



# Delivering Zero Waste

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## Introduction

### Why is this guidance needed?

This guidance expands on the Proposed Local Development Plan Policy 34: Waste Management Infrastructure. This guidance will explain the approach taken towards waste within Perth and Kinross and provide guidance to developers on the siting and design of waste management infrastructure.

### Who is this guidance for?

This guidance is aimed primarily at developers, agents and others involved in the preparation of planning applications.

### What are the aims of this guidance?

This guidance will support the policies within the Local Development Plan (LDP). It will demonstrate the progress made by Perth & Kinross Council in achieving the aims of enabling those who choose to live, work and visit the area to lead a zero waste lifestyle. As well as this it will provide a summary of the waste management infrastructure sites within Perth and Kinross, and the current capacity of these sites. Furthermore the guidance will provide information for developers to ensure that the principles of the Zero Waste Plan are incorporated into all new developments.

### What is the status of this guidance?

This guidance will become statutory supplementary guidance and form part of the Local Development Plan. It will be used alongside the policies of the Local Development Plan and the Strategic Development Plan (TAYplan) to assess development proposals.

### What do we mean by Zero Waste?

A key theme which is repeated throughout this guidance is the shift towards a zero waste lifestyle. By this we mean that we are looking towards creating a change in how people view waste. We will highlight the importance of firstly reducing waste, then reusing it and finally recycling with the aim of sending as little waste as possible to landfill.

Throughout Perth and Kinross we emphasise the importance of creating a circular economy which recognises the value of secondary resources and waste to the economy, including composting facilities, transfer stations, materials recycling facilities, anaerobic digestion, and mechanical, biological and thermal treatment plants.

## Background

### Zero Waste Plan 2010

Scotland's Zero Waste Plan is the National Waste Management Plan for Scotland and is required by the revised EU Waste Framework Directive (2008/98/EC) and the National Waste Management Plan for Scotland Regulations 2007. The Zero Waste Plan sets out a vision for Scotland which describes:

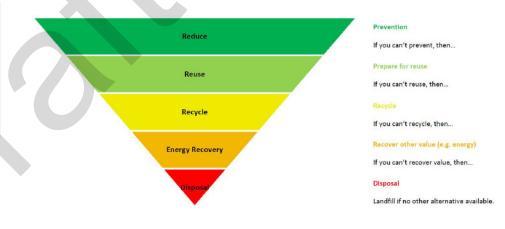
> "...a Scotland where resource use is minimised, valuable resources are not disposed of in landfills, and most waste is sorted into separate streams for reprocessing, leaving only limited amounts of waste to go to residual waste treatment, including energy from waste facilities."

The four main goals of the Zero Waste Plan are:

- to meet the target of 70% recycling and maximum 5% to landfill by 2025 for all Scotland's waste;
- introducing landfill bans for specific waste types;
- encouraging source segregation and separate collection of specific waste types;
- restrictions on inputs to energy from waste facilities utilising resource streams which cannot practicably offer greater environmental and economic benefits through reuse or recycling.

The Zero Waste Plan seeks to change attitudes towards waste. By working collaboratively with Local Authorities and businesses, it aims to develop a consistent education and awareness programme and develop schemes to drive reductions in waste and increase recycling rates.

### **The Waste Hierarchy**



The Zero Waste Plan sets out the waste hierarchy, which was introduced through the European Waste Framework Directive. The hierarchy focuses on prevention of waste as the highest priority followed by reuse, recycling, recovery of other value (eg energy), with disposal as the least desirable option.

More detail on the preferred means of waste management for different types of waste can be found within Scottish Government's guidance on the waste hierarchy.

### **Circular Economy**

The Zero Waste Plan highlights the economic benefits that can be achieved through the reuse of waste and highlights the importance of creating a circular economy within Scotland. The circular economy is where products and materials are kept in high value use for as long as possible. A more circular economy will benefit:

- the environment cutting waste and carbon emissions and reducing reliance on scarce resources;
- the economy by improving productivity, opening up new markets and improving resilience;
- communities more lower cost options to access the goods we need with opportunities for social enterprise and encourage UK manufacturing.

The multiple economic benefits of reducing waste, treating waste as a resource and promoting a circular economy are highlighted in the Scottish Government's Guidance on applying the waste hierarchy (2013). A circular economy focuses on ways in which waste can be used as a resource. Instead of creating products which will be thrown away, there is a greater focus on the reuse of products. Further guidance on this is provided within the Scottish Government's Guidance on applying the waste hierarchy (2013).

This approach to waste suggests that reuse should be considered at the beginning of the process and, through careful design, the aim is to create products that can be reused and recycled to get the maximum benefit from the product. Businesses are encouraged to use resources more sustainably and minimise waste which will reduce their costs and ensure they can operate more efficiently and cost effectively.

More detail on the circular economy can be found within the Scottish Government's Making Things Last Document.

### **National Planning Context**

National Planning Framework 3 recognises that waste is a resource and an opportunity, and Scottish Planning Policy (SPP) highlights the influence planning can have on delivering a zero waste economy by supporting the provision of facilities and infrastructure.

Both guidance documents emphasise the need to waste as little as possible and recognise that every item and material, either natural or manufactured, is a resource which has value for our economy in line with the Zero Waste Plan.

SPP suggests that the planning system should:

- promote developments that minimise the unnecessary use of primary materials and promote efficient use of secondary materials;
- support the emergence of a diverse range of new technologies and investment opportunities to secure economic value from secondary resources, including reuse, refurbishment, remanufacturing and reprocessing; and
- help deliver infrastructure at appropriate locations, prioritising development in line with the waste hierarchy: waste prevention, reuse, recycling, energy recovery and waste disposal.

### **Development Plan Context**

The Development Plan for Perth and Kinross consists of two key documents; the Strategic Development Plan (TAYplan) and the Perth and Kinross Local Development Plan (LDP). These plans guide development within the area and create a vision for Perth and Kinross.

### • TAYplan

TAYplan is the Strategic Development Plan for the Tayside city-region. TAYplan sets out the land-use planning policies to guide where development should and should not go over the next 20 years. It considers the big, long-term issues which affect the whole TAYplan city-region; including climate change, the scale of housing and population change, infrastructure planning and sustainable economic growth.

The LDP must be consistent with the Strategic Development Plan highlighting development sites and providing detailed policy guidance that is specific to the Perth and Kinross area.

TAYplan highlights the need to shift to a low carbon and zero waste economy emphasising the need to use our land and resources more efficiently. It highlights the need to ensure that waste management solutions are incorporated into development to allow users/occupants to contribute to the aims of the Scottish Government's Zero Waste Plan.

Policy 7 of the approved TAYplan 2016-2036 highlights TAYplan policy position with regards to Energy, waste and resources.

### $_{\rm icv}$ **7** ENERGY, WASTE AND RESOURCES

To deliver a low/zero carbon future and contribute to meeting Scottish Government energy and waste targete and prudent resource consumption objectives:

A: Local Development Plane should identify areas that are suitable for different forms of energy, waste and resource management infrastructure\* and policy to support this. This can include, where appropriate, locations of existing heat producers (e.g. waste management or industrial processing), renewable sources of heat and electricity, and existing waste management facilities to ensure the co-location/provinty of surplus heat producers and heat users.

B. Strategic Waste management infrastructure, beyond community or small scale facilities, is most likely to be focussed within or close to the Dundee and/or Perth Core Areas (identified in Policy 1).

C. Infrastructure associated with the extraction, transfer and distribution of liquid and gas minerals may take advantage of the locational flexibilities offered by various extraction techniques to overcome issues relating to the scale and impacts of any buffer zones and residential proximity in a manner which reflects Policy 7D and Policy 2. D. Local Development Plans and development proposals should ensure that all areas of each, sites and routes for energy, waste and resource management infrastructure have been justified, at a minimum, on the basis of these following considerations: i. The specific land take requirements associated with the infrastructure technology

and associated statutory safety exclusion zones or buffer areas where these exist; ii. Waste management proposals are justified against the Scottish Government's Zero Waste Proc (2014) buttish where the deliver of Statuset

Plan (2010) to support the delivery of the waste management hierarchy, and, Safeguarding Scotland's Resources (2013); iii. Proximity of resources (e.g. geo-thermal

heat, sand, gravel, gas, oil, woodland, wind or waste material); and to users/customers, grid connections and distribution networks for the heat, power or physical materials, by-products and waste that are produced, as appropriate; iv. Anticipated effects of construction and

operation on air quality, carbon emissions, noise and vibration levels, odour, surface and ground water pollution, drainage, waste disposal, leakage of hazardous substances, radar installations, navigation aids and aviation landing paths;

 Sensitivity of landscapes, the water environment, biodiversity, geo-diversity, habitats, tourism, recreational interests and listed buildings, scheduled monuments and conservations areas; vi. Impacts of infrastructure required for associated new grid connections and distribution or access infrastructure; vii. Cumulative impacts of the scale and massing of multiple developments, including existing infrastructure in general but particularly in sensitive areas;

viii. The appropriate safety regimes and postoperational restoration of land, particularly for extraction of solid, liquid and gas minerais; ix. Strategic cross-council boundary impacts as a result of energy proposals which may be strategically significant (as defined on page 45) including landscape, historic and environmental considerations identified in the spatial framework (Map 7b); and,

x. Consistency with the National Planning Framework and its Action Programme.

Footnote

Poonce Totargy, was and reacure management infradructure Totargy, and an application provides the transmission, for collection, separation, handling, forsafer, processing, resource recovery and disposit of washer, and, for exploration, estraction, transfer, distribution and storage of said, squo or gas meres, ins in incurse encycing pairs, sologicar thermailmechanical processing, energy from washe pairs, wind turbines (including reovering), goo-formal heat, biomas plants, combine heat and power plants, solar power, hydroelectif, gas and oil extraction requiremt, electricity frasmission lines, oil and gas poelines (including carbon capture and storage), sold mileral cotting and transfer facilities.

## • Perth and Kinross Proposed Local Development Plan 2017

The Proposed Local Development Plan was published in December 2017. This LDP, once adopted, will be a statutory document that guides all future development and use of land. It acts as a catalyst for changes and improvements in the area and shapes the environment and economy of Perth and Kinross. Part of the vision statement for the LDP refers to the need to live a zero waste lifestyle.

"We want our Plan to ensure that development does not place an unsustainable burden on future generations and which will enable us to live a zero waste lifestyle, maximising the value from waste resources."

The LDP provides clear guidance on what development will or will not be allowed and where. There are five policies that refer to waste:

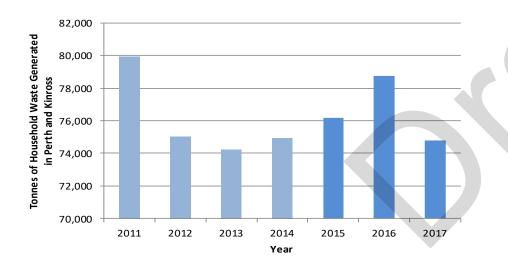
- **Policy 31** this policy focuses on renewable and low carbon energy generation. It could cover energy from waste and refers to the upcoming supplementary guidance.
- **Policy 47** suggests that a waste management plan is required for minerals and other extractive development.

- Policy 34 this policy specifically relates to Waste Management Infrastructure and provides criteria against which to assess new waste management infrastructure proposals.
- **Policy 35** this policy focuses on recycling and processing of inert and construction waste.
- **Policy 7** this policy states that waste management sites can be considered acceptable in business and industrial areas subject to site-specific considerations.

## How Much Household Waste is Generated in Perth and Kinross?

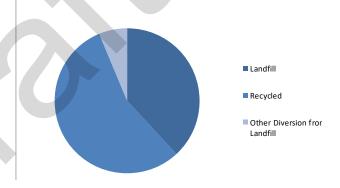
## How much household waste is generated in Perth and Kinross?

Data for household waste within Perth and Kinross shows a decline from 2011, after the introduction of the Zero Waste Scotland Regulations.



## How is household waste treated in Perth and Kinross?

In 2017, 56% of household waste generated in Perth and Kinross was recycled. And 38% was sent to landfill, all other waste was either sent for incineration or managed by other methods.



Throughout Perth and Kinross, recycling rates are increasing and landfill rates are decreasing. A similar trend can be seen throughout Scotland.

Data provided by SEPA through the Scottish Household Waste Discover Data Application

## How Much Total Waste is Handled in Perth and Kinross?

Site	Waste types	Waste inputs to site (tonnes)	Waste treated / recovered on site (tonnes)	Waste output from site (tonnes)
PKC: Kinross, civic amenity	Household / commercial, industrial / other special	2,378	-	2,378
PKC: North Perth, recycling & civic amenity	Household / commercial	2,388	-	2,388
PKC: Auchterarder, civic amenity	Household / commercial	1,289	-	1,289
PKC: Aberfeldy, civic amenity	Commercial	940	-	940
PKC: Bankfoot, civic amenity	Household	525	-	525
PKC: Pitlochry, civic amenity & recycling	Household / commercial / industrial / inert	1,536	-	1,536
PKC: Blairgowrie, civic amenity & transfer station	Household / commercial / industrial / inert	10,538	-	10,538
PKC: Friarton, Perth, waste transfer station	Household / commercial, industrial / other special	55,052	-	55,052
PKC: North Forr, Crieff, civic amenity & transfer station	Household / commercial / industrial	6,278	-	6,278
Earnside Energy Ltd, Glenfarg, composting & anaerobic digestion	Household / commercial / industrial	45,924	41,790	13,614
Suez Recycling & Recovery UK Ltd, SITA Binn Landfill, Glenfarg	Household / Commercial / Industrial / Special asbestos	29,201	22,400	10,002
Autoparts Blairgowrie, metal recycler	Other special	134	134	140
Dalcrue Auto Salvage Ltd, Methven, metal recycler	Commercial	120	120	110
David Band (Metals) Ltd, Perth, metal recycler	Commercial	1,893	-	1,929
J R Jenkins, Madderty, Crieff, metal recycler	Industrial	13	13	317
Perth Auto Recyclers Ltd, Perth, metal recycler	Household	1,520	1,438	1,376
Binn Skips Ltd, Holden Environmental, Perth, metal recycler & transfer station	Household / Commercial / Industrial / Other special / Special asbestos / Inert	17,913	12,739	18,877
Binn Waste Management Ltd, Binn Farm RDF Plant, Glenfarg, other treatment	Household / Commercial	31,232	31,232	29,889

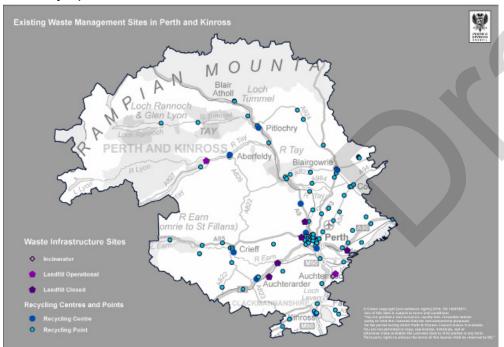
Site	Waste types	Waste inputs to site (tonnes)	Waste treated / recovered on site (tonnes)	Waste output from site (tonnes)
Viridor Waste Management Ltd, Friarton Bridge Park, Perth, other treatment	Household / Commercial / Other special	30,414	30,414	31,065
Barnhill Estates, Lambhill, Blairingone, transfer station	Commercial	10,623	-	12,887
Suez Recycling & Recovery UK Ltd, Binn Farm, wood recycling, transfer station	Commercial	70,332	66,345	77,506
Suez Recycling & Recovery UK Ltd, Binn Farm, DMR, transfer station	Household	2,955	2,955	3,103
Co-An, Welton Road Industrial Estate, Blairgowrie, transfer station	Industrial	111	-	111
PKC: Pitlochry, transfer station	Industrial	4,422	-	4,422
Tayside University Hospitals NHS Trust, Perth Royal Infirmary, transfer station	Industrial	290	-	290
Scottish Water Contracting, Perth Area Office, transfer station	Special asbestos	<1	-	3
Tayside Contracts, Blair Atholl Roads Depot, transfer station	Industrial	219	-	212
Wyllie Recycling Ltd, Ruthvenfield Way, Perth, transfer station	Household / Commercial	18,935	17,875	18,968
Binn Skips, Glenfarg, transfer station & composting	Household / Commercial / Industrial / Inert	104,312	104,312	96,279
Castlecroft Securities Ltd, Scotloo, Friarton Road, Perth, transfer station & other treatment	Household / Commercial / Industrial / Other special	11,671	9,164	11,350
Scottish Water, Perth Wastewater Treatment Plant, transfer station & other treatment	Household / Commercial / Industrial	121,615	125,830	13,215
Tayside Contracts, Loanleaven TP, Perth, transfer station & other treatment	Industrial	1,708	1,708	756

This data provides a picture of waste capacity in Perth and Kinross (SEPA 2017).

## Waste Management Infrastructure in Perth and Kinross

## What is the capacity of the current waste management sites?

Within Perth and Kinross there are currently 42 waste management sites that are highlighted in the map below, all of which are accepting below their annual capacity. There is currently only one landfill site with capacity within Perth and Kinross at Binn Farm. This site still has capacity for 687,255 tonnes of waste but it is not currently operational.



This data provides a picture of waste capacity within Perth and Kinross (SEPA, 2017).

Site activity	Number of sites	Annual capacity (tonnes)	Waste accepted (tonnes)
Civic amenity	7	34,184	9,055
Civic amenity / transfer station	2	90,656	65,589
Civic amenity / transfer station / landfill (not operational)	1	7,000	6,278
Composting / anaerobic digestion	1	97,620	45,924
Incineration / other treatment	1	60,000	0
Landfill	1	372,000	29,201
Landfill (not operational)	6	39,999	-
Metal recycler	5	21,747	3,680
Metal recycler / transfer station	1	12,000	17,913
Other treatment	2	90,000	61,646
Transfer station	10	342,799	107,887
Transfer station / composting	1	175,000	104,312
Transfer station / landfill (not operational	1	24,999	-
Transfer Station / other treatment	3	299,500	134,994
Grand total	42	1,597,504	586,479

### Sites for Waste Management Infrastructure in Perth and **Kinross**

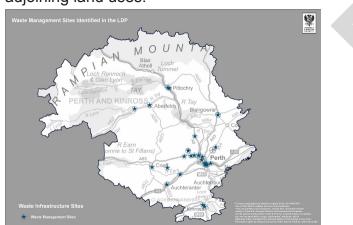
### Waste Management Sites Within the LDP

Local Development Plan Policy 34 Waste Management Infrastructure highlights a presumption in favour of the retention of waste management sites identified in the plan. These are shown on the map. Development of waste management infrastructure will be supported by the plan where the proposals accord with the principles of the Zero Waste Plan and make a positive contribution to the provision of a network of waste management installations.

In addition, in line with SPP we will seek to safeguard land surrounding existing waste management sites for potential expansion of waste management operations at these sites. This will prevent waste management activities from being restricted by adjoining land uses.

Policy 34 sets out the criteria which will be used to assess the appropriateness of new waste management infrastructure development. It states that waste management infrastructure will be supported where:

- a the proposal accords with the principles of the Zero Waste Plan, prioritises development in line with the waste hierarchy and makes a positive contribution to the provision of a network of waste management installations;
- b an outline of the main alternatives available in terms of location, technology and design and an indication of the main reasons for the applicant's choice, taking into account the environmental, social and economic effects is supplied;
- c the developer, in considering alternative site locations, takes account of potential impacts of alternative project options in respect of any adverse environmental effects;
- d potential impacts on pollution and noise in respect of any adverse effects on the community are taken into account;
- e applicants demonstrate in their application documents how the design process was conducted and how the proposed design evolved. Applicants should set out the reasons why the favoured choice has been selected:
- the proposal takes account of waste arisings, current and planned waste or other distribution or access infrastructure and identifies need;



- g the location offers a good standard of accessibility;
- h the proposal provides a sufficient statutory safety exclusion zone or landscaped buffer and screening, where appropriate;
- i the proposal is located close to an existing waste management installation and/or within an area identified within the Plan for existing or new employment uses;
- j proposals must be compatible with surrounding development and the underlying land allocation where this is not employment;
- k the proposal demonstrates satisfactory mitigation measures for any unacceptable impacts arising from the construction and operation of the development with respect to emissions including: air quality; carbon emissions; noise and vibration levels; odour; dust; litter; vermin; birds; insects; drainage including leachate and surface and ground water; leakage of hazardous substances; radar installations, navigation aids and aviation landing paths. It will also be necessary to mitigate any landscape and visual impact, traffic impact, impact on the natural or built heritage, and the water environment, biodiversity, geodiversity, habitats, tourism, recreational interests and listed buildings, scheduled monuments and conservation areas. Cumulative impacts will also be considered; and
- the potential for heat and/or electricity generation (which may include local or district heating schemes and co-location of industrial processes where the heat could be utilised) has been fully explored, and utilised where it is demonstrated to be viable.

### **Energy From Waste**

More information on developments that will create energy from waste, particularly heat, can be found in the upcoming Supplementary Guidance on Renewable Energy which is due to be published in 2019. More information specifically on energy from heat can be found in SEPA's Thermal Treatment of Waste Guidelines. All new waste infrastructure developments should meet the criteria listed in Policy 34.

### **Environmental Impact Assessments**

For most waste management infrastructure proposals, an Environmental Impact Assessment (EIA) will be required. If you are unsure about any aspect of your application, including the EIA, you can ask for pre-application advice from us. To complete the EIA screening, we are likely to ask for the following information:

- the contact details of the developer;
- the key characteristics of the project;
- the location of the project;
- the characteristics of the potential impact.

More details of the EIA process can be found on the Council's website. Where an EIA is not required we may still require assessment to be carried out to ensure that there is no adverse impact on the surrounding area as a result of this development. These assessments could include air quality (including odour) assessments, noise assessments, flood risk (including drainage) assessments, transport statements, visual impact assessments,

habitat (including protected species) assessments and construction method statements (CMS). This is not an exhaustive list and the assessments required will vary depending on the proposed development. It is suggested that further information on this should be obtained through pre-application discussions.

### **Restoration and Aftercare**

Where appropriate, applications will have to consider restoration and aftercare and after-use proposal and these should be agreed in advance of operations. It is important that this considers the enhancement and connectivity of existing habitats as well as the creation of new habitats. In some cases, it may be that restoration bonds will be required.

In addition for landfill sites, SEPA will require separate financial provision to be made. The operator is required by the PPC permit conditions to have its financial provision independently audited every three years. Should there be any variation to the permit that affects the total amount of financial liability associated with the operation then financial provision will be reviewed at the time of any such application.

More detail on the licensing process is available on SEPA's website.

## Waste Infrastructure in New Developments

The LDP Placemaking Guide highlights the importance of designing new developments that are sustainable with a focus on carbon reduction and increasing resilience to climate change. Looking specifically at waste, the guide states that it is "...vital to minimise the waste produced from a development, both in terms of construction and afterwards, once the buildings are lived in ... on-site composting and recycling should be provided if possible and any storage needs for recycling should be designed sufficiently to provide good access for collection. These issues need to be integrated into any design scheme at an early stage."

The following principles are established:

- Recycling facilities should be as easy and straightforward to use as general waste bins.
- Storage areas should be appropriate for access by both users and collection crews.
- Provision should be made for segregated waste streams including dry mixed recyclates, food waste and colourseparated glass.
- New commercial developments should comply with Waste (Scotland) Regulations 2012.

More information on this can be found within the Council's Waste Services Planning Guidance.

### **Site Waste Management Plans**

Although it is not a legal requirement to provide a Site Waste Management Plan, these can be effective tools in reducing construction waste allowing developers to manage materials more efficiently which could reduce costs.

A Site Waste Management Plan sets out how resources will be managed and how waste will be controlled at all stages during a construction project. It covers who will be responsible for resource management, what types of waste will be generated, how the waste will be managed - will it be reduced, reused or recycled?, which contractors will be used to ensure the waste is correctly recycled or disposed of responsibly?, and legally and how the quantity of waste generated by the project will be measured.

More information on this can be found on the NetRegs website.

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