

Zero Waste Project – Progress Report

Report by John Blair, Director, Commercial Services

1 Introduction

This progress report is produced to update the Council of the decisions taken by the Joint Project Board to progress the Zero Waste Project involving Midlothian and City of Edinburgh Councils. A similar report is also being considered today by City of Edinburgh Council's Transport Infrastructure and Environment Committee.

2 Background

The Zero Waste Project has been established by Midlothian and City of Edinburgh Councils to deliver a Contract with the private sector to treat residual municipal solid waste that is currently landfilled. The Project will receive residual waste remaining after all reasonable efforts have been exhausted to reduce, reuse and recycle waste.

The Cabinet at its meeting on 17 June 2008 agreed to adopt a resolution entitled "Towards a Zero Waste Midlothian" which can be summarised as follows:-

Midlothian will continue to encourage its residents and businesses to actively participate in reducing, reusing and separating waste for recycling while recognising that, for the foreseeable future, large volumes of unsegregated materials that are discarded will have to be collected and dealt with by the Council.

Accordingly, Midlothian Council will in future aim to treat all discarded materials it collects from the residents and businesses of Midlothian as potentially valuable resources from which maximum practicable value should be extracted in accordance with the waste hierarchy and within the limits of legislation, government policy and funding.

In making its resolution to move towards a Zero Waste Midlothian, the Council aspires that by 2020 it will exceed the Scottish Government targets by recycling and composting over 60% of the materials it collects and landfilling close to zero biodegradable municipal waste.

[Source: Extract from Midlothian Council Cabinet 17 June 2008]

On 28 January 2009 the Strategic Forum, comprising the Chief Executive Officers and Lead Elected Members of the Partner Councils, approved the Initiation Documents which outline the basic strategy and resources required to deliver this major Project.

This Project is part of an integrated approach to sustainable waste management in the Lothian and Borders Area and is inextricably linked to the waste reduction, re-use and recycling activities of the partner Councils and their shared vision of a zero waste future. It will also assist the Scottish Government meet its aspirations as laid out in its current consultation document "Scotland's Zero Waste Plan."

The finalised Project Initiation Document is available in the Members Library and on the Council's website.

Project Justification

The main justification for this Project is that in both financial and environmental terms, the large scale landfill disposal of municipal waste that cannot be readily recycled or composted will not be a sustainable option in the near future.

In the medium to longer term, 'doing nothing' will become the most expensive option with high landfill gate fees and escalating landfill tax, with the Partner Councils likely to incur punitive fines for sending quantities of biodegradable municipal waste to landfill in excess of landfill diversion targets.

In addition, unprecedented changes in waste management policy and guidance, and a shift in public perceptions and expectations of waste management, combined with the new demands of the Climate Change and the Carbon Reduction agendas mean that significant changes in traditional practices will be required to meet a wide array of future targets.

It is recognised that part of the solution involves procuring cost-effective treatment capacity to recover value from residual municipal solid waste in the form of recyclables and energy. This will minimise the need for landfill and will bridge any gap between the performance of the Councils' source-segregated collection systems and Scottish Government targets.

Policy Framework

On 24 January 2008, the Cabinet Secretary for Environment, Richard Lochhead, made a Statement to the Scottish Parliament outlining the new Government's policies for a Zero Waste Scotland which included:

- A Complete review of the National Waste Plan;
- The amount of municipal waste being recycled or composted is to be increased to 60 per cent by 2020 and a new target of 70 per cent by 2025;
- Landfill from municipal waste is to be reduced to five per cent by 2025;
- No more than 25 per cent of municipal waste is to be used to generate energy by 2025;
- Large, inefficient incinerators are to be rejected;
- The growth in municipal waste to be stopped by 2010.

On 20 August 2009 the Scottish Government issued its consultation document on Scotland's Zero Waste Plan which takes forward proposals linked to the policy announcement.

Existing Zero Waste Achievements

Midlothian Council was awarded a total of £31.116m of Strategic Waste Fund grant in 2004 (covering the period 2004/05 to 2019/20) which has enabled the Council to undertake a number of waste projects including:-

- Introduction of green waste collection services together with two weekly residual collection.

