

## BILLET D'ÉTAT

WEDNESDAY, 29th JANUARY 2014

Volume 1

PUBLIC SERVICES DEPARTMENT IMPLEMENTATION OF THE SOLID WASTE STRATEGY II 2014

### BILLET D'ÉTAT

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# TO THE MEMBERS OF THE STATES OF THE ISLAND OF GUERNSEY

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I hereby give notice that the item contained in this Billet d'État which has been submitted for debate will be considered at the Meeting of the States of Deliberation already convened for WEDNESDAY, the 29<sup>th</sup> JANUARY, 2014.

R. J. COLLAS Bailiff and Presiding Officer

The Royal Court House Guernsey 20<sup>th</sup> December 2013

#### PUBLIC SERVICES DEPARTMENT

#### IMPLEMENTATION OF THE SOLID WASTE STRATEGY

The Chief Minister Policy Council Sir Charles Frossard House La Charroterie St Peter Port

9<sup>th</sup> December 2013

Dear Sir

#### 1 Executive Summary

- 1.1 The States have long recognised that the Island's method of waste disposal landfill is not sustainable. The last decade, in particular, has seen a number of States debates on waste. In February 2010, the Public Services Department (Public Services) was directed by the States to produce proposals for a revised strategy for disposing of solid waste.
- 1.2 In February 2012, the States approved the 'Revised Waste Strategy', which was formulated with the internationally accepted Waste Hierarchy at its core, focusing on minimisation and recycling of waste (gradually increasing up to a 70% recycling target in 2025), leaving only a small remaining 'residual' fraction to be dealt with (Billet d'État IV of 2012). Public Services was directed to advance a number of work streams towards implementing the agreed strategy.
- 1.3 It should be noted that, under the present legislative framework, the Environment Department is responsible for formulating waste policy. This is to guard against conflicts of interest between service departments (like Public Services) providing and commissioning services, and private sector commercial interest. However, the roles and responsibilities have become blurred because of past States resolutions.
- 1.4 Clearly, this is not ideal and it is understood that some members of the Environment Department have concerns about the process described above and the subsequent implications for roles and responsibilities. However, it must be emphasised that, in bringing forward this report and the proposals outlined within it, Public Services is following States direction to go about implementing the previously agreed waste strategy.
- 1.5 This report is split into two sections, each addressing an element on which Public Services was required by the States to report back. The various work streams

necessary to deliver the approved waste strategy are interlinked and, in choosing the single report approach, Public Services consulted the Policy Council on how best to present its findings and recommendations to the States to enable effective consideration of the subjects involved.

- 1.6 In addition to addressing the elements encompassed by the February 2012 States resolutions, Public Services has included financial information for all aspects of the waste strategy implementation to ensure States Members have the most up to date information. The Department has also taken the opportunity to seek to have the February 2012 resolutions relating to delegated authority for Treasury and Resources rescinded and replaced with new directions based on the financial information in this report.
- 1.7 Finally, the report seeks the establishment of a solid waste trading account, which would ensure that waste trading activities fund both ongoing operations and the implementation of the waste strategy.

#### Export

- 1.8 Having considered in 2012 the range of options set out for the disposal of residual waste, the States directed Public Services to pursue an export solution and to report back to the Policy Council with full costings to lay before the States. However, as Public Services has been responsible for carrying out all of the work necessary to give effect to the relevant resolution, the Policy Council agreed that it would be sensible for Public Services to lay this report before the States itself.
- 1.9 Section 1 of the report outlines the options investigated for the export of residual waste for energy recovery. Recovery generates electricity (and, where possible, useable heat) so value is extracted from even this discarded portion of waste.
- 1.10 The export of waste from one jurisdiction to another is regulated by international conventions and legislation, and national legislation. However, since the 2012 debate, the European market for refuse derived fuel (residual waste that has undergone certain preparatory treatment) has further developed and movements across European boundaries are common.
- 1.11 The February 2012 resolutions specifically instructed Public Services to include in its investigations the option of buying into the Jersey plant; and local legislative changes to facilitate export of waste to Jersey were approved by the States in September 2013<sup>1</sup>.
- 1.12 Public Services was directed to return to the States with full costings for the export of waste. Definitive costings will only be determined through a formal tendering exercise. However, in light of the predicted introduction of significant extra plant capacity over the next few years, which could lead to a bigger market for waste as a fuel, it was considered entirely possible that gate fees at receiving

<sup>&</sup>lt;sup>1</sup> Billet d'État XVIII of 2013

energy recovery plants could fall. A formal tender has not, therefore, been advanced at this stage and prices included in this report are indicative, based on information sourced from plant operators in a targeted market review exercise. This approach was endorsed by the States Corporate Procurement team within Treasury and Resources ('Corporate Procurement').

- 1.13 Whilst it must be emphasised that the costs presented in this report are the best available at this time, the indication is that, subject to certain conditions, there is potential scope to export refuse derived fuel ('RDF') to energy from waste ('EfW') facilities in a number of nearby European countries at a lower cost than that anticipated last year. (The 2012 report envisaged the cost for the export element of the strategy to be £182 per tonne. Revised estimates in this report, calculated based on five shortlisted EfW facilities, indicate cost per tonne figures from four of the operators falling below this in the range of £109 to £159 per tonne.)
- 1.14 Subject to approval of the recommendations relating to export in this report, Public Services intends in due course to issue tenders for both the Transfer Station (which is required to prepare the residual waste for export) and for the export of waste. To facilitate this process, this report recommends that the Treasury and Resources Department ('Treasury and Resources') be given delegated authority to approve recommended tenderers for these projects and to release the relevant funds. This approach would safeguard commercial sensitivities and enable Public Services to move forward with the contract without delay.

#### Legislation and Policy

- 1.15 The waste strategy approved in February 2012 will represent a change to the way waste management services and facilities are delivered in the future. In the 2012 debate, the States accepted that to underpin the implementation of the strategy and achieve the challenging targets set, it would be necessary to amend the current legislative framework and implement other means of encouraging waste minimisation.
- 1.16 Public Services was directed to return to the States with the results of its investigations into any legislative and policy changes necessary. Section 2 of the report serves to respond to that resolution.
- 1.17 This report proposes amendments to current Guernsey legislation to provide an effective regulatory framework and a mix of incentives and requirements to help maximise waste prevention and minimisation, and encourage participation in recycling schemes.
- 1.18 Given the subject matter of the report, some terminology and abbreviations may be unfamiliar to readers. Therefore, a glossary has been included as Appendix 1.

#### 2 Report Structure

- 2.1 This report is split into three further sections, dealing with the following areas:
  - Background
  - Export of Waste
  - Legislation and Policy

#### 3 Background

- 3.1 It has been acknowledged for many years that Guernsey's current method of waste disposal i.e. landfill cannot continue in the long term. The Island's only remaining putrescible landfill site at Mont Cuet has a limited life span and, based on a rolling five-year average at current tipping rates, is predicted to be full by mid-2022. In addition, landfill of putrescible waste causes an unacceptable level of damage to the environment.
- 3.2 The key events over the last decade can be summarised as:
  - **June 2004:** Proposals to construct the Lurgi EfW plant were rejected by the States of Guernsey.
  - **July 2009:** The States approved Suez Environnement as the preferred bidder for the design, build and operation of a waste treatment facility on Longue Hougue, incorporating EfW.
  - **February 2010:** Following significant debate the States overturned the July 2009 decision and directed Public Services to return to the States as soon as practicable with proposals for a revised strategy for disposing of solid waste.
  - **2010-2011:** Public Services undertook extensive consultation with all key stakeholders in the development of the revised waste strategy.
  - **February 2012:** The States approved the revised waste strategy.

#### 4 Roles

- 4.1 The Environmental Pollution (Guernsey) Law, 2004 ('the EP Law') establishes the States policy, regulatory and operational management framework for all waste. Under the law:
  - The Environment Department ('Environment') is the policy department for waste, to ensure there are no conflicts of interest between service departments providing and commissioning services and private sector commercial interest:

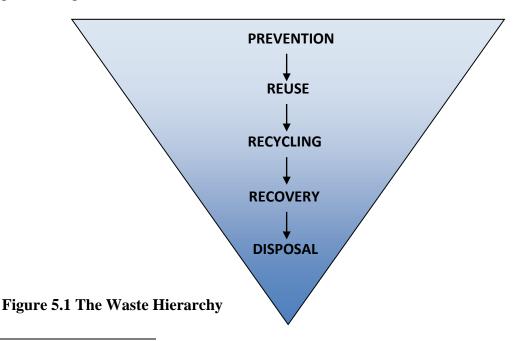
- The Director of Environmental Health and Pollution Regulation ('the Director') is appointed to carry out pollution control functions including the regulation of waste activities in connection with 'prescribed operations' (transportation, sorting, storage, treating, disposal etc. of solid waste);
- The Public Services Department is designated as the Waste Disposal Authority ('WDA') with specific duties in connection with the public waste stream, including provision of public waste disposal sites. In managing such sites Public Services must have regard to the current Waste Disposal Plan and in effect acts as a service provider although it also has functions in relation to the review of waste management systems, identifying options for waste disposal and making recommendations to the Environment.
- 4.2 In accordance with the roles set out in the Law, it is clear that Environment, and not Public Services, has responsibility for formulating waste strategy although it must do so in light of recommendations made to it by the WDA; indeed responsibility for advising the States on waste strategy is within its mandate. Environment should develop policy which is reflected in the Waste Disposal Plan that is approved by the States. The WDA is then required to provide suitable facilities etc. to give effect to the Waste Disposal Plan.
- 4.3 It is evident that these responsibilities have become blurred because of States resolutions tasking Public Services with reporting back on strategy issues and past transfer of relevant waste functions set out in the EP Law. This means that if the proposals in this report are approved, Environment would be expected to draft a Waste Disposal Plan consistent with this report, unless there were very good reasons to make alternative recommendations to the States. Such reasons may revolve around wider environmental policy.
- 4.4 Clearly, this order of events is not ideal, but Public Services was reluctant to hold back from presenting its proposals in full at this time because it considers it imperative to maintain momentum with the implementation of the strategy.
- 4.5 Following the 2012 States debate, Public Services approached the previous Board of the Environment to confirm that it was happy for Public Services to continue to lead on the workstreams required to give effect to the proposals accepted by the States, working closely with Environment officers. Environment agreed with this approach, accepting that it was the will of the States for Public Services to progress the matter. Environment has provided a letter of comment to be submitted with this report (Appendix 2).
- 4.6 Public Services, the Policy Council and the Law Officers recognised the challenge presented by the need to have different bodies i.e. the Policy Council and Public Services reporting back to the States on different, but closely related issues. If followed to the letter there would be a report from Policy Council on the export of waste, which would re-present the recommendations and research of the Public

Services Department. Given the Council's mandate to be the interface with the Parishes, there would be a further report from the Policy Council dealing with the changes to the waste legislation relating to the Parishes, but for which the preparation and consultation had been carried out by Public Services. Finally, there would be a third report coming from Public Services that would propose the other elements of legislative changes required.

- 4.7 While the presentation of multiple reports would technically be correct it would not be the most effective means of engaging States Members in debate. All the elements relate to the implementation of the waste strategy approved by the States, and are closely interrelated. A single report will lead to a single debate where States Members will be able to discuss all aspects of the proposals relating to export, policy and legislation at the same time.
- 4.8 The Policy Council concurs with this approach on the basis that it safeguards against the piecemeal consideration of the proposals and ensures the final resolutions of the States are clear in the context of the whole waste strategy.

#### **5** Waste Strategy

- 5.1 In February 2012 Public Services returned to the States with its 'Revised Waste Strategy' report<sup>2</sup>, which had been developed through extensive consultation with Island stakeholders to ensure that, as far as was practicable, all views had been considered fairly. The States approved the recommended strategy.
- 5.2 The strategy is underpinned by the Waste Hierarchy, which is an internationally accepted principle and is essentially a guide to sustainable waste management. Waste prevention is at the top of the list, followed by re-use; after which comes recycling and then recovery (including energy recovery) and disposal is the least preferred option.



<sup>&</sup>lt;sup>2</sup> Billet d'État IV of 2012

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- 5.3 In summary, the waste strategy focuses on ensuring that waste is dealt with at the highest level possible in the Waste Hierarchy, which should mean that only a relatively small fraction remains for final treatment/disposal.
- 5.4 Following approval of the waste strategy in February 2012, a number of interrelated work streams were identified as being required to achieve the objectives of the waste strategy. These work streams are illustrated by Figure 5.2:



Figure 5.2 Waste Strategy Work Streams

#### 6 Facilities

6.1 Implementation of the waste strategy will require three key waste management facilities. The following provides a brief overview of these:

#### Materials Recovery Facility ('MRF')

- 6.2 A Materials Recovery Facility (or Facilities) is required for:
  - The segregation of co-mingled dry recyclables collected from the kerbside from households and small businesses that opt into the kerbside scheme;
  - The recovery of recyclable materials from mixed commercial waste, including the separation of other materials, to meet the Waste Acceptance Criteria ('WAC') set for the waste Transfer Station. The WAC are necessary to allow off-island shipment under European and international law.
- 6.3 Public Services only intends to provide or procure facilities for the processing of household dry recyclables, with the addition of small businesses that opt in to kerbside collections (see the Legislation and Policy section in this report). There is no intention to interfere in the market for the sorting of commercially collected dry recyclables and mixed commercial or household (skip) waste –i.e. waste from a household source that has been placed in a skip for commercial collection. All residual waste, regardless of source, will, however, be expected to be sent to the Transfer Station to be prepared for export.
- 6.4 It is currently anticipated that MRF facilities required for household dry recyclables will be procured through a tender process. Public Services will offer a contract to process dry recyclables from household collection services (including small businesses who opt in to these schemes) and bring bank facilities. Household collection contractors will deliver dry recyclables to a specified MRF. There will be no restriction on the operator processing additional dry recyclables in accordance with any licence granted by the Regulator but this will not form part of the contract with the States of Guernsey, as the belief is that as facilities currently exist for processing commercial dry recyclables, it is not logical to construct additional facilities or seek new contracts for this purpose.
- 6.5 Outputs from this processing facility (or facilities) will be exported to various recycling markets, with any residual waste that cannot be recycled delivered to the waste Transfer Station for preparation for export in accordance with the WAC of the receiving plant.

#### In-Vessel Composter ('IVC')

6.6 Segregated food waste collected from households and the commercial sector will be delivered to an IVC facility procured by the WDA on behalf of the States of Guernsey. This will be procured by tender, most likely a design, build and operate contract.

#### Transfer Station

6.7 Residual waste from both household and commercial sources will be delivered to a Transfer Station procured by the WDA on behalf of the States of Guernsey, to be prepared for export to an off-Island waste treatment facility. This will be procured by tender, most likely a design, build and operate contract.

#### **EXPORT OF WASTE**

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#### 7 Introduction

7.1 Amongst other things, the States resolved in February 2012:

"To direct the Public Services Department to pursue the option of export of waste, including the possibility of buying into the Jersey plant, and to report back to the Policy Council no later than September 2013 with full costings to lay before the States".

