

The Highland Council
Community Services Committee
21 August 2014

Agenda Item	17
Report No	COM/25/14

Waste Prevention and Recycling Interventions

Report by Director of Community Services

Summary

This report updates Members on two initiatives aimed at reducing the quantity of waste landfilled and at the same time encouraging greater diversion through recycling. It also updates Members on the latest communication from the European Commission on waste and the economy which should be viewed as the context for planning purposes given the long lead-in times associated with waste management and the generational impact of infrastructure decisions.

1. Background

- 1.1 On the 2 July 2014 the European Commission published a communication to other European institutions entitled: *Towards a Circular Economy: A Zero Waste Programme for Europe*.
- 1.2 The paper concentrates on sustainable growth of the economy and how a “circular economy” (an economy where resources are kept and used and re-used in the economy, rather than being discarded) supports this ideal.
- 1.3 Although many policy instruments will be required to make the changes required throughout value chains (product design right through to the way in which consumers derive and use products) waste policy and targets will also play a part.
- 1.4 The paper suggests that strong policy signals will be required to move the EU to a “recycling society”, including higher recycling targets by 2030 and promotion of the development of markets for high quality secondary materials all with the objective of securing raw material supplies, creating jobs, improving industrial efficiency, and reducing greenhouse gas emissions.
- 1.5 In some respects Scottish Government policy has already embraced the ideas in the paper whereby focus on waste is shifting towards its use as a key resource in the re-industrialisation of the Scottish economy by sustainable means.
- 1.6 It is with this backdrop in mind that waste programmes must continue to seek ways to reduce waste at source, and at the same time increase re-use and recycling both in Highland and across Scotland.

- 1.7 This paper summarises two initiatives (one new and one continuing) which are aimed at reducing residual waste and increasing recycling.
- 1.8 Preliminary results from the first stage of the waste analysis project which is aimed at establishing current levels of recyclates in residual waste and contamination levels in the recycle waste streams are also presented.

2. Behaviour Change Campaigning

- 2.1 Work continues to focus on increasing the amount of recycle captured in the blue recycling bins, brown bins and food waste bins (Inverness only) by door knocking, information leaflets, individual bin stickers, website info, tweets, shows, presentations and information stands. The future aspirational work plan is attached as **Appendix A**. The programme may require to change to accommodate workload priorities or pressures.
- 2.2 Specific projects include the following.
- 2.3 Since April, staff have concentrated their efforts at Recycling Centres, helping householders with bagged mixed waste to recycle more and dispose of less.
- 2.4 Primary and Secondary Schools will be offered new recycling and/or litter workshops that include educational presentations, giant floor games, waste analysis and litter picks. Increasing the quantity of recycle captured from schools and internal offices will continue but with renewed vigour. This will require further commitment from schools and other Council services.
- 2.5 Non Domestic Rated premises without commercial waste contracts in Skye & Lochalsh, Sutherland & Caithness were targeted at the beginning of the year with approximately £28K of income from new collection contracts as a result.
- 2.6 Commercial waste and recycling customers continue to be offered advice and support to help them reduce waste, increase recycling and to comply with the Zero Waste (Scotland) Regs 2012.
- 2.7 Campaigning on specific issues including dog fouling and chewing gum have been rolled out with successful results, and followed up with increased targetted enforcement patrols. Misuse of litter bins by businesses is also being targeted across the region with 4 FPNs issued in recent months to businesses using litter bins to dispose of their waste.
- 2.8 June saw the launch of Clean Up Highland encouraging communities to clean up their local area. This forms part of national "Clean Up Scotland" launched by Keep Scotland Beautiful (KSB) in the year that Scotland hosts The Homecoming and two of the biggest sporting events in the world - The Commonwealth Games and The Ryder Cup.
- 2.9 Although the current programme will continue greater emphasis will now be placed on waste prevention and re-use and in devising ways in which we can drive down residual waste.

3. Improving Controls and Diversion at Recycling Centres

- 3.1 A report was approved on 6 February 2014 by TECs Committee to improve the operation of the Recycling Centres ([Item3 TEC114.pdf](#)) with respect to licence compliance, increase recycling, and drive down residual waste.
- 3.2 A ban on the deposit of household waste associated with commercial or trade activities (i.e. work carried out for business or profit) was introduced at all Recycling Centres throughout Highland as of 28 April 2014.
- 3.3 A pilot project at Alness Recycling Centre was introduced on 26 May 2014, the main thrust of which was to target customers accessing the site with a van or trailer by requiring them to complete a Household Waste Declaration form prior to arrival. Site staff and users have been supported by waste awareness staff on site during this change process.
- 3.4 This was introduced to ensure as far as we can that commercial waste is excluded from the site and that site users are encouraged before arrival to segregate waste into recyclables and non-recyclable.
- 3.5 Although it is too early to state with certainty the success factors, to date there has been a reduction in waste to landfill and an improvement in the recycling rate (compared with 2013-14) recorded at the site and the total tonnage throughput has reduced.
- 3.6 The pilot findings will be captured at the end of September 2014 whereupon the results will be analysed and the findings presented to November Community Services Committee.

4. Waste Compositional Analysis

- 4.1 Highland Council received funding from Zero Waste Scotland to carry out a Waste Compositional Analysis of Household waste. The Analysis involves taking waste from five sample areas of 50 households chosen to reflect different social demographic groups as well as collection types around the Inverness area.
- 4.2 In each sample area, each collection (residual, recyclables, garden and food waste) is uplifted, weighed and sorted into different categories to identify what material and amounts are being generated and in which bins they are being placed. The programme is being carried out in two phases (June and October).
- 4.3 The interim results from the first phase are shown as **Appendix 2**. Information using the “carbon metric” (which was reported to TEC Committee in May 2010 TEC 64/10 and August 2011 TEC 36/11) as well as the more usual weight metric is given to allow comparison with the more traditional weight based targets.
- 4.4 Bearing in mind the “snapshot” nature of waste analysis some of the interesting points to note are:

Most capture rates of key materials exceed 60%;

Glass which is captured through the bottle banks (and is the longest running recyclate of all) has a capture rate of 65%;

Other “heavier” materials (rubble, wood, WEEE) which is collected at recycling centres have very high capture rates of around 85%;

The contribution of food and green garden waste to the overall “weight” of residual waste is large and consequently targeting these to achieve a weight based target is obvious. However in carbon terms (ie climate change reduction) their impact when collected and processed is (particularly when landfill is banned) very limited.

One notable exception (if our figures are taken in isolation) to the good capture rates is textiles – only one third being captured. However the matter is complicated by the fact that many textiles do not enter a “measurable” waste-stream; but will be diverted directly to charity shops or shops that buy textiles. Therefore the overall rate is liable to be considerably higher and given the carbon implications this is important.

Food waste collections in Inverness were rolled-out in September of last year. The capture rate is less than 50% and as such we will undertake further work to improve this. However the overall objective of the scheme must be to reduce food waste in the first place.

Although capture rates are good, to achieve higher recycling we need to re-double our efforts to increase capture by encouraging greater and more regular use of our existing services.

- 4.5 Once the project is complete the results will enable us to quantify how much recyclate remains in the residual bins as well as establishing the total amount of materials each household discards each week. We can then target intervention campaigns to encourage more recycling.
- 4.6 The final report on the project will include recommendations for roll-out to other sites across Highland and projections of the likely impact of the interventions in respect of increased recycling and reduced landfilling including risks and any financial implications .

3. Implications

- 3.1 Where waste is re-used or recycled in greater quantities and landfill reduced then there will normally be a saving and a reduction in climate change emissions.
- 3.2 There are no legal or risk implications associated with this report.
- 3.3 There are no equalities, Gaelic or rural communities implications arising from this report.

Recommendation

Members are invited to:-

- (i) note the progress to date; and
- (ii) agree that a report comes to the November Community Services Committee giving a more detailed analysis of the Waste Compostional Analysis Project and an indication of the potential level of savings that an increase in recycling can generate.

Designation: Director of Community Services

Date: 4 August 2014

Author: Andy Hume, Imogen Percy-Bell, Steve McDermott

Background Papers: TECS Committee 6th February 2014 (TEC1/14) - Review of Recycling Centres

TECS Committee 26th May 2011 (TEC 36/11) –Scotland's Zero Waste Plan

TECS Committee 12th August 2010(TEC 64/10) - Scotland's Zero Waste Plan

Appendix 1

Education and Awareness Plan 2014 – 2016

Month	Campaign/Project	Other activities
January 2014	<p>Dog Fouling</p> <ul style="list-style-type: none"> • MFR advertising for 2 weeks, issued PRs & photo shoots in each area • New branding launched - A3 foam posters for ROTG bins, posters, stickers, adverts in ICA, Lochaber Life, website banner, tweets • Members briefing note <p>Seaboard Villages flytipping and litter project</p> <ul style="list-style-type: none"> • Door knocking • Beach clean • School visits <p>Commercial customer contract renewals</p> <ul style="list-style-type: none"> • Prepare renewal paperwork • Order 25,000 2014/15 bin permits • Prepare 'Business Support How to Guide for Renewals' – aim to improve efficiency and customer focus • Design and print 6000 newsletters for commercial customers 	<ul style="list-style-type: none"> • AWC monitoring & follow ups - weekly • Enforcement Patrols • Waste Audits at schools • ZWS Regs - Follow up commercials without recycling contracts, telephone calls and visits • Write procedure for ZWS regs commercials not recycling
February	<p>NDRs – Caithness, Sutherland, Skye & Lochalsh</p> <ul style="list-style-type: none"> • 1500 letters sent out to businesses without waste collection contracts • Issue PR <p>Brown bins starting in March</p> <ul style="list-style-type: none"> • Design and print 75,000 2 year collection calendar • Issue PRs, adverts in ICA and Lochaber Life mags, posters in Service Points, update website, twitter feeds 	<ul style="list-style-type: none"> • AWC monitoring & follow ups - weekly • Waste audits at schools • Follow up Commercials that have not returned their renewal paperwork • Prepare for Recycling Centre project • Collate responses from NDR mailing
March	<p>Recycling Centre Project</p> <ul style="list-style-type: none"> • Prepare briefing notes for members for "Ban on man with van" and Alness Pilot" • Carry out staff feedback sessions – Easter Ross sites only • Design info leaflets 	<ul style="list-style-type: none"> • AWC monitoring & follow ups - weekly • Schools waste audits • Prepare for launch of Clean Up Highland • Prepare for launch of FPN rise • Update FPN books – June • NDRs follow ups

<p>April</p>	<p>Recycling Centre Project</p> <ul style="list-style-type: none"> • Issue members briefing notes • Issue PR (ban on man and van) to all areas • Design & issue Alness Pilot advert • Train all RC staff on new procedures <ul style="list-style-type: none"> • Attend all RCs to assist with new procedures • Alness RC Pilot – focus on increased h/hld segregation 	<ul style="list-style-type: none"> • AWC/litter bin monitoring - weekly • Enforcement Patrols • Schools waste audits • Node press release issued • Preparing schools litter and recycling workshops, talks and games • Food waste – flats door knocking, caddy delivery • New 2 year recycling and refuse collection calendars produced and on website • NDRs follow ups
<p>May</p>		
<p>June</p>	<p>Launch Clean Up Highland</p> <ul style="list-style-type: none"> • Event “stunt” photo with a community group • Press release in each area • Website – new web copy • Forward info to Ward Managers, Members, Community Councils • Tweets <p>Enforcement Focus – High Street Events</p> <ul style="list-style-type: none"> • High Street events with tents focussing on all aspects of litter and enforcement <p>Dogs Trust Events – Caithness/Sutherland/R & C/ Inverness/Fort William</p> <ul style="list-style-type: none"> • Press releases/advertising free micro chipping <p>Recycling Centre focus</p> <ul style="list-style-type: none"> • Focus on commercials and increased h/hld segregation <p>Recycle Week</p> <ul style="list-style-type: none"> • Focus on Recycling Centres • WA staff to be at RCs helping h/hlds to segregate their waste, offering info on blue bins etc • Press release, photo shoots, Tweets, website 	<ul style="list-style-type: none"> • AWC/litter bin monitoring & follow ups - weekly • Enforcement Patrols • Schools waste audits • Balintore doorknocking, individual bin stickering and removal of extra bins • Milnafua doorknocking • Prepare for smoking litter campaign • NDRs follow up commercial visits • RC engagement • Order pencils, bags for life, cigarette pouches for stalls

