

# 1.0 Summary of Recommendations

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Recommendations intended to be included in the roadmap for Malta can be summarised as follows:

1. Further reforms of door to door waste collection systems are recommended.
  - a. Following the trials currently taking place on food waste collection, integrated waste collection service standards and obligations could be introduced.
  - b. Responsibility for waste collection should be moved from the local authority level to a much smaller number of regional waste authorities.
  - c. Concerning producer responsibility systems, clarity on costs is needed. Ideally the full costs of management the packaging waste would fall on producers and not the general tax-payer.
  - d. Particularly if no landfill (or residual waste) tax is introduced, local authorities (or on the regional authorities where responsibility has been moved) should be assigned recycling targets so that those responsible for waste collection can ensure that the service delivery, and the structure of incentives, is of a standard that delivers the required performance. It is suggested that sanctions are needed to give substance to the targets.
2. Adaptation of the treatment systems:
  - a. Anaerobic digestion operations at Sant' Antnin and Maghtab to treat source segregated organics.
  - b. With the anaerobic digestion element of the current MBT facilities dedicated to source separated waste, the operation of the mechanical treatment plants needs to be reviewed.
3. A significant increase to the cost of disposal of mixed / active waste at landfill, and also MBT, ensuring the full cost of treatment (including aftercare) is covered. Further residual waste cost increases via a residual waste tax should be planned and announced for a period of years ahead.
4. Strengthening and empowerment of enforcement capability / capacity, including Inspection and enforcement of commercial organisations to ensure they are subscribing to collection services.
5. Improvements to data capture and management systems.
6. Institutional reforms. Decision making and implementation processes for waste management to be streamlined to allow projects that are in the interests of moving waste up the hierarchy to be put into practice more quickly and efficiently.
7. Pay-as-you-throw for household waste should be introduced only once all other aspects of waste management have been addressed and systems are functioning as intended.

## 2.0 Potential Issues with Approach to Waste Management

Number	Potential issue	Description	Reasons for the issue
1	Waste management currently failing to implement the waste hierarchy - significant dependence on landfilling	<p>Convenient and zero cost waste disposal routes for households (frequent door-to-door collections, free bulky waste collection and civic amenity site services).</p> <p>Ability for commercial enterprises to dispose of waste for free through household collection systems.</p> <p>High share of biodegradable waste disposed of in landfills. Missing separate collection of the biowaste fraction.</p>	<p>Historic daily residual waste collection service provided, with (typically) only one day per week dedicated to recycling.</p> <p>A very large number of Local Councils in Malta (68 in total), each with responsibility for waste collection, leading to inefficiency and difficulties in administration. Enforcement ineffective.</p> <p>Recycling targets (and sanctions) are not in place for local authorities or collectors. Therefore, those involved in the management of waste are not obliged or incentivised to meet the national targets, and seemingly assert limited control over waste collection service provision.</p> <p>Disposal costs paid by local authorities, but from public funds allocated by government. If budget not available to settle all disposal costs, the cost can go unpaid and is picked up by WasteServ (also supported by government funds). Hence, dysfunctional budgetary accountability for waste.</p> <p>Low cost of waste disposal. Disposal fees set within the 1997 Deposit Of Wastes And Rubble (Fees) Regulations (as subsequently amended), which only intends for fees to be adjusted in line with the retail price index and not to reflect the costs of operating facilities or to account for any non-monetary impacts (such as environmental costs). Landfill and MBT treatment at €20/tonne + VAT. Economic rationale not present to drive waste up the waste hierarchy.</p> <p>Limited financial benefit in local authorities taking decisive action to stimulate recycling due to the low disposal cost (and seemingly optional budgetary accountability).</p> <p>No pay-as-you-throw for households, and ability for commercial business to misuse the household collection system.</p> <p>Due to the low disposal price, legitimate commercial waste collection charges are unlikely to be sufficient to properly incentivise recycling.</p>

