

1.0 Summary of Recommendations

Despite some progress made over the last 10 years, recycling and composting remain at a low level and the large majority of municipal waste is still landfilled. In view of existing obligations in EU waste legislation and the targets proposed in the new legislative package on waste, further measures are needed to improve municipal waste management in Hungary.

Recommendations for Hungary can be summarised as follows:

- **Governance:** Ensure there is a clear **devolution of responsibilities** down to the local level:
 - Ensure every target in the NWMP is linked to a clear strategy indicating who is responsible for monitoring and implementation at the local level
 - Establish a framework for monitoring performance and consider the introduction of sanctions for not meeting the targets set at the local level.
- **Separate collection:**
 - Put in place a programme to support municipalities to provide guidelines and support on the efficient operation of kerbside collections at the local level, including guidance on collection system operation.
 - Improvements to the separate collection service
 - Extension of the door to door collection service.
 - Introduce collections of source segregated biowaste (collecting food waste as well as garden waste).
 - Development of quality standards for compost.
- Undertake a review of **waste treatment infrastructure requirements**, taking into account the need to significantly step up collection and recycling, to phase out landfilling and to avoid overcapacity in residual waste management (incineration and MBT).
- Consider applying **economic instruments** to increase the cost of residual waste treatment and disposal
 - Review the level of landfill fee to ensure it covers the full cost of treatment for landfills compliant with the landfill directive.
 - Consider the introduction of a residual waste tax covering waste sent to landfill and MBT systems (including outputs sent for incineration).
 - Roll out of pay-as-you-throw (PAYT) systems once the above improvements to the collection systems have been made.
- Undertake a review of the governance and performance of EPR schemes.
- Undertake a **review of data capture systems** including the performance of the MBT systems as well as the recycling data.
- Actions to increase re-use and waste prevention activity.

Further detail is provided in the tables that follow.

2.0 Potential Issues with approach to Waste Management

Number	Potential issue	Description	Reasons for the issue
1	The roles, responsibilities and financial means at the regional/local level are not clearly defined in the NWMP	<p>The NWMP lacks detailed information about the authorities' and actors responsibilities for meeting the targets. In order to realise the objective of key policies, those actors responsible for delivering the outcome need to be clearly identified. Without this information the plan will not have the intended effect on the waste management system.</p> <p>There seems to be a lack of financial means to deliver an efficient waste management system. 80 % of projects have been financed by the EU, according to a reviewed source.</p>	The NWMP 2014-2020 was declared legally adopted 31 December 2013 (according to the requirement of EU), but is under conceptual revision in 2015. The targets and policies have been established without enough research and consultation, which led to a lack of clarity regarding how to make sure the targets and policies would be implemented.
2	Information transfer to and from municipalities	There is no direct way to municipalities and there is no feedback as well. A lot of information is lost. It means that most of the municipalities want to do something but they do not know what and how. They definitely need information about their tasks.	Primarily municipalities are not environmental organizations. They have a lot of other obligations. Individual action is not expected and thus does not happen.. Governmental engagement is necessary to change the situation. The Herman Ottó Institute (HOI) is able to carry out this task. It should be a "bridge" towards municipalities.

Number	Potential issue	Description	Reasons for the issue
3	The data quality	<p>There are discrepancies between the different data sources (for example between Eurostat and the national datasets used for planning purposes). It is also not clear how Hungary's performance against the WFD recycling target has been calculated. On recycling, performance data for some materials (such as plastics) appears relatively high given the types of system in place to collect the recyclables, based on a comparison between composition data and data submitted to Eurostat.</p> <p>Data clarity could also be improved regarding the waste streams going to landfills, including how much of this material is un-treated and how much is stabilised; on the mass flow information through the MBT facilities; and on the extent to which door to door collection schemes are now in place across the country.</p>	<p>The waste management Information System database was established by the Ministry of Agriculture in order to improve the accuracy of data on waste treatment. There still appear to be some gaps and inaccuracies in the data collected; calculations are not always transparently reported, and definitions are not always clearly indicated.</p>
4	Almost non-existent separate collection of food waste and other organic waste	<p>Hungary needs to decrease the quantities of waste disposed in landfills in order to comply with the Landfill Directive Target for landfilling of biodegradable municipal waste. Further composting or anaerobic digestion would be aligned with the waste hierarchy, but this is likely to require separate collection in order to obtain quality outputs for which there is a demand. Referring to the data supplied in 2014 20% of the biodegradable municipal waste was collected separately.</p>	<p>It is understood that the prevalence of door-to-door collection of dry recyclables is increasing although the authorities are unable to confirm the coverage of such schemes at present. A quality and convenient system for recycling is a pre-requisite for PAYT with the possibility for the individual to influence the waste fee.</p> <p>According to reviewed sources there is a lack of market for compost. This could hinder a large-scale implementation of source separation of organic waste.</p>

Number	Potential issue	Description	Reasons for the issue
5	Low levels of dry recycling, particularly glass	<p>The recycling of packaging waste is financed by the EPR. This scheme is now state run, with fees centrally determined by the government. Separate collection systems are run locally by non-profit organisations responding to government contracts.</p> <p>Historically low levels of door to door collection, although it is understood this situation is changing. There is currently one “Waste Island” per every 2000 inhabitants. The prevalence of glass collection points has recently decreased but in many areas there is no door to door collection of this material. The rate of material recycling is reported as 21 % of MSW.</p>	<p>Low incentives for separate collection and recycling – no targets are set for municipalities.</p> <p>Fees charged by the EPR system are not sufficient to cover the cost of the recycling system, particularly for glass. The state-run system is relatively inflexible as funding levels are dependent on central budgets and are not known in advance, which is likely to act as a disincentive for further investment in collection infrastructure. Despite of increasing collected amount, overall EPR-financing has not much changed for years.</p>
6	There is too much residual waste, and much of this is landfilled without treatment	64 % of the MSW is landfilled. According to the regulation on landfill it is not allowed to landfill waste without pre-treatment. The pre-treatment is mostly MBT systems.	<p>Reasons include the relatively poor separate collection of dry recyclables and almost non-existent separate collection of organic waste.</p> <p>The landfill fee is centrally determined, and is currently at €21 / tonne, with no plan to increase this in the immediate future. There are no plans to introduce a landfill tax. As such the cost of landfilling is relatively low.</p>

3.0 Recommended Measures

Measure	Type of instrument	Responsibility	Estimated costs	Available EU funding	Anticipated impact
1) Ensure clear devolution of responsibilities down to the local level					
Ensure that every target in the NWMP is linked to a clear strategy of indicating who is responsible for monitoring and implementation at the local level.	Administrative	FM	Low cost to government	n/a	Greater accountability, increasing the likelihood of action taken at the local level, thus tackling issue 1.
Establish a framework for monitoring performance and consider introducing sanctions for not meeting targets devolved down to the local level. This is likely to be particularly important if the total cost of landfilling remains low to incentivise change (see recommendation 5).	Legal/ Administrative	FM	Low cost to government	n/a	Introduction of a greater financial incentive that will drive future increases in recycling. This should make improved recycling systems more financially viable. If fee is set at the right level, it may not be necessary to mandate separate collection, as this could be driven by the market. Deals with issues 4 and 5.

Measure	Type of instrument	Responsibility	Estimated costs	Available EU funding	Anticipated impact
2) Improve data quality and transparency					
Undertake a review of calculation methods, including the definitions used when undertaking the calculations. Associated documentation should ensure transparency of calculation methods, and that there is read across between the different systems subject to the differing reporting requirements. The database should also be extended to cover the inputs and outputs from the MBT systems, including the quantities of stabilised waste (this will require mass balance studies on the MBT facilities to be undertaken).	Administrative, informative	FM / Hungarian Central Statistical Office	Low	n/a	Addresses issue 2.
3) Improvements to separate collection schemes					
An increase the coverage of source segregated organic material collections is required to ensure Hungary meets the landfill directive requirements. The authorities should consider therefore consider mandating source segregation of bio-waste (collecting food waste as well as garden waste) - at a minimum - in the more densely populated areas alongside the current legislation which mandates the provision of source segregation for dry recycling.	Administrative	FM	Potential high cost	EU funding available for at least the capital elements	Recycling rates will improve without the necessity to rely on MBT to meet the Directive targets. This will also result in better quality recyclate and compost / digestate.
Alongside the introduction of organics collection schemes, put in place a plan to extend the roll out of door to door collection systems so that this covers at a minimum all households in the densely populated areas. As an interim measure, an increase in the number of recycling points (bring sites) should also be considered – particularly for glass, where current collection levels are low.	Administrative	FM / municipalities	Potential high cost	EU funding available for at least the capital elements	Although collection costs may increase, treatment costs will be reduced. The introduction of such schemes will help ensure the good performance of PAYT schemes. Addresses issues 3, 4 and 5.

Measure	Type of instrument	Responsibility	Estimated costs	Available EU funding	Anticipated impact
<p>Work on the market development for compost and develop the quality standard mentioned in the NWMP. Protocols for compost quality can be developed based on work which has been undertaken in other countries.</p>	<p>Administrative / informative</p>	<p>FM / OKTF</p>	<p>Low cost to government</p>	<p>n/a</p>	<p>Increased incentive for the implementation of bio-waste collection systems, thus helping to improve recycling rates. Helps to address issue 3.</p>
<p>4) Review of waste treatment infrastructure requirements</p>					
<p>Alongside agreeing proposals for improved collection systems have been agreed, undertake a review of treatment infrastructure requirements, focusing particularly on organic treatment capacity but also considering residual waste treatment requirements. This should take into account the increased recycling rate resulting from the improved systems, and the potential need to ensure there is sufficient MBT capacity to allow the ban on untreated bio-waste to be introduced and enforced. The review should also ensure there is sufficient treatment capacity to cover the increase in source segregated bio-waste.</p>	<p>Administrative</p>	<p>FM</p>	<p>Low cost</p>	<p>n/a</p>	<p>Ensure there is sufficient infrastructure available to treat the additional bio-waste that will result from the separate collection. Ensure compliance with Malagrotta ruling (if required). Ensure there is not overcapacity of residual treatment, which would tend to act against future increases in recycling. Assists with issues 3 and 5.</p>

Measure	Type of instrument	Responsibility	Estimated costs	Available EU funding	Anticipated impact
5) Measures to increase the cost of residual waste treatment and disposal					
At a minimum, review the landfill fee to ensure it covers the full cost of treatment for landfills that are compliant with the landfill directive.	Fiscal / administrative	FM	Low cost to government, although costs will rise for producers	n/a	Introduction of a greater financial incentive that will drive future increases in recycling. This should make improved recycling systems more financially viable. If fee is set at the right level, it may not be necessary to mandate separate collection, as this could be driven by the market. Will assist in dealing with issues 3, 4 and 5.
Once the data systems have been improved, undertake a review of the performance of the landfill fee in driving improved recycling performance. Outcome of the review should be used (in conjunction with recommendation 4) to consider whether the current fee levels are sufficient to ensure change.	Fiscal / administrative	FM	Low cost to government, although costs will rise for producers	n/a	Introduction of a greater financial incentive that will drive future increases in recycling. This should make improved recycling systems more financially viable. If fee is set at the right level, it may not be necessary to mandate separate collection, as this could be driven by the market. Will assist in dealing with issues 3, 4 and 5.
Based on the above review, consider the introduction of a residual waste tax. Lower levels of tax should be set for the stabilised output from MBT systems. The tax should also apply to waste sent for incineration (including that sent for export). Levels should be dictated in advance and should be set sufficient to incentivise an increase in recycling – such as in the case of Greece.					

