

WASTE STRATEGY

CORE STRATEGY



Isle of Man
Government

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Minister's Introduction

The Isle of Man needs a strategy for managing waste. Its residents and its commercial and industrial sectors need to know that when waste is produced there are facilities and schemes for its safe management and disposal. The Waste Strategy acts as a framework within which the Island's waste can, or will be, managed advising on the need for capital and revenue investment and informs the business sector on the availability of waste infrastructure.

This document contains the core policies and to set out how the Island wants to manage its waste. It will be accompanied by an Annual Statement of need which will detail what is required in terms of facilities and schemes for managing waste. Finally both of these will be supported by a series of contemporary technical reports which will include the detail and information required to inform decisions.

I am pleased to bring forward the Waste Strategy for the Isle of Man.

A handwritten signature in black ink, appearing to read 'R K Harmer', with a large, stylized flourish at the end.

Hon R K Harmer MHK
Minister for Infrastructure

Isle of Man Waste Strategy

Introduction – the need for a revised waste strategy

In 2012 the Department of Infrastructure published the Waste Policy and Strategy 2012-2022. Mirroring the approach adopted by UK jurisdictions, specifically that of Scotland, this 10 year Strategy set a vision for a zero waste Island. The Waste Policy and Strategy set two high level performance targets: by 2022 to increase recycling levels from the 50% to 70%; and, to decrease landfill from 25% to 5%. It acknowledged the critical role played by Energy from Waste plant for the disposal of residual wastes, and identified the need for a hazardous waste transfer facility and a replacement problematic waste landfill. The hazardous waste transfer facility has now been developed, and work is ongoing to identify a replacement problematic waste landfill space.

In November 2017, the Department carried out a review of the 2012 Waste Policy and Strategy. The purpose of the review was to identify progress against the Strategy's aims and objectives after the five year period of its adoption and to ensure the Strategy remained fit for purpose. This review identified the need to carry out a full revision of the Waste Strategy in advance of 2022. One of the major drivers for revision was the lack of contemporary auditable waste data in the 2012 Waste Policy and Strategy (current and projected waste arisings; waste composition; capacity of existing waste facilities; methods for waste management). Without such baseline data any Strategy is at a significant risk of failure. Other drivers for a revision have subsequently been identified:

- there are solid waste streams, specifically marina and harbour dredgings and shell fish industry waste, that need now to be included within the Strategy waste arisings data. These wastes were previously disposed of to sea.
- Local Authorities, through the Waste Working Groups, have completed preliminary work on elements of a household waste strategy, for example identifying which household waste materials should be targeted for recycling, and considering options for incentivising recycling. The Waste Working Group has also reviewed the operation of the Energy from Waste and the option of supplementing the waste feedstock through the importation of Refuse Derived Fuel.

- there is increasing uncertainty about access to European and international markets for wastes disposal and recycling following the UK's withdrawal from the European Union and as a result of legislation introduced by other jurisdictions. Where these changes do not reduce access, the changes may make the cost of accessing these markets increasingly more expensive.
- work has commenced on the environmental monitoring requirement for closed and legacy landfill sites.

The need for baseline data is being addressed. The Department for Environment Food and Agriculture is working to develop its system of data capture, collation and reporting on an on-going basis, albeit this will take time. In the interim it would be possible to draft a revised version of the Waste Policy and Strategy, using as its template the Strategy approach adopted by UK or European jurisdictions, and accommodating the issues above.

However there are two primary reasons why this approach would fail to deliver a Waste Strategy for the Isle of Man that is fit for purpose. The issues concern its focus and its format. The approach would also fail to take into account the need to assess on an iterative basis how deliverable and how affordable the proposed Strategy is. This is needed to advise revisions in waste legislation, roles and responsibilities, and subsidy schemes. For this reason the Waste Strategy is adopting a different approach. At the Core of the Strategy are the following overarching principles which are a continuation from the 2012 Waste Strategy and Policy but supporting these are a number of high level policy statements which intend to provide direction for the management of the Island's waste.