Number	Potential issue	Description	Reasons for the issue
2	Incompatibility of collection systems and treatment technologies currently employed	Malta's currently operational MBT plant has previously suffered mechanical breakdown of the AD facility due to incompatible feedstock. Also, apart from some limited recyclate recovered from residual waste, all outputs from both the mechanical treatment facility and AD facility continue to be landfilled.	Poor operational management of the existing facility. No separate collection of organics currently, which would allow the AD facility to switch to purely source segregated feedstock. No known local market for thermal treatment of refuse derived fuel (or inadequate processing capability to produce an internationally marketable output).
3	Incomplete coverage of costs with regard to MSW management, polluter pays principle not being upheld	Businesses not subscribing to commercial waste collection services and placing waste out for collection alongside household waste.  Free riders within EPR systems.	Lack of centralised systems to understand if businesses are contracting for waste services. Lack of enforcement. Lack of prerogative or incentive for collectors to distinguish between household and commercial waste, other than the potential fraudulent taking of payments to collect commercial waste as household.  Packaging producers exempt from Eco-contribution. Producers should self-comply or subscribe to GreenPak or Green MT, but some may do neither. Imported packaging (Amazon type products) likely to be a problem. Lack of monitoring and transparency.
4	Poor data on waste	Data has reportedly been improving, but is sourced from a number of different sources which are difficult to tally to get the full picture on waste generation and management.	Non-harmonized waste database and insufficient reporting system/routines in frequent data collection.  No requirement for local authorities or collectors to record and report collected waste quantities. Historically it has been difficult to check collected waste quantities against managed wastes, although there have been recent improvements in this respect.

Number	Potential issue	Description	Reasons for the issue
5	Policy, planning and implementation can be a convoluted process and take a long time to be delivered.	The institutional arrangements for decision making and putting plans into action appear to be overly drawn out and convoluted, resulting in a very gradual development of waste systems and no big-bang / high impact reforms (which arguably are more acutely needed in a small island environment where there is such a direct link from generated waste to the local treatment and recovery operations).	<p>Small island population, with a large number of public departments each with a wide remit and limited staff.</p> <p>Strategic intentions such as those within the WMP lack firm commitment and allocation of responsibilities.</p>

## 3.0 Recommended Measures

Measure	Type of instrument	Responsibility	Estimated costs	Available EU funding	Anticipated impact
<b>Collection Reforms</b>					
<p>Following the trials currently taking place on food waste collection, integrated waste collection service standards and obligations could be introduced. For household waste, this might place a requirement on local authorities (or regional authorities if responsibility is moved to this level) for the following (as is outlined in the WMP):</p> <ul style="list-style-type: none"> <li>• Minimum frequency for separate food waste collection from households - three times per week;</li> <li>• Minimum frequency for kerbside recycling collection from households - twice per week;</li> <li>• Maximum residual waste collection frequency - once per week as standard;</li> </ul> <p>Service standards for businesses could also be introduced:</p> <ul style="list-style-type: none"> <li>• An obligation for all commercial businesses to subscribe to waste collection services, and to keep evidence for a fixed period of time (i.e. to keep collection contract, bills etc. going back up to four years ready for inspection);</li> <li>• An obligation for commercial businesses producing in excess of 5kg of food waste per week to participate in and present food waste for separate collection.</li> </ul>	Regulatory requirement on local authorities and businesses.	OPM / MSDEC: policy developments. Local authorities and waste collectors: implementation . MEPA: Enforcement	Likely to be cost negative over a reasonable timeframe once environmental costs taken into account.	Unknown.	<p>Food waste and recycling diverted from landfill, helping to address issue 1.</p> <p>Benefits from AD treatment of source segregated biowaste, thus helping to tackle issue 2.</p> <p>Combatting of businesses free riding within local authority waste collection, helping to tackle issue 3.</p> <p>Innovation in private sector encouraged.</p>

