

Roadmap for Romania (RO)

To help ensure full implementation of EU waste legislation and the waste hierarchy, including by addressing the still very predominant reliance on landfilling municipal waste (98.7 %), the following recommendations are made:

Main recommendations

- 1. Introduce a landfill tax and progressively increase the landfill tax to divert waste from landfill. Use revenues to support separate collection and alternative infrastructure.**
- 2. Extend and improve the cost-effectiveness, monitoring and transparency of existing EPR schemes and eliminate free-riding.**
- 3. Implement the bio-waste strategy including specific measures to divert biodegradable waste from landfill.**
- 4. Intensify inspection and enforcement activities in order to ensure compliance with legal provisions for municipal waste management.**
- 5. Update the national and regional WMPs including specific policy measures how to achieve the targets set by the WFD and analysis of the current waste management situation on the basis of robust data, analysis of impacts of implementation of the policy measures, required infrastructures and projections of future waste generation and treatment.**
- 6. Establish and control separate collection infrastructure and schemes. Implement door-to-door separate collection as soon as possible.**
- 7. Initiate comprehensive awareness raising campaigns on separate collection and proper waste management.**
- 8. Improve the utilisation and allocation of available EU funding in order to support waste prevention, preparing for reuse and recycling.**

National waste management situation

Administrative structure: In respect to waste management, Romania relies on agencies at three levels: the Ministry of Environment and Forests (MoEF); the National Environmental Protection Agency with its regional and county branches (regional EPAs); the County Councils and municipalities. Beside the national WMP prepared by the MoE, eight regional EPAs prepare regional WMPs. County associations that comprise of municipalities and the County Council are responsible for managing waste infrastructure built under the Sectoral Operational Programme (SOP 1) and also for elaborating WMPs on county level. This function is delegated to the County Council, including contracting for investments and operation [WORLD BANK 2011].

Waste generation and collection: The total amount of municipal waste generated is 7,830 kt and 365 kg per capita which is below the EU-27 average (502 kg) [EUROSTAT 2012b]. Approximately 70 % of the population had access to municipal waste collection service in 2010 [EUROSTAT 2010] (increased now to 80-85 %). Most rural areas are lacking collection services. The separate collection for household packaging waste (PW) from the private sector is still poorly developed (23 % of total population). The “dual” system has been adopted for separate collection, namely a dry and a wet bin. The system will be enhanced with additional bins for three fractions (paper/ cardboard, metal/ plastic and glass), required by law. There is very limited bio-waste collection.

Policy instruments applied to move up the waste hierarchy: No landfill tax currently exists, but according to MoE it is expected to be introduced in 2013. Recovery Organisations are required to pay a penalty of 2 RON/kg to the Environment Fund (about 0.22 €), in case the annual recovery target for packaging waste are not met. Economic operators, who produce and/or market products in reusable packaging, have to apply a deposit system. Bags made of non-biodegradable material are charged with a tax of 0.2 RON (about 0.02 €) each. By amending the Environmental Fund Law in 2010 a target was introduced to reduce with 15% the amount of municipal waste that is delivered to landfill; In case of failure the public local authorities have to pay 100 lei/t on the difference.

Waste treatment: Self-sufficiency for disposal of municipal waste has been reported to be 100 %. This figure probably takes into account temporary storage of waste in view of disposal, since a number of landfills still have to be constructed under SOP. There are 80 non-compliant landfills officially operating, to be closed gradually until July 2017 (transition period). Practically all municipal waste is landfilling (98.7 %), one of the highest in EU. Recycling quota is only 1.3 %. There are 34 sorting plants (capacity ~500,000 t/y mainly hand-sorting); 47 are planned to be constructed (capacity ~1.3 Mio t/y). However, the effectiveness of selective collection is limited [Ernst & Young 2011]. Romania was granted derogation until 2013 for packaging waste target achievement. According to NEPA, the target for reduction of biodegradable waste in 2010 (four year derogation) disposed in landfills has been achieved (quality of data unknown). Waste treatment facilities in operation are still limited as Romania is currently implementing its integrated solid waste management system (ISWM) via EU funding and the SOP Environment 2007-2013. Out of the 39 waste management projects identified to be financed in the 2007-2013 programming period, 18 have an approved. The remaining are expected to be approved in 2012, but it is unknown whether they will be operational in the end of the eligible period (end of 2015). With the implementation of the SOP, there will be additionally 20 composting facilities (planned capacity ~200,000 t/y) and 17 MBT (planned capacity ~1.3 Mio t/y). The MBTs have been typically designed for a low cost “waste stabilisation”. Currently, there is no waste incineration. Bucharest and Brasov municipalities plan two Waste to Energy (WtE) plants under PPP (expected to be operational in 2020).