This Core Strategy will be supported by two other important pieces of work. There will be an Annual Statement of Need which will set out a contemporary position statement on the capacity and capability to deal with waste arisings. This piece of work will be fundamental in assisting decisions being made on the future need for facilities. As this document will only be useful if updated on an annual basis it does not form part of the Core Strategy. The other important area of work is a series of more detailed Technical Reports. These will be subject to review and revision, prepared to an agreed action plan involving stakeholder engagement and supported by specialist advisors. They will cover a range of issues including but not limited to:

- collating data on current waste arisings and forecasting for future arisings, waste facilities and capacity,
- household waste and recycling and target materials,
- the role of the Energy from Waste plant,
- calculating the need for landfill void,
- legislative requirements,
- the monitoring and management of closed landfills and
- waste education.

These three elements – the Core Strategy, the Annual Statement of Need and the various the Technical Reports will form the Isle of Man Waste Strategy replacing the 2012 Waste Policy and Strategy 2012-2022.

Core Strategy

Context

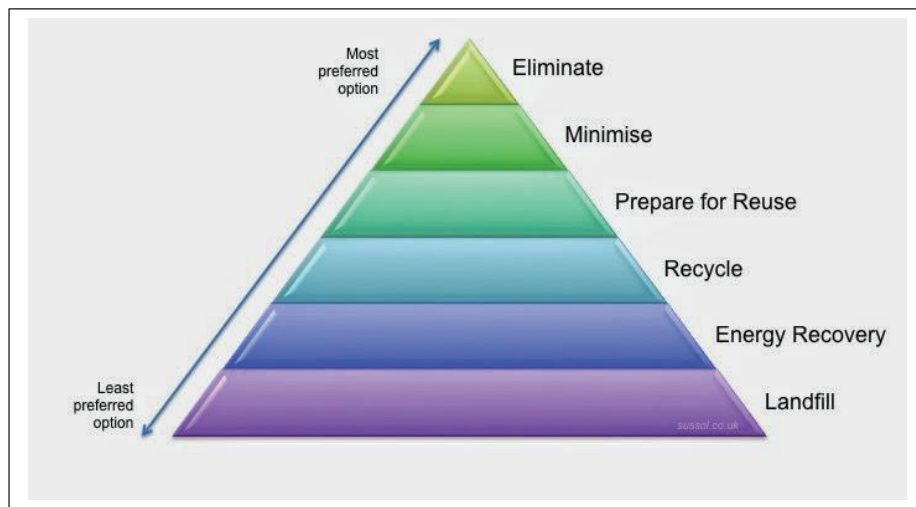
A century ago waste was predominantly produced on Island from materials which could be reused or recycled, or burned locally without producing harmful chemicals and leaving only inert ash. The 21st Century waste stream is very different. Household, commercial and industrial wastes now comprise predominantly oil based products such as plastics, electrical goods containing hazardous materials and semi-precious metals, and synthetic chemical compounds which benefit our lives but can be complex to manage. The facilities required to manage these wastes are therefore more complex and costly. Due to economies of scale many facilities cannot be developed on Island. In addition there are solid waste streams, marina silts for example, which the Island needs now to take account of in the waste strategy as EU environmental legislation is driving changes to traditional practices for their disposal. This EU legislation, which has become extremely prescriptive, has also impacted upon the way waste facilities are developed and operated, and can be imported and exported.

For the Waste Strategy to be successful it needs therefore to be relevant to the Isle of Man context, contemporary, deliverable and affordable.

The Sustainability Hierarchy - IOM Response

The EU Waste Framework Directive (Directive 2008/98/EC) established the waste hierarchy as the guiding framework for managing waste (Figure 1). The focus was to be on waste reduction, with reuse, recycling, and recovery of energy all of greater priority than final disposal. In applying this EU legislation the UK has set increasingly more stringent weight based targets for recycling. These targets have been challenged by some on the basis that weighing what you recover for recycling, rather than what you leave in a bin for disposal, is not a true indicator of recycling success. They have also been challenged on the basis that the weight of an item or packaging does not equate to resources and energy conservation – the two key drivers for recycling. However along with the Landfill Tax, Producer Responsibility and Take-Back Schemes, and Packaging Recovery Notes, the economic drivers for diversion of waste from landfill has increased the rates of recycling in the UK. With the ability to transport residual wastes between jurisdictions, to export Refuse Derived Fuel (RDF) to Europe, and having the economy of scale to develop specialist facilities serving the needs of the UK, self-sufficiency in waste management has not been a key issue within the UK.