- Introduction of the two box systems to the majority of households in the Council area to recycle card, paper, cans and plastic.
- Construction of a modern Community Recycling Centre at Newtongrange.
- Expansion of the recycling facilities at Penicuik.
- Development of a waste awareness campaign covering a number of sectors.
- Introduction of waste recycling to the trade sector.
- Introduction of internal recycling to Council offices.

These initiatives have allowed the Council to achieve an overall recycling rate of 37.4% as at March 2009.

The Partner Councils have both made significant progress in activities related to recycling and composting since they implemented extensive source segregated collection services. The table below shows the progressive improvements in annual percentage recycling rates since 2001/02.

Year	Midlothian Council
2001/02	4
2002/03	4
2003/04	5
2004/05	5
2005/06	22
2006/07	32
2007/08	36
2008/09	37

While the Councils have made positive steps in addressing the Zero Waste Agenda there is much still to do and the Council's "Towards a Zero Waste Midlothian" resolution outlines the following activities in support of a zero waste society.

- To promote wider understanding of waste management issues, particularly the waste hierarchy, through the provision of public information and education.
- To support and promote initiatives to reduce the quantity of municipal waste arising in Midlothian, both that which is produced within the Council and externally.
- To provide recycling and reuse opportunities for all residents and businesses through ongoing development of its kerbside collections, recycling points and recycling centres.
- To promote awareness and to maximise involvement in the Council's recycling services as part of its continuous improvement strategy.
- To increase the levels of reuse and recycling of waste within the council and to improve its level of green purchasing.
- To evaluate alternatives to landfill disposal, including residual waste treatment technologies, to comply with Scottish Government targets on recycling and energy from waste.
- To work with partners to explore opportunities for joint working in the provision of waste management services, including the procurement of waste treatment facilities.

- To develop a zero waste strategy aimed at achieving the Scottish Government targets that is based on life cycle analysis and the Best Practicable Environmental Option.
- To investigate and pursue opportunities to source additional funding to implement all aspects of the Council's zero waste strategy.
- To utilise the expertise gained from its former pathfinder status and to work in partnership with national organisations and initiatives.
- Encourage and develop options for managing waste which complies with the waste hierarchy in the following order of priority.
 - **Prevention:** Waste should be prevented or reduced at source where possible.
 - **Reuse/Refurbishment:** Where waste cannot be prevented, waste materials or products should be reused directly, or refurbished and reused.
 - **Recycling/Composting:** Waste materials not reused should then be recycled or reprocessed into a form that allows them to be reclaimed as a secondary raw material.
 - **Energy Recovery:** Where useful secondary materials cannot be reclaimed, the energy content of the waste should be recovered and used as a substitute for non-renewable energy sources.
 - **Landfill Disposal:** Only if waste cannot be prevented, reclaimed or recovered, should it be disposed of into the environment by controlled landfilling.

The Councils in line with the Scottish Government's approach recognise that they are on a journey and for the foreseeable future there will be a need for appropriately sized residual treatment infrastructure to reduce the reliance on landfill. The joint Council Zero Waste Project will be an essential element of the Councils' integrated approach to Zero Waste.

Zero Waste Project

The main objective of this Project is to procure a long-term residual waste treatment contract that will enhance household waste recycling levels and recover value from residual municipal waste that has not otherwise been recovered or recycled.

The final contract will:

- Enable the two Partner Councils to meet their biodegradable municipal waste landfill diversion targets and comply with Scottish Government policies and targets;
- Attract maximum competition to secure best value and be affordable and deliverable;
- Encourage innovation while not interfering with the achievement of the best practicable levels of source-segregated recycling;
- Be sufficiently flexible to allow for continued increases in recycling and the impact of reductions in waste production; and
- Moves as much waste as far up the waste hierarchy as possible to contribute towards the Councils' shared vision of a zero waste future.

The Project Initiation Document has been produced to define all the major aspects of the Project and form the basis for its management and the assessment of overall success. There are two primary uses of the document:

- To ensure that the Project has a complete and sound basis before there is any major commitment to the Project by the Councils; and
- To act as a foundation document against which the Project can assess progress, change management issues and ongoing viability questions.

This document will be referred to whenever a major decision is taken and used at the conclusion of the Project to measure whether the Project was managed successfully and delivered an acceptable outcome to Midlothian and City of Edinburgh Councils.