<p>July</p>	<p>Litter bin campaign</p> <ul style="list-style-type: none"> • Issue PR – litter bins are only for litter not commercial or h/hld waste • Put new stickers on litter bins, update website, • Focus on litter bin monitoring and follows ups <p>High Street Events/local Shows</p> <ul style="list-style-type: none"> • High Street events focussing on all aspects of litter and enforcement • Team up with EHO and WA team <p>Inverness RC</p> <ul style="list-style-type: none"> • Focus on commercials and increased h/hold segregation <p>Food waste Doorknocking</p> <ul style="list-style-type: none"> • Focus on low participation areas, leaflets 	<ul style="list-style-type: none"> • AWC/litter bin monitoring & follow ups - weekly • Enforcement Patrols • Prepare for events • Prepare for Black Isle Show • NDR focus – towns/villages in each area, checking for premises that do not have commercial bins • Prepare for smoking litter campaign • Don't feed the Seagulls- issue PR, change over A3 RoTG posters in problem areas
<p>August</p>	<p>Smoking Litter</p> <ul style="list-style-type: none"> • Press releases and photo shoots in each area • New branding to be launched • A3 foam posters for ROTG bins • Advertising in ICA and Lochaber Life (need to think about S&L, Sutherland and Caithness) • Posters for shops, pubs, clubs, etc - • Website - new web copy • Internal campaign for staff using webmaster, Heads of Service, posters • Tweets <p>Food waste Doorknocking</p> <ul style="list-style-type: none"> • Focus on low participation areas, leaflets <p>Attend local shows</p> <ul style="list-style-type: none"> • Local Shows including Black Isle Show focussing on all aspects of Recycling, Litter, Environmental Health and enforcement • Team up with EHO and WA Team 	<ul style="list-style-type: none"> • AWC/litter bin monitoring - weekly • Enforcement Patrols • PDSA events • Prepare for Chewing Gum Campaign • Prepare for Ditch the Dirt Campaign • Plockton Door knocking – litter bin and commercial issues. • Contact all schools to promote new Litter and Recycling Workshops • Organise Waste, Litter and EH awareness days

<p>September</p>	<p>Ditch the Dirt Campaign</p> <ul style="list-style-type: none"> • Utilise national campaign material • Press release and photo shoot • Website – new banner, new web copy • Tweets • Members Briefing note 	<ul style="list-style-type: none"> • AWC/litter bin monitoring - weekly • Enforcement Patrols • Start Secondary School visits • Prepare communications for new blue bin materials – if spec changes • Waste, Litter and EH days • Prepare for European Week for Waste Reduction (EWWR)
<p>October</p>	<p>Chewing Gum Campaign</p> <ul style="list-style-type: none"> • Utilise national campaign material • Press release and photo shoot • Website – new banner, new web copy • Tweets • Members Briefing note 	
<p>November</p>	<p>New Blue Bin Materials (if spec changes)</p> <ul style="list-style-type: none"> • Write and issue PRs • Stickers on bins • Doorknocking • Update members, Community councils, Service Points • Update website • Issue Tweets • 	<ul style="list-style-type: none"> • AWC/litter bin monitoring - weekly • Enforcement Patrols • School visits • Prepare for Xmas campaign • Prepare for Reuse campaign
<p>December</p>	<p>Xmas Campaign</p> <ul style="list-style-type: none"> • Collection arrangements stickers on bins • Adverts, press releases • Focus on RCs after Christmas 	<ul style="list-style-type: none"> • AWC/litter bin monitoring - weekly • Enforcement Patrols • Prepare for commercial renewals • Design new Commercial Waste customer newsletter • New Blue bin materials continued • Prepare for Reuse campaign

Month	Campaign/Project 2015	Other activities
January	<p>Reuse campaign</p> <ul style="list-style-type: none"> • Doorknocking • Press release • Website • Tweets <p>Commercial customer contract renewals</p> <ul style="list-style-type: none"> • Prepare renewal paperwork • Order 25,000 2015/16 bin permits • Prepare 'Business Support How to Guide for Renewals' – aim to improve efficiency and customer focus • Design and print 6000 newsletters for commercial customers 	<ul style="list-style-type: none"> • AWC/litter bin monitoring - weekly • Enforcement Patrols • School visits • Prepare fly tipping campaign
February	<p>Flytipping/fire</p> <ul style="list-style-type: none"> • MFR campaign? • Press release and photo shoot • Website – new banner, new web copy • Tweets <p>Members Briefing note Dog fouling</p>	<ul style="list-style-type: none"> • AWC/litter bin monitoring - weekly • Enforcement Patrols • School visits • Follow up commercial customers without contracts • Prepare for brown bins starting
March	<p>Brown bins starting</p> <ul style="list-style-type: none"> • Issue press releases • Update website • Issue tweets 	<ul style="list-style-type: none"> • AWC/litter bin monitoring - weekly • Enforcement Patrols • School visits • Prepare for RC focus
April	<p>Recycling Centres</p> <ul style="list-style-type: none"> • Focus on commercials and increased h/hold segregation <p>Blue bins</p> <ul style="list-style-type: none"> • Doorknocking 	<ul style="list-style-type: none"> • AWC/litter bin monitoring - weekly • Enforcement Patrols • School visits • Prepare for one stop shop campaigns

<p>May</p>	<p>Recycling, Litter and Environmental Health 'one stop shop' Awareness Days</p> <p>EH – Food safety, Private Water Supplys, Housing Grant, Healthy eating</p>	<ul style="list-style-type: none"> • AWC/litter bin monitoring - weekly • Enforcement Patrols • School visits • NDR Focus – towns and villages, checking commercial premises without contracts • Prepare doorknocking for food waste
<p>June</p>	<p>Recycling – Blue bins, Recycling Centres, Waste Min, Recycling Week</p>	
<p>July</p>	<p>Litter – Dog fouling, Anti smoking litter, Street litter, don't feed the seagulls</p> <ul style="list-style-type: none"> • Issue press releases, photo shoots • Manned stalls in High Streets, shopping centres, local events etc <p>Smoking Litter Campaign</p> <ul style="list-style-type: none"> • Press releases and photo shoots in each area • A3 foam posters for ROTG bins • Advertising in ICA and Lochaber Life (need to think about S&L, Sutherland and Caithness) • Posters for shops, pubs, clubs, etc - • Website - new web copy • Internal campaign for staff using webmaster, Heads of Service, posters • Tweets 	
<p>August</p>	<p>Food waste Doorknocking</p> <ul style="list-style-type: none"> • Focus on low participation areas, leaflets <p>Attend local shows</p> <ul style="list-style-type: none"> • Local Shows including Black Isle Show focussing on all aspects of litter and enforcement • Team up with EH and WA Team for manned displays 	<ul style="list-style-type: none"> • AWC/litter bin monitoring - weekly • Enforcement Patrols • School visits • Prepare for Ditch the Dirt Campaign • Prepare for Chewing Gum Campaign

<p>September</p>	<p>Ditch the Dirt Campaign</p> <ul style="list-style-type: none"> • Utilise national campaign material • Press release and photo shoot • Website – new banner, new web copy 	<ul style="list-style-type: none"> • AWC/litter bin monitoring - weekly • Enforcement Patrols • School visits
<p>October</p>	<ul style="list-style-type: none"> • Tweets • Members Briefing note <p>Chewing Gum Campaign</p> <ul style="list-style-type: none"> • Utilise national campaign material • Press release and photo shoot • Website – new banner, new web copy <ul style="list-style-type: none"> • Tweets • Members Briefing note 	<ul style="list-style-type: none"> • NDR Focus – towns and villages, checking commercial premises without contracts • Prepare Glass Campaign
<p>November</p>	<p>Glass bottles & Jars Campaign</p> <ul style="list-style-type: none"> • Issue press releases, photo shoots • Adverts • Update website • Issue tweets • Members briefing note 	<ul style="list-style-type: none"> • AWC/litter bin monitoring - weekly • Enforcement Patrols • School visits • Prepare for Xmas
<p>December</p>	<p>Xmas Campaign</p> <ul style="list-style-type: none"> • Collection arrangements stickers on bins • Adverts, press releases <p>Focus on RCs after Christmas</p>	<ul style="list-style-type: none"> • AWC/litter bin monitoring - weekly • Enforcement Patrols • Prepare for Dog Fouling campaign • Design commercial customer newsletter

Month	Campaign/Projects 2016	Other activities
January	<p>Dog Fouling</p> <ul style="list-style-type: none"> • Issue PRs & photo shoots in each area • A3 foam posters for ROTG bins, posters, stickers, adverts in ICA, Lochaber Life, website banner, tweets • Members briefing note <p>Commercial customer contract renewals</p> <ul style="list-style-type: none"> • Prepare renewal paperwork • Order 25,000 2015/16 bin permits • Prepare 'Business Support How to Guide for Renewals' – aim to improve efficiency and customer focus • Design and print 6000 newsletters for commercial customers 	<ul style="list-style-type: none"> • AWC/litter bin monitoring - weekly • Enforcement Patrols • School visits
February		
March	<p>Litter Education & Enforcement focus with Environmental Health</p> <ul style="list-style-type: none"> • Issue press releases • Manned stalls in High Street with info • Enforcement patrols 	<ul style="list-style-type: none"> • AWC/litter bin monitoring - weekly • Enforcement Patrols • School visits • Follow up commercial customers that have not returned paperwork

Appendix 2

Waste Compositional Analysis

Highland weighted average residual waste composition

Material	Wt kg/hh/wk	% Compn	Carbon Factor kgCO ₂ eq Arising	Carbon Factor kgCO ₂ eq Recycled	Carbon Factor kgCO ₂ eq Incin'd	Carbon Factor kgCO ₂ eq Landfill
Total Glass waste	0.50	5.14%	895	-201	-	26
Total Paper and Card	0.98	10.10%	1026	-342	-540	542
Total Metal	0.33	3.40%	3666	-2457	17	6
Total Plastic bottles	0.12	1.30%	3218	-578	1186	6
Total Dense plastic	0.62	6.38%	3218	-578	1186	6
Total Plastic film	0.71	7.29%	3218	-578	1186	6
Total Garden wastes	1.23	12.47%	0	-46	-56	214
Total Food wastes	2.63	27.00%	3590	-55	-61	257
Total Wood wastes	0.11	1.15%	675	-412	-846	840
Total WEEE	0.07	0.76%				
Total Textiles & footwear	0.47	4.85%	21148	-5990	140	526
Total Miscellaneous combustible	0.23	2.34%				
Total Misc. non-combustible	0.29	3.04%	12	2		3
Hazardous wastes	0.03	0.26%				
Total Healthcare waste	1.23	12.65%				420
Total Fines	0.19	1.93%				
Total	9.76	100%				

Note Healthcare Waste consists mostly of Disposable Nappies and Pet Excrement & Bedding

The carbon factors are standard figures for Household waste from the Scottish Carbon Metric Technical Paper published in October 2013. A negative figure denotes a carbon saving.