Borough Council and the Implementation Executive of Bedford Borough Council as the Constitution of the Project Board.

1 Establishment of the Project Board

- 1.1 The Project Board shall, unless the Project Board otherwise decide, be the "Bedfordshire and Luton Joint Waste Disposal Project Board".
- 1.2 The Project Board is established under Section 101(5) of the Local Government Act 1972, as applied by Section 20 of the Local Government Act 2000 and Regulation 11 of the Local Authorities (Arrangements for the Discharge of Functions) Regulations 2000.

2 Objectives

The purpose of the four Authorities in establishing the Project Board is to facilitate the joint procurement of, and the subsequent operation and management of, facilities for the treatment and (subject to the agreement of the Authorities) the disposal of residual waste in pursuance of the current and future waste disposal functions of the Authorities arising under Section 51 of the Environmental Protection Act 1990, and to secure the continuing improvement in the effective discharge of those functions by the Authorities.

3 Membership and Appointment of the Project Board

- 3.1 The Project Board shall comprise :
 - 3.1.1 An officer appointed by each of the Authorities as the Authority Lead Officer for that Authority. Up to 1st April 2009, one such officer would be appointed by each of each of Bedford Borough Council, Bedfordshire County Council, Central Bedfordshire Council, and Luton Borough Council. From 1st April 2009, one such officer would be appointed by each of Bedford Borough Council, Central Bedfordshire Council and Luton Borough Council. Unless there are over-riding reasons to the contrary, each Authority shall appoint the officer with responsibility for waste functions as the Authority Lead Officer (Voting Members)
 - 3.1.2 The Project Director, if he/she is an employee of one of the Authorities (Non-Voting)
 - 3.1.3 The Project Manager, if he/she is an employee of one of the Authorities (Non-Voting)

- 3.1.4 An officer of one of the Authorities agreed by the Authority Officers to be the Financial Adviser to the Project Board (Non-Voting), and
- 3.1.5 An officer of one of the Authorities agreed by the Authority Lead Officers to be the Legal Adviser to the Project Board (Non-Voting).
- 3.2 The Project Board may at any time appoint additional advisers from among the employees of the Authorities for any specific purpose and may invite them to attend meetings of the Project Board.
- 3.3 Each Authority Lead Officer may appoint an alternate officer of his/her employing authority to act on his/her behalf, and such alternate officer shall be treated for this purpose as if he/she were the Authority Lead Officers
- 3.4 Each Authority may at any time appoint another officer to be that Authority's Authority Lead Officer, and any member of the Project Board shall automatically cease to be a member of the Project Board upon ceasing to be an officer of his/her employing Authority.
- 3.5 All appointments to membership of the Project Board shall be made by notification in writing from the Authority to the Secretary of the Project Board.
- 3.6 Upon being made aware of any Officer ceasing to be a member of the Project Board, the Secretary of the Project Board shall write to that Officer confirming that he/she has ceased to be a member of the Project Board, and notifying the Authority and the other members of the Project Board accordingly.
- 3.7 The Project Board shall agree arrangements for the executive member of each Authority with responsibility for waste functions and the appropriate officer of the Department for Environment, Food and Rural Affairs to be invited to attend meetings of the Project Board as an observer.

4 Chair and Vice-Chair of the Project Board

- 4.1 The Project Board shall make its own arrangements for the conduct of its meetings.
- 4.2 Meetings of the Project Board shall be chaired by the Senior Responsible Owner or ,in his absence, by such Authority lead officer as the Project Board shall elect on the day to preside at that meeting.

5 Secretary to the Project Board

- 5.1 The Project Board shall be supported by the Secretary to the Project Board.
- 5.2 The Secretary of the Project Board shall be an officer of one of the Authorities, appointed by the Project Board for this purpose.
- 5.3 The functions of the Secretary of the Project Board shall be –
 - To maintain a record of membership of the Project Board
 - To notify the proper officers of each Authority of any anticipated “key decisions” to be taken by the Project Board, to enable such “key decisions” to be included in the Forward Plans of each Authority as required by the Local Authorities (Access to Information)(England) Regulations 2001

- To carry out such notification to and consultation with members of any Authority as may be necessary to enable the Project Board to take urgent “key decisions” which have not been included in the Forward Plans of the three Authorities
- To summon meetings of the Project Board in accordance with Paragraph 6 below
- To prepare and send out the agenda for meetings of the Project Board in consultation with the Authority lead Officers and the Project Manager
- To keep a record of the proceedings of the Project Board
- To take such administrative action as may be necessary to give effect to decisions of the Project Board
- Such other functions as may be determined by the Project Board