Project Risks

The key risk areas to be addressed are as follows:

- Market and Financial Risks;
- Regulatory and Legislative Risks;
- Planning Risk and Environmental Risks;
- Demand and Contract Risks;
- Design and Build, and Operational Risks;
- Technology and Obsolescence Risks;
- Off-Take and Residual Value Risks;
- Landfill Tax and Landfill Allowance Risks;
- Existing Contract Risk;
- Affordability Risk;
- Deliverability Risk.

The Project Team maintains a Risk Log and will develop Contingency Plans for any risks which are deemed to warrant such an approach.

Project Timetable

The following key milestones have been identified:

Milestone	Timeline
Appointment of Advisers	August 2009
Approval to purchase site	September 2009
Application for Planning Permission in Principle	February 2010
OJEU and pre qualification (commencement of procurement), Sign off by Councils	February 2010
Approval to tender including evaluation framework and affordability	February 2010
Invitation to Participate in Dialogue (3-5 bidders)	June 2010
Invitation to Continue Dialogue (2 bidders)	April 2011
Appointment of Preferred Bidder	January 2012

Milestone	Timeline
Approval to award contract	February 2012
Award of Contract (subject to Planning), Sign off by Councils	February 2012

In addition to the key dates above, the Zero Waste Project is holding a “Towards Zero Waste” conference in Edinburgh in October, and in November a two-day Study Tour to London to view potential technologies and discuss procurement issues with local authorities.

The procurement stages may vary in length but a 2 year period is the target for the procurement phase.

Key Issues and Developments

Significant progress is being made on the Project and the following areas are highlighted for information and consideration by the Council.

Appointment of Project Advisers

In line with the European Union procurement rules, the Project Team and Officers from Midlothian and City of Edinburgh Councils invited tenders from Financial, Technical and Legal firms which were then evaluated on a 70/30 Quality/Price basis. The Project Board on 12 August 2009 agreed to appoint:-

Financial Advisers	Ernst & Young
Legal Advisers	Pinsent Mason
Technical Advisers	Entec

Site Issues

Experience has shown that it is essential to be able to offer a site to bidding contractors as this assists in ensuring as level a playing field as possible during the procurement process. The identified site at Millerhill Marshalling Yards in Midlothian covers an area of 37.7 acres and is the only large, brownfield site capable of being brought into Council ownership/control for the purpose of ensuring sufficient interest and competition from the market to provide best value in procurement.

The intention is to offer the site to contractors, for the period of the Contract, but with the option to allow them to propose additional or alternative sites. The Millerhill site, while essential to generate competition, has not been confirmed as the preferred site for the Project. Only once tenders are received will the full range of possible sites be available. The preferred site will be identified through the evaluation of bids during the procurement process.

To allow the councils to develop the full range of options whilst ensuring level playing field procurement it would be prudent to acquire the site prior to the commencement of the procurement process.

Accordingly Midlothian Council has obtained an Option to purchase the site at a cost of approximately £2 million. To progress the Joint Project it will be considered necessary to purchase the site in line with the Option Agreement which requires notice to be served on the site owner by 18 December 2009, with the purchase price being paid in January 2010.

The Project Board have agreed that the site be jointly purchased by the two Councils and that the purchase price and ownership costs be apportioned on a “tonnage” basis between the Councils based on the level of input and use of the site by each Council. This precise tonnage calculation will be confirmed by the Project Advisers in the coming months.

The view of Midlothian Council’s Estates Unit is that the proposal represents best value in the current market and, if for any reason the site needs to be sold on or used for a different purpose, that the capital costs of purchase (approx £2 million) and improving the site (see below) would be recovered.

It is currently estimated that the treatment facility will be used at a ratio of approximately 80:20 by the City of Edinburgh Council and Midlothian Council respectively, based on an estimate of the relative proportions of tonnage throughput by each Council over the life of the contract. A split of costs on this basis results in approximately £1,600,000 to be paid by the City of Edinburgh Council and approximately £400,000 to be paid by Midlothian Council in 2009/10 for the site purchase. The precise split will be formalised following the work carried out by the Technical Advisers during the pre-procurement stage of the project.