7.2 This section of the report fulfils the requirements of that States resolution.

#### **8** Context of Export

- 8.1 As indicated by Figure 5.2, it is important to appreciate that export is just one part (the final step) of the waste strategy.
- 8.2 There are a number of interfaces between the various work streams. Export is closely linked to the other work streams that were identified in Figure 5.2, in particular:
  - Work Stream 1 Kerbside collection of dry recyclables and food waste. The recommended kerbside collection scheme will affect the waste composition and calorific value ('CV') of the waste to be exported.
  - Work Stream 3 Materials Recovery Facilities. One or more MRFs will be required to process mixed commercial waste to maximise recovery of recyclables, and to process household dry recyclables. Outputs will be required to meet the WAC for the waste Transfer Station.
  - Work Stream 3 Transfer Station. This facility will be required to prepare waste for export in accordance with WAC at the receiving (offisland) plant.
  - Work Stream 5 Legislation. Waste will be exported in accordance with relevant legislation for the shipment of waste.
  - Work Stream 5 Funding Mechanisms. Various funding mechanisms are required to cover the costs of implementing the waste strategy, including the processing and export of residual waste.
  - Work Stream 7 Management of Mont Cuet. Future waste disposal at Mont Cuet will be restricted to Hazardous/Specially Controlled waste that cannot be dealt with by alternative further treatment or export, allowing the remainder of the site to be engineered for green waste composting.
- 8.3 It is important to recognise that the strategy needs to be considered holistically in terms of implementation. With a few exceptions, it is not possible to isolate different elements and remove or change them without there being an impact on another aspect of the implementation plan.

#### 9 Why Export of Waste?

- 9.1 There are a limited number of options in terms of what can be done with Guernsey's waste after as much as possible has been reused or recycled. In 2010/2011 Public Services considered the options in detail and carried out a very wide-ranging stakeholder engagement exercise to help with the development of a revised waste strategy. The best practical environmental options for disposal were identified as required under the Environmental Pollution (Guernsey) Law, 2004.
- 9.2 The results of that engagement and consultation process were reported to the States in February 2012. The conclusion was that the Island would need to develop processes and policies and build infrastructure to minimise and recycle as much waste as possible and, after those processes have been exhausted, either build its own EfW plant or export its residual waste for heat treatment and energy recovery elsewhere. Analysis of the three options remaining, after agreed assessment criteria had been applied, resulted in Public Services' conclusion that waste that cannot be dealt with at the higher levels of the Waste Hierarchy should be exported for energy recovery at an EfW plant. The States agreed with this conclusion.
- 9.3 There are a number of benefits associated with exporting waste to an off-island EfW plant, as follows:
  - Guernsey's waste will not be put into landfill (in Guernsey or elsewhere).
  - Guernsey's waste will be used to generate electricity and potentially recoverable heat, rather than just thrown away the use of waste in this manner is categorised as 'recovery' in the Waste Hierarchy (whereas landfill is 'disposal', even if the gas produced by the decaying waste is used to generate electricity).
  - An EfW plant would not need to be built on-island. The option of an on-island incinerator has been rejected twice by the States previously and there is likely to be significant public resistance.
  - It will be less expensive to build and operate infrastructure associated with the export of waste (principally a Transfer Station where the residual waste is prepared, baled and stored ready for export) than it would be to construct and operate an on-island EfW plant. An EfW plant requires a much higher capital spend because the processes undertaken are more complex. Operating costs are also higher because of those processes, whilst decommissioning costs at the end of life are also an issue.
  - A Transfer Station can be constructed to handle changing quantities of waste, so it is more flexible in terms of future waste quantities, whereas an EfW plant designed to process current volumes of waste would not run (or generate electricity) efficiently at the significantly lower throughputs of waste predicted towards the end of the period covered by the strategy. It is likely that it would have to stop and start, rather than run continuously, which is inefficient and also leads to higher maintenance requirements.

#### 10 Predicted Quantity of Waste to be Exported#

- 10.1 It is not intended that all of Guernsey's waste will be exported. Inert construction and demolition waste will continue to be utilised for land reclamation. Recyclable materials will be separated either at source, or through a MRF, and recycled. Food waste would be separated at source from other waste and processed onisland in an IVC to produce compost for use locally. Only after these processes have taken place will the residual waste be exported. Some hazardous or other specially controlled waste would continue to be disposed of on-island in an appropriate manner, either in a specially engineered cell at Mont Cuet or, as now, in small bespoke incinerators like that used for clinical waste.
- 10.2 Modelling of future waste streams during the waste strategy development indicated a maximum tonnage of residual waste for treatment of approximately 28,000 tonnes per year at the start of the contract period, which is likely to be early in 2016. Recycling rates are predicted to increase in future with the provision of improved facilities and services (such as separate kerbside collections of dry recyclables and food waste), along with continuing work to educate islanders about waste minimisation and recycling to bring about individual behavioural and cultural change. Certain materials are recycled at present but, in future, a greater proportion of waste is likely to become recyclable as technologies evolve and/or the market value of resources in the recyclates increase. As part of the waste strategy, it is also intended to minimise the amount of waste produced in the first place.
- 10.3 Therefore as recycling rates achieved in Guernsey increase, the quantity of residual waste to be exported could be expected to decrease to approximately 18,000 tonnes per year by 2025<sup>3</sup>.

#### 11 Options for Export of Waste

- 11.1 Ricardo-AEA was commissioned by Public Services to provide technical advice for the analysis of options and procurement of services in relation to the export of residual waste. A market review and feasibility study, was produced and initially issued in March 2013. A copy (dated August 2013<sup>4</sup>) is included in Appendix 3 to this report. This is a redacted version of the report, which has had specific references to actual facilities removed to respect commercial sensitivity.
- 11.2 The February 2012 States report made specific reference to the export of waste for heat treatment and recovery. Therefore, in keeping with the intent of the February 2012 States report, Ricardo-AEA identified EfW facilities within Europe (including the UK) and screened them using five initial criteria<sup>5</sup>, including that

<sup>5</sup> Distance (<500km from the receiving port); Age (commissioned post-1995); Available capacity (30Ktpa headroom or >150Ktpa design capacity); Recovery (R1) status; Current feedstock type

<sup>&</sup>lt;sup>3</sup> This relies on the 70% recycling target being achieved. Future population level (which has a direct link with waste produced) will influence the precise tonnages of future residual waste for treatment.

<sup>&</sup>lt;sup>4</sup> The August 2013 version corrected a non-material typographical error.

they should meet R1 classification, which is effectively a requirement that such facilities processing municipal solid waste meet energy efficiency requirements specified under EU waste law. That screening process generated 45 possible options for receiving Guernsey's waste. Those facilities were contacted and subsequently 18 expressions of interest were received, including Jersey. This initial list was further refined, which resulted in a shortlist of five destinations being taken forward to the next stage.

- 11.3 Although Jersey did not score highly, it was retained as an option owing to its proximity and because of the willingness and commitment of the governments of Guernsey and Jersey to work together.
- 11.4 The shortlist of potential options for receiving Guernsey's exported residual waste was compiled based on specific plants/operators. However, these details are commercially sensitive. Whilst Public Services cannot disclose the plant/operator names in this report, it can confirm that shortlisted options relate to the following countries or territories (in alphabetical order):
  - Belgium
  - Channel Islands
  - Holland (2)
  - Sweden
- 11.5 For any of the options, it is important to consider what to do if there are problems with the export of waste. For example, if there was to be bad weather/seas that prevented shipping of the waste for a period of time, Guernsey would need to have sufficient storage capacity to hold the waste until normal conditions returned. If the chosen EfW plant was to break down for some reason, then there would need to be an alternative plan. For the Jersey plant, that might be using Mont Cuet either to store waste temporarily prior to shipping it at a later date, or to dispose of it (landfill). For any of the European options, this might be switching to the use of an alternative nearby plant. It should be noted that the tender specification and resulting contract with any future facility will include a contingency plan to deal with such eventualities. Safeguards will ensure that there is a contractual obligation, with penalties in the case of default, to deal with the exported waste.

#### 12 Possibility of Buying into the Jersey Facility

- 12.1 The States resolution from February 2012, which directed Public Services to pursue the export option, includes pursuing "the possibility of buying into the Jersey plant".
- 12.2 As stated in the February 2012 States Report (paragraph 7.27) and the Ricardo-AEA Report of August 2013 (paragraph 1.2.6) Guernsey could potentially

purchase a share of the Jersey facility and establish a joint managing body. "This gives the potential advantage of security on both sides and a more advantageous commercial deal for Guernsey, with the disadvantage of restricting flexibility. This would require careful negotiation of detailed contractual terms and conditions to ensure that neither party was exposed to unacceptable risk or benefitted disproportionately from the arrangement".

- 12.3 In the February 2012 States Report, the advantages and disadvantages are touched upon very briefly (paragraphs 7.29 and 7.30).
- 12.4 It is the view of Public Services that Guernsey would not obtain best value by becoming a part-owner of the Jersey facility, having taken into consideration the advantages and disadvantages identified below.

Table 12.1 Advantages and Disadvantages of Purchasing a Share in the Jersey Facility

Advantages	Disadvantages
Security - a 'guaranteed' place to	Reduced flexibility in terms of where to
receive Guernsey's residual waste.	send Guernsey's residual waste.
More advantageous commercial	Cost of purchasing a share of the Jersey
rate for receipt of waste (compared	facility.
to use of Jersey facility if Guernsey	
is not a part-owner).	
	Jersey rates (even with discount to a part-
	owner) might still be higher than
	elsewhere.
	Long-term commitment (including
	possible costs associated with
	decommissioning at end-of-life of the
	Jersey facility).
	In the event of problems (operational,
	contractual or otherwise) which
	necessitate shipment elsewhere, Guernsey
	would bear increased costs (the continuing
	costs of the Jersey plant, plus additional
	costs relating to the alternative facility).
Jersey has already borne the risks	Should the market change and
associated with the capital project.	opportunities arise for lower cost options
(This is true of all options that do	to be exploited, being tied in to Jersey
not include Guernsey building its	would prevent this.
own facility.)	

12.5 There is, of course, potential to send waste to the Jersey EfW facility (with agreement between the islands), even if Guernsey is not a part-owner of the facility. However, it should be noted that, under current Jersey Law, waste imported for incineration would still be classed as waste for disposal. Without

appropriate amendment being made to Jersey's legislation, there is a significant risk of objections to shipments from Guernsey. This is covered in more detail in Appendix 4.

#### 13 Market Testing – Export of Waste

- 13.1 Following the initial screening described in paragraphs 11.1-11.5 above, the process to develop a tender specification, service delivery plan and associated tender documents for issue to each of the shortlisted facilities, was begun. The intention was that a preferred supplier would be identified, with whom a contract would be signed, whilst the other shortlisted parties would be invited to sign up to a framework agreement. The framework agreement would enable Public Services to run a competition amongst these remaining bidders in the event of any issues being experienced with the preferred supplier.
- 13.2 The waste market is changing and, based on current information, significant extra capacity in EfW plants is predicted in Europe in the next few years. Public Services therefore took the view that it was entirely possible that demand for waste might continue to rise, and gate fee prices fall in the interim period, and considered that it would not be prudent to sign a contract now (and be locked in to 2013 prices) for a 2016 start. It is also possible that, during that same period, the requirements for export of waste (as laid out in international legislation) might change (as outlined in section 25 below). This approach was fully endorsed by Corporate Procurement.
- 13.3 Public Services has, therefore, not issued a full tender at this point. Rather, it has sought confirmation of the following through the Channel Islands e-Tender Portal, to complement information that it had already obtained:
  - Treatment price/gate fee, based on a range of tonnages per annum, and calorific values (inclusive of taxes);
  - Transport costs (inclusive of port/harbour dues at both ends, but exclusive of loading);
  - Insurance requirements (for shipments);
  - Willingness to sign up to a framework agreement.
- 13.4 The responses to these points have informed this States Report.

#### 14 Costs

14.1 In developing its costings Public Services has considered the quantity of waste to be exported, the facilities that will be required to prepare the waste for export, and the manner in which the waste should be transported. Relevant assumptions have been made where appropriate and are listed in Appendix 5. It should be noted that costs shown in this section exclude any allowance for inflation i.e. 2013 prices.

14.2 The 2012 States Report predicted a starting tonnage for export of 28,000 tonnes of residual waste per annum. This figure has been utilised in the cost model.

#### 15 Capital and Operational Expenditure for the Transfer Station

- 15.1 It is intended that the Transfer Station be constructed on States-owned land at Longue Hougue as part of a waste management complex, potentially also incorporating a MRF, IVC and recycling depots.
- 15.2 It is not possible to know the precise costs until the various elements of the infrastructure (including the Transfer Station) are tendered and any licensing or design requirements identified. This is likely to be in early 2014. Public Services submitted estimated costs for the total capital investment in on-island waste management infrastructure within its capital prioritisation bid in April 2013, which was considered by the States in September 2013<sup>6</sup>.
- 15.3 Annual costs in Table 19.1 include recovery of the estimated total capital investment for the Transfer Station building, process plant, mobile plant and peripherals over 20 years. Costs associated with financing this capital investment by way of loan over 20 years have also been included at an estimated interest rate of 5% per annum.
- 15.4 The operational costs for the Transfer Station include: 8 staff; maintenance; utility costs; and baling and wrapping costs.

#### 16 Logistics Costs and Quayside Storage

- 16.1 There will be a requirement to allow for storage of the baled waste prior to loading onto a ship. It is anticipated that the bales will be shipped Lo-Lo<sup>7</sup> and it is assumed that shipments will take place on average once a month, each containing some 2,200 bales of wrapped waste.
- 16.2 Ships will use the North Quay within St. Sampson's Harbour. Guernsey Harbours have been consulted in terms of the requirements for ships using this port.
- 16.3 As it is intended that the Transfer Station will be located on Longue Hougue, baled waste will need to be moved to North Quay in St. Sampson's. For these movements to take place in one go to coincide with the loading of the ship would be difficult and disruptive. Therefore the bales would be moved every few days to the North Quay area. This would necessitate vehicle movements across an already heavily used area in terms of traffic. Initial 'without prejudice' discussions with officers at Environment indicate that the level of vehicle movements associated

<sup>7</sup> Lo-Lo is Load on, Load off and requires the use of cranes as opposed to Ro-Ro which uses vehicles/trailers to load on and off a ship via a ramp.

<sup>&</sup>lt;sup>6</sup> Report, dated 23 July 2013, in Billet d'État XIX of 2013.

with the movement of waste currently predicted is unlikely to give rise to significant concerns from a planning perspective. However, the likely effect of the development of the Transfer Station on traffic along with other planning requirements will be considered by Environment when a formal planning application is made.