6 Convening of Meetings of the Project Board

6.1 Meetings of the Project Board shall be held at such times, dates and places as may be notified to the members of the Project Board by the Secretary to the Project Board, being such time, place and location as –

6.1.1 the Project Board shall from time to time resolve

6.1.2 The Secretary of the Project Board, in consultation where practicable with the Authority Lead Officers, shall determine in response to receipt of a request in writing addressed the Secretary of the Project Board from any member of the Project Board, which request sets out an urgent item of business within the functions of the Project Board.

The Secretary of the Project Board shall settle the agenda for any meeting of the Project Board and shall incorporate in the agenda any items of business and any reports submitted by any of –

- The Authority Lead Officers
- The Project Board
- The Chief Executive of an Authority
- the Chief Finance Officer to an Authority
- the Monitoring Officer to an Authority
- the Legal Adviser to the Project Board
- the Project Manager

7 Procedure for Decisions of the Project Board

7.1 The Voting Members of the Project Board shall take decisions collectively, so that a decision shall not be effective on behalf of the Project Board unless and until all Voting Members have signified their agreement to that decision, and each Voting Member of the Project Board shall be taking a decision on behalf of each of the Authorities as opposed to acting just on behalf of their employing authority, and a decision of the Project Board shall be a decision of each of the Authorities

7.2 The Project Board shall normally take decisions at formal meetings of the Project Board, at which a decision shall be of no effect unless it is taken in the same terms by each of the members of the Project Board present at the meeting

7.3 Notwithstanding Paragraph 7.2 above, where all the Authority Lead Officers agree that a decision is urgent, such a decision may be taken without a meeting by the Secretary to the Project Board securing the individual agreement of each of the

Authority Lead Officers and the Project Manager (if he/she is an officer of an Authority) to the decision.

- 7.4 A meeting of the Project Board shall be inquorate unless there are present at least four members of the Project Board.

8 Powers of the Project Board as an Executive Officer Board

- 8.1 The Project Board shall be an executive Officer Board.
- 8.2 The Executives of each of the Authorities have delegated to the Project Board all executive functions and powers of that Authority as may be necessary, calculated to facilitate, incidental or conducive to the discharge of the functions of the Project Board except as specified below, and such functions and powers shall include the power to delegate the discharge of any such function or power to an individual officer of any of the Authorities, including, but not limited to, the Project Director
- 8.3 The following functions (the “Reserved Matters”) are reserved to the Authorities and shall not be within the powers of the Project Board –
- 8.3.1 All non-executive functions of any of the Authorities
 - 8.3.2 Any decision which is contrary to or not wholly in accordance with the budget approved by each Authority for the Project Board, or is contrary to an approved policy or strategy of any of the Authorities.
 - 8.3.3 The approval of the Outline Business Case for the Project
 - 8.3.4 Agreement of the evaluation criteria to be applied throughout the procurement process
 - 8.3.5 Selection of a preferred bidder following evaluation of the responses to the Invitation to Submit Detailed Submissions.
 - 8.3.6 The decision to award the Contract if the final Bid proposed by the Project Board for acceptance is materially outside the financial parameters set out in the Outline Business Case
 - 8.3.7 Approval or amendment of any Joint Working Agreement between the Authorities in respect of the discharge of the Authorities’ waste disposal functions
- 8.4 Where a Reserved matter comes to be considered by one or more of the Authorities, it shall be the function of the Project Board to prepare and present a common report and recommendation on that matter to the Authority/ies which are considering the matter.

9 Attendance at Meetings of the Project Board

- 9.1 Notwithstanding that a meeting or part of a meeting of the Project Board may not be open to the press and public, the officers specified out in Paragraph 9.2 below of each Authority shall be entitled, in person or by another officer nominated by that officer, to attend all, and all parts, of such meetings, unless the particular officer has a conflict of interest as a result of a personal interest in the matter under consideration.

9.2 The following are the officers who shall have a right of attendance in accordance with clause 9.1 –

- the Chief Executive of any of the Authorities
- the Chief Finance Officer to any of the Authorities
- the Monitoring Officer to any of the Authorities
- the Project Manager if he/she is not an officer of an Authority
- the officers of each Authority with responsibility for waste disposal functions (if they are not the Authority Lead Officer), and
- the Secretary to the Project Board

10 Amendment of this Constitution

This Constitution can only be amended by resolution of all of the Authorities.