Figure 1 The EU Waste Hierarchy



The context for the IoM Waste Strategy is very different to that of other UK and European jurisdictions. Although it is important to consider best practice in other countries, as an Island there are distinguishing characteristics, physical, economic and legislative, which impact on how wastes can be managed:

- i. we live on an Island that imports most of the goods it uses. These goods are packaged and that packaging then becomes waste
- ii. once goods reach their end of life or are broken and cannot be repaired, they have to be disposed of as part of the waste management system
- iii. the Island's manufacturing, service and infrastructure sectors produce, as by-products, wastes that are notified as hazardous and harmful to health or the environment and require specialist treatment or disposal
- iv. as a Crown Dependency we are subject to the restrictions imposed by EU Shipment of Waste Regulation (No.1013/2006) and the and UK Transfrontier Shipment of Waste Regulations 2007 . This means that only waste being recycled or disposed of within a specialist (usually hazardous) waste facility can currently be exported, subject to prior approval from the UK for their importation.

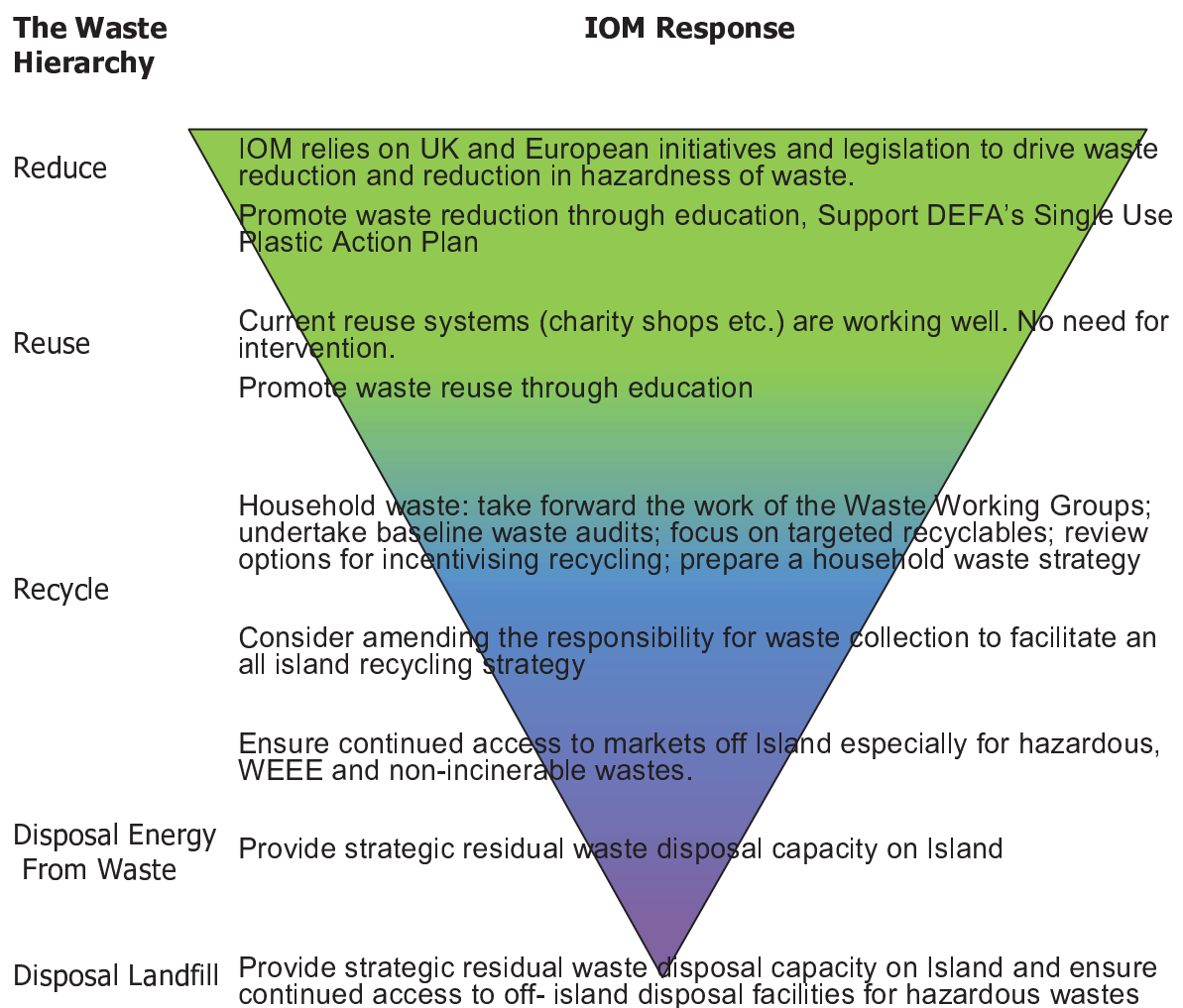
- v. the Island is limited by its physical size and its economy. Economies of scale dictate the Island cannot afford to develop bespoke, technically complex, facilities to manage all wastes produced. Some waste types have therefore to be exported at a cost to the waste producer. This cost impacts local industry and the economics of materials recycling
- vi. the drivers for the waste hierarchy are resource conservation and reducing carbon emissions. In a global context the actions of the Island may be minimal. The Island has previously acknowledged and accepted its role and responsibility for delivering these global aims. If continued this will inevitably mean a need to balance, and in some instances prioritise, environmental over economic considerations.
- vii. as a net importer of goods the Island is to a greater extent a beneficiary of legislation and drivers in other jurisdictions that result in changes in product design to reduce waste, reduce the hazardousness of waste or assist in goods reuse or recycling
- viii. the Island cannot access UK schemes that either provide income for recycling, or allow for the end of life free recycling through Producer Responsibility Schemes. Island residents may purchase goods (for example fridges) the cost of which includes the cost of its end of life recycling. However the IOM can neither access this money nor the free 'take back' schemes.