Overview of the most relevant problems and their reasons (in order of importance)

No	Deficit/Problem	Description of the problem	Reasons
1	Waste management largely diverting from waste hierarchy - significant dependence on landfilling	<p>The main management method for municipal waste is landfilling: The disposal rate is 98.7 % (practically all), one of the highest in EU, whereas the recycling municipal waste quota of 1.3 % is also very low. The effectiveness of separate collection is limited (in particular of paper) and is currently implemented mainly in urban areas. Although increased through general environmental campaigns and educational activities, the environmental awareness and readiness to participate in separate collection of public is still on low level. There are 80 non-compliant landfills officially operating, which are to be closed gradually until July 2017 (transition period granted by EU). There is a lack of experts at Project Implementation Units (PIU) level in counties and poor cooperation with municipalities and other local government members of Intermunicipal Development Association (IDA) on political grounds. Contracts award criteria refer only to the lowest price, leading to extended periods of construction and/or compromise of quality.¹ No up-to-date National Waste Management Strategy and Plan exist.</p> <p>Further, there is slow progress in the procurement/ implementation of the Integrated Waste Management System (ISWM) pipeline. Romania has to establish by the end of 2015, 30 or more regional ISWM systems (out of the 42 Regions). According to SOP ENV, the total funding (EU and national) for priority axis 2 is 1.167 Mio €. By the time being, 18 projects have been approved but only a few have signed contracts with a contractor. Another thirteen projects are expected to be approved in due time and thus enter to the tendering phase, in order to complete the projects within the timeframe of current programming period (latest on 2015).</p>	<ul style="list-style-type: none"> • Operation of non compliant landfills is dictated by absence of regional landfills; the rehabilitation of sites is still pending and will take place along with the construction of the other waste facilities through SOP ENV 2007-2013; even though some sites are officially operating, closure remains a major challenge • Absence of treatment facilities (with the exception of some composting plants) and slow progress of works construction financed through SOP • Packaging waste recycling in an early stage with limited separate collection; typically PW are placed directly into mixed bin • No landfill tax and other economical measures established • The participation of the informal sector is significant (scavenging, ad-hoc sorting in landfills) • Collection coverage for mixed municipal waste is not yet 100 % • Rural population is not used to pay fees for waste management, dispersed population in rural areas; The affordability ratio for waste management has been set to 1.8 % of the lower income decile of population and projects have been designed on this; this cannot cover the operation costs of modern technologies as anaerobic digestion and incineration in most cases • Tariffs are low to reach cost-recovery levels; county councils resist increasing fees because of the low level of income • Although there has been lately some debate for economic instruments, landfill taxes have not been implemented. This is the case with PAYT systems • Absence of experience in the procurement of complex waste projects and waste collection services that has resulted in some cases to appeals and delays¹.
2	High share of biodegradable waste disposed of in landfills and	<p>Capacity of waste treatment infrastructure for bio-waste (sorting plants, composting and MBT plants) is currently not sufficient. There is no separate collection of bio-waste. The awareness for bio-waste management is generally low. Provision of home composting bins to citizens in rural areas will be implemented</p>	<ul style="list-style-type: none"> • Preparation of feasibility studies and application forms and respective approvals has taken significant time • Elaboration of the updated National Waste Management Strategy and National Waste Management Plan to incorporate the provisions of the new WFD is

¹ This problem is expected to be remediated in the near future with the aid of the “2010 174 RO SWE SLW project outcomes: Romanian Standardised Tender Documents for Solid Waste Projects”, on behalf of JASPERS