It is recognised that the agreed purchase price of the land, which is adjacent to the former Monktonhall Colliery, is discounted heavily due to:-

- the site currently being land locked. The site will require an upgrade of an existing local road and a new site access from the north of the site, which is estimated at approximately £1.5million. There is also the opportunity, in time, for access to be obtained directly from the A1 road when a new junction is constructed adjacent to the current junction at Queen Margaret University. Planning permission from East Lothian for this new junction is already in place. However, the cost of roadworks from this junction into the Millerhill site is estimated at £2.4 million and would require a sound justification for progressing this option over the access from the north of the site;
- the need for stabilisation and remedial works. This would involve grouting coal seams, capping all existing mine shafts and contaminated land remediation. The costs associated with these works are estimated at approximately £1.1 million.

To provide greater certainty on these potential site development costs a transport and access study is being completed along with a contaminated land and intrusive ground investigation. Preliminary feedback from the studies suggests that there are no significant concerns regarding these estimates.

To ensure the best possible interest from potential contractors, it is proposed to apply for Planning Permission in Principle to Midlothian Council early next year. However, prior to doing so it is intended to commence an appropriate level of public engagement and to complete environmental studies on site.

Technology

To ensure the Project benefits from innovation and secures value for money the Project Board has agreed that the Councils will not prescribe the technologies to be employed by contractors. However given the complexities of waste management and the ambitious targets set by government it is expected that contractors will propose a mix of technologies including Mechanical and Biological Treatment (MBT), and high efficiency Energy from Waste (EfW). The terms MBT and EfW cover a wide range of processes including:-

- **Autoclave**

Sterilisation of wastes via a pressurised high temperature process.

- **Anaerobic digestion**

A method of composting which does not require oxygen. This composting method produces methane and is also known as anaerobic composting.

- **Gasification**

A chemical or heat process which converts wastes to a gaseous form.

- **Pyrolysis**

Chemical decomposition of waste by heat in the absence of oxygen resulting in various hydrocarbon gases and carbon like residue.

Due to recent policy implications and targets it is not anticipated that contractors will come forward with single process mass burn incinerators.

The Planning Application in Principle will require to cover a wide range of technologies to accommodate proposals from contractors that are likely to be very different in terms of use of the Millerhill site, ranging from transfer only activities to a combination of technologies. The application will therefore include provision for Mechanical & Biological Treatment, with prepared fuel being fed to an on-site Energy from Waste Facility, with other materials such as food waste being treated separately by anaerobic digestion. The successful contractor will later apply for detailed Planning Permission for any infrastructure proposed at the site.

While the detail of the application will require to be worked up after community engagement and other assessments, the scale of proposals require to be consistent with the Scottish Government Policy.

Existing Contract Issues

Midlothian Contract with Waste Recycling Group – Midlothian's landfill contract expires in July 2011 which is prior to the earliest possible commencement date for the operational phase and there may an option within this agreement to extend the period to fit in with the Project commencement. The Director, Commercial Services has commenced preliminary discussions with the Waste Recycling Group. Alternatively, it may be necessary to arrange an interim contract with an alternative contractor.

City of Edinburgh Contract with Viridor – This landfill contract extends into the period of the operational phase of the Project by up to a maximum of 5-6 years. While this is a relatively small time intrusion into what is likely to be a 25-30 year treatment contract, it requires careful consideration to ensure a level playing field for bidders. Contractors will be asked to consider options for the mitigation of this contract, on behalf of City of Edinburgh Council, including the potential to phase the provision of infrastructure.

The Procurement Model

Residual waste projects of this scale in England have typically been delivered through the PFI route although not exclusively. The Project Board has agreed however that the Councils should challenge traditional ways of delivering this type of infrastructure and develop a model that provides the best possible value for money without reducing market interest.

The Councils are not in a position to carry out the treatment activities directly and post collection activities are currently provided by specialist contractors. Accordingly there will be a requirement for a contractual arrangement between the public sector and the private sector.

The Project Board has agreed to work closely with the Scottish Futures Trust in developing a model that delivers the best value for money. This model may include a mix of private and public finance but must minimise the risk to the public sector.

Project Governance

The Project Manager reports directly to a Joint Council Project Board which has been established to progress decisions on behalf of the Councils throughout the procurement phase. The Board comprises a Director from each Council and is attended by the Project Manager and Lead Officers of the Councils. The following key decisions will be referred directly to the Councils:

- Commencement of Procurement (the advertisement and pre-qualification of contractors): Estimated February 2010;
- Establishment of a vehicle to manage the Contract; and
- Contract Award and Project Closure: Earliest estimate February 2012.