For a Waste Strategy to be relevant and achievable these factors need to be taken into account when interpreting the Waste Hierarchy. This means identifying the aspects of the Waste Hierarchy the Island:

- could have influence or control over, given its economic and physical size and its resources,
- must focus on to maintain a healthy economy and environment
- should aim to influence the Island's status as a Biosphere Island, i.e. conserve resources, reduce energy consumption, address climate change

This process produces the following Island response to the waste hierarchy (Figure 2). It provides the framework and focus for developing the Waste Strategy's policies and Action Plan, and for prioritising and targeting resources.

Figure 2 The Isle of Man response to the Waste Hierarchy



The Infrastructure Hierarchy – Isle of Man Priority

Unlike the approaches adopted by UK and European jurisdictions which prioritise waste reduction reuse and recycling, the priority for the IOM needs, in the first instance, to be waste disposal (Figure 3). The Strategy needs to ensure, on an on-going basis, that the Island has, or will have, the strategic infrastructure or schemes

required to dispose of its solid wastes. Failure to ensure disposal capacity would be severely damaging to the Isle of Man economy. If a company cannot dispose of its waste, or cannot dispose of it at a cost that is economic in business terms, then that company is highly unlikely to locate to, or remain on, the Island. Failure to ensure disposal capacity could also be severely damaging to Island's environment. Despite regulation and enforcement, companies may choose to use unregulated, less costly, methods for wastes management (burning, burying, and disposal to watercourses).