Measure	Type of instrument	Responsibility	Estimated costs	Available EU funding	Anticipated impact
Delivery of comprehensive awareness raising and communications campaigns aimed at the general public on separate collection as indicated in recent budget statements. Proper waste management should be initiated alongside the above reforms.	Educational	Local Councils Association	Unknown.	Potentially , such as that from the ENPI CBCMED Programme.	To provide understanding of the new services and how waste needs to be presented, and to encourage participation and compliance. Helps to address issue 1.
<p>Formalise the regionalisation of waste collection:</p> <ul style="list-style-type: none"> <li>Facilitate the establishment of regional territorial units or similar entities for coordinated procurement of waste collection services.</li> <li>Guidance and training on skills in procurement should also be provided.</li> <li>These regional waste authorities would also be responsible for data collection and reporting.</li> </ul>	Institutional / organisational	Multi-level co-operation needed	Potential cost savings on reformed service delivery	n/a	Waste management costs can be reduced, while providing legal certainty for private operators. This will help address issue 5
Transparency in accounting for the costs of producer responsibility systems is needed (for example, the expected change in costs where recycling collection moves from once to twice per week should be identified). Ideally the full waste system costs for packaging (including that treated within the residual as well as recycling) should fall on producers and not the general tax-payer. Free riders should be tackled.	Fiscal				Promote recycling and implement the principle of full cost coverage by waste producers helping to gather the necessary funding for separate collection, helping to tackle issue 3.

Measure	Type of instrument	Responsibility	Estimated costs	Available EU funding	Anticipated impact
Particularly if no landfill tax is introduced, recycling targets should be placed on local authorities (or the regional authorities with responsibility for waste collection), set at a level to ensure Malta to meet its overall directive target obligations. Interim targets should be introduced alongside the key target years to encourage performance, alongside sanctions for non-compliance.	Recycling targets	Government imposed targets on local / regional authorities	Unknown	n/a	Those responsible for collection are incentivised to ensure services are operated well, and recycling objectives are met. Would help to address issue 1.
Consider the reintroduction of deposit refund schemes (DRS)	Fiscal, administrative	MSDEC	Potential cost recovery	For capital items	Increase the quantities of high quality recycle, helping with issue 1, and also assisting with issue 3.
<b>Treatment System Reforms</b>					
Anaerobic digestion elements of MBTs should treat source separated organics. This could be facilitated through the purchase of de-packaging equipment at the front end of anaerobic digestion facilities to deal with packaged food coming from business sector, as well as bagged food waste from households. Digestate can be used on land. This should be linked to a review of future treatment requirements for source segregated organic waste.	Operational. Potential compost standards.	WastServ with co-operation at all levels	Overall system change costs linked to other reforms	Funding potentially available for equipment	Waste moved up the hierarchy, addressing issue 1. Better functioning of the treatment systems (addressing issue 2).
With the anaerobic digestion element of the MBT facilities dedicated to source separated waste, adaptation of the mechanical component (through additional plant development) is needed. The leading possibilities are to redesign the facilities as either aerobic stabilisation facilities or biodrying RDF production facilities. A study is needed to develop the best strategic solution. This study should be linked to the option appraisal for thermal solutions or RDF outlets currently in progress.	Strategic appraisal	Wasteserv	Unknown	Unknown	A strategy for functional residual treatment facilities for the future, tackling issue 1.
<b>Economic Reforms</b>					

Measure	Type of instrument	Responsibility	Estimated costs	Available EU funding	Anticipated impact
The true costs of disposal to be reviewed with a view to immediately increasing disposal charges. Currently the costs charged for landfilling and MBT are not sufficient to cover the full operational costs (nor the financing of capital or aftercare costs in the long term) for these facilities. Nor are the costs high enough to encourage waste away from disposal.	Fiscal	MSDEC	Cost recovery measure	n/a	Separation for recycling stimulated due to increased cost for residual waste disposal, thus helping to tackle issue 1. Waste prevention also encouraged.  Stimulation of the private sector. Private sector investment in systems to support recycling.
If recycling targets are not devolved to local authorities as described above, in addition to increasing the costs of disposal (as recommended above), a residual waste treatment tax should also be introduced, announced for a period of years ahead, at increasing levels. Tax rates should be lower for the stabilised outputs from MBT systems. Tax should also be applied to the outputs from thermal treatment.	Fiscal	OPM / MSDEC	Effectively a monetary cost placed on environmental damage. Tax revenues available for subsequent investment.	n/a	Alongside the previous message, will assist with issue 1.
<b>Further General Reforms</b>					
Strengthening and empowerment of enforcement capability / capacity. Inspection and enforcement is needed to enforce against fly tipping, producers complying with packaging regulations and commercial organisations not subscribing to collection services (among other things).  Fixed penalty notices should be awarded for breaches. A warning system prior to penalisation may be appropriate for commercial organisations not contracting for waste collection or packaging compliance schemes etc.	Enforcement	MEPA under direction from MSDEC	Difficult to quantify especially during transition periods, potentially significant.	Unknown	A more level playing field within EPR schemes by better monitoring and more transparency.  Businesses not free-riding within household collection services.  Deterrent to fly tipping.  Activities will help to address issues 3 and 4.

Measure	Type of instrument	Responsibility	Estimated costs	Available EU funding	Anticipated impact
<p>Improvements to data management:</p> <ul style="list-style-type: none"> <li>Requirement for local / regional authorities charged with collecting household waste to record and report collected waste quantities.</li> <li>Requirement for collectors collecting business waste to separately record and report business waste from local authority waste. This obligation should oblige customer tracking through on-vehicle weighing, customer logging etc.</li> </ul>	Regulatory obligation plus electronic reporting system development	MEPA	Unknown	Unknown	<p>Better data.</p> <p>Better ability for collectors to quantify collected commercial waste and set prices to incentivise business to separate waste and reduce quantities disposed.</p> <p>Contribution to efforts to reduce commercial waste free riding within household collection.</p> <p>Activities will help to address issue 4.</p>
Simplify administration of waste management by administrative / institutional reforms. Suggest that, under authorisation from OPM, MSDEC to expand its capacity to deal with waste issues in the short to medium term, and to take the lead role to more autonomously progress the policy developments needed to take waste management forwards.	Institutional reform	OPM, and MSDEC in turn	Unknown	n/a	Centralised decision making, regulations to be put in place more efficiently, changes in waste sector can be expedited. Will help tackle issue 5.
Pay-as-you-throw for household waste should be considered once high performing collection systems are in place alongside effective enforcement mechanisms.	Fiscal	MSDEC	Cost recovery measure if introduced	n/a	To be considered but not introduced until waste collection and management systems further developed, so as to avoid fly tipping and associated issues. Important to consider when tackling issue 1.

### 3.1 Timeline for Introducing the Proposed Measures

	2015	2016	2017	2018	2019	2020
<b>Integrated collection standards</b>		Announcement	In place			
<b>Awareness and communications programme</b>		Announcement	In place			
<b>Regionalisation of waste collection</b>		Announcement		In place		
<b>Review of producer responsibility costs</b>			Announcement		In place	
<b>Targets placed on local authorities</b>		Announcement		In place		
<b>Consider re-introduction of DRS</b>		Announcement		In place		
<b>Adaption of MBT system equipment</b>		Announcement	In place			
<b>Review of disposal costs</b>		Complete				
<b>Residual waste tax</b>			Announcement		In place	
<b>Enhance enforcement capabilities</b>			Announcement	In place		
<b>Improvements to data management</b>		Complete				
<b>Administrative / institutional reform</b>			Announcement	In place		
<b>Roll out of PAYT systems</b>				Announcement		In place