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Appendix D – Glossary of Terms

Acronym	Term	Definition
AD	Anaerobic Digestion	The process by which biodegradable material is broken down in the absence of oxygen. Material is placed into an enclosed vessel in controlled conditions; the waste breaks down into digestate and biogas.
	Biodegradable	Waste that is capable of being broken down by plants and animals. Biodegradable municipal waste includes paper and card, food and garden waste, and a proportion of other wastes, such as textiles.
BMW	Biodegradable Municipal Waste	Waste from households, commercial activities and other activities and sources whose activities are similar to those of households and commercial enterprises, that is capable of being broken down by plants and animals, such as food and garden waste, and paper and paperboard.
BAMWMS	Bedfordshire Authorities Municipal Waste Management Strategy	Provides the detailed implementation plan for local municipal wastes. Adopted in April 2006 the strategy presents detailed proposals for future waste services, including recycling, composting and other potential waste treatment technologies and also sets out plans and policies for the period up to year 2020.
BAWP	Bedfordshire Authorities Waste Partnership	A forum where the WCAs and WDAs within Bedfordshire meet to discuss joint working opportunities and increase performance.
BEaR	Bedfordshire Energy and Recycling	Name given to the project initiated by Bedfordshire County Council in 2004 to deliver the long-term residual waste management solution for the County of Bedfordshire. The BEaR Project's scope was extended to provide a joint solution to include the Borough of Luton in July 2008.
BVPI	Best Value Performance Indicator	Key indicators designed to boost Local Authority performance in every sector of their work.
	Composting	An aerobic, biological process in which organic wastes, such as garden and kitchen waste are converted into a stable granular material which can be applied to land to improve soil structure and enrich the nutrient content of the soil.
IVC	Composting (In-vessel)	The aerobic decomposition of shredded and mixed organic waste within an enclosed container or chamber, through which air is forced. The control systems for material degradation are fully automated - moisture, temperature and odour can be regulated, leading to rapid composting. A stable compost can be produced much more quickly than outdoor windrow composting.

	Composting (Windrow)	The aerobic decomposition of shredded and mixed organic waste in elongated heaps, called windrows, (normally outdoors). The windrows are turned mechanically to periodically aerate the composting waste. The process takes at least 16 weeks, at the end of which the compost represents half the weight of the input material.
C&D	Construction and Demolition Waste	Waste arising from construction and demolition activity and often referred to as "inert". Some Inert C&D waste may be recycled for alternative aggregate at an Inert Waste Recycling Facility (IWRf).
C&I	Commercial and Industrial Waste	Waste arising from premises used for industry, trade or business, and hence may include a wide range of waste material.
CHP	Combined Heat and Power	A highly fuel-efficient technology which produces electricity and heat from a single facility.
	Commercial Waste	Waste arising from premises which are used wholly or mainly for trade, business, sport, recreation or entertainment, excluding municipal and industrial waste.
DBFO	Design, Build, Finance and Operate	A contract structure where the selected bidder designs, builds, finances and operates the facility. Effectively a one stop solution.
DEFRA	Department of Environment Food and Rural Affairs	A UK government body whose mission it is to enable everyone to live within our environmental means.
EfW	Energy from Waste	The combustion of waste under controlled conditions in which the heat released is recovered to provide steam (usually) for electricity generation.
EoI	Expression of Interest	A document submitted to DEFRA outlining the proposed project in order to be considered for PFI funding.
	EU Landfill Directive	Adopted by the Member States during 1999, is intended to reduce the environmental effect of landfilling waste by introducing uniform standards throughout the European Union. The main objectives are to stimulate recycling and recovery of waste, and to reduce emissions of methane (a powerful greenhouse gas). The Directive requires the UK to reduce the proportion of biodegradable municipal solid waste going to landfill to 35% (by weight) of the 1995 level by 2020. It also introduces the mandatory "pre-treatment" of putrescible waste and a ban on the co-disposal of hazardous and non-hazardous wastes.
	Hazardous Waste	Legislation concerning the treatment and disposal of waste classified as "hazardous" came into effect in July 2004. Wastes are defined as hazardous if, for example, they are highly flammable, harmful, toxic, carcinogenic, or corrosive. This includes waste from industrial chemical processes, oil refining, metal processes, solvents, waste oils etc.