A Strategic Forum comprising the Chief Executives and Lead Members of the two Councils has also been formed and will if necessary act as a dispute resolution body and assist in the provision of strategic advice.

Evaluation Framework and Affordability

With the appointment of the Advisers there will be a significant focus on the Evaluation Framework to be utilised during procurement which will inform the decision making progress in terms of technology including deliverability, environmental benefit and affordability. This framework and the affordability implications will be the subject of a further report back to the Council for approval.

3 Report Implications

3.1 Resources

Human Resources

A joint Council Project Team has been established to manage the procurement process and this in-house resource will be utilised as much as possible and where appropriate to keep external costs to a minimum.

Development Budget

The Project Board has agreed a 3 year project development budget of £3.8million which will provide for the in-house Zero Waste Project Team, Project Advisers, significant works associated with bringing forward the planning application and includes a 15% contingency.

Discussions are ongoing regarding the allocation of development costs with the two Councils with Midlothian Council of the view that a split based on tonnage is the most equitable. If agreement can be reached that the Development Budget costs can be split between Midlothian and City of Edinburgh Councils on a tonnage basis, Midlothian Council's share of these costs (approximately £760,000) can be met from within the base budget assuming part utilisation of Zero Waste Fund monies.

Site Acquisition – Purchase of Millerhill

The purchase price of Millerhill is approximately £2.0 million with the transaction carried out in January 2010. Any movement from this value of £2.0 million will only result from movements in the Retail Price Index between now and January 2010.

The Project Board have agreed that the costs associated with the purchase of the Millerhill site will be split on a “tonnage basis”. Assuming an approximate 80:20 split, Midlothian Council's share of these costs (approximately £400,000) will require to be provided for in the General Services Capital Plan. It is likely the £400,000 capital cost will be funded by means of a revenue contribution using the Zero Waste Fund thereby avoiding potential associated borrowing costs.

Progress reports to each Council on both these items will be prepared in due course.

Site Preparation Costs

Total site preparation costs are estimated as follows:

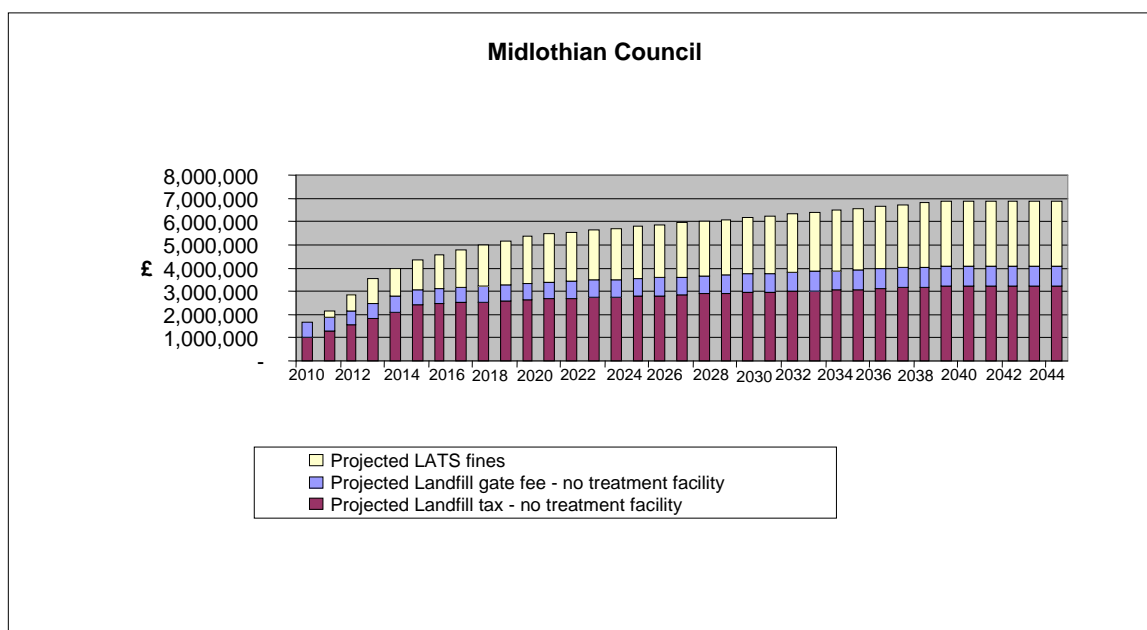
Element	Cost	Incurred
Access Costs	£1.5 m	2012/13
Site Remediation	£1.1 m	2012/13
Total	£2.6 m	

