The Highland Council

Agenda Item	10
Report No	COM 36/14

Community Services Committee
6 November 2014

Update on Waste Strategy

Report by Director of Community Services

Summary

This report updates Members on the latest actions in respect of developing the residual waste strategy to ensure that the Council meets its statutory obligations in terms of the Waste Scotland Regulations 2012. Landfilling biodegradable municipal waste is required to cease by 1 January 2021 and consequently alternative treatment and disposal provision for the Council's residual waste will have to be made.

1. Background

1.1 Members will recall that consideration of a settled waste strategy for the Council has been difficult. Key dates and initiatives are given as **Appendix I.**

1.2 The Council's current strategy was approved in 2009.

1.3 Two potential solutions were presented which included (for residual waste): a single energy from waste plant situated in the Inner Moray Firth; and the provision of three energy from waste plants (one each in Skye, Caithness, and the Inner Moray Firth) which was known as the "local solutions" option.

1.4 Members approved the "local solutions" option and further work was undertaken on the Skye proposal.

1.5 Subsequently the Service was asked to review the Strategy (together with many other parts of the service) which culminated in a report (2013) outlining a number of residual waste treatment and disposal options including energy from waste, basic treatment and shipment from Highland and biological stabilisation.

1.6 This review has culminated in the appointment of consultants to prepare an "Outline Business Case" for residual waste treatment which should give Members the information required on which to base a decision which will then allow work to start on obtaining the solution on the ground.

1.7 It is anticipated that the work will be concluded by Christmas but there is an expectation that details of the costs of the various modelled options will be available by the end of November 2014.

2. Outline Business Case

2.1 An outline business case follows a standard format and should provide the Council with a number of scenarios including a Baseline or Reference Case

(which is usually referred to as the “do nothing” option).

2.2 The chosen scenarios are then modelled in terms of their technical merits and then in terms of their economics over an extended period (usually 20 or 25 years).

2.3 The report will also examine the various procurement and delivery options which the Council might like to consider together with a risk assessment.

2.4 The inception meeting for the project has already been held and a number of options have been considered for inclusion in the Business Case.

2.5 The options considered for the business case are:

1. Residual Waste Transfer: transport of untreated waste out-with Highland for treatment and disposal by 3rd party (“do nothing” option);
2. Residual Waste Treatment: pre-treatment of waste at central location within Highland, with treated waste then transported out-with Highland for further treatment/disposal by 3rd party;
3. Development of three ‘local’ Energy from Waste (EfW) Plants, with one in Skye (for Skye and Lochalsh waste), one in Caithness (for Caithness and Sutherland waste) and one in Inverness (for Inverness, R&C and NBS and Lochaber waste) and constructed as follows to allow individual costs to be estimated and identified:

- 1 x EfW – local EfW plant in either Skye or Caithness, with export of surplus RDF to market;
  a. Centralised pre-treatment plant (and transport of RDF back to Skye or Caithness);
  b. Local pre-treatment plant
- 2 x EfW – local EfW plants in Skye and Caithness, with export of surplus RDF to market;
  c. Centralised pre-treatment plant (and transport of RDF back to Skye and Caithness);
  d. Local pre-treatment plants
- 3 x EfW as above plus plant in IMF with both a and b above.

3. Key Issues

3.1 Addressing the key issues when attempting to deliver a strategy for twenty years plus is extraordinarily difficult given the number and magnitude of uncertainties.

3.2 This difficulty has in part bedevilled progress in Highland and across Scotland for the last 15 years.

3.3 However highlighting the key issues and uncertainties does at least ensure that they can be identified and considered.

3.4 Some of the main issues and uncertainties are as follows:

3.4.1 Plant “Capacity” is the quantity of residual waste which the various plants are designed to accept over their lifetime. Given it is simply not possible to predict

future waste trends with certainty it will always be difficult to estimate the capacity of plant which will assure its use over twenty or so years. The diversion rate (that waste which will be recycled/re-used) chosen for modelling purposes is also important. For the purposes of this exercise it is proposed to use a diversion figure of 50%. A sensitivity analysis will examine the effect of a 60% rate on the outputs.

3.4.2 As stated above movement in residual waste growth or reduction will impact on the size of plant(s) required. As previous modelling exercises have proven, future waste tonnages may be significantly different from those forecast. By way of example in 2003 under the auspices of the Highland Area Waste Group modelling work to 2020 concluded that by 2020 Highland would produce a total of 190kT/yr of municipal waste and that 109kT would have to be incinerated or landfilled.

3.4.3 In 2012 the Council's total annual arisings were only 149kT with just over 91kT requiring disposal.

3.4.4 Waste Composition has been changing over recent years with significant changes being made to food packaging. Composition can have an effect on the calorific value of residual waste which in turn is an important criterion when operating energy from waste plant.

3.4.5 As the appendix illustrates waste management in Scotland has been inundated with legislative and policy changes over the last 15 years. This has in some measure contributed to the largely unchanged landscape in residual waste treatment over this period. There seems to be little sign of a period of stability emerging in the medium term given the most recent paper by the EU Commission on the "circular economy".

3.4.6 Perhaps the single most difficult cost/benefit to predict is future fuel and energy costs. Where a plant is remote from waste arisings then the cost of transportation can be significant. Equally where a plant is providing energy and/or heat the benefits can be significant and buffer against sudden rises in gas/electricity prices.

3.4.7 Delivering energy from waste solutions in Scotland has been fraught with difficulty. In 2000 Scotland had two operational EfW plants (Shetland and Dundee). In 2014 these remain the only two plants processing residual municipal waste.

3.4.8 Therefore the time to deliver an energy from waste solution, even where planning and SEPA approval has been granted, can take several years.

3.4.9 Whilst these issues make accurate predictions difficult, (or not possible) the industry has wrestled and accommodated them over the years. Therefore whilst in some instances it is simply not possible to predict the changes, the solutions implemented must be sufficiently flexible to accommodate change.

4. Current Residual Waste Disposal

4.1 The Council currently operates two landfill sites: Seater in Caithness and

Granish in Badenoch and Strathspey.

4.2 We have also recently entered into new waste transfer/transport/disposal contracts for residual waste. The contracts run to September 2017 with the option for two one year extensions taking the current arrangement potentially to September 2019.

4.3 Lochaber residual waste will continue to be landfilled at the local private sector site at Duisky.

4.4 Residual waste from Inverness will be transferred and transported to Stoneyhill Landfill site (near Peterhead) by SITA Ltd *via* its waste transfer station at Henderson Road Inverness. This is the same arrangement (but different operators) as was put in place in 2003 on the closure of Longman landfill site.

4.5 Residual waste from Ross and Cromarty will be transferred and transported *via* Wm Munro's transfer station at Beechwood Alness to Seater landfill site.

4.6 Skye and Lochalsh waste will continue to be transferred at the council operated waste transfer station in Portree to Seater landfill site by private transportation contractor.

4.7 The new contracts give the Council time to fully consider the options and also to see how the market in residual waste treatment evolves over this critical time in Scotland.

5. Implications

5.1 The cost of the Outline Business Case will be found from existing budgets.

5.2 There are no legal or risk implications associated with this report.

5.3 There are no equalities, Gaelic or rural communities implications arising from this report.

Recommendation

Members are invited to note the progress to date and to re-endorse the approval previously given in 2009 for residual waste treatment to be based on appropriately sized and sited Energy from Waste facilities.

Designation: Director of Community Services

Date: 24 October 2014

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Appendix I

Residual Waste Strategy: Key Dates and Initiatives

YEAR	INITIATIVE
1998	Consultant's Report to new Council proposing EfW for residual waste
1999	1st National Waste Strategy for Scotland
1999	Council's PFI process for Integrated Waste Management
2000	Highland Area Waste Plan Process starts chaired by SEPA
2001	1st Grants from the Strategic Waste Fund
2003	Highland Area Waste Plan published recommends an EfW plant (also 1st National Waste Plan for Scotland)
2003	Longman landfill site closes and an "interim" landfill solution with the private sector procured for most of Highland waste
2004	Council submits "Implementation Plan" to Scottish Executive but rejected on cost grounds
2005/6	Strategic Waste Fund Grants to roll-out recycling services
2005/6	North of Scotland Strategic Options Review Initiative recommends EfW solution for residual waste. Grant application to SE rejected on cost grounds.
2007	Launch of Zero Waste Policy and distribution of remaining Strategic Waste Fund to Councils
2008/11	Launch of Zero Waste Fund
2009	Council approves "local solutions" strategy for three EfW plants
2010	1st National Zero Waste Plan
2010	The EU Waste Framework Directive is reviewed
2012	Waste Scotland Regulations come into force banning biodegradable municipal waste from landfill by 1st January 2021
2014	SEPA publishes Thermal Treatment Guidelines for residual waste treatment
2014	EU Commission publishes a paper on the "Circular Economy" including proposals on higher recycling targets