Having identified the critical factors governing disposal capacity, and determined a programme of work for ensuring access to that capacity, the Island needs then to determine its focus on, and policies towards, waste reduction, reuse, and recycling. This process will need to be guided by the waste hierarchy and aims of sustainable development, taking into account the constraints of affordability and deliverability. This process will identify those wastes for which a subsidy may be required to ensure access to off Island Schemes.

The Strategy needs therefore to undertake a pragmatic response to the waste hierarchy to:

- ensure the provision of strategic disposal capacity for residual incinerables, non-incinerable inert and non-incinerable problematic wastes. The need to secure strategic landfill void space for problematic and inert waste is currently identified as the priority work area for infrastructure development
- enable a relationship to be maintained with the UK and other jurisdictions that allows the export for disposal or recycling in the UK, from the Island, of hazardous wastes and targeted non-incinerable, hazardous or high embodied carbon materials;

This produces the Infrastructure Hierarchy (Figure 3), which identifies, in order of priority, the facilities and/or schemes the Island needs to support economic activity and deliver sustainable wastes management.

Figure 3 The Waste Infrastructure Hierarchy

Order of Priority	Facility/Scheme
1	Disposal capacity for: Incinerable waste (EfW) Non-incinerable waste <ul style="list-style-type: none">- hazardous- problematic- inert
2	Access to Recycling Schemes for: <ul style="list-style-type: none">- hazardous waste- non incinerable waste- high embodied carbon waste (e.g. plastic)
3	Access to Schemes for: reusing waste reducing the amount or hazardousness of waste

Core Waste Strategy Policies

The following Core Waste Strategy Policies provide the framework for decision making about: how wastes will be managed; how the impact of managing those wastes will be controlled; the ability of the Island to accommodate businesses producing wastes; the need to ensure the costs of managing those wastes are, with a few exceptions, carried by the producer; and, identifying opportunities for savings in the cost of collecting household waste delivered through economies of scale and standardisation of practices.

Policy 1 Protecting the Environment and Human Health

The management of waste (its collection, transportation, storage, processing, and disposal) has the potential to cause harm to the environment and people, now and in the future. It is imperative that a 21st century waste strategy reflects the need to protect the Islands habitats and people from harm, and to identify and address issues relating to historic waste disposal.

All waste should be managed in accordance with relevant and valid standards to safeguard residents, visitors, flora and fauna, fresh water and marine habitats.

The Departments of Isle of Man Government will identify, monitor, and where necessary manage areas of historic waste disposal.

Policy 2 Island Self-Sufficiency

The Island aims to be self-sufficient in managing its wastes. However it is limited by its physical size and its economy which means it cannot afford to develop bespoke facilities to manage all the wastes it produces. Some waste types, including manufacturing sector by-products, are hazardous and require specialist treatment or disposal in facilities off island. Other materials, such as waste paper or aluminium, need to be exported for reprocessing. Where material are exported for recycling it is important that the energy savings accrued through recycling are not outweighed by the distance the material travels.

The Island will not allow the importation of waste for treatment or disposal. Importing waste would undermine the aims of minimising pollution, protecting the environment, and self-sufficiency. The island will not support the development of new businesses on Island which produce wastes for which there is no management facility, or for which there is a facility but this forms part of the Islands strategic waste infrastructure.

The Isle of Man will aim to be self-sufficient in managing the waste it produces by:

- **only exporting waste for disposal where this is considered to be the best environmental option for that waste and will work to ensure access to that option is maintained**
- **not importing waste**
- **considering the cost and capacity for dealing with waste when looking to facilitate the development of businesses on Island which produce waste for which there is either no disposal or management facility.**

Where waste is exported for recycling, in keeping with the Isle of Man policy of reducing greenhouse gas emissions, the Island will aim to minimise the distance those materials are transported for primary reprocessing.

Policy 3 Disposal of Residual Incinerable Waste

The Island needs a disposal route for managing its incinerable waste arisings, including mixed household, commercial and clinical wastes. The Energy from Waste Plant is a strategic facility which is designed to accommodate fluctuations in waste arising and to accept a range of waste types. The Facility is currently operated at about 80% capacity. It is considered the most appropriate and reliable option for managing wastes on an Island. The Facility is operated, managed and maintained to European standards. The current contract runs until 2029 but the Facility can, subject to it remaining compliant, continue to operate well beyond that date.