- 16.4 Working with Corporate Procurement, an indicative price for transporting the bales has been obtained through consultations with local logistic companies. These local transport costs contribute significantly to overall total costs. As a means of reducing these costs Public Services considers it may be worthwhile evaluating options for the development of a quay at the Longue Hougue site. This is considered to be outside the scope of this current States Report and Public Services intends to evaluate the business case and associated capital costs for the next capital prioritisation bid submission.
- 16.5 North Quay does not have adequate room to store this level of cargo without adversely affecting daily operations at the quay. Therefore an adjacent area at Griffiths Yard<sup>8</sup> has been identified as a storage location for baled waste. An area approximately 1,500m<sup>2</sup> in size is anticipated to be required. Indicative costs for leasing an area of the yard have been sought from States Property Services (rates will need to reflect commercial market values at the time the land is required, and may require a formal market valuation). Planning permission and a Waste Management Licence would be required for this storage facility.
- 16.6 Local loading costs have been based on using contracted staff, as it is anticipated that the ship will be loaded by others, rather than Guernsey Harbours.
- 16.7 Costs for Pilotage and Harbour dues associated with using St Sampson's Harbour have been incorporated into transportation costs as quoted by the EfW plant operators.
- 16.8 Off-Island transportation costs are for moving baled waste from St. Sampson's to the gate of the receiving EfW plant, including any overland transport in that country.

#### 17 EfW Gate Fees

17.1 Gate fees – i.e. the rate per tonne charged by the receiving plant – will be a big factor in determining the cost of export. It is also the area where Guernsey may be able to exercise indirect control by ensuring that as little waste as possible is exported in order to minimise total costs. The indicative costs used in this Report are based on those supplied by the five companies identified through selection criteria in the desk top exercise conducted earlier in 2013 by Ricardo-AEA.

<sup>&</sup>lt;sup>8</sup> Griffiths Yard is an area at Northside. Part of this yard is currently used as a base for the Island's sewage tanker fleet, and the remainder is leased to commercial tenants.

17.2 Please note that the indicative costs supplied in the Ricardo-AEA Report (Appendix 3) are predicted 2016 prices based on long contract terms (10+ years), whereas the indicative costs from the market testing exercise are 2013 prices. The difference between the two sets of figures indicates that the assumption that prices relating to the export of waste from Guernsey are likely (although not guaranteed) to decrease in future is likely to be sound.

#### 18 Other Costs

- 18.1 Another consideration is financial guarantees. European Union Member States must appoint bodies to act as "Competent Authorities" in relation to EU waste shipment legislation, whose responsibility it is to determine whether waste shipments may be accepted and under what conditions<sup>9</sup>. They require financial guarantees (or equivalent insurance) to be in place, usually in the form of a bond held by a banking institution as security to cover the costs of shipment, storage and recovery or disposal of waste, and administration fees.
- 18.2 The total sums to be guaranteed, and the bond required to be deposited with a financial institution have been assessed.
- 18.3 Charges made by financial institutions for these guarantees are included in estimated total costs based on an indicative quote of 2.15% of sums insured.
- 18.4 Finally, owing to uncertainties inherent in changing prices Public Services has allowed for a 10% contingency on all costs except for EfW gate fees, which it reasonably expects will decrease over time.

#### 19 Total (Annual) Costs for Export of Waste (28,000 Tonnes)

- 19.1 As highlighted earlier in this Report, export is just one element of the Waste Strategy.
- 19.2 For the sake of clarity it is important to note that the costs in Tables 19.1 to 20.4 that follow refer to the export of waste from the point of delivery of residual waste to the Transfer Station onwards only. Other costs such as those associated with kerbside collections and sorting of waste in a MRF are not unique to export. As explained in the February 2012 States Report, those costs would be incurred regardless of which of the three options on the table at that time were chosen.
- 19.3 It is also important to emphasise that the figures shown below are the best figures that can be supplied at this time. As highlighted earlier, these costs exclude any allowance for inflation.

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<sup>&</sup>lt;sup>9</sup> In the Bailiwick, the Health and Social Services Department is the current Competent Authority.

Table 19.1 Estimated Total Costs for Export of Waste (28,000 tonnes)

	Annual Costs for Export of Waste					
	Common	Lowest total cost	Other 2013 export costs indications			Highest total cost
TONNAGE = 28,000						
	£'000s	£'000s	£'000s	£'000s	£'000s	£'000s
Capital Expenditure:						
Capital depreciation	313					
Financing costs of capital	189					
	502					
Operating Expenditure:						
On-island:						
Operational expenditure of Transfer Station	546					
Logistics costs moving waste to North Quay,						
storage prior to shipment and ship loading						
costs	357					
Total on-island operating expenditure:	903					
Total on-island costs:	1,405	1,405	1,405	1,405	1,405	1,405
Cost per tonne:	£50	£50	£50	£50	£50	£50
Off-island:						
Transportation of waste to EfW gate		495	552	676	893	,
EfW gate fees		966	1,690	1,641	1,907	4,040
Total off-island operating expenditure:		1,461	2,242	2,317	2,800	
Cost per tonne:		£52	£80	£83	£100	£194
Financial guarantees:		4	9	9	8	14
Cost per tonne:		<£1	<£1	<£1	<£1	<£1
Contingency:		190	197	209	231	. 282
Cost per tonne:		£7	£7	£7	£8	£10
TOTAL COSTS, per tonne:		£3,060	£3,853	£3,940	£4,444	£7,141
Total cost per tonne:		£109	£138	£141	£159	<del></del>

19.4 Table 19.1 sets out cost estimates for each of the five shortlisted EfW plants. It can be clearly seen that one of the operators approached has quoted a price considerably higher than the other four.

#### 20 Total Export Costs - Per Annum, Per Tonne

20.1 Public Services is aware that a key question will be how much export will cost the community in terms of waste charges. The per tonne rate, which would also apply to the commercial sector, for total costs relating to the export of waste would range from £109 to £255 per tonne.

20.2 Table 20.1 illustrates how these 'per tonne' rates might affect local households, based on current inputs into Mont Cuet. Approximately 45% of the Island's residual waste comes from domestic households, with the remainder coming from the commercial sector. Assuming that these percentages remain fairly stable, spread across approximately 26,000 domestic households, the figures in Table 20.1 give a range of £49 to £115 per household per annum relating to the export of waste.

**Table 20.1 Approximate User Costs for Exporting Waste to the Shortlisted Plants** 

Tonnage	Lowest				Highest
28,000	Cost	Other 2013 Cost Indications			Cost
Total, £,000s	3,060	3,853	3,940	4,444	7,141
Per tonne (£)	109	138	141	159	255
Per	49	62	63	72	115
household					
(approx) (£)					

#### Sensitivity Analysis

20.3 Sensitivity analysis has been undertaken to test how the total costs per tonne of waste exported may vary with changes in original estimates or underlying assumptions.

#### Annual tonnage of waste exported

20.4 In order to test the sensitivity of the per tonne total costs to the expected declining volumes of residual waste, Public Services has also calculated total costs for an annual tonnage of exported waste of 18,000 tonnes. The results of this can be seen in Table 20.2.

<sup>10</sup> In 2012 33,000 tonnes of waste were received at Mont Cuet. Excluding those waste streams that will continue to be dealt with on-island (2,000 tonnes), approx. 14,000 tonnes were domestic sourced (black bag waste, litter and non-recyclable waste from domestic recycling sites) and approx. 17,000 from

commercial sources.

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Table 20.2 Estimated Total Costs for Export of Waste (18,000 tonnes)

	Annual Costs for Export of Waste					
	Common	Lowest total cost	Other 2013 export costs indications			Highest total cost
TONNAGE = 18,000						
	£'000s	£'000s	£'000s	£'000s	£'000s	£'000s
Capital Expenditure:						
Capital depreciation	313					
Financing costs of capital	189					
	502					
Operating Expenditure:						
On-island:						
Operational expenditure of Transfer Station	418					
Logistics costs moving waste to North Quay, storage prior to shipment and ship loading costs	267					
Total on-island operating expenditure:	685					
Total on-island operating experiantific:	1,187	1,187	1,187	1,187	1,187	1,187
Cost per tonne:		£66	£66	£66	£66	
Off-island:						
Transportation of waste to EfW gate		318	355	434	574	900
EfW gate fees		621	1,086	1,055	1,226	2,183
Total off-island operating expenditure:		939	1,441	1,489	1,800	3,083
Cost per tonne:		£52	£80	£83	£100	£171
Financial guarantees:		4	9	9	8	12
Cost per tonne:		<£1	<£1	<£1	<£1	<£1
Contingency:		151	155	163	177	210
Cost per tonne:		£8	£9	£9	£10	£12
TOTAL COSTS, per tonne:		2,281	2,792	2,848	3,172	4,492
Total cost per tonne:	L .	£127	£155	£158	£176	<u> </u>

20.5 At this lower volume it is estimated that on-island costs would increase by around £15.75 per tonne (average £7.09 per household per annum) as a consequence of recovering the same capital costs. Only the most expensive operator quoted gate fees and transportation costs that varied according to annual tonnages of waste delivered (lower price quoted per tonne at lower volumes). Hence, except for this operator, off-island operating expenditure is the same per tonne at both 18,000 and 28,000 tonnes.

#### Currency exchange rate

20.6 This Report uses an exchange rate of £1.00 to €1.16. The performance of the £ against the €over the course of 2013 has averaged at €1.17. A sensitivity analysis has tested implications of a range of rates, from €1.00 to €1.30:

**Table 20.3 Sensitivity Analysis – Impact of Exchange Rate**<sup>11</sup>

Exchange	Exchange Estimated Total Cost Per Tonne (£) (28,000 Tonnes per annum)					
Rate	Lowest	Other 2013 export cost indications Highest Cost				
(€to £1)	Cost	indications			Cost	
1.30	104	129	132	148	234	
1.16	109	138	141	159	255	
1.00	118	151	154	175	287	

#### Interest Rate

20.7 This Report uses a 5% interest rate in respect of the loan estimated as required to finance the capital infrastructure investments. A sensitivity analysis has tested implications of a range of rates, from 4% to 10%:

Table 20.4 Sensitivity Analysis – Impact of Interest Rate

Interest	Estimated Total Cost Per Tonne (£) (28,000 Tonnes per annum)						
Rate	Lowest						
	Cost	i	Cost				
10%	117	146	149	167	263		
8%	114	143	146	164	260		
6%	111	140	143	161	257		
5%	109	138	141	159	255		
4%	108	137	140	158	254		

#### EfW gate fees

- 20.8 The EfW gate fees and transportation/shipping costs have been market tested across five contractors at various tonnages and CVs.
- 20.9 The EfW operators approached for indicative quotes were requested to provide quotes across a range of annual tonnages: 18, 20, 25 and 28 thousand tonnes. Only one (generally the most expensive) varied its gate fees according to annual tonnages across this range.
- 20.10 For the probable range of forecast tonnage outputs from Guernsey over the next 20 years, it seems unlikely (based on the indicative quotes received) that EfW gate fees will be affected by decreasing total tonnages. Guernsey's volume output represents only a very small proportion of total capacity at the individual EfW plants and Guernsey is not therefore in a position through volume to influence gate prices.

<sup>11</sup> Note - for purposes of comparability of prices across all EfW operators, prices originally quoted in Sterling have been translated into Euros.

#### Transportation/shipping costs

20.11 The worldwide market for shipping is currently volatile. There is over-capacity in the sector and recessionary impacts around the globe have exerted a downwards pressure on prices. It is not possible at this stage to forecast when this market volatility will settle and over what timescale, but any cost increases will impact on the overall cost of export.

#### 21 The 'Bigger' Financial Picture

- 21.1 As previously mentioned, it must be stressed that the costs listed in the tables above relate to the export (final) element of the strategy only and do not include costs associated with steps earlier in the process. While this answers the relevant 2012 States resolution to report back on export costs, it does not provide visibility on the overall costs for the entire strategy.
- 21.2 Section 22 below therefore attempts to provide some insight into the potential 'bigger picture' costs. It must be emphasised that this is a guide and not definitive. Whilst there is now reasonable clarity on likely export costs, precise costs for other elements of the strategy (MRF, IVC, kerbside, etc.) will not be confirmed until the respective areas have been put out to tender. A number of conservative assumptions have therefore been made, effectively to represent what is currently considered to be the worst case scenario for costs. This includes the capital costs of export, which remain indicative.

#### **22** Financial Implications for the States

- 22.1 Waste management and recycling activities are currently funded through a combination of charges levied at States-owned sites (gate fees) and an allocation from General Revenue. Gate fees include a surcharge (currently £75 per tonne) which is effectively ring fenced and known as the Waste Strategy Fund, which in the past was used to cover the costs of aborted EfW projects. More recently it has been used to cover costs such as the development of the Waste Strategy and waste prevention and minimisation initiatives.
- 22.2 Now that the costs of delivering the strategy are becoming clearer, with initial budgets for the programme to 2016 having been formulated, it is considered appropriate to reflect the costs of all waste-related expenditure in a single statement to bring greater clarity to those total costs.
- 22.3 Therefore, with the support of Treasury and Resources, Public Services now proposes that the States establish with effect from 1 January 2014 a 'Solid Waste Trading Account' bringing together the financial reporting for all solid waste trading management activities. In doing so the Departments feel this brings greater clarity to the reporting of the overall total costs involved for all solid waste management related activities.

- 22.4 It is intended over the long term that a 'user pays' principle will be adopted where charges levied on waste producers, whether household or commercial, will fund capital infrastructure and the full operating costs of waste collection, treatment and disposal.
- 22.5 Current best estimates for income and expenditures on the Solid Waste Trading Account over the next three years (so including development and implementation of the Waste Strategy throughout 2014 and 2015 and anticipating 2016 as the first year of revised operations under 'user pays' principle) are set out below from paragraph 22.12 onwards.

#### Capital Expenditure

- 22.6 Looking ahead to the longer term, it is envisaged that loan financing will be required for the procurement of infrastructure. Latest estimates of capital expenditure of £29.5 million on waste services, together with estimated borrowing costs associated with financing this capital investment by way of a loan over 20 years at 5% (equivalent to combined costs of £2.36 million per annum), have been factored into the figures within this Report.
- 22.7 More precise costs for delivering the infrastructure and funding requirements will not be known until Public Services has completed a procurement tender process. It should be noted that, for the sake of completeness, Public Services has included all possible infrastructure that could be necessary, rather than limiting the updated costs to those elements included in the 2012 Report, which focused on the high level strategy. Consequently, capital figures in this Report include sums for a Repair and Reuse Centre; a Civic Amenity Site at Longue Hougue; and the cost of capping Mont Cuet, aspects that were not costed for the 2012 States Report, although mention was made of the need for a Repair and Reuse Centre and a Civic Amenity Site.
- 22.8 As part of the Capital Prioritisation process, earlier this year Public Services provided a breakdown of its capital estimates by specific plant elements (MRF, IVC, Transfer Station, etc.) to Treasury and Resources. These estimates were developed by Public Services initially through consultations with its technical advisers. On the advice of States Property Services a Guernsey Uplift multiplier plus an Optimism Bias factor was then applied to those initial estimates. Reasons behind the resulting increased capital expenditure estimates between the February 2012 States Report and the 2013 Capital Prioritisation bid were fully disclosed to Members through presentations in March 2013. However, Public Services and Treasury and Resources have agreed that for reasons of commercial sensitivity and obtaining best value for money for taxpayers during future procurement processes it would be inadvisable to provide a further detailed breakdown of these estimated costs through this Report.
- 22.9 Public Services believes its estimates to be prudent, but at the same time, given the inclusion of contingencies for Guernsey Uplift and Optimism Bias, is confident they now represent the upper limit on capital expenditure assuming no material changes to the envisaged infrastructure elements required.