No	Deficit/Problem	Description of the problem	Reasons
	missing separate collection of bio-waste fraction	under the SOP; the efficiency of this measure, when in place, is unknown. Further, there is slow progress in the procurement/ implementation of the Integrated Waste Management System (ISWM) pipeline. There exists significant capacity for secondary fuel co-incineration in the seven cement factories with possibilities for extension; however this option is partially exploited.	<p>pending</p> <ul style="list-style-type: none"> Public, especially in rural areas, is familiar with composting systems, however provision of free composters as part of SOP is still pending Bio-waste management is not an urgent issue compared to the problems faced in municipal waste management (and the problem is not seen as integral part of municipal waste management) Cost for bio-waste management is currently high for local authorities Limited information provision, including guidelines or manuals on separate collection of bio-waste, guidance on promotion of home composting, etc. Until now, municipalities and citizens were concentrated only on collection and safe disposal; public is not familiar with integrated waste management
3	Incomplete coverage of households with separate waste collection, especially in rural areas	Approximately 23 % of the population is connected to waste collection services. As a result waste is not collected to full extent and environmentally sound management of such waste is not likely. Separate waste collection is currently limited to few urban settlements; approximately 96 % of the household and similar wastes are collected directly into the mixed bin (of the connected households). Although increased through general environmental campaigns and educational activities, the environmental awareness and readiness to participate in separate collection of public is still on low level.	<ul style="list-style-type: none"> Purchase of recyclables bins is done from the municipalities (from PIU) via Cohesion Funds; hence, slow progress exist also in the procurement Poor contribution from the private sector (according to the principle of “producers’ responsibility”) Focus has been to the commercial sector rather than the household packaging Geographical circumstances and regional population patterns (urban areas with less than 15 inh/km²) No landfill tax and no PAYT schemes that would favour prevention and participation to separate collection and alternative systems currently exist.
4	Weak capacity to implement projects and other administrative drawbacks	The strategy on waste management (currently pending) is set by the National authorities; implementation however is under the responsibility of local level. Also there is no updated national Waste Management Plan in place. Technical complexity of the projects – experience in International Federation of Consulting Engineers (FIDIC) procedures but also national legislation is necessary – deems a hard task for the PIU personnel. There is a lack of experts at Project Implementation Unit (PIU) level in counties and poor cooperation with municipalities and other local government members of Intermunicipal Development Association (IDA) on political grounds. Further, there is slow progress in the procurement and implementation of the pipeline of Integrated Waste Management Systems (IWMS) pipeline.	<ul style="list-style-type: none"> Preparation of feasibility studies / application forms and respective approvals has taken significant time Program experience revealed that available funding exceeds local-level absorption capacity and raising counterpart contributions is difficult; lack of technical expertise to realise complex projects Tender documents and procurement procedure have faced with appeals Absence of experience in the procurement of complex waste projects and waste collection services, has often resulted in some cases to appeals and delays. Technical criteria for awarding the contracts are not included Lack of trained personnel in central and local administration (SOP and local PIU)

Action plan

Horizontal measures addressing several problems

MEASURE	Type of the instrument	Responsibility	Indicative time scale	Estimated costs	Estimation of achievable result
MEASURE 1: Establish a landfill tax					
Establish and implement a landfill tax starting from at least 10 €/t	Legal Economic/ fiscal	MoEF, MoF	Short-term	Low	- Landfilling made less attractive, switch to other competitive options - Improved treatment of municipal waste; Increased awareness on waste management issues
Utilize revenues from the landfill tax to further develop infrastructure for source separated collection (including home composting) as well as awareness campaigns	Legal Administrative	MoEF, MoF	Short- to mid-term	Low	
MEASURE 2: Restrictions on landfilling certain types of waste					
Implement / introduce restrictions/ bans in landfilling certain waste streams , such as biodegradable waste, paper, glass, wood, textiles, recyclables, etc. This instrument should be applied after extensive consultation. Timescale for successful implementation is 5-10 years or longer.	Legal	MoEF MoF	Long-term	High	- Potentially high benefits - Increase resource efficiency
Introduce restrictions/ban on landfilling municipal waste by clearly defining the term “pre-treatment” and by setting stricter limit values, i.e. calorific values and TOC value (following a thorough consultation; exact conditions, technical details and timeplan to be specified); Action on EU level is probably required to assure common rules and harmonisation)	Legal	MoEF MoF	Long-term	High	- Avoidance of GHG emissions - Biodegradable waste landfilled reduced;
Introduce study and extensive consultation on content (identifying most promising waste streams/contents), schedule, responsibilities of enforcement for landfill restrictions /bans	Administrative Informative	MoEF MoF	Ad-hoc to mid-term	Low	- Increase in composting/ anaerobic digestion
Introduce penalties for non-compliance with specific targets or restrictions/ban	Legal	RMA's	Long-term	Medium	
MEASURE 3: Implement PAYT scheme					
Implement PAYT as soon as appropriate collection and treatment infrastructure are in place, starting with pilot projects	Economic/fiscal	Ministry of Administration, Local Council	Long-term	Medium	- Increase of separately collection - Reduction of landfill dependency
Support municipalities by introducing PAYT scheme by providing information on how to set up/introduce such systems by making available guidance, support experience exchange, conferences, buddy systems, awareness on benefits and costs	Informative	Ministry of Administration, Local Council MoEF	Long-term	Medium	- revenues available for local waste management