Access costs are estimated and should the site be chosen for use by the successful contractor, at this stage it is anticipated that the Councils will manage the access road construction directly to ensure value for money.

Actual site remediation costs will be very much reliant on the footprint and location of any on-site works proposed by the successful contractor. Due to the risks involved it is most likely that the contractor will be required to carry out these works directly which will ultimately be paid for by the Councils over the Contract duration.

Contract Costs v “Do Nothing”

The costs of continuing as normal – the “do nothing” option, have been calculated and are shown in the graph below (at current cost levels):-



The estimated baseline exposure in 2010 and the estimated exposure by 2020, as illustrated in the above graph, are stated in the table below.

	2010 (£'000)	2020 (£'000)
LATS fines	-	2,031
Gate fee	622	717
Landfill tax	1,016	2,631
TOTAL	1,638	5,379

The estimated Contract costs involved with a residual waste treatment solution, which will be paid for in the form of a price per tonne (or Unitary Charge), will be subject to detailed technical and financial modelling in the current pre-procurement phase of the project. This will allow an affordability assessment to be carried out, with the results reported to Council.

However, based on indicative modelling to date, it is expected that the cost of the “Do Nothing” option over the proposed contract period is significantly greater than the comparable costs under a likely residual waste contract.

3.2 Risk

In considering the options to support a resolution to move “Towards a Zero Waste Midlothian” in partnership with the City of Edinburgh Council the Council will be provided with an appropriate risk assessment as part of any recommendations being brought to Members.

The Council will also have to balance proposals against the risk that failure to act will expose the Council to increasing landfill tax and potential fines. Fines can be imposed for excess landfilling as a result of the European Landfill Directive which limits the amount of biodegradable municipal waste permitted to be landfilled. The Council’s potential exposure to fines is detailed in Section 3.1 above.

The risks inherent in delivering a residual waste solution will be managed through the Project Team’s risk register.

3.3 Policy

Strategy

The proposals support a number of Council priorities covering the following agreed objectives:

- Objective 1 – supporting healthy, caring and diverse communities where local needs are met
- Objective 2 – Maximising business opportunities
- Objective 4 – Conserving and improving Midlothian’s natural environment and
- Objective 6 – Delivering responsive, efficient and effective services to the people of Midlothian.

Consultation

No consultation has been carried out at this stage. As the project progresses, appropriate consultation will be undertaken as necessary.

Equalities

No assessment of the implications on equalities has been carried out at this stage. As the project progresses, appropriate evaluations of equality implications will be undertaken as necessary.

Sustainability

The proposals in this report support the Council’s core value of sustainability as outlined in its Corporate strategy:

“we want to ensure that everything we do can be justified by its positive long term social, economic and environmental benefit to Midlothian and so is not done merely for short term gain.”

By adopting the Zero Waste Project Midlothian Council will be setting out its long term vision of a Zero Waste Midlothian and would be consistent with the councils Sustainability strategy.

4 Recommendations

It is recommended that the Council notes the decisions taken by the Project Board as outlined in the report and specifically:-

- a) Approval of the Project Initiation Document;
- b) Approval of the Project Development Budget of £3.8m over 3 years
- c) Approval of the appointment of Project Advisers (Ernst & Young, Entec & Pinsent Masons);
- d) To agree to purchase the Millerhill site, at a cost of approximately £2million to be split between the Councils on a tonnage calculation subject to the Project Board being satisfied with the final reports on site access and remedial works;
- e) To agree that in respect of (b) and (d) above, the split of costs between Midlothian and City of Edinburgh Councils should be on a tonnage basis (provisionally calculated at approximately 80:20 but subject to confirmation by the Project's Technical Advisers).
- f) To agree the governance arrangements and delegate procurement progress decisions to the Project Board.

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