- 22.10 It should also be stressed that Public Services continues to be committed to working hard to achieve reductions wherever possible to the capital investments required to deliver the Waste Strategy. From implementation plans currently being developed, it is anticipated that some of the capital investment amounts may not be required as Public Services explores and pursues opportunities for private sector funding of some elements, such as new refuse collection vehicles or MRF facilities. Furthermore, collaborations with local social and charitable organisations are being explored with potential to reduce investment costs associated with a Repair and Reuse Centre.
- 22.11 In due course Treasury and Resources will be approached to procure loan financing on Public Services' behalf at the most competitive rates. Public Services is proposing that Treasury and Resources be given delegated authority to approve capital expenditure up to a maximum of £29.5 million upon receipt of fully developed business cases. Therefore there will be ample opportunity for scrutiny by Treasury and Resources of the detailed proposals before any capital expenditure is approved.

#### Solid Waste Trading Account

22.12 As referred to above, it is proposed that the States sets up from 1 January 2014 a 'Solid Waste Trading Account'. Public Services considers it would be helpful to present in this Report its current estimates for total costs of waste management activities over the next few years as the Waste Strategy is fully developed and implemented; and for the first year of operations under the Waste Strategy thereafter.

Table 22.1 Solid Waste Trading Account Budgets for 2014 to 2016

	BUDGET	BUDGET	BUDGET	
	2014	2015	2016	
	£ 000s	£ 000s	£ 000s	
INCOME:				
Tipping charges	4,800	4,741	-	
Surcharges at Mont Cuet	1,600	1,541	-	
New waste management charges	-	-	12,186	
Otherincome	381	381	470	
TOTAL INCOME:	6,781	6,663	12,656	
EXPENDITURE:				
Waste site operations	3,273	3,423	3,346	
Collection costs	1,065	1,177	1,624	
Export costs	-	-	3,942	
Recycling initiatives	1,047	907	756	
External consultancy costs	437	442	75	
Administration	697	842	552	
TOTAL OPERATING EXPENDITURE:	6,519	6,791	10,295	
Capital costs	-	-	2,361	
NET TRADING SURPLUS / (DEFICIT):	262	(128)		

- 22.13 Based on current estimates, it is projected that once the Waste Strategy has been fully implemented annual operating costs for waste management activities will increase by approximately £3.5 million to £10.3 million per annum, principally owing to the costs of export and higher costs of collection. In addition, annual costs of capital, spread over 20 years, are estimated to be £2.4 million per annum.
- 22.14 It should be noted that these figures are arrived at based on the following assumptions:

- by 2016 household and commercial recycling rates will have reached 56%;
- in 2016, 40% of household and commercial food waste will be collected and treated on island at an IVC; and
- publically provided MRF facilities will process household dry recyclables only, with facilities for sorting commercial waste being provided by the private sector.
- 22.15 It is expected that once the Waste Strategy is fully implemented the costs of operating the waste sites will be broadly similar to current costs. Whilst costs at current sites will be reduced, these will be replaced with new costs of operations at Longue Hougue.
- 22.16 Collection costs in 2014 and 2015 are the costs of kerbside collections of dry recyclable materials, which will be introduced in 2014. Collection costs are expected to increase in 2016 with the introduction of food waste collections, although precise details have yet to be determined.
- 22.17 Export costs incorporated into these figures have been taken as the second most expensive of the five export destinations as set out in Table 19.1. Should the cheapest export costs from table 19.1 be secured, a reduction to the total estimated costs in 2016 of £1.384 million per annum would result (approx. £23 per household see table 20.1).
- 22.18 It is anticipated that the relatively high costs incurred during 2014 and 2015 on recycling initiatives will deliver further increases to the recycling rate above 50%. Since higher recycling rates serve to minimise the tonnage of residual waste requiring processing and export, thereby reducing these elements of costs, the Department regards recycling initiatives as extremely important to the delivery of the overall Waste Strategy.
- 22.19 Public Services does not have sufficient internal resources to cover all the complex work streams involved in implementation of the strategy and therefore will need to buy in a level of support from external advisers. Provision has been made for professional adviser fees based on current best estimates by Public Services as it is currently working with its advisers to scope and cost the inputs it expects to require in support of the infrastructure procurement process. All external advisers were appointed following competitive tender, and these appointments have been reviewed and endorsed by Treasury and Resources.
- 22.20 Although estimated capital costs are now greater than the indicative sums in the 2012 States Report, lower than anticipated costs for export mean the overall cost of the strategy over a 20-year period remains broadly similar. Hence the estimated average cost to householders that was reported in 2012 is still within the range currently anticipated. (See also para 22.24)
- 22.21 Once all costs of implementing the Waste Strategy are determined Public Services proposes to set new waste management charges, both gate fees and household charges, at levels sufficient to recover those appropriate proportions of total costs

that may reasonably be attributable to each user group, and to encourage appropriate behaviours.

#### Costs to Householders

- 22.22 The total annual cost of the Waste Strategy over 20 years, taking into account all costs of capital and operating expenses, is estimated by Public Services to be around £10 to £13 million per annum. This range is influenced by the impact of export costs on total costs, which as set out above could range between £109 and £255 per tonne. However, the extent of this latter range is itself caused by the inclusion of one operator that is considerably more expensive than all the others. Given that it is highly unlikely the States would enter into a contract with that operator at the level of gate fee indicated at present, Public Services is confident that the total annual cost of the Waste Strategy is likely to be at the lower end of the range given above.
- 22.23 Since for the purposes of this States Report it has been possible only to establish a range for export costs per tonne, equally it is only possible for Public Services to set out a range for annual charges to householders. With the majority of the island's waste, household and commercial, expected to pass through the Transfer Station and on to export, it is only once final costs per tonne of export have been established that costs per household can be determined more accurately.
- 22.24 Taking into account the range of export costs, as set out in section 20 above, total averaged costs per annum that Public Services would recommend the States seek to pass on to householders on the basis of services being fully funded by users, range between £5.1 million to £7.7 million<sup>12</sup> or approximately £195 to £298 per annum averaged across 26,000 households. To put these future cost estimates into some context, householders on average currently pay £108 per annum (of which on average £36 is paid to the Douzaines for parish refuse collection).
- 22.25 As explained above, the inclusion of the most expensive export option has caused the range to be wide and the expectation is that average annual fees to householders will be at the lower end.
- 22.26 This Report is recommending that, in broad terms, charges are levied by Public Services to householders on the basis of a fixed element and a variable element i.e. a charge per bag. The parishes will only be responsible for passing on collection charges but, for the purpose of calculating future average charges per household, collection charges have been included in the illustrations in this Report i.e. they are included in the range of £195 to £298 per household per annum.

<sup>12</sup> It is not appropriate to apply a simple 45% (being the approximate household % of total waste) to arrive at the proportion of total costs attributable to households as the allocation of specific capital or operating costs within the Waste Strategy varies according to the estimated proportional usage of the different facilities in the treatment of household waste. Figures are derived from financial modelling by the Public Services Department.

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- 22.27 The exact mechanism i.e. the method of calculating the fixed charge and the proportion of fixed versus variable charges are yet to be decided and will be the subject of a further States Report, assuming the current proposals are approved.
- 22.28 It should also be noted that annual costs to individual households will vary according to householders' behaviour in matters of recycling (polluter pays principle).

#### Costs to Commercial Entities

- 22.29 As far as practicable, small businesses will be eligible and encouraged to participate in kerbside collection schemes, and will be charged similarly to householder for costs of collection, processing and disposal.
- 22.30 Commercial organisations delivering waste to the waste processing facilities will be charged gate fees according to the nature of the waste load being delivered.

#### 23 Future Tender Process – Export of Waste

- 23.1 Tenders for the export of waste contract will be assessed using robust evaluation criteria which are likely to include:
  - Cost (including opportunity to benefit from any future fluctuations in commodities markets),
  - Contingency availability (if destination EfW plant could not receive Guernsey's waste for a period of time),
  - Calorific value of waste able to be received,
  - Location/transport links,
  - Upper/lower limits on the quantity of waste that could be received,
  - Length of contract,
  - Effective disposal of any ash that remains after processing in the EfW plant (i.e. Guernsey does not receive back that ash, as to do so could infringe waste shipment legislation),
  - Environmental impact,
  - Flexibility (including opportunity to benefit from any future technological advances).
- 23.2 Public Services recommends the States give Treasury and Resources the authority to approve the recommended tender for export of waste and to release the funds for capital and operational costs for it in due course. This approach would safeguard commercial sensitivities and enable Public Services to move forward with the contract for export of waste without delay.
- 23.3 In order to obtain the best possible bids, it is Public Services' intention to open the tender process for the export of waste to all potential suppliers (and not just to restrict it to those who participated in the recent market testing exercise).

- 23.4 Treasury and Resources has advised that, to enable it to consider and approve the recommended tender and to release funds for the export of waste contract (following the tender process), it would need to consider a full Business Case, based on the standard five case model:
  - Strategic
  - Economic
  - Financial
  - Commercial
  - Project management
- 23.5 The Business Case would need to satisfy Treasury and Resources in respect of the overall funding proposal.
- 23.6 Tenders for the construction (and potentially operation) of the Transfer Station will be assessed using robust evaluation criteria developed as part of the procurement documentation for all facilities at Longue Hougue. The detail of the procurement methodology is being developed at the time of writing this Report. There are a number of issues to address, including:
  - Design responsibility,
  - Operational responsibility,
  - The potential for, and appropriateness of, private facilities for a MRF,
  - The most appropriate mechanism of funding the capital investment requirements.
- 23.7 The procurement methodology and the evaluation criteria will be taken for approval to the Waste Strategy Infrastructure Project Board, which includes political and officer representation from both Public Services and Treasury and Resources. The entire Longue Hougue infrastructure project, which includes an IVC and MRF, will also be subject to a Gateway Review process.
- 23.8 It should be highlighted that in any tender documentation, the States (through Public Services) would have the right to stop the procurement at any time. The grant of planning permission and conformity with the Waste Disposal Plan would also be set as a pre-condition for any resultant construction contract. Such a contract could also be drafted to feature clear break clauses, where the agreement would be able to be terminated at specific points, and/or a more general ability to order construction works to halt at any point. (It should be appreciated that termination at set break points, or in general, might incur some level of cost to the States, based on work undertaken by the contractor to that point.)
- 23.9 With regard to the infrastructure the intention, subject to States approval, is to issue tender documents in February 2014 and, following consideration of tenders received, to appoint a preferred bidder by late June 2014. The preferred bidder will then proceed to the detailed design stage. This has the advantage that the Waste Disposal Plan will, in all likelihood, have been submitted to the States

- before a preferred bidder is identified, meaning that, in the unlikely event of there being any incompatibility between the approved Waste Disposal Plan and the implementation activity, the latter could be halted at a natural "break point".
- 23.10 Whilst consideration of waste licensing applications (by the Director) will need to take place once the facilities have been built and tested, (non-binding) preapplication discussions would provide clear insight into the licensing requirements at an early stage.

#### 24 Legislation (Guernsey)

- 24.1 Consideration has been given as to whether any changes are required to Guernsey legislation to permit the export of waste. The recommended changes were set out in a States Report from the Health and Social Services Department, developed in consultation with Public Services, titled 'Amendments to the Transfrontier Shipment of Waste Ordinance, 2002', considered and approved by the States in September 2013<sup>13</sup>.
- 24.2 It will be necessary for a management plan to be approved by the States in regard to the import and export of waste for Guernsey, as required under section 10 of the Transfrontier Shipment of Waste Ordinance, 2002 (as amended). It is the responsibility of Environment to draw up that management plan and submit it for approval.
- 24.3 To comply with planning legislation, it will be necessary to undertake environmental impact assessments and traffic impact assessments relating to the effects of the development of the Transfer Station, including traffic movements resulting from the movement of waste from the Transfer Station to the quayside, so that this information can be provided as required for consideration of the planning application.

#### 25 Legal Considerations (Outside the Bailiwick of Guernsey) and Risks

- 25.1 The export of waste from one jurisdiction to another is regulated by international conventions and legislation and national legislation, the most relevant of which are:
  - The Basel Convention on the control of transboundary movement of (certain) waste and its disposal (the Basel Convention),
  - The OECD Decision concerning the transfrontier movement of wastes destined for recovery operations (the OECD Decision),
  - The EU Regulation on shipments of waste (the Waste Shipment Regulation) which implements the Basel Convention and the OECD Decision in the EU, and

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<sup>&</sup>lt;sup>13</sup> Report, dated 03 July 2013, in Billet d'État XVIII of 2013 (Volume 1).

- The EU Waste Framework Directive to which the Waste Shipment Regulation cross-refers.
- 25.2 Further details of these international conventions and legislation and of the legal risks relating to export of waste are set out in Appendix 4, including risks arising relating to Guernsey's obligations under the Basel Convention.
- 25.3 Guernsey is bound by some of these international conventions and legislation, or is indirectly affected because any territory of destination is so bound. Specific domestic provisions apply in Jersey but that legislation also implements the Basel Convention and the OECD Decision.
- 25.4 There are two main requirements for the export of waste for recovery in an EfW plant. Those requirements are that the waste has been 'substantially altered' prior to export so that it becomes a 'refuse derived fuel' (RDF); and that the EfW plant receiving the waste should meet R1 classification, which is effectively a measure of the (high) energy efficiency of an EfW plant.
- 25.5 It is also important (under the EU Waste Shipment Regulation) that waste is transported in an appropriate manner so that it is all received at the designated EfW plant (and not scattered or leaked en route) and complies with all relevant requirements of the Regulation. Certain requirements for financial guarantees/bonds are required to be put into place, either by the States or an operator it appoints, to ensure this. There are also certain legal requirements about how to obtain permissions to export waste from one jurisdiction to another (timeliness, format of information required, etc).
- 25.6 Case law has shown that there can be differing interpretations as to what 'substantially altered' means and, therefore, what constitutes RDF. It is understood that the Department for Environment, Food and Rural Affairs (DEFRA) in the UK has asked the Environment Agency (EA) to consider and clarify the interpretations of those terms to inform guidance. If this guidance results in a tighter interpretation of what constitutes RDF it may mean that it becomes more difficult for UK processors to export to the rest of the EU. This has no direct effect on anything exported from Guernsey into the other countries of the EU, as DEFRA does not have to consent to such exports. However, it may have an indirect effect if the European Commission itself or other competent authorities in the EU adopt the UK guidance.
- 25.7 Changes in either the legal definitions (which would take time to change) or individual jurisdictions' interpretations of those terms (which could be quicker) could have an effect on what waste materials can or cannot be exported in the future, or on the degree of pre-processing required to allow waste materials to be exported in the future. This could impact on the export of Guernsey's waste (what is exported, how it is exported, etc.). Generally, environmental standards get tighter/more restrictive over time. Public Services is in touch with the UK agencies so that it can keep abreast of relevant developments (which might include the UK bringing in measures to restrict the export of waste so that it has a sufficient quantity of waste to power its own EfW plants). Public Services

received detailed technical advice on these issues as set out in the Ricardo-AEA Report (Appendix 3) to understand and mitigate these risks (in particular paragraphs 2.5.2, 2.5.3 and 4.1.4 of the Ricardo-AEA Report).

- 25.8 It should be noted that, whilst the **impact** of a change substantial enough to be of concern would be high, the **likelihood** of such a substantial change is currently considered to be relatively low. The contact with DEFRA also means that Public Services is aware of DEFRA's thinking in such matters and would expect to receive advance notice of any changes. In addition, any change would not solely affect Guernsey, but the wider EU and international waste industry.
- 25.9 There is scope under the EU Regulation, for Competent Authorities to object to shipments on the basis that it is inconsistent with certain provisions of national law; however, shipments for recovery already take place within the EU, with the UK EA reporting that almost 900,000 tonnes of RDF was exported from the UK to European EfW facilities in 2012<sup>14</sup>.
- 25.10 Public Services is engaging with a number of relevant Competent Authorities to establish whether there are likely to be any objections to the export of waste from Guernsey to other jurisdictions (known as 'pre-application feedback'). The first three responses received have been positive, and information from others is expected shortly. However, a definitive view will only be obtained when a full application for the transport of waste is submitted (to the Guernsey Competent Authority and to the Competent Authority in the destination country). That application will include information about where the waste is being sent and the quantity and composition of the waste.
- 25.11 Public Services is being advised on the legal aspects of export of waste by the Law Officers.

<sup>&</sup>lt;sup>14</sup> Environment Agency presentation to the Chartered Institute of Wastes Management 'Regulatory Developments in the Export of Refuse Derived Fuel', February 2013

#### LEGISLATION AND POLICY

#### 26 Introduction to Legislation and Policy

- 26.1 In February 2012 Public Services was directed by the States to report back with the results of investigations into any legislative and policy changes necessary to give maximum effect to the waste prevention and minimisation measures that formed part of the revised Waste Strategy as approved by the States. The new Waste Strategy will represent a change to the way in which waste management services and facilities, particularly those for households, will be delivered. Therefore changes to legislation and policy are needed to underpin this.
- 26.2 It is recognised that legislation may not always be the most effective way of influencing behaviour change, and measures such as education, provision of facilities, recycling 'on the go', etc. have been considered and are proposed. This section of the Report proposes amendments to current Guernsey waste legislation in order to provide an effective regulatory framework and a mix of incentives and requirements to help maximise waste prevention and minimisation measures and encourage participation in recycling schemes.
- 26.3 The proposals include amending the Douzaines' functions and duties; changes to charging mechanisms and, subject to approval of other policy by the States, provisions regarding the export of waste and non-legislative measures designed to encourage behaviour change, which will contribute to achieving the objectives set out in the Waste Strategy.
- 26.4 Environment and the Director have been consulted on the content of this section of the Report.
- 26.5 The main legislative provisions regulating current waste operations in Guernsey are:
  - The Parochial Collection of Refuse Law, 2001 ("the Refuse Law"),
  - The Environmental Pollution (Guernsey) Law, 2004 ("the EP Law"),
  - The Environmental Pollution (Waste Control and Disposal) Ordinance, 2010
  - The Waste Control and Disposal (Duty of Care) Regulations, 2010,
  - The Waste Control and Disposal (Specially Controlled Waste) Regulations, 2010,
  - The Transfrontier Shipment of Waste Ordinance, 2002,
  - The Refuse Disposal Ordinance, 1959, and
  - The Collection of Refuse Order, 1964.
- 26.6 Some of this legislation, particularly the older Laws, is no longer fit for purpose as the context in which they were drafted has altered. Others simply need amending in response to a shift in focus under the new Waste Strategy. This section of the Report sets out the changes needed.

#### 27 Economic Viability of Key Facilities

- 27.1 To deliver the Waste Strategy the States will need to procure facilities such as an In-Vessel Composter (IVC) and a waste Transfer Station. The cost of procuring those facilities will ultimately be borne by the users, who are the entire Island community. There is a risk for an operator of a particular facility that anticipated volumes cannot be guaranteed if material can be diverted to alternative facilities, thereby reducing tonnages below the predicted operating envelope. Contract prices are likely to be higher to reflect that risk. Significantly lower throughput will almost certainly mean higher gate fees, which in turn will lead to fewer users. Ultimately the States, and indeed the taxpayer, bear the risk of significant volume fluctuations. For the avoidance of doubt, such volume fluctuations are considered to be those which fall significantly outside the predicted throughput, which is expected to change over time in any event. To reduce that risk, it is proposed that licensing provisions that currently exist in respect of public waste disposal sites should be extended to include other strategically important facilities, namely the IVC and Transfer Station.
- 27.2 At present there is provision in the EP Law to control, through licensing, the activities of all waste transport operations and all waste management operations. In making licensing decisions in relation to private waste disposal sites the Director may take into account the public interest in ensuring waste is not, without good reason, diverted from public waste disposal sites. The Director is also required to impose conditions on waste licences to ensure the long term, efficient and sustainable management of waste. The economic viability and efficiency of the new recovery and export transfer facilities outlined above is part of this public interest and it would therefore be appropriate for this issue to be addressed through the licensing system i.e. extend the current provisions to cover these other facilities. This proposal would be limited to private facilities which may compete with the Island's key strategic infrastructure for processing food waste and preparing residual waste for transfer to off-island facilities.
- 27.3 The Waste Disposal Plan, which Environment will place before the States for approval by the middle of 2014, will set out the policy, which the Director will then have to take into account when making licensing decisions.
- 27.4 Public Services considers such provisions essential to ensure the economic viability of the Island's key waste infrastructure. While the Department seeks to impinge as little as possible on the free market it is essential that strategic facilities can remain available and viable for the long term and, in a small jurisdiction, it is not always possible to support multiple providers given the costs of building public waste management facilities and the limited economies of scale.

#### 28 Household Waste Collections

#### **Current Arrangements**

- 28.1 The framework of the Refuse Law was first drafted in the mid 1950s and regulates the collection of household waste in Guernsey. In summary, the main provisions are:
  - Douzaines have a duty to make arrangements for the regular collection of refuse from households in the parish and to transfer that refuse for disposal at a public disposal site i.e. to deliver it to Mont Cuet.
  - The cost of collections and disposal must be recovered by the Douzaine by the levy of an annual refuse rate on the owner calculated on the basis of the Tax on Real Property (TRP) value of his/her property.
- 28.2 Currently all Douzaines contract out the service to five private refuse contractors, who provide services for the ten parishes under separate contracts. The majority of households receive a weekly collection with those in St. Sampson's and St. Peter Port having twice weekly collections. The implementation of the Waste Strategy will represent a significant alteration to the way in which waste is collected and managed, particularly for households and, as such, the legislation regulating waste collection will require amendment.

#### Options for future collections

- 28.3 There are essentially two options for arranging household waste collections in future, which are either:
  - To cease the involvement of the Douzaines and centralise the service, or
  - To continue to use the Douzaines to arrange household waste collections, albeit with changed responsibilities to reflect the new waste management regime.

As part of the development of the proposed legislative framework both of these options were considered.

- 28.4 There are certain benefits associated with centralisation, as follows:
  - **Economies of scale:** Guernsey (pop. 63,000) is comparable in size with modest Waste Collection Authorities in the UK, for example Torridge in Devon (pop. 64,000) or Maldon in Essex (pop. 62,000).

However, in terms of individual parishes, even St. Peter Port (pop. 17,000), the largest parish on the island, is still considerably smaller than the smallest UK mainland Waste Collection Authority. In October 2007, the West Somerset Authority, then the smallest on the UK mainland with a population of 35,000, recognising the economies of scale that could be achieved through cooperation, became a member of the Somerset Waste Partnership (combined pop. 540,000).

Integrated Skills (Guernsey) Ltd ('ISL') undertook work for Public Services to examine potential kerbside schemes. Initial work carried out by ISL<sup>15</sup> utilising Routesmart software has shown that if collection routes (focused on recycling but applicable to residual waste) were constrained by parish boundaries there would have to be two more rounds per week than if the routes ignored parish boundaries. This would require an additional vehicle and crew, which would not be fully utilised, representing an inefficient use of resources.

- **Greater control:** Currently the Douzaines are responsible for the collection of household waste with no involvement by the States, which is mandated to develop and set waste policy in addition to providing waste disposal facilities. This lack of involvement might make it difficult for Public Services (as the WDA) to introduce initiatives which underpin waste minimisation efforts, such as alternate weekly collections of black bag waste to encourage use of kerbside recycling collections.
- 28.5 There are also downsides to centralisation such as the loss of the "personal touch" many parishioners believe stems from the involvement of the Douzaines, plus the cost to the States of putting in place suitable systems and processes to procure and manage the collections, albeit these would not be significant.
- 28.6 Public Services also considered the merits of retaining the involvement of the Douzaines in arranging household waste collections. Again, there are benefits associated with this approach, as follows:
  - The Douzaines have long experience of dealing with parish waste collections and are well equipped to deal with queries.
  - Parishioners feel that they receive a good service and are loath to see this change.
- 28.7 The main drawback to retaining the Douzaines' involvement is that it will require more complicated legislative amendments and will lead to a more complex charging system, as both the parishes and Public Services will be seeking to recoup costs from householders.

# 29 The Proposed Way Forward

- 29.1 Initial engagement with the Douzaines elicited strong views that they should continue to be involved in the arrangement of household waste collections. The Douzaines considered that:
  - They are able to deliver the service more efficiently and at a lower cost than a centralised service (a view reportedly shared by their parishioners).

<sup>&</sup>lt;sup>15</sup> Integrated Skills (Guernsey) Limited – Report No. 2 – Draft Report on Recommended Optimum Kerbside Collection Scheme – December 2012

- The current waste contractors are valued by both the Douzaines and parishioners and, therefore, should continue to provide the service.
- The contracts are awarded by competitive tender and the Remède procedure provides Parishioners with the chance to hold the Douzaines to account.
- 29.2 As a result of this feedback, three options were shared with the Douzaines in an attempt to reach a mutually acceptable solution:
  - Each Douzaine remains responsible for arranging their parish household waste collections, with additional responsibilities given the change in waste management services. All risk and responsibility sits with the Douzaines, who pass on all collection and processing costs to households in accordance with a charging mechanism agreed by the States.
  - Public Services acts as a Waste Management Authority ('WMA'), and carries out the functions of both collection and disposal. Douzaines no longer have a statutory responsibility for collections, but could still be involved through a mechanism such as an advisory forum. All risk and responsibility sits with Public Services.
  - A combination of the above two options. Douzaines arrange separate collections of residual waste, dry recyclables and food waste, deliver those waste streams to facilities specified by the WDA, and ensure compliance with the WAC set by each facility. Douzaines also pass collection costs on to households, enforce requirements for the presentation of waste for collection, and are liable for penalties for non-compliance with the WAC. The WDA arranges provision of certain facilities, passes on the cost of processing, disposal or transfer of waste to households, and ensures the WAC are applied at the receiving facilities as appropriate.
- 29.3 The three options above were outlined at workshops held with all Douzaines in August 2013. While some Douzaines would prefer to have complete responsibility for all aspects of waste collections, many parish representatives felt it would be difficult for some Douzaines to take on such responsibilities because of increased resource requirements. As such the option with shared responsibility was considered most appropriate, as it enables the Douzaines to continue to be involved with waste collections, but removes some of the responsibilities and potential risks involved in the first option above.
- 29.4 The consultation carried out by Public Services has shown a clear desire to see continued parish involvement. As a result Public Services' view is that, although what is proposed represents a compromise, it will help to ensure the timely delivery of the overall objectives of the Waste Strategy agreed by the States.
- 29.5 In order to make this option work well, there will need to be a great deal of cooperation between the Douzaines and Public Services. Public Services is very encouraged by the engagement seen to date and looks forward to a positive working relationship with the Douzaines as part of the successful delivery of the Waste Strategy.

#### 30 Legislative Matters

- 30.1 Under section 1(1) of the Refuse Law the Douzaines have a duty to 'make such arrangements as may be necessary for the regular collection of refuse from dwelling houses and tenement houses in the Parish and the efficient transfer of that refuse for disposal at a public waste disposal site'. The Douzaines currently comply with this duty by contracting with private refuse contractors to provide regular collections of black bag waste from all households in their respective parishes.
- 30.2 The introduction of kerbside recycling for food waste and dry recyclables will be integral to achieving the recycling targets approved by the States in February 2012. As such it will be necessary to widen the scope of the Douzaines' duty to include a requirement to make arrangements for the regular separate collection of dry recyclables and food waste. The recommended legislative changes are outlined in paragraph 37.5.
- 30.3 The States, through Environment, the WDA and other relevant departments, are responsible for the development and setting of waste policy and the delivery of waste management services.
- 30.4 The Waste Strategy approved in February 2012 followed significant public consultation to ensure it took into account the views and requirements of the Island's population. This strategy is now being implemented to deliver a waste management framework which reflects consultation responses. However, it is proposed that the arrangement of waste collection services to all households in Guernsey will continue to be the duty of the Douzaines who currently do not have any statutory duty to comply with the Waste Strategy set by the States, unlike the WDA which is required to take account of the Waste Disposal Plan in providing waste management facilities.
- 30.5 It is proposed to address this by amending the Refuse Law to include the provision that, in carrying out their functions, including in making arrangements for the collection of household waste and recycling, the Douzaines must have regard for the Waste Disposal Plan, which will set out the agreed policies relating to waste and how those policies must be implemented. The recommended legislative changes are outlined in paragraph 37.11.
- 30.6 The provision of waste management services will change significantly over the next few years as the Waste Strategy is fully implemented. As outlined in this section of the Report requirements placed on Douzaines will change as a result of their continued involvement.
- 30.7 Some Douzaines may find the new requirements too burdensome given the voluntary nature of their organisation and staffing. As such, the option of introducing a mechanism by which a Douzaine could choose to delegate its functions under the amended Refuse Law to the WDA has been considered.

- 30.8 Delegating these functions would mean that the WDA would carry out the following on behalf of the parish:
  - The arrangement of household waste collections and the transfer of waste to the relevant licensed facilities.
  - The charging of households within the parish for the cost of those collections.
  - The enforcement of requirements on households (outlined in paragraphs 37.14-37.24).
- 30.9 If such a power to delegate were exercised the duties and powers and responsibilities for the same would remain those of the particular Douzaine and it is proposed that the delegation could be revoked at any point if the Douzaine so wished. This would allow some flexibility for parishes to take different approaches in relation to their widened functions, bearing in mind the potential impact on resources and following the practical experience of the proposed interim kerbside scheme. If it transpired that a significant proportion of Douzaines were electing to delegate their responsibilities in this way, Public Services would reserve the right to revisit the option of centralisation. The recommended legislative changes are outlined in paragraph 37.25.
- 30.10 Public Services has engaged with the Douzaines to ensure they have had sufficient opportunity to consider and understand the legislative recommendations outlined in so far as they relate to parish functions. Public Services met with all Douzaines individually in September and October 2013.

#### 31 Charging Proposals - Households

31.1 Charging for waste services is the means by which the States can recover the cost of the provision of waste management and disposal facilities. It is also a key instrument to influence behaviour in relation to waste generated and the proportion of waste reused or recycled. Any charging mechanisms introduced must be robust enough to drive change whilst remaining affordable for households and businesses.

#### Charging options considered

31.2 There are a number of ways in which charges for waste services can be implemented. The key options are summarised in Table 31.1 below.

**Table 31.1 Charging Options for Waste Services** 

Charging	Benefits	Disadvantages	Impact on
policy			behaviour
Current	•Charge may be	•Charge not related	<ul> <li>No change from</li> </ul>
(based on	related to ability to	to household size	current behaviours
Tax on	pay as it is based	•Charge not related	

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Real	on property size.	to amount of waste	
Property)	However, it is	produced	
	recognised that this	<ul> <li>No direct incentive</li> </ul>	
	may not always be	to recycle	
	the case		
	•Simple to		
	administer		
Flat rate	•Simple to	<ul> <li>Charge not related</li> </ul>	<ul> <li>No change from</li> </ul>
charge	administer	to household size	current behaviours
		<ul> <li>Charge not related</li> </ul>	
		to amount of waste	
		produced	
		•No direct incentive	
		to recycle	
Pay As	<ul> <li>Charge related to</li> </ul>	<ul> <li>More complex to</li> </ul>	•Reduction in waste
You Throw	services used	administer	produced
(charged	•Incentivises waste	•Variable income to	•Increase in
based on	minimisation	fund services	recycling rates
amount of	•Incentivises	•Decreasing income	<ul><li>May cause</li></ul>
waste)	recycling	stream if	increase in burning
		successful,	or fly-tipping in
		therefore necessary	attempt to avoid
		to readjust	charges

# Pay As You Throw (PAYT) schemes

- 31.3 The summary above indicates that the only form of charging scheme likely to encourage the behaviour change required to deliver the Waste Strategy is a PAYT scheme.
- 31.4 PAYT schemes involve charging householders direct for the rubbish they put out for collection be that by paying for black bags or paying by weight/volume of waste or a different method. As such they provide a clear link between the amount of residual waste, recycling or food waste generated and the cost to the householder of its collection and processing. Such schemes have the potential to create an understanding of the link between consumer choices and the cost of dealing with the waste <sup>16</sup>. Evidence has shown that the schemes can lead to a reduction in the amount of waste generated.
- 31.5 Research has indicated support for PAYT schemes among the Guernsey public. 17

<sup>16</sup> CIWM (2007), Direct and Variable Charging for Household Residual Waste – Overview of Key Issues
<sup>17</sup> Island Analysis (2012), Kerbside Recycling Focus Groups

# Options for delivery of a PAYT scheme

31.6 There are a number of options for PAYT schemes. Table 31.2 below provides an outline of the advantages and disadvantages of the various options.

**Table 31.2 Advantages and Disadvantages of PAYT Charging Mechanisms** 

Option	Advantages	Disadvantages
Pay-per-bin (volume and/or frequency)	The fixed annual cost would provide greater surety over the annual income for the Waste Disposal Authority. It would also provide households a set annual cost figure.	<ul> <li>The householder would have paid for a set volume to be collected at a set frequency so there would be no financial incentive to further reduce the waste generated.</li> <li>There would be a capital cost of procuring the bins to be provided to the households. Existing bins could not be used as there would need to be standardisation.</li> </ul>
Pay-per-bag	<ul> <li>Householder is incentivised to reduce waste as the payment method is flexible. Less waste equals lower costs.</li> <li>Households can spread the costs by purchasing bags throughout the year as opposed to an annual payment.</li> <li>Direct and regular link between level of cost and the volume of waste generated.</li> <li>Lower visual impact since containers will be removed by each collection.</li> </ul>	<ul> <li>If charging is based solely on pay-per-bag the WDA will have less certainty of income over the long term.</li> <li>Potential for households to stockpile waste which could lead to issues with excessive waste and unevenly distributed collection volumes. If food waste is removed there should be no issue with vermin.</li> </ul>

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Option	Advantages	Disadvantages
Bag and tag (tags purchased and attached to bag as proof of payment)	<ul> <li>Householder is incentivised to reduce waste as the payment method is flexible. Less waste equals lower costs.</li> <li>Households can spread the costs by purchasing tags throughout the year as opposed to an annual payment.</li> <li>Direct and regular link between level of cost and the volume of waste generated.</li> <li>Lower visual impact since containers will be removed by each collection.</li> </ul>	<ul> <li>If charging is based solely on pay-per-tag the WDA will have less certainty of income over the long term.</li> <li>Less control over quality of bag used by households.</li> <li>If collections are at night might be easy for evasion as tags may not be easily seen.</li> <li>Potential for households to stockpile waste which could lead to issues with excessive waste and unevenly distributed collection volumes. If food waste is removed there should be no issue with vermin.</li> </ul>
Weight- based	<ul> <li>Householder is incentivised to reduce waste as the payment method is flexible.     Less waste equals lower costs.</li> <li>Accurate data available for household waste generation statistical analysis.</li> </ul>	<ul> <li>High capital costs required to implement the system due to need for weighing equipment on all bin lorries.</li> <li>Potential for householders to avoid costs by depositing waste in other bins.</li> <li>High administration costs – particularly raising invoices.</li> <li>Potential for a high number of appeals and associated resource implications.</li> </ul>

- 31.7 While weight-based schemes tend to be the most successful with regard to waste prevention<sup>18</sup> they require expensive infrastructure. In addition they require the use of bins which, following consideration by ISL as part of an initial study, was considered impractical for many Guernsey households. This is because of reduced collection efficiency from time taken to empty bins, increased noise, public acceptability of bins left on pavements and high capital costs. It is therefore proposed that the charging mechanism is based on a pay-per-bag system owing to the lower capital costs and the regular reinforcement of the link between cost and waste generation by the need to purchase bags.
- 31.8 The vast majority of EU PAYT schemes utilise a combination of fixed and variable rates<sup>16</sup>. This is to mitigate the risk of revenue fluctuations and provide certainty that the costs of waste management are fully recovered.

<sup>18</sup> BioIntelligence Service (2012), Use of Economic Instruments and Waste Management Performances – Final Report, European Commission

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- 31.9 It is therefore proposed to introduce a charging mechanism that comprises:
  - Variable charge: This per bag element will provide the direct link to households between the cost to them and the amount of waste they put out for collection. It will provide a financial incentive for islanders to reduce the waste they generate by charging based on volume of waste generated.
  - **Fixed charge:** This element will ensure that the costs of providing household waste management services can be fully recovered. The charge would be similar to a standing charge for utilities, such as water and electricity, set at a level to cover at least the fixed costs of providing services to each household and running a processing plant. It should be noted that even if a household does not put out any rubbish there are still costs involved in making the service available. Thus there is no possibility of "opting out".

#### Charging for recycling

- 31.10 Under existing arrangements recycling is "free" at the bring facilities to individuals for domestic use only. This has led to the common misconception that provision of such facilities is free of charge or can be done at a low cost. It can be argued that recycling should remain free at the point of use for households in the future to encourage recycling. However, although recycling is better than putting waste out for recovery or disposal, the ideal behaviour based on the Waste Hierarchy would be either to reuse the item or prevent the waste from arising in the first place. Public Services is keen for householders to recognise this principle and encourage behaviour change towards waste prevention and minimisation wherever possible.
- 31.11 It is therefore recommended to charge households for recyclables put out for collection, most likely in the form of a charge for recycling bags. The cost per bag for residual waste would be set higher than the cost per bag for recyclables.

#### Funding of additional household waste management services and initiatives

- 31.12 Household waste management services are not limited to the collection of waste, dry recyclables and food waste at the kerbside, but will also include:
  - Services
    - o Household Waste Recycling Centre
    - o Rationalised bring bank facilities
    - o Repair and Reuse Centre
  - Initiatives on waste prevention and minimisation, such as the Real Nappy Scheme and Love Food Hate Waste.
- 31.13 These additional services, facilities and initiatives are key in driving down waste generation and encouraging reuse and recycling.

- 31.14 In Guernsey, households have embraced the facilities already available for reuse and recycling, such as the bring banks located around the island and the Civic Amenity Site at Longue Hougue, which has contributed to the domestic recycling rate of 45.9% <sup>19</sup>. These facilities are free at the point of use as they are funded from General Revenue and the Waste Strategy Fund. This fund is provided for by the waste surcharge, which is included on the gate fee for specific waste types disposed of at Mont Cuet, and is used to cover costs such as the development of the Waste Strategy and waste prevention and minimisation initiatives.
- 31.15 It is proposed that to encourage use of the additional services these should continue to be provided free at the point of use. As such any charge for household waste should, in addition to covering the costs of collection, processing, transport, sorting, preparation and export of residual waste, dry recyclables and food waste, also seek to cover the costs of any additional public waste management services and initiatives including those outlined above.

#### Proposed charging

#### 31.16 The following charges are proposed:

- The Douzaines will make a direct charge to households for the costs of collections and transfer of waste, recyclables and food waste to licensed facilities based on a fixed charge per household, calculated by whatever method is set out in the relevant legislation. This is on the basis that the collection service represents a fixed cost regardless of how much waste is placed out by each household. Douzaines will collect this charge annually, biannually or quarterly as they prefer.
- The WDA will directly charge households to cover the costs of processing
  the materials after collection and to pay costs of all other public waste
  management services and initiatives provided, arranged or funded by the
  WDA i.e. the States and made available to households. This charge will
  comprise:
  - o A charge per bag (black bags and recyclables bags)
  - o An annual fixed charge per household.
- 31.17 Subject to approval of the recommendations above and consideration of the Waste Disposal Plan a further Report will be brought to the States prior to the introduction of the new charges. This will set out how the new household charging mechanism will work, including the exact split between the fixed and variable charge elements; explain by whom such charges will be payable; and seek approval for drafting the relevant Ordinances to cover the functions of the Douzaines and the WDA under the relevant Laws.

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<sup>&</sup>lt;sup>19</sup> Domestic annual rolling rate to the end of Q3 2013

- 31.18 The necessary amendments to the EP Law and Refuse Law are outlined paragraphs 37.7-37.10.
- 31.19 In considering the level of charges the States will need to take into account the total revenue the WDA is seeking to generate in order to cover the costs of providing treatment of recyclable and residual waste.
- 31.20 Excluding Construction and Demolition waste, at present the island generates 74,000 tonnes of waste of which approximately 45% is from households. Current estimates forecast that the total costs of managing 74,000 tonnes of waste in the future will be around £10 to £13 million per annum.
- 31.21 Based on these figures a fully funded charging mechanism would aim to pass on between £5.1 to £7.7 million per annum to households through a combination of fixed and variable charges. In determining the split between the fixed and variable charge elements the States will have to balance the need to be certain of recovering costs (achievable through the fixed charges) with the desire to drive up recycling rates by the use of a charge per bag. If the balance is wrong, it could lead to a shortfall in income collected or could cause undesirable behaviour, such as fly tipping, by people trying to reduce their costs. The precise total costs of delivering the Waste Strategy will not be known until such time as the infrastructure elements have been tendered, built and are in operation.

#### 32 Charging Proposals - Commercial

- 32.1 As noted previously it is not intended to interfere in the current arrangements for commercial dry recyclables and mixed commercial and household (skip) waste, apart from a different treatment method (which, subject to States approval, will be to export for recovery at an off-island EfW plant). It should, however, be noted that in this Report there are proposals to amend the licensing regime to protect strategically important facilities but this would not offer any more protection to new facilities than currently exists for Mont Cuet, which is effectively being replaced by a waste Transfer Station as the sole destination for residual waste.
- 32.2 The policy in this case will be to ensure that at waste sites provided, operated, or funded by or on behalf of the WDA in accordance with the WDP (e.g. IVC and Transfer Station), commercial waste taken to the site(s) for processing or transfer will be charged a gate fee at a per tonne/load rate to cover the cost of providing the service. In addition, gate fees at different facilities will be set at differential rates to encourage businesses to deal with their waste through methods such as reuse and recycling which are higher up the Waste Hierarchy than recovery and disposal, i.e. a business will be able to reduce the costs of dealing with its waste by keeping its dry recyclables and food waste separate from its residual waste.
- 32.3 WAC at the Transfer Station will also specify that only pre-sorted commercial waste with recyclable materials removed will be accepted, to ensure that businesses, as far as practicable, maximise the proportion of their waste that is

recycled or reused in order to assist in meeting the States approved recycling targets. At present a gate fee is charged and WAC are imposed on loads of waste sent for disposal at Mont Cuet, so the recommendations reflect current policy for public waste disposal sites.

32.4 The recommended legislative provision is outlined in paragraph 37.6.

#### Small businesses

- 32.5 Research has identified demand for an affordable solution for small businesses<sup>20</sup> producing waste of a similar composition to households. A survey by Island Analysis showed that 51% of businesses currently take advantage of the bring bank facilities. It is proposed that small businesses are allowed to opt into household collection services for black bag waste, recyclables and food waste and a duty be placed on the Douzaines to make arrangements to provide such collections.
- 32.6 Businesses could still choose to use a private contractor but if they opt in to the parish collection rounds they will be charged in a similar manner to households for use of the service. This would have the dual benefit of providing an affordable option for small businesses and potentially reducing the costs for households in the parish because the fixed collection costs will be shared among more customers.
- 32.7 The recommended legislative provisions are outlined in paragraphs 37.4 and 37.7-37.9.

#### **33** Proposed Enforcement Measures

- 33.1 The States approved challenging recycling targets in February 2012 and in order to achieve these it will be necessary for the community to participate wholeheartedly in recycling schemes.
- 33.2 Participation in recycling schemes is already very high, for which Islanders deserve recognition. Nevertheless any community will have some individuals or groups who are less willing to take part in such schemes. Whilst Public Services is confident that the right education and support will prove effective at encouraging behaviour change, it nevertheless believes it would be useful to be able to exercise legal powers to enforce compliance, should that be required in future.
- 33.3 This is not intended to be heavy handed but if dry recyclables are mixed incorrectly or food waste is contaminated, such materials may require further sorting or may have to be disposed of as residual waste with resulting cost and to the detriment of meeting recycling targets.