MEASURE	Type of the instrument	Responsibility	Indicative time scale	Estimated costs	Estimation of achievable result
Inform households /support information provision by local authorities on PAYT scheme by leaflets and brochures and campaigns, inform on benefits and possibility to save money if separation is properly applied	Informative	Ministry of Administration, Local Council MoEF, RMA	Mid-term	Medium	
MEASURE 4: Enforce Extended Producer Responsibility (EPR) schemes					
Expand the principle of EPR or voluntary agreement schemes for non-packaging waste flows (i.e. printed paper, expired pharmaceuticals, household hazardous waste)	Economic/fiscal	MoEF	Short- to mid-term	Low	<ul style="list-style-type: none"> - Enforce common rules for all market players; - transparency - Increase potential for longer life cycle, reuse and recycling - Lower waste generation during production - Improved performance of deposit refund systems
Set in place and improve the performance of deposit refund systems for packaging (glass, plastic, metal, etc.) in combination with EPR schemes by increasing incentives (e.g. increase deposit and refunds) and improving awareness raising to public	Economic/ Fiscal	MoEF	Short- to mid-term	Low	
Enforce regulation and control of existing Recycling Schemes , including use of independent auditor for verification of recycling quotas; intensified control of recovery operations; control of reporting	Administrative	MoEF	Ad-hoc to mid-term	Low	
Improve transparency of the system via contracts which need to be signed by the Packaging Organisation and Local Authorities	Administrative	MoEF; Municipalities	Short-term to mid-term	low	
MEASURE 5: Enhance Regulation, Inspection and Enforcement					
Provide for inspections by the local and regional Authorities and fine illegal dumping	Administrative	RIEW, RMA, MoI	Ad -hoc to short -term	Low	<ul style="list-style-type: none"> - Control illegal operations and shipment on waste - Assure a sound management of waste by controlling documents and activities - Better implementation of legal provisions - Higher commitment of RMA/ municipalities
Implement fines for illegal dumping activities (addressing all actors involved: municipalities, citizens, waste producers and waste management companies) and other environmental offences	Administrative, Legal	RIEW, RMA, MoI	Ad-hoc to short -term	Low	
Thorough Monitoring and Regulation of waste management companies at the stage of permitting/ licensing and periodically during operation, including waste management infrastructure and landfills	Administrative	RIEW, RMA, MoI	Ad-hoc	Low	
MEASURE 6: Improve waste management planning and update the national/regional WMP(s), data quality and projections					

MEASURE	Type of the instrument	Responsibility	Indicative time scale	Estimated costs	Estimation of achievable result
Elaboration of updated national strategy and national/regional Plans on the basis of the new WFD	Legal	MoEF	Ad- hoc to short-term	2.5 Mio €	<ul style="list-style-type: none"> - Elaboration of strategic documents that illustrate National commitment to waste policy; - Define mixture of technologies, capacities and funding needs in the waste sector - Transparency and improvement of reporting; - Identification of short-comings and areas where action is required;
Improve the quality of data/indicators regarding waste quantities generated, collected, recycled, recovered and disposed	Administrative	MoEF	Short-term	Low	
Forecast with as much accuracy as possible future municipal waste generation and treatment capacities	Administrative	MoEF	Short-term	Low	
MEASURE 7: Improvement of the utilisation and allocation of available EU funding					
Improve utilisation and allocation of Cohesion Funds by better coordination of the responsible central and local parties, in order to develop alternative waste treatment infrastructure etc.	Administrative	MoEF, County Councils	Short- to mid-term	Low	<ul style="list-style-type: none"> - Acceleration of the relevant administrative processes, approval of the documentation, tendering procedures, publicity, allocation of funds, etc - Improved waste treatment infrastructure
Increase administrative adsorption capacity for EU funding by allocating more resources and technical capacity building	Administrative	MoEF	Short- to mid-term	low	