Incineration with energy recovery will remain the primary method for disposing of residual incinerable waste on Island beyond the current facility contract period of August 2029, subject to the facility meeting the required emission and operational standards

The Department will work to utilise the Energy from Waste Facility to dispose of waste which can technically and safely be managed via the incineration process.

Policy 4 Management of Farming Sector Fallen Stock and Meat Plant Residues

The agricultural sector is a key part of the Islands economy, heritage and natural environment. As a by-product of its activities it produces animal wastes which need to be safely managed.

The Animal Waste Processing Plant (AWPP) will continue in its role as the primary strategic method for disposing of animal waste.

Policy 5 Household Waste Recycling

Household waste is known to contain waste packaging and materials which could be separated for recycling. The amount of potentially recyclable material can be identified through baseline waste audits. To deliver an effective household waste recycling strategy the Island needs to target materials, and to ensure that when materials are separated for recycling they are of a high quality to ensure access to recycling markets off island. Benefits can accrue through joint working and by adopting standardised education programmes which promote schemes. The success of those schemes will be measured not by the tonnage of material extracted but the amount of recyclable material remaining in the residual waste stream. There is a need to develop a waste data strategy to ensure the comparability of all household waste data.

The Department, working with others across Government and the Local Authorities, will identify household waste packaging and items that will be targeted for recycling across all Local Authority waste collection areas and will establish limits for the amount of targeted recyclables remaining in the residual household waste stream.

The Departments of Infrastructure and Environment, Food and Agriculture will work with Local Authorities to ensure the auditability of all wastes collected and managed, and will report comparative recycling performance.

Policy 6 Managing Resources & the 3Rs

To be move towards sustainable waste management the Island needs to:

- reduce its reliance on fossil fuels, and this means plastics and goods made from polymers;
- reduce its consumption of rare earth metals;
- reduce the amount of waste it produces;
- reduce the hazardousness of that waste.

This will require a change in the way residents, businesses and authorities (national and local) view waste, considering it not as a problem for others to manage (at a cost) but a misuse of the earth's resources and a waste of energy, and this requires a personal, informed response.

The Department, working with others, will support decision making by its residents, businesses and Local Authorities by providing information, advice, and where possible research about waste, to inform choice. It will promote the use of recycling schemes.

Policy 7 Reducing the Use of Single Use Plastics

As a sea nation the Island needs to reduce the amount of plastic waste and plastic fibres, the majority originating from single use plastics, entering the marine environment. Single use plastics often represent an unsustainable use of resources and make a significant contribution to global greenhouse gas emissions and environmental pollution.

The Department will support the Department of Environment, Food and Agriculture in delivering the Single Use Plastic Action Plan target of eliminating all unnecessary single use plastics across Government by January 2021.

Policy 8 Ensuring an efficient household waste collection service

There is a financial cost to dealing with waste arisings in an environmentally responsible manner. These costs can be reduced through economies of scale delivered through shared services and facilities or using initiatives such as joint procurement of services. Local Authorities are responsible for the collection of household waste. The Department will work with Local Authorities to identify opportunities for cost savings through shared services and standardisation of practices to realise improvements in the provision of schemes for recycling and a reduction in the environmental impact of waste collection.

The Department has initiated waste working groups with both the officers and the political members of the Local Authorities. It is hoped that through this joint working these groups will provide a forum and a mechanism to explore issues surrounding the household waste collection service to ensure that it offers the most efficient service to the rate payer.

The Department will continue to work with Local Authorities to explore options for reducing the cost and environmental impacts of waste collection, and for decreasing the amount of potentially recyclable material in residual household waste. This will include considering the potential benefits from shared services, facilities, and schemes, and adopting common standards of operation. The Department will work with Local Authorities to determine how best such initiatives will be progressed.