Measure	Type of instrument	Responsibility	Estimated costs	Available EU funding	Anticipated impact
6) Review governance and performance of the Extended Producer Responsibility scheme					
<p>The review should consider whether continued state-run governance of the scheme is appropriate, or whether a private sector scheme could be reintroduced, provided associated data systems are improved. In particular, the need to ensure continual improvement and long term investment in collection infrastructure should be addressed. The review should also include consideration of the system costs and its fees to confirm the extent to which costs of recycling are covered by the fees from producers. Ideally the fees should be sufficient to cover the full cost of managing the obligations following the producer responsibility, also taking into account the revenue from sold secondary raw material. The fees set should be linked to the recyclability of the material - this requires a dialogue between the packaging industry and those running the scheme with a view to increasing the involvement of producers. Consideration should also be given to expanding the scheme to other waste streams.</p>	Legal / administrative	FM / OKTF-NHI	Low cost to government. Fees for producers may increase.	n/a	Greater incentives for packaging waste prevention. Increase in recycling of packaging through improvements in scheme funding and associated infrastructure. Will assist in dealing with issue 4.
7) Programme to support municipalities and educate householders					
<p>Develop a programme aimed at raising the level of awareness of householders and businesses in respect of the need for recycling and waste reduction. This could be based on examples of campaigns undertaken in other countries with good recycling performance. The programme should be launched alongside the changes to collection systems.</p>	Informative	FM, municipalities	Medium cost	Potentially, such as that from the ENPI CBCMED Programme.	Alongside improvements in recycling collection system, will improve recycling rates.

Measure	Type of instrument	Responsibility	Estimated costs	Available EU funding	Anticipated impact
<p>Put in place a programme to support municipalities to provide guidelines and support on the efficient operation of kerbside collections at the local level, including:</p> <ul style="list-style-type: none"> • Materials to be collected • Frequencies of collection • Good practice when issuing contracts for collection services including the interface with the EPR system • Good practice on minimising collection costs • Information campaigns aimed at both local authorities and waste producers <p>It is important that the programme makes use of knowledge from the private sector and waste services operating in other countries. The remit of the programme should also include provision of advice to government on the appropriate level of support required by local authorities to deliver the services, including the provision of sufficient financial and human resources at a local level to ensure appropriate service operation.</p>	Administrative	FM	Medium cost	Structural Funds or ERDF funding may be available	<p>The measure is expected to support the municipalities in fulfilling their responsibilities in relation to the development of the separate collection system, once issue 1 is addressed.</p> <p>The implementation of proper separate collection system as a result of the guidelines will also ensure the fulfilment of waste management targets. This will help to address issues 3, 4 and 5.</p>

Measure	Type of instrument	Responsibility	Estimated costs	Available EU funding	Anticipated impact
8) Actions to increase re-use and waste prevention activity					
Government should consider integrating re-use activities into the existing EPR scheme. Other activities that should be reflected in the forthcoming waste prevention plan include actions tackling one-way plastic bottles and food waste. Hungary could also consider developing re-use centres – such as those introduced in Slovenia, supported by developing a system of re-use credits helping to finance the activities of the third sector.	Administrative / fiscal	FM	Moderate cost to government	Funding available for capital items	Will assist in the achievement of future targets, as well as contribution to landfill directive and waste framework directive targets.
9) Roll out of PAYT systems					
This should commence once well managed collection systems – using door to door services rather than bring based systems - are in place. It should build on the existing PAYT system for residual waste already in operation in parts of the country, but be extended to cover recyclables and organic waste collection.	Fiscal	FM / municipalities	Dependent on the system to be implemented.	May be able to use structural Funds	To be considered but not introduced until waste collection and management systems further developed, so as to avoid fly tipping and associated issues. Will assist with issues 3, 4 and 5.

3.1 Timeline for introducing the Proposed Measures

	2015	2016	2017	2018	2019	2020
Framework for monitoring performance at a local level		Announcement		In place		
Improve data systems		Announcement	In place			
Improve separate collection schemes		Announcement	In place			
Review waste treatment infrastructure requirements		Announcement			In place	
Review of landfill fee		Complete				
Introduction of residual waste tax			Announcement			In place
Review of EPR scheme		Announcement		In place		
Support programme		Announcement	In place			
Actions to increase re-use / prevention		Announcement			In place	
Roll out of PAYT systems			Announcement			In place