<sup>&</sup>lt;sup>20</sup> For the purposes of this report a small business is defined as having no more than 10 employees in any one location from which parish type waste is collected and generating a similar volume of waste (or less) per week to a typical household.

- 33.4 In addition, subject to States approval of export, the residual waste sent to offisland EfW plants will be subject to WAC at the receiving facilities, as well as general criteria set out by the Competent Authority of destination. To ensure Guernsey is able to meet such WAC it will be necessary to prove that the States are making every effort to deal with our waste in an environmentally sound manner. Legal provisions for enforcing separation of recyclable materials will demonstrate Guernsey's commitment to ensuring that such material does not enter the waste stream for export.
- 33.5 An example of how the WDA might specify waste should be put out for collection is outlined below as an illustration only:
  - Dry recyclables should be:
    - o Kept separate from residual waste and food waste.
    - o Split into two streams for collection:
      - Stream A: tins/cans/cartons/plastics
      - Stream B: paper/cardboard
    - o Presented for collection in the coloured bags marked for dry recyclables which can be purchased from specified outlets and possibly Douzaine offices.
  - Food waste should be:
    - o Kept separate from residual waste and dry recyclables.
    - o Presented for collection in the food caddy provided by the WDA. Only biodegradable materials such as newspaper or corn starch bags to be used to line the caddy. Plastic bags would be strictly forbidden.
  - Residual waste should be:
    - o Kept separate from dry recyclables and food waste.
    - Presented for collection in the bags marked as residual waste which can be purchased from specified outlets and possibly Douzaine offices.
  - Other recyclable materials (for example: batteries, polystyrene) which have facilities for recycling in Guernsey should be:
    - o Kept separate from residual waste, dry recyclables and food waste.
    - o Taken to the relevant waste management facility.
- 33.6 An island wide communications plan will be implemented prior to such requirements coming into force to ensure households (and businesses) understand the importance of complying with waste separation requirements.
- 33.7 The requirements outlined above will require sanctions to be available in case of non-compliance. Enforcement is considered a last resort and incentives and education represent the preferred approach. Therefore, it would be hoped that any enforcement powers would be used infrequently but it is important that a proportionate mechanism is in place to act as a deterrent and to encourage householders to comply with the requirements.

#### **Options**

- 33.8 Public Services was aware that there were a number of potential enforcement options and it therefore had to decide which was most appropriate to recommend.
- 33.9 The Department initially considered the use of fixed penalty offences which are currently provided for in Guernsey through the Offences (Fixed Penalties) (Guernsey) Law, 2009. That Law effectively provides that a fixed penalty notice may be issued where certain offences are committed and, if that penalty is paid within the specified time, proceedings for the offence will not be started in court. The advantages of implementing this option would be that the main legislation and system behind the scheme are already in force, although some legislative amendments would be required for the breach of the above householder requirements to become an offence and to enforce the same. However, this option would also increase resource demand on the Guernsey Police both for issuing tickets and investigation of non-payments to prepare for prosecution. Following consultation with the Home Department it was agreed that this would not be appropriate use of police resources and was not proportionate to the offence.
- 33.10 Another option is to introduce legislation to enable civil fixed penalty notices to be issued when a breach was committed. This would not be a criminal offence but there would be power to serve a notice requiring payment of a fixed penalty, much in the same way as Local Councils in the United Kingdom deal with parking infringements. Non payments would then be pursued as a civil debt owed to the parish.
- 33.11 This is a similar approach to that being recommended in England in the draft Deregulation Bill (published in July 2013), which seeks to decriminalise the existing household waste offences and instead introduce a fixed monetary civil penalty for any failure to comply with the duties. In England such action can only be taken where the breach has caused or is likely to cause a "nuisance" / "harm to local amenity". This was also considered for Guernsey but there were concerns that some of the breaches, for example putting dry recyclables in the wrong bag or contaminating food waste, would not necessarily give rise to such a nuisance or harm. As such it was concluded that this test should not be added to the Guernsey system as any breaches would need to be enforceable.
- 33.12 A civil penalty system would also allow a means of enforcing the requirements without householders potentially being convicted of a criminal offence and having a criminal record. It also takes the enforcement burden away from the Police, but would mean that the new requirements had to be enforced by suitably trained and experienced enforcement officers. It is proposed that enforcing the requirements be passed to the Douzaines as part of their responsibility for waste collections.

#### Requirement for businesses to separate recyclable materials from residual waste

33.13 In developing this Report the option of placing similar requirements on businesses, as are proposed for occupiers of dwellings or business premises using the parish collection scheme, was considered.

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- 33.14 It is proposed that instead a criterion of waste acceptance at the Transfer Station will be that all non-household residual waste must be pre-sorted to ensure recyclable elements have been removed. This would enable businesses to make the choice either to source separate their waste for collection by using a private contractor, or pass on this requirement to the collector.
- 33.15 Failure to do so would result in either the load being rejected and redirected to another waste facility for sorting or a contamination charge imposed if accepted at the Transfer Station. That charge would be imposed under the WAC at the facility and set at a higher rate than normal for the materials in question owing to the load containing other materials which means that it can no longer be processed as intended and may need to be sent with residual waste for recovery or disposal.
- 33.16 In addition, to discourage businesses from accepting the higher contamination charge in lieu of having to sort their waste, it is proposed that those consistently breaching WAC will be subject to further sanctions under the site access conditions, proportionate to the seriousness of the breach, such as refusal of access to the facility for a defined period or withdrawal of credit facilities or other appropriate sanction.

# **34** Commercial Responsibility<sup>21</sup> in the Guernsey Context

- 34.1 The concept of producer responsibility is based on the "polluter pays" principle, and requires businesses which place products on the market to take responsibility for their products when they reach the end of their life. There are numerous directives in the European Union, such as the Waste Electronic and Electrical Equipment (WEEE) Directive, which require Member States to introduce schemes to implement this principle. Examples include collection schemes organised by industry (packaging) and producer compliance schemes (batteries) to which producers subscribe in order to discharge their responsibilities under the EU directives and relevant domestic legislation.
- 34.2 Research into other small self-governing island states has shown limited evidence of legislative provisions for producer responsibility. Guernsey is a small jurisdiction with our economy predominantly focused on the service sector as opposed to production.

# 34.3 Options considered include:

• Waste management plans: In Austria there is a requirement for businesses with over 20 employees to produce a waste management plan, providing information about the type, quantity, origin and location of all the waste accumulated through the operation of the business, as well as defining measures for prevention and disposal. In addition, waste

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<sup>&</sup>lt;sup>21</sup> For the purpose of this report the commercial sector is considered to include the voluntary sector.

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management plans are already a requirement of the waste licensing regime in Guernsey. A waste management plan would ensure that larger businesses address all the waste streams they produce and the appropriate method of disposal. It would widen companies' focus, which may have a tendency towards the 'quick wins', to comply with corporate policies. However, subsequent to further investigations, it was considered that making this a legal requirement would be too burdensome for local businesses, which are generally committed to improving environmental standards.

- **Product bans:** In some jurisdiction bans have been introduced on specific materials to reduce waste generation and encourage the use of alternatives which may be reusable or more easily recycled. Examples of bans on disposable food and drink service ware can be found in San Francisco, Germany, Switzerland and Austria. In 1991 Munich banned the use and sale of disposable drink containers and tableware on public land. Overall, between 1990 and 2004, the amount of waste generated at events has decreased by 50%. At the world renowned Oktoberfest in Munich, waste was reduced from 11,000 tonnes in 1990 to 550 tonnes in 1999. This illustrates the potential for waste minimisation by switching to recyclable or reusable products. It is therefore recommended that when contracting with event organisers provision is made to ensure that recyclable or compostable food and drink containers are used at events on States-owned land. It is recognised that a period of adjustment will be necessary and so it is further recommended that this need not be enforced before 2018. which gives a 5-year lead-in time and ensures that all new waste management facilities are up and running before the new policy comes into force.
- **Black plastic**: A specific ban on black plastic packaging, which cannot currently be recycled locally, was considered but it was felt that such a ban would be too onerous on local businesses and, given the high reliance on imported goods, too difficult to enforce.
- **Product charges:** These charges are added to the price of certain products or materials which are considered to cause adverse environmental effects during their manufacture, use or disposal. These charges are effective in either: (1) reducing the usage of certain products such as disposable batteries in favour of rechargeable, and/or (2) covering the costs of disposing of the waste type such as disposable batteries. The charges could be levied at either import and/or on purchase cost. The funds raised from product charges could be used to provide 'free at the point of use' collection facilities to make it simple and effective to dispose of these waste types. Advice received from the Law Officers' Chambers suggested that introduction of charges on imported goods could have implications for Guernsey's obligations in relation to free movement of goods under Protocol 3 to the UK Treaty of Accession to the EC. In addition imposing charges on local retailers could result in increased costs

to the consumer. This could negatively affect retailers and the local economy as it would encourage consumers to shop online to find cheaper alternatives.

- 34.4 The issues in applying producer responsibility in Guernsey are outlined below:
  - Guernsey's retail industry is already under pressure from growth in online shopping. Since almost all products sold on island are imported, the cost of producer responsibility is disproportionately loaded on retailers.
  - Any new initiative would have an impact on local price inflation and it is
    highly likely that any increase in costs would be passed to consumers,
    meaning that they will be affected by waste charges both directly
    (household charges) and indirectly. However, it could also be argued that
    increased costs might reduce consumption, thereby contributing to the
    goal of minimising waste, but potentially also hitting the retail trade.
  - The impact on retailers and consumers is likely to be unpopular and as such will influence the acceptability of any proposals which will affect businesses.
- 34.5 Consequently it is proposed that no charges or legislative requirements should be levied on businesses for the purpose of applying the principle of producer responsibility. It is proposed instead that the commercial sector should be given the opportunity to develop voluntary initiatives in consultation with Public Services and the Commerce and Employment Department so as not to place undue burden on this sector. Work is already being progressed to establish voluntary initiatives in a number of industry sectors.
- 34.6 However, Public Services believes businesses must recognise their responsibilities and, if they do not accept this voluntarily, in the future the Department will have no option other than to recommend to the States that legislative measures be introduced. This is not the preferred route but businesses must engage in the process of minimising waste and working towards high recycling targets.
- 34.7 It is estimated that the actions outlined above will require 140 man hours to implement. Existing Public Services staff resources will be used at a total cost of approximately £4k.

# 35 States to Lead by Example

- 35.1 In its 2011 Review of Waste Policy in England<sup>22</sup> DEFRA recognised that the expectations of businesses with regard to waste management are high and that Government departments and the wider public sector have a responsibility to manage efficient and sustainable operation of Government estate.
- 35.2 The States have direct influence over an estimated 182 places of work, where well over 5,000 people are employed and 7,060 children/young people are educated.

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<sup>&</sup>lt;sup>22</sup> Government Review of Waste Policy in England 2011

This does not include the many islanders who pass through public buildings such as the hospital and airport every day. In 2010 (Billet d'État XXIV refers) the States directed "that the Public Services Department liaise with all other Departments and Committees to achieve a commitment to recycling across Government".

- 35.3 Progress has been made in some areas but there is still not a universal standard across the States. If as outlined above, the States expect the business community to recognise its responsibility in such matters, then it stands to reason that the States must commit to the same.
- 35.4 In 2008 recycling facilities for tins, glass, plastics, cartons and food waste were introduced in Sir Charles Frossard House. This initiative has led to a 20% decrease in the volume of residual waste generated at this location. This is equal to 52 1,100 litre bins per year. Paper and cardboard recycling was already in place prior to 2008.
- 35.5 Public Services has established a cross-departmental Waste and Recycling Working Party which brings together representatives from all States committees with the objective 'to ensure the States sets a good example in waste management, and in line with the Island's Waste Strategy.'
- 35.6 It is recognised that there will be financial demands, initial and ongoing, required from all States committees at a time when they are being asked to reduce costs but, if achieving the recycling targets set by the States in February 2012 is a priority, then a clear message needs to be sent out to the Island that the States are willing to lead by example. There are also examples from other jurisdictions where recycling has led to savings being made. Aberdeenshire Council premises have saved more than £50,000 every year in waste collection and disposal costs as a result of a recycling initiative introduced in 2008 to increase staff awareness and participation in initiatives to reduce, reuse and recycle at council premises. This led to a 13% reduction in waste sent to landfill.
- 35.7 To progress this work stream Public Services will:
  - Continue to work with departmental representatives through the cross-departmental Waste and Recycling Working Party to:
    - o Set common standards,
    - o Achieve waste reduction targets measured by appropriate key performance indicators.
- 35.8 It is estimated that the cross-departmental Waste and Recycling Working Party will have an annual staff resource demand of 137 hours within Public Services and 29 hours per departmental representative. This will be met by existing staff resources and is expected to last 2-3 years at a cost in the region of £32k.

# 36 Commitment to Recycling 'On The Go'

- 36.1 Recycling has become a social norm and there is now a significant drive for the public to be able to recycle 'on the go', in public places, outside, and at events. The London 2012 Olympics produced many lessons to be learned in this area. The planning and commitment which went into the Zero Waste Events Protocol meant the Organising Committee realised a reuse, recycling and compost rate of 62% from sites under their control during the Games.
- 36.2 Guernsey has numerous public events throughout the year which inevitably generate waste. Recycling provisions at these events vary greatly, and there is benefit to be gained from encouraging better waste management.
- 36.3 To progress this work stream Public Services will:
  - Review current provision of 'on the go' recycling facilities in Guernsey.
  - Develop an action plan to increase the facilities available.
  - On States-owned land, seek to implement requirements for events to provide recycling facilities.
- 36.4 It is estimated that the actions outlined above will require 70 hours. Existing Public Services' staff resource will be utilised at a total cost of approximately £2k.

# 37 Legislative Changes Required

#### Extension of licensing controls

37.1 It is proposed that certain existing controls on licensing of private waste disposal sites, under the EP Law, be extended to include other private facilities which may compete with the Island's key waste infrastructure such as the IVC and Transfer Station. This will involve amendment to section 33 of the EP Law to ensure that the Director has to take account of the public interest, in ensuring that waste is not without good reason diverted from public waste sites in accordance with the policies laid down in the WDP, when considering applications for different types of treatment facilities and not only those relating to the disposal of waste.

#### Amendments to the functions of the Waste Disposal Authority

- 37.2 The provisions in section 32 of the EP Law focus on the provision of public waste disposal sites on island. Section 32(1) states that 'it is the duty of the Waste Disposal Authority to make reasonable provision for the reception and disposal of all normal household and commercial waste at one or more public waste disposal sites.'
- 37.3 In light of the Waste Strategy's focus on waste minimisation and prevention, it is proposed that the WDA's functions under the EP Law be amended to give it a

more flexible duty to make reasonable provision, as required by the WDP, for the disposal or recovery of household and commercial waste by providing facilities itself or via arrangements with the private sector; consequently the current powers of the WDA to impose waste acceptance criteria at public waste disposal sites would be widened to all States provided, funded or arranged recovery or disposal facilities. It would also be clarified that this duty would only require the WDA to provide those sites identified as waste management facilities to be managed by or on behalf of the WDA in the Waste Disposal Plan. It is intended that pursuant to this duty the WDA could then make arrangements for:

- Processing facilities for domestic dry recyclables (including the MRF).
- Processing facilities for household and commercial food waste (including the IVC).
- Subject to States approval of the export option, of transfer facilities for such waste (including the Transfer Station).
- 37.4 This amendment may necessitate other amendments to the provisions of the Law (which currently refer generally to disposal) to reflect this wider and more flexible duty and to clarify that arrangements are required for recovery as well as disposal consistent with the Waste Strategy. This includes consequential amendments to the related duties of the WDA and of Environment in relation to waste management, including in relation to the preparation of the Waste Disposal Plan, under Part V of the EP Law which will in practice need to refer to recovery as well as disposal of waste including off island.