PROBLEM 1: Waste management largely diverting from waste hierarchy - significant dependence on landfilling

Abbreviations: Ministry of Environment and Forest (MoEF), Ministry of Finance (MoF), Ministry of Interior (Mol), Regional Municipal Associations (RMA)

Proposals to address the problem	Type of the instrument	Responsibility	Indicative time scale	Estimated costs	Available EU Funding	Estimation of achievable result	Priority scoring
PROPOSAL 1: Establish appropriate infrastructure for reuse, separate collection and alternative treatment of municipal waste							
Encourage prevention, reuse and preparation for reuse options in the country (e.g. keep products for longer, good home practices, waste prevention toolkits, charity organisations and shops, internet auction sites, free exchange schemes and impose taxation reliefs)	Informational Administrative Infrastructural	Ministry of Administration, Municipalities, County Councils	Ad-hoc to mid-term	Low to medium	LIFE	Saving of materials and energy in all cycles of material; avoidance of GHG emissions	++
Promote public-private partnership (PPP) systems for waste projects; Promote incentives for small projects to operate in parallel with centralised facilities	Legal Infrastructural	Ministry of Economy, Ministry of Finance, MoF County Councils	Short to mid-term	Medium to High	Private, Cohesion Fund, National	Optimised involvement of private sector; contribution in local level	++
PROPOSAL 2: Initiate awareness raising campaigns on collection and treatment of municipal waste for different target groups							
Information campaigns on separate collection, recycling centres, fee systems, etc. (households, SMEs, retailers etc.)	Informational educational	MoEF Municipalities, County Councils	Short-term	Low to medium	National	Increase of participation, reduced foreign material in bins and improved quality	++
Provide guidelines and manuals on separate collection, recycling, etc.	Informational Educational	MoEF	Short-term	Low	National, Private	See above	++
Involve civic amenity sites in recycling event days' and campaigns	Informational	Local counties, operators, MoEF	Ad-hoc to mid-term	Low	National, Private	See above	+
PROPOSAL 3: Increase cooperation between relevant stakeholders and maximise contribution in the consultation phase							
Initiate in depth consultation with relevant actors from industry, retailers, NGOs and waste management organisations	Administrative	Ministry of Administration MoEF, Municipalities County Councils	Short-term	Low	n.a.	Increased efficiency and best use of infrastructure	++
Increase synergies & communication between County Councils and municipalities	Administrative	MoEF, Ministry of Administration Municipalities	Ad-hoc to long-term	Low	n.a.	See above	+

Proposals to address the problem	Type of the instrument	Responsibility	Indicative time scale	Estimated costs	Available EU Funding	Estimation of achievable result	Priority scoring
		County Councils					

PROBLEM 2: High share of biodegradable waste disposed of in landfills and missing separate collection of biowaste fraction

Proposals to address the problem	Type of the instrument	Responsibility	Indicative time scale	Estimated costs	Available EU Funding	Estimation of achievable result	Priority scoring
PROPOSAL 1: Completion/ improvement of waste treatment infrastructure via the OP Environment 2007-2013 or via National Funds							
Construction of a number of small decentralized composting plants	Infrastructural	MoEF	Short- to mid-term	35 Mio €	Cohesion Fund National	Increase of biodegradable waste diversion to cover at least green, market and bio-waste from urban areas; avoidance of GHG emissions	+++
Construction of anaerobic digestion plants in local level (number and capacities to be specified) and WtE plants (5-7 plants estimated at national level)	Infrastructural	MoEF	Short- to mid-term	800 Mio €	Private Cohesion Fund, National	Diversion with potential to organics recycling; generation of renewable electricity and avoidance of GHG emissions; examine exploitation of district heating networks	
Establish civic amenity sites in selected areas (6-10 per region that also include collection bins for green / garden / food waste).	Infrastructural	County Councils MoEF	Ad-hