

Action 1: We will keep the waste data needs of Scotland under review, considering gaps, overlaps, inconsistencies and future requirements to ensure we continue to capture relevant data

Action plan point	What people said
<p><i>Action identified</i></p> <ul style="list-style-type: none">Identify communication links between SEPA and local authorities / businesses to ascertain data needs for circular economy opportunities, and to drive circular economy partnerships	<p>Commercial waste data should be collected and reported by the business from where the waste originates</p> <p>There is a lack of data on where waste originates</p>
<p><i>Comments</i></p> <ul style="list-style-type: none">A better understanding of where waste originates and its movement is requiredDifficult to know composition of mixed waste streams - whether general household waste or mixed recycling. Better compositional information could be used to develop more robust conversion factors, and help to develop policy focused on stopping waste going to landfillThere is more perceived confidence in household waste data than business waste data; and a lack of confidence in data on waste movementsDoes it matter where waste comes from i.e. household or business? Focus should be on what waste there is, and what can be done with it, regardless of where it has come from	<p>It's more difficult to be confident in waste data arising from mixed waste collections</p> <p>What waste is being landfilled; is this waste a possible resource?</p> <p>We need to focus on what materials are in the waste stream, regardless of their household / commercial origin</p> <p>What is the composition of our waste? More frequent waste composition studies are needed</p> <p>More detail about what material(s) make up Materials Recovery Facility rejects would help local authorities identify how to reduce rejects</p>

Action 2: We will identify opportunities to improve systems and processes, and work with stakeholders to make this happen, developing guidance and training to support users

Action plan point	What people said
<p><i>Actions identified</i></p> <ul style="list-style-type: none"> • Guidance and training on how to complete Licensed Site Returns (LSRs) should be tailored to particular sectors / companies • Develop integrated LSR and WasteDataFlow (WDF) data reporting, and apply the same reporting requirements. • Investigate feasibility of a national waste data portal, for upload of waste contractor data that is needed by Local Authorities for WDF reporting • Provide system development case studies 	<div> <p>Training and guidance should be tailored to particular sectors / companies as it helps when multiple site officers complete returns</p> </div> <div> <p>Provide information and updates on the waste tracking system</p> </div> <div> <p>Case studies: showcase system development in businesses</p> </div> <div> <p>Data collection / reporting is a manual process - adopt a national, electronic waste data system e.g. Waste Tracking</p> </div> <div> <p>Partner organisations to sign up to the discovery phase of the Waste Tracking System</p> </div>
<p><i>Comments</i></p> <ul style="list-style-type: none"> • WDF: currently difficult to report accurate data, particularly when data comes from contractors e.g. average volumes of waste from different sites / regions are provided; waste flows and end destination of waste may be unknown; breakdown of Dry Mixed Recyclables sent to Materials Recycling Facility is averaged across a number of local authorities • Different waste tracking systems are currently used / being developed - need to ensure these can feed into any future national system 	<div> <p>Make better use of the WDF user group to exchange experience and disseminate information</p> </div> <div> <p>It's difficult to monitor trends and spot mistakes in WasteDataFlow data as reporting is annual</p> </div> <div> <p>Accurate quantification of waste volumes is problematic due to time pressures – individual loads of waste are not processed individually</p> </div>

Action 3: We will collect and manage waste data using best practice principles to build trust and ensure clarity across the data chain

Action plan point	What people said
<p><i>Actions identified</i></p> <ul style="list-style-type: none"> Clarify the terms 'data owner' and 'data custodian' and define their responsibilities Waste data reporting needs to be improved, making it more relevant to a range of purposes and comparable to different data Provide more WasteDataFlow guidance on how to record / report complete track of waste movement Improve Materials Recovery Facility (MRF) reporting so that MRF outputs better reflect individual inputs 	<p>The WDF guidance defines data owner and data custodian well, but this is not the case for other waste data</p> <p>Make waste data reporting relevant to a range of purposes e.g. compliance, and in a format that means it can be linked to other data sets e.g. financial / economic data</p> <p>Develop EWC bar codes to use when collecting waste; what about software that converts the waste description into the correct EWC code?</p> <p>Waste data reported to SEPA should be more publicly available</p> <p>One system, that everyone uses, will drive consistency</p>
<p><i>Comments</i></p> <ul style="list-style-type: none"> Best practice principles need to recognise system constraints, and that systems may need changing Caution is required when changing data collection methods to ensure data is comparable and can still be statistically analysed Data collection / reporting needs to be practicable and appropriate for all waste operators / waste collection systems e.g. weighing every load of waste is not always practical Waste descriptions need to improve 	<p>SEPA needs to work with data provider(s) to develop best practice data capture requirements</p> <p>Where system changes are made need to consider how to report on this e.g. rework old data using new method?</p> <p>Need to ensure confidentiality is protected</p> <p>Better outputs of financial context can help drive better quality data input</p>

Action 4: We will review and progress the tools and levers required to support and monitor Scotland's transition to a more circular economy

Action plan point	What people said
<p><i>Actions identified</i></p> <ul style="list-style-type: none"> • Define 'circular economy' • Identify measures that can be used to track circular economy progress – what is possible now, and in future • Share learning from Zero Waste Scotland 'resource mapping' project – what happens to waste • Record in / out cross-border movements of waste • Improve sharing of waste data e.g. Packaging Waste Recovery Notes, Deposit Return Scheme 	<p>What is meant by circular economy? Different interpretations / understandings make it difficult to identify what measures and actions are required</p> <p>How can we get a reuse measure e.g. second-hand market, eBay, gumtree?</p> <p>What circular economy measures are used by others?</p> <p>Share ZWS resource mapping learning</p> <p>If waste to landfill and recycling goes down then, by proxy, can infer less waste is being produced / more material is being reused</p> <p>WDS partners to invite other organisations to Practitioner group(s)</p>
<p><i>Comments</i></p> <ul style="list-style-type: none"> • Waste data reporting needs to be improved to be able to link waste data to other data • Important to share information • Measuring production versus consumption is difficult – need to use best measure in circumstances • Most waste data is focused on municipal waste, and some data is not currently used • Tackling waste crime needs to widen – non-compliance is a waste crime that is not currently enforced 	<p>What is legislation that restricts access to some waste data in Scotland?</p> <p>Linking waste data to other data e.g. GDP, disposable household income, geographical information etc. will help to identify and inform circular economy opportunities / decisions</p> <p>Data from Waste Transfer Notes, by-products etc. are not currently used</p> <p>Sharing waste data will improve understanding on what happens to waste</p>

Action 5: We will share and publish waste data in an efficient and timely manner and in ways that make it easier to communicate the impact and value of waste

Action plan point	What people said
<p><i>Actions identified</i></p> <ul style="list-style-type: none"> • Within the NHS publish individual health board waste data • Liaise with other public bodies to gain an insight into digital transformation project(s) • Refine methodology for measuring carbon impact of waste (carbon reporting is usually passed to another in-house team) 	<div> <p>Reporting data from different NHS health boards internally will help identify waste management improvement opportunities</p> </div> <div> <p>Liaise with National Registers of Scotland / Scottish Government to find out more about digital transformation work e.g. tracking the movement of cattle</p> </div> <div> <p>Rolling, quarterly waste data reporting would remove the problem of waste being reported on different timescales</p> </div> <div> <p>Visualise waste data better – tonnes, carbon, financial costs, jobs</p> </div> <div> <p>Lacking a national, waste management campaign (at a UK and Scottish level):</p> <ul style="list-style-type: none"> • What is the best media to reach people? • There is a (public) perception that all waste goes to landfill despite being segregated at source • Use good imagery e.g. recent images of plastic contamination of oceans have been hard-hitting • Present cost saving benefits of waste saved e.g. savings equivalent to employing three members of staff </div>
<p><i>Comments</i></p> <ul style="list-style-type: none"> • Different volume to weight conversion factors makes waste data comparisons difficult • Waste data reporting is done on different timescales • Need to improve public awareness & knowledge of circular economy • Better visualisation of waste data is required • A national waste management media campaign is needed 	