# Duty to make arrangements for kerbside collections

- 37.5 The introduction of kerbside recycling for food waste and dry recyclables will be integral to achieving the recycling targets approved by the States in February 2012 as part of the revised Waste Strategy. As such, it is necessary to widen the scope of the Douzaines' collection duty to include a requirement to make arrangements for the regular separate collection of dry recyclables and food waste for all households including requirements:
  - To make such arrangements as may be necessary to collect the separate waste streams as required by the WDA (e.g. dry recyclables should be separated into two streams for collection: plastics/cartons/tins/cans and cardboard/paper);
  - To transfer such waste to the waste management facilities as required by the WDA and not just for disposal (this will include transferring food waste to the IVC, dry recyclables to the MRF and residual black bag waste to the Transfer Station for export); and
  - To provide the above collection and transfer service for small businesses opting into the parish collection service.

#### Power of the WDA to charge gate fees at WDA facilities

37.6 An amendment will be required to widen the WDA's existing charging powers (see section 32(2)(c) of the EP Law) to include the power to set charges at the gate of all States-funded facilities. The current power is limited to public waste disposal facilities.

# Powers required for household charging mechanisms

EP Law

- 37.7 The States will by Ordinance set the mechanism for charging households, and small businesses that opt in to such services, for all household waste management facilities provided, arranged or funded by the WDA on behalf of the States, to include:
  - Processing of residual waste at the Transfer Station and onward transportation to an off-island EfW facility,
  - Processing of food waste at the IVC,
  - Processing of dry recyclables at the household MRF,
  - Household Waste Recycling Centre,
  - Rationalised bring bank facilities,
  - Repair and Reuse Centre, and
  - Initiatives on waste prevention and minimisation, such as the Real Nappy Scheme and Love Food Hate Waste.
- 37.8 The WDA mechanism for the fees, the person chargeable and the fee levels would be set out in the Ordinance; it is recommended that the fee levels only could be amended by Regulations of the WDA.

Refuse Law

- 37.9 The States will by Ordinance set the charging mechanism for charging households, and small businesses that opt in to such services, for the cost of the collection and transfer of waste collected through the parish system.
- 37.10 Subject to approval of the recommendations in paragraph 31.16 and States' consideration of the WDP, a further Report will be brought to the States prior to the introduction of the new charges, setting out how the new household charging mechanism will work, including the exact split between fixed and variable charge elements, and explaining by whom such charge will be payable, and seeking approval for drafting of relevant Ordinances to cover both the functions of the Douzaines and the WDA under the relevant Laws.

#### Duty to have regard to the Waste Disposal Plan

37.11 It is recommended that the Douzaines have a duty to have regard to the Waste Disposal Plan when carrying out their functions under the Refuse Law.

# Requirements on households relating to the presentation of household waste for collection

- 37.12 It is proposed that a statutory duty is placed on occupiers of dwellings, and small business premises opting into the parish waste collection service, to require them:
  - To set out for collection their residual waste, dry recyclables and food waste in the manner specified in writing by the WDA.
  - To place residual waste, dry recyclables and food waste out for collection only on the days and times specified by the Douzaines.

#### Proposed enforcement system for non-compliance with requirements

37.13 It is recommended that a civil fixed penalty system should be introduced to deal with non-compliance with requirements relating to the presentation of household waste for collection. The proposed system is outlined below:

First breach

- 37.14 First breaches will result in advisory notices, such as:
  - Sticker on bag stating why the bag was not collected and an information leaflet through the letter box or attached to the bag where relevant premises are difficult to identify (by parish contractors).
  - The information leaflet should contain outline of householder requirements and warning of consequences of further failure to comply.

Second breach

- 37.15 Following a second breach the Douzaine will issue a warning notice outlining the breach and the consequences of committing the same or a similar breach within specified period (i.e. penalty payable).
- 37.16 If the same or similar breach is then committed within the period of time specified on the warning notice a fixed penalty notice will be issued by the Douzaine. This notice will specify the breach, the level of penalty payable and outline the right of appeal against that notice.
- 37.17 If the penalty is not paid within a specified period it will be recoverable as a civil debt by the parish.

Service of notices and identification of occupiers committing breaches

37.18 Notices would be served on occupiers by being left at the relevant premises. This will be difficult in the areas of high density housing or multiple occupation. From an enforcement perspective, ideally bags would be tagged/identified in some way to reduce the difficulties of identifying the correct person on whom to serve

- notice. However, effectiveness would be limited given the ease by which householders could choose not to affix the tag.
- 37.19 The purpose of the penalty is to act as a deterrent to householders and not to generate revenue or fund other initiatives. As such it is recommended that the civil penalty is set at a level which recovers the direct and indirect costs of enforcement and which is proportionate to the breach. Currently under the Offences (Fixed Penalties) (Guernsey) Law, 2009 fixed penalties range between £40-£100. It is not envisaged that the new civil penalties would be higher than this current range.
- 37.20 The revenue collected from civil fixed penalties would be retained by the Douzaines to cover some of the costs of enforcement.
- 37.21 It is proposed that the States should have the power by Ordinance to set the level of the fixed penalty.

**Appeals** 

37.22 It is proposed that there would be a right of appeal against such civil penalties and that they should be heard by the soon to be established Parochial Appeals Tribunal which is considered to be the most appropriate appellate body. This Tribunal will be established under Parochial legislation to hear appeals in relation to proposed similar civil penalties for failure to comply with requirements in relation to hedge cutting and douits.

Enforcement powers

- 37.23 The relevant enforcement powers will need to be conferred on Parish Officials as the collections would be on behalf of the Douzaines. In addition, it is likely to be Parish Officials who are informed of breaches by neighbours and the relevant provisions sit within the Refuse Law. However, it will be necessary to ensure that appropriate training is provided to Parish Officials.
- 37.24 As part of the recommended civil penalty system outlined above it will be necessary to provide Parish Officials with the standard enforcement powers, subject to standard safeguards to ensure compliance with human rights and a proportionate exercise of powers, including powers to search sacks put out for collection and to require information from householders to enforce the householder obligations.

# Power to delegate functions to the WDA

37.25 It is recommended that a power be in place whereby Douzaines could choose to delegate their functions under the Refuse Law to the WDA. If such a power to delegate were exercised the duties and powers and responsibilities for the same would remain those of the particular Douzaine. However, a parish could decide to delegate its functions to the WDA to carry them out in the name of the parish.

This would allow some flexibility for different parishes to take different approaches in relation to their widened functions bearing in mind the potential impact on resources and following practical experience with the proposed interim kerbside scheme.

#### Repeal of limitations on the quantity of refuse collected

- 37.26 Under section 1(3) of the Refuse Law the Douzaines are able to impose limitations on the quantity of refuse collected. In the future, households will pay an amount per bag for the residual waste and dry recyclables they present for collection. This will mean they are charged proportionately for the demand they place on the service and it is the intention to ensure that the prices for bags are set in a way that encourages the desired behaviour.
- 37.27 As such it is proposed that this current provision is repealed.

#### Consequential repeals and amendments

37.28 The above recommended changes to legislation may necessitate consequential amendments to other parts of the EP Law and Refuse Law, to legislation made under them and to other legislation that cross-refers to such provisions. It is, therefore, recommended that such amendments as are necessary are also made.

### 38 Resource Implications

- 38.1 Legislative drafting resources for the relevant recommendations in this Report would be significant in view of the number of amendments, the need to check any necessary consequential amendments and the complexity of the related legal issues. Drafting time only is estimated at three months.
- 38.2 Other resource implications (financial, staff, etc.) have been detailed throughout the main body of this Report.

# 39 Relationship to Overarching Strategies

39.1 In the development of the recommendations in this Report consideration has been given to the strategic fit with the States Strategic Plan (SSP), and specifically the States Environmental Policy Plan. The relevant points in the context of this Report are outlined below:

# • States Strategic Plan

o Policies which protect the natural environment and its biodiversity by accounting for the wider impacts that human activity has on it.

#### • Environmental Policy Plan

- o The amount of waste generated will be minimised.
- o Solid and liquid waste disposal will accord with environmentally

- acceptable methods.
- o Having due regard to social acceptability identify best practicable environmental option in respect of waste management practices.

# 40 Compliance with Principles of Good Governance

40.1 Public Services considers that it has complied with the six principles of good governance in the preparation of this Report.

#### 41 Consultations

41.1 The Law Officers have been consulted and their comments taken account of in this Report.

#### 42 Recommendations

- 42.1 The Public Services Department and, only insofar as the recommendations relate to Parochial functions, the Policy Council, recommends the States to:
- 1. Rescind Resolution 3 on Article VII of Billet d'État No. IV of 2012.
- 2. Establish, with effect from 1 January 2014, a "Solid Waste Trading Account" and for the financial arrangements in relation to solid waste to be managed therefrom, including that currently within Public Services' Revenue Budget.
- 3. Authorise the Treasury and Resources Department to approve expenditure from the "Solid Waste Trading Account" necessary to progress development and implementation of the solid Waste Strategy, funding of waste minimisation, and recycling initiatives, including kerbside collections, until such time as a new charging regime is in place.

#### Export of Waste

- 4. Direct the Public Services Department to tender for the construction, or construction and operation, of the Transfer Station as part of the infrastructure necessary for the new Waste Strategy and, following that tender, to recommend a tenderer for the same to the Treasury and Resources Department.
- 5. Direct the Public Services Department to tender for the transportation and export of residual waste to an off-island energy from waste facility and, following that tender, to recommend a tenderer for the same to the Treasury and Resources Department.

6. Approve the giving of authority to the Treasury and Resources Department to approve the Public Services Department's recommended tenderers for 4 and 5 above on receipt of a suitable business case and to release the relevant funds for capital costs and for operational costs of the same upon such approval, with the capital costs being funded by way of a loan either from the States General Investment Pool or the external market.

#### Other Infrastructure

- 7. Direct the Public Services Department to tender for the construction, or construction and operation, of the following:
  - Materials Recovery Facility
  - In-Vessel Composter
  - Civic Amenity Site
  - Repair and Reuse Centre
  - Kerbside collection vehicles (if required)

and, on receipt of such tenders, to recommend preferred bidders to the Treasury and Resources Department.

8. Approve the giving of authority to the Treasury and Resources Department to approve the Public Services Department's recommended tenderers for 4 and 7 above on receipt of suitable business cases; and to release the relevant funds for capital costs up to a total sum not to exceed £29.5 million (including capital costs related to export of waste) with the capital costs being funded by way of a loan either from the States General Investment Pool or the external market; and at the same time to approve operational costs associated with those same facilities.

#### Legislation and Policy

# Approve the policy recommendations:

- 9. That certain current controls on licensing of private waste disposal sites, under the Environmental Pollution legislation, be extended to other private facilities which may compete with the Island's key waste infrastructure (as set out in particular in paragraphs 27.1 to 27.4 and 37.1).
- 10. To amend the Waste Disposal Authority's current duty to make reasonable provision for the disposal of household and commercial waste to cover the making of arrangements for recovery or disposal of such waste and consequently to widen the current powers of the Waste Disposal Authority to impose waste acceptance criteria at public waste disposal sites to all States provided, funded or arranged recovery or disposal facilities (as set out in paragraphs 37.2 to 37.3).
- 11. That the Douzaines retain their current waste collection functions but that the parochial collection of refuse legislation be amended to -

#### 1. require the Douzaines to -

- make such arrangements as may be necessary to collect the separate waste streams as required by the Waste Disposal Authority;
- Transfer such waste to the waste management facilities as required by the Waste Disposal Authority and not just for final disposal;
- provide the above collection and Transfer service for small businesses opting into the parish collection service; and
- take into account the Waste Disposal Plan in carrying out their functions in relation to parochial collection of waste,

as set out in paragraphs 30.2 to 30.6, 32.5 to 32.6, 37.5 and 37.11,

- 2. confer on the Douzaines a power to delegate their functions under the Parochial Collection of Refuse Legislation to the Waste Disposal Authority as set out in paragraphs 30.7 to 30.9, and
- 3. remove the Douzaines current power to impose limitations on the quantity of refuse collected under the Parochial Collection of Refuse Legislation as set out in paragraph 37.26.
- 12. In relation to the introduction of a new charging system for waste management services provided to householders (as set out in particular in 31.9 to 31.16 and 37.7-37.10).
- 13. To amend the Waste Disposal Authority's current gate fee charging powers to include all States provided, funded or arranged recovery or disposal facilities (as set out in particular in paragraphs 31.16 to 31.21, 32.1 to 32.3 and 37.6).
- 14. In relation to the introduction of statutory duties on occupiers of households and small business premises using parish collection services regarding the presentation of household waste and other parochially collected waste put out for collection (as set out in particular in paragraphs 33.1 to 33.7 and 37.12).
- 15. In relation to the introduction of a civil fixed penalty scheme to enforce the statutory requirements outlined in recommendation 14 (as set out in paragraphs 37.13 to 37.24).
- 16. To make any amendments consequential to the above policy proposals to the Environmental Pollution Law, and legislation made under it, the Parochial Collection of Refuse Law and other legislation relating to waste and legislation making reference to the same.
- 17. To direct the Public Services Department and the Commerce and Employment Department to work with the commercial sector to develop and implement voluntary initiatives to prevent or minimise waste both generated by businesses directly and indirectly and through the products and services businesses provide.

- 18. To direct all States Departments, Committees, and Councils to implement, as far as practicable, such waste prevention and minimisation initiatives as are needed to contribute to the achievement of the States approved recycling targets.
- 19. To direct all States Departments, Committees and Councils that own or manage land hired out or otherwise used for public events to include, as far as practicable, in terms and conditions of such hire or use, a requirement for organisers to provide recycling facilities.
- 20. To direct all States Departments, Committees and Councils that own or manage land hired out or otherwise used for public events to include, in terms and conditions of such hire or use, a requirement that, where relevant, only recyclable or reusable tableware and takeaway food and drink containers be used, such conditions to be phased in as soon as practicable but in any event no later than 31 December 2018.
- 21. Direct the preparation of any legislation necessary to give effect to the proposals recommended in 9 to 20.

Yours faithfully

P A Luxon Minister

Deputy S J Ogier (Deputy Minister)
Deputy Y Burford
Deputy D J Duquemin
Deputy R A Jones