	Household Waste	Includes waste from household collection rounds (waste within Schedule 1 of the Controlled Waste Regulations 1992), waste from services such as street sweeping, bulky waste collection, hazardous household waste collection, litter collections, household clinical waste collection and separate garden waste collection (waste within Schedule 2 of the Controlled Waste Regulations 1992), waste from civic amenity sites and wastes separately collected for recycling or composting through bring/drop off schemes, kerbside schemes and at civic amenity sites (Source: Municipal Waste Management 1995/96, DETR, June 1997).
HWRC	Household Waste Recycling Centre	A facility where the public can dispose of household waste. Household Waste Recycling Centres often have recycling points. Sites also referred to as Civic Amenity Sites.
	Incineration	The controlled burning of waste, either to reduce its volume, or its toxicity. Energy recovery from incineration can be made by utilising the calorific value of paper, plastic, etc to produce heat or power or both. Current flue gas emission standards are very high. Ash residues can be disposed of to landfill or recycled to aggregate material.
	Industrial Waste	Waste from any factory and from any premises occupied by an industry (excluding mines and quarries).
	Inert Waste	Waste which, when deposited into a waste disposal site, does not undergo any significant physical, chemical or biological transformations and which complies with Annex 111 of the EC Directive on the Landfill of Waste. For example excavated materials from civil engineering projects, construction and demolition wastes etc.
	Kerbside Collection	Any regular collection of recyclables from premises, including collections from commercial or industrial premises as well as from households. Excludes collection services delivered on demand.
LAA	Local Area Authority/ Agreement	LAAs set out the priorities for a local area agreed between central government and a local area (the local authority and Local Strategic Partnership) and other key partners at the local level.
	Landfill	The disposal of waste material by tipping into voids in the ground.
	Landfill Sites	The controlled deposit of waste to land. Often mineral working and extraction sites are used as landfills, and it can provide a means to restore the land.
LATS	Landfill Allowance Trading Scheme	A scheme whereby waste disposal authorities are allocated allowances for the amount of biodegradable municipal waste that can be disposed of to landfill.
	Landfill Gas	A gaseous by-product from the digestion by anaerobic bacteria of putrescible matter present in waste deposited on landfill sites.

LDF	Local Development Framework	Collective name for all the policies and documents that form the planning framework for the area.
	Leachate	Generic term given to water which has come into contact with waste materials and which has drawn pollutants out of those materials into solution, thereby contaminating the water.
	Leachate Treatment	The process to reduce the polluting potential of leachate. Treatment may include recirculation, spray irrigation over adjacent grassland, and biological and physio-chemical processes.
MBT	Mechanical Biological Treatment	MBT is a generic term used to describe a combination of waste management technologies that utilise biological and mechanical processes to treat waste. These technologies can use aerobic or anaerobic processes as part of the biological element of the treatment process, with a mechanical element designed to separate out materials not suitable for biological treatment.
	Mitigation	Measures to avoid, reduce or offset the adverse effects of risks to the project.
MRF	Materials Recycling Facility	A special sorting facility where mixed recyclables are separated into individual materials prior to despatch to re-processors who wash and prepare the materials for manufacturing into new recycled products.
MSW	Municipal Solid Waste	This includes household waste and other wastes collected by the Waste Collection Authority, or its agents, such as municipal parks and gardens waste, commercial or industrial waste, and waste resulting from the clearance of fly-tipped materials.
MTFS	Medium Term Financial Strategy	Represents a structured view of how the Council is managing its finances over the medium term to ensure that this fits and supports the direction of Council objectives. The current MTFS is for a three year period.
	Non Hazardous Waste	All those wastes that do not fall under the definition of hazardous waste and do not meet the waste acceptance criteria for inert waste.
OBC	Outline Business Case	A much more detailed and costed business case which will be further tested on the issues covered at the EoI stage and is where the authority will demonstrate that pursuing their solution will deliver value for money (vfm). It is also tested with regards to financial deliverability and how well the output specification is defined.
OJEU	Official Journal of the European Union	A Journal where notices are placed as an official means of information delivery concerning the progress of a particular competitive procurement (usually over the relevant EC threshold, but not always) to the European public at large.
	Organic Waste	General term used to describe garden wastes, kitchen wastes and other putrescible wastes.
PFI	Private Finance Initiative	A method to provide financial support between the public and private sectors.

PPP	Public Private Partnership	Arrangements typified by joint working between the public and private sector. Where delivery of public services involves private sector investment in infrastructure, the most common form of PPP is the Private Finance Initiative.
PQQ	Pre-Qualification Questionnaire	A process is to enable the Authority to create a short list of potential providers by obtaining sufficient information to evaluate suitability in terms of; technical knowledge and experience, capability/capacity and organisational and financial standing.
	Proximity Principle	This principle suggests that waste should generally be disposed of as near to its place of production as possible.
RDF	Refuse Derived Fuel	A fuel created through the sorting, shredding and drying of municipal waste to create a combustible material. This material is then fed in to a combustion facility. When the fuel is also heat-treated or dried the material can be called SRF.
	Recycling	Involves the reprocessing of wastes, either into the same product or a different one. Many non-hazardous wastes such as paper, glass, cardboard, plastics and scrap metals can be recycled. Special wastes such as solvents can also be recycled by specialist companies.
	Reduction	The process of reducing the amount of waste produced. Key element of the Waste Hierarchy. There are a number of ways in which reduction can be accomplished. For example within a manufacturing process, involving the review of production processes to optimise utilisation of raw (and secondary) materials and recirculation processes. It can be cost-effective, both in terms of lower disposal costs, reduced demand for raw materials and energy costs. It can be also carried out by householders through actions such as reusing products and buying goods with reduced packaging.
	Re-Use	Can be practised by the commercial sector with the use of products designed to be used a number of times, such as re-usable packaging. Householders can purchase products that use refillable containers, or re-use plastic bags. The processes contribute to sustainable development and can save raw materials, energy and transport costs.
	Reference Project	The technical solution selected as the basis for establishing the operational and financial deliverability of the project.
SRF	Solid/Secondary Recovered Fuel	Some of the outputs from the MBT process can be used as fuel. RDF can be loose, shredded, or compressed into dense fuel pellets. When the MBT output is also heat-treated or dried the material can be called SRF. Turning municipal waste into SRF or RDF is one of the options available for Local Authorities to meet the diversion targets set by the Landfill Directive.

	Sustainability Appraisal	A statutory requirement to appraise of the impacts of policies and proposals in relation to economic, social, and environmental issues.
EoEP	The East of England Plan	The emerging Regional Spatial Strategy (RSS) for the East of England.
tpa	Tonnes per annum	Unit of weight per year.
	Unitary Authority	A local authority which has the responsibilities of both Waste Collection and Waste Disposal Authorities.
VfM	Value for Money	A concept associated with the economy, effectiveness and efficiency of a service, product or process, i.e. a comparison of the input costs against the value of the outputs and a qualitative and quantitative judgment over the manner in which the resources involved have been utilized and managed.
	Waste Arisings	The amount of waste generated in a given locality over a given period of time.
	Waste Hierarchy	A hierarchy of approaches to waste management, with 'reduction' the most preferred approach, followed by 're-use'; 'recycling, composting or energy recovery from waste'; and finally 'disposal'.
WCA	Waste Collection Authority	In the case of Bedfordshire and Luton, the Waste Collection Authorities are Bedford Borough Council, Mid Beds District Council, South Beds District Council and Luton Borough Council.
WDA	Waste Disposal Authority	Local authority responsible for the disposal of waste collected within its administrative boundary. In Bedfordshire and Luton these are Bedfordshire County Council and Luton Borough Council.
WIDP	Waste Infrastructure Delivery Programme	A programme designed to work with local authorities and the regions to accelerate the build of new diversion infrastructure. WIDP will sit within the Waste Implementation Programme (WIP) to compliment their ongoing support to local authorities and add resources to meeting the Landfill Directive obligations.
WRAP	Waste and Resources Action Programme	A Programme that's mission is to accelerate resource efficiency by creating stable and efficient markets for recycled materials and products, while removing barriers to waste minimisation, re-use and recycling.
WRATE	Waste and Resource Assessment Tool for the Environment	A 'Life Cycle Assessment' (LCA) software tool for comparing different management systems treating Municipal Solid Waste (MSW).
WTS	Waste Transfer Station	A site to which waste is delivered for sorting prior to transfer to another facility for recycling, treatment or disposal. Waste from collection vehicles is stored temporarily prior to bulk transport to a treatment or disposal site.

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