

EAST AYRSHIRE COUNCIL

DEPARTMENT OF NEIGHBOURHOOD SERVICES

CABINET – 20 APRIL 2011

UPDATE: ZERO WASTE PLAN

**Report by Depute Chief Executive/Executive Director
of Neighbourhood Services**

1. PURPOSE

- 1.1 The purpose of this report is to submit details of the Zero Waste Plan published by Scottish Government; seek endorsement of the response to Scottish Government consultation on the Zero Waste (Scotland) Regulations 2011; report progress on the Joint Ayrshire Residual Waste Treatment Project; and to provide an update on the kerbside food waste and plastics collection trial, running December 2010 – December 2011.

2. BACKGROUND

- 2.1 The Zero Waste Plan, published on 9 June 2010, sets out the strategic direction for waste policy in Scotland with 22 proposed actions to deliver it. The new Zero Waste (Scotland) Regulations 2011, which are currently out to consultation covers 3 of those actions relating to the introduction of regulatory measures to:
- require source segregation and separate collection of specified waste materials;
 - restrict input to landfill (effectively banning materials which could be reused or recycled or which could be used to produce energy); and
 - restrict inputs to thermal treatment facilities (effectively banning materials which could be reused or recycled).
- 2.2 The consultation paper, corresponding to the Zero Waste Plan, describes a vision for a Zero Waste Scotland where resource use is minimised, valuable resources are not disposed of in landfill sites and most waste is sorted into separate streams for reprocessing, leaving only limited amounts of waste consigned to residual waste treatment, thermal treatment and ultimately landfill disposal. Responses to the consultation paper were submitted by 28 February 2011 to the Scottish Government. The Council responded to the consultation document both separately and jointly via the Ayrshire Joint Strategic Waste Management Project Group. The response submitted on behalf of East Ayrshire Council to the Scottish Government proposals is appended.
- 2.3 Successful implementation of the Zero Waste Plan will assist Scotland towards sustained economic growth. Recycling represents a highly significant opportunity for Scotland to reduce its dependency on primary and finite resources and deliver a sustainable supply of basic raw materials.

3. PROPOSAL

- 3.1 Zero Waste legislation proposes that, with effect from 2013, any person that produces controlled waste will be subject to a Duty to separate their dry recyclable waste i.e. paper, cardboard, metals, plastics, glass and textiles from all other wastes for the purpose of recycling. This duty does not extend to householders, although householders are already required to separate their wastes for recycling under the Environmental Protection Act 1990.
- 3.2 If implemented in its current format, this new Duty means that with effect from 2013 all shops, offices, factories, restaurants, schools and hospitals must segregate their dry recyclable wastes for recycling. For householders, the Duty will be placed on local authorities to ensure that separate containers are provided to householders to allow for the separate collection of dry recycle.
- 3.3 The suggested timeline detailed within the Zero Waste Plan and current consultation paper indicates that Councils will be required to implement separate food waste collections from 1st April 2013 and will be banned from disposing of this waste to landfill from 1st April 2015.
- 3.4 Implementation of the new regulations requires food waste from business waste producers to be collected from all other wastes i.e. it will not be permissible to collect food waste alongside other wastes – this includes green garden waste. Unless it can be shown that it is not technically, environmentally or economically practical, food waste from households too would require separate uplifts from 2013.
- 3.5 The duty to enforce the proposed new regulations would appear to fall jointly between the Scottish Environment Protection Agency (SEPA) and local authorities, with SEPA being the lead enforcement agency in terms of waste management licences, Duty of Care Reports and transfer notes. A failure of a business or waste carrier to segregate their dry recyclable wastes or food wastes would leave them liable to a fine not exceeding £5,000.
- 3.6 Should Councils be required to enforce areas of this new legislation relating to business waste producers and householders, consideration would need to be given to the resources required to effectively apply the requirements of the regulations.

4. Update on Food and Plastics Kerbside Pilot

- 4.1 Since the successful implementation of the domestic kerbside collection system, introduced in 2004, East Ayrshire Council has consistently ranked amongst the top recycling authorities in Scotland. In recognition of the Zero Waste Plan and future waste recycling targets the Council launched the first phase of its food waste and mixed plastics collection service to approximately 6,000 households on 6th December 2010; with a further 3,500 households introduced to the collection service in March this year.

- 4.2 To date (week ending 1 April 2011), 153.76 tonnes of food waste and 67.92 tonnes of plastics have been collected from participating households. Not only does this additional collection enhance the Council's current recycling performance, the waste collected would previously have been disposed of to landfill, costing the Council £76.50 per tonne, rising to £85.50 in 2011/12.
- 4.3 Food waste collected from the kerbside is processed via anaerobic digestion (AD) by William Tracey Limited at a lower rate than landfill. In addition, the Council currently receive a rebate for its mixed plastics. Given current capture rates it is estimated that on full roll out of trial (9,500 households) annual efficiencies (based on projected 2011/12 landfill costs) totalling £73,000 can be achieved (£22,500 for food processing compared to landfill costs and £27,200 sales of plastics & £23,300 associated plastic landfill diversion savings). Although annual collection costs including staffing and ongoing vehicle costs are estimated at £152,000, excluding initial container provision, greater efficiencies may be made through the revision of residual waste collection services in future.
- 4.4 A report published by Zero Waste Scotland last year indicated that the average yield per household per week for a separate food waste collection is 1.5kg. Analysis of the local food waste collection figures suggest a high uptake from participating householders with the average household presenting 1.88 kg of food waste per week, equating to 0.38kg per household per week above the national average. Although the high performance may in part be due to the additional food waste collected over the festive period, continued analysis over the coming months will provide the Council with greater qualitative data.

5. Update on Joint Ayrshire Residual Waste Treatment Project

- 5.1 As endorsed by Cabinet on 17 December 2008 East Ayrshire Council, remains committed to working alongside South and North Ayrshire Councils on the joint procurement for the services of a residual waste treatment facility. The Chairmanship of the Ayrshire Strategic Waste Management Project Group is rotated on an annual basis by the three partner Authorities and at present the Group is chaired by Councillor Robert McDill.
- 5.2 Following publication of the Scottish Government's Zero Waste Plan, the existing Official Journal of the European Union (OJEU) notice is out of step with the Scottish Government's policy due to the need for the pre-treatment of waste, the limitation on waste which can be consigned to thermal treatment, and the introduction of a carbon metric.
- 5.3 As a result of the Scottish Government's change in approach, the Ayrshire Joint Strategic Waste Management Project are currently developing an Outline Business Case (OBC) that will recommend the treatment of Ayrshire's residual municipal waste arisings in accordance with EU Landfill Directive and Scottish Government Zero Waste Plan. It is the intention to present the Outlined Business Case to the next Project Group meeting (16th June 2011) prior to submitting the Outlined Business Case to the respective Councils before summer recess. Given

the aforementioned change to scope of the project and the OBC requirements, project delivery is now estimated for 2015/16. Timescales are however dependant on the Government publishing the finalised Zero Waste (Scotland) Regulations in the coming months.

- 5.4 The key objective of the OBC is to assist the 3 Ayrshire Councils in making a long-term business decision regarding the delivery and investment in municipal residual waste treatment infrastructure in Ayrshire.
- 5.5 The Project Director and Project Manager met with representatives from the Scottish Government on 4 November 2010 to discuss the initial draft of the OBC. The Scottish Government have indicated that they are satisfied with the approach adopted by the 3 Ayrshire Councils. In addition SEPA have advised that they are also satisfied with the Technical Options Appraisal which advocates a change in reference case towards Mechanical Biological Treatment (MBT). MBT is a hybrid treatment which combines biological and mechanical techniques, and may also use techniques to produce Refuse Derived Fuel (RDF). MBT can reduce the volume of waste to landfill by around 20% depending on the input, improves the quality of recyclable materials, and stabilises waste.
- 5.6 It is proposed that the legally binding inter-authority agreement required to enter into a contract with the successful provider from the residual waste treatment procurement exercise will develop from augmenting the existing Memorandum of Understanding, as agreed by the AJSWMPG on September 2009. This will result in a single contract between the 3 Ayrshire Councils and the provider on a joint and several basis, thus each authority will be bound to deliver their proportion of the contracted waste.

6. POLICY IMPLICATIONS

- 6.1 Development of the kerbside collection service via the implementation of designated food and plastics collection and the Council's continuing commitment to deliver a long term residual waste treatment facility is consistent with the national Zero Waste Plan and Aim 8 of the "Delivering Community Regeneration" Action Plan 2009-2011 – "To mitigate against and adapt to the negative effects of climate change".

7. LEGAL IMPLICATIONS

- 7.1 East Ayrshire Council is obliged to comply with the European Landfill Directive EC/1999/31/EC and National Recycling/Composting Targets which culminates with a recycling target of 70% recycling by 2025.

8. FINANCIAL IMPLICATIONS

- 8.1 The food and plastics collection trial as well as the funding associated with the procurement of a residual waste facility, have to date been met utilising allocated Zero Waste Fund monies.

- 8.2 Should separate collections of food waste become mandatory in 2013, significant additional resources in the form of collection containers, vehicles, manpower and promotional materials will be required, this should however be partly offset through savings arising from additional landfill diversion and associated income.

9. CONCLUSION

- 9.1 The Zero Waste Plan promotes a shift in the perception in which we consider and handle waste i.e. from a waste to a resource. Creating regulatory certainty is designed to promote greater confidence within the waste sector encouraging the private sector to invest in future waste infrastructure.
- 9.2 To date, collection data arising from the food waste and plastics scheme confirms a high uptake of the trial however as the trial is still in its infancy continued analysis over the coming months will provide the Council with greater qualitative data
- 9.3 The timescale to implement separate food waste collections by 2013 as indicated in the new Zero Waste (Scotland) Regulations 2011, which is currently out to consultation, is however perhaps overly ambitious and the Council have highlighted these concerns, including clarification on financial resources via the consultation process, and COSLA network.
- 9.4 East Ayrshire Council alongside North and South Ayrshire Councils are drafting an OBC for the procurement of a residual waste treatment facility in line with the Zero Waste Plan. Further, the three authorities are working towards a legally binding inter-authority agreement, allowing a single contract, to which the three authorities will contribute, with the preferred bidder/contractor.
- 9.5 There are various waste treatment technologies which may be suitable for the long term joint treatment facility to ensure that the Councils meet their obligatory targets and reduce waste to landfill thereby avoiding or minimising financial penalties. The Councils recognise their responsibility to examine and utilise those processes which can provide a best value solution for the treatment of residual wastes.

10. RECOMMENDATIONS

- 10.1 Cabinet is invited to:
- (i) endorse the response to the Scottish Government consultation on the Zero Waste (Scotland) Regulations 2011;
 - (ii) support the Council's continued joint working with its partner authorities and note progress to date

- (iii) note the Council's approach towards the development of kerbside recycling and initial progress on the delivery of kerbside collections of kitchen food waste and plastics;

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5 April 2011

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List of Background Papers

Cabinet Report - Update on the Development of a Long Term Waste Treatment Solution for Ayrshire 17 December 2008

East Ayrshire Council response to Zero Waste (Scotland) Regulations 2011

Joint Ayrshire Memorandum of Understanding September 2009

Appendix 1

East Ayrshire Council Response to Zero Waste (Scotland) Regulations 2011

Background

The Zero Waste Plan, published on 9 June 2010, set out the strategic direction for waste policy for Scotland and proposed 22 actions to be taken to deliver it. The current consultation covers 3 of those actions relating to the introduction of regulatory measures to:

- require source segregation and separate collection of specified waste materials;
- restrict input to landfill (effectively banning materials which could be re-used or recycled or which could be used to produce energy); and
- restrict inputs to Energy from Waste facilities (effectively banning materials which could be re-used or recycled).

The intention is for the proposed regulations to work together with other policy instruments (e.g. landfill tax and recycling targets) to help achieve a Zero Waste Scotland and drive investment towards the most sustainable waste management solutions for Scotland in the long term. Each measure is not intended to be seen in isolation; but as a package of interdependent and complementary measures.

Two new statutory instruments are proposed

(1) The proposed Zero Waste (Scotland) Regulations 2011 amend the:

- Environmental Protection Act 1990
- Waste Management Licensing Regulations 1994
- Pollution Prevention and Control (Scotland) Regulations 2000
- Landfill (Scotland) Regulations 2003 and

(2) The proposed Environmental Protection (Duty of Care) (Scotland) Regulations 2011 replace The Environmental Protection (Duty of Care) Regulations 1991

The proposed regulatory measures take a resources-based approach to managing wastes from all sectors. In an “all waste” approach, waste can be broadly split into two categories - sorted materials for recycling and unsorted waste requiring further recovery and disposal. The proposed regulations reflect this split by taking a two pronged approach:

- to maximise recycling and
- to maximise resource recovery and protect the environment through treatment of unsorted waste.

The Scottish Government therefore proposes regulations to require:

- **Source segregation and separate collection of the key recyclable materials.** These materials are paper and card, glass, metals and plastics. Food waste is also targeted. Source segregation is a crucial component of a successful recycling strategy because it enables the quality of the materials to be maintained. Making source segregation and separate collection a statutory duty aims to maximise the quantities of high quality materials available for reprocessing.
- **A ban on mixing separately collected recyclable materials.** Once recyclable materials have been segregated, they must be managed in a way which does not compromise their quality. The proposed regulations will give the Scottish Environmental Protection Agency (SEPA) statutory powers to include conditions in environmental permits to make sure that source segregated materials are not mixed with other wastes or materials in a way which would hinder their recycling potential.
- **A ban on landfilling the key recyclable materials.** This supports the upstream measures taken to maximise levels of quality recycling, by banning those same materials from landfill if they are source segregated and separately collected. It is important to understand that the ban does not apply to unsorted wastes containing the banned materials. The restriction is not to ensure that unsorted waste arriving at landfills is completely free from the listed materials.
- **A restriction on the inputs to energy from waste (EfW) facilities.** Not all recyclable waste is segregated at source, and in some cases it will end up in the unsorted waste stream. To ensure waste materials which could have been reused or recycled are not incinerated, EfW inputs will be restricted (through the Environmental Permit), to residual waste and other suitable single stream wastes such as contaminated wood. This restriction means that unsorted waste will not be able to go directly for EfW without first being pre-treated thereby providing a second opportunity to remove recyclate missed at the source segregation stage and ensure that Scotland does not simply move from mass landfill to mass incineration.
- **A ban on waste disposed to landfill based on organic content.** This is proposed in order to protect the environment from the potential impacts of

landfilling biodegradable waste. It is proposed that only waste loads below a set limit relating to organic content can be sent to landfill. This will reduce both the volumes and biodegradability of waste being sent to landfill.

It is recognised that introducing these measures will require appropriate lead-in times. The Scottish Government's aim, in setting the timings for introduction, is to balance the need for environmental improvement with the time required for local authorities and the waste management industry to make the necessary adjustments to their practices, and to develop the alternative infrastructure required.

Questions

Question 1.

Are there any other materials or waste streams which should be included in these requirements to sort and separately collect?

East Ayrshire Council's understanding is that the proposed new regulations will require separate collections of dry recyclables and food wastes to be introduced from 2013 onwards.

East Ayrshire Council currently provide a source segregated collection service to its householders and this new Duty will therefore have limited implications to the kerbside household recycling service provided.

Question 2.

Food waste is required to be presented in a dedicated container. Are there any other recyclable materials which should be sorted and presented separately for collection in a dedicated container?

As stated in the Question 1 response, East Ayrshire currently provides a source segregated collection for paper and cardboard, glass, cans, household batteries and aerosols as well as green garden waste. In addition East Ayrshire Council launched a one year trial separate kerbside collection of food waste and mixed plastics in December 2010 to approximately 10,000 households. Upon successful completion of the trial, East Ayrshire Council would wish to extend this collection service to all households where practically feasible, and offer a similar collection service to commercial customers.

Textiles provide additional opportunity for consideration.

Question 3.

Do consultees have any comments on the new draft Duty of Care Code of Practice?

East Ayrshire Council supports regulation 2 of the draft Zero Waste (Scotland) Regulations 2011 which require under Section 34 of the Environmental Protection Act 1990, that commercial enterprises including, shops, offices, factories, restaurants, schools and hospitals present recyclable materials for separate collection from waste. East Ayrshire Council are fully supportive in the uplift of high quality recycle from source separated collections to maximise resource recovery,

however in recognising that space and storage restrictions will be a real concern for some commercial premises, comingled collections are a more realistic and practical solution and should be considered in certain cases.

East Ayrshire Council along with its partners, North and South Ayrshire Council, who together form the Ayrshire Joint Strategic Waste Management Project, welcome the proposed harmonisation between the revised Waste Framework Directive and Trans-Frontier Shipment to ensure protection for human health and the environment.

Question 4.

Do consultees consider that Government should mandate more specifically what actions waste collection authorities must take to improve recycling of waste from households? If so, what are they?

East Ayrshire Council is of the opinion that a “one size fits all” approach does not allow for local circumstance and deliverability to be taken into account. Local authorities are best placed to decide on the most suitable collection regime / policy for their localities. And due consideration should be provided to the establishment of local treatment facilities for recycling – thereby promoting sustainable development principles and enabling local employment.

Question 5.

What additional measures, if any, should Government consider in order to oblige householders to recycle?

East Ayrshire Council is currently working towards maximising its domestic kerbside service. In order to aid this process and invoke the mind set changes required to achieve recycling targets, East Ayrshire Council would advocate the introduction of incentive schemes and a range of enforcement powers which could be used in a targeted and localised manner.

Question 6.

Do consultees agree that banning the listed materials accompanied by a “requirement to sort” will be effective in achieving high recycling rates? If not, what additional or alternative measures could be adopted?

East Ayrshire Council is of the opinion, that whilst landfill bans will be a key driver, they will not be the solitary motivator in achieving high recycling rates. Complimentary drivers include: maximisation of existing kerbside systems, limits on residual waste uplifts – frequency and /or capacity (both domestic & commercial), continued good will and support from residents, commercial “buy in”, effective resource management in the production process and investment in infrastructure for recycling, reuse and recovery opportunity.

Question 7.

Do consultees consider that banning the listed materials accompanied by a requirement to sort will help support investment in the infrastructure required to achieve high recycling rates?

East Ayrshire Council supports the principle of landfill bans for certain materials and believe that enforcement will lead to investment in the required infrastructure.

Question 8.

What pre-treatment do consultees consider is necessary in order to ensure that only residual waste is managed in EfW facilities?

Maximisation of the kerbside sort system is the preferred and cleanest form of pre-treatment. Funding mechanism, such as the Zero Waste Fund, allows Councils to develop existing systems –e.g. introduce separate food waste collections systems etc. The Council would wish to see an economic appraisal undertaken, which details the cost benefit analysis of utilising pre-treatment technologies for municipal residual wastes.

Question 9.

Do consultees agree that this is an appropriate measure to prevent over provision of residual waste management infrastructure?

Whilst there is good quality data arising from local authorities (via the Waste Data Flow), there would appear to be a gap in information relating to non-municipal waste. Linking regulatory frameworks to complete qualitative information, will ensure the required infrastructure is procured in the correct locations in the appropriate timescales.

Question 10.

What single stream waste, such as contaminated wood, do consultees consider are appropriate for EfW?

Waste which is not feasible to recycle or where no market/infrastructure exists could be potentially considered as a waste stream suitable for EfW.

Question 11.

Scottish Government intends that the EfW restrictions will apply immediately to any new installation. What transitional period should be allowed for existing EfW installations to comply with the regulations?

Whilst East Ayrshire Council support restrictions being applied at the same time as legislative bans on materials, recognition must be made of investment required and timescales for refurbishment or planned reinvestment of existing plants.

Question 12.

Do consultees consider that the lead-in times for the landfill bans are reasonable?

East Ayrshire Council believe the lead in times suggested are slightly ambitious as a note of caution is required with regard to infrastructure and investment provision for collection, sorting and processing i.e. all stages of the process.

Question 13.

What test method do consultees consider should be used to assess the level of biological activity?

The Ayrshire Joint Strategic Waste Management Project Group are of the opinion that the consultation document contains insufficient information to form a considered view, however would suggest giving due cognisance to a method based on determining the theoretical oxygen demand which can be more accurately measured in relation to the suggested testing protocols using standard analytical methods in a fraction of the time (typically three hours) compared to the measurement periods for the suggested testing protocols.

Question 14.

Do consultees have any other comments?

East Ayrshire Council is committed to delivering the following objectives from the Scottish Government's vision for a Zero Waste Society:

- Understanding and maximising the value of resources;
- Sustainable Economic Growth;
- Minimising the impact on the environment;
- Eliminating unnecessary use of primary resources.

East Ayrshire has embraced the concept of providing source separated collection opportunities and produces a high quality end product to the market place. To aid this going forward we would seek clarification of the legal definition of each of the materials contained within the consultation to ensure maximum diversion and compliance with the Waste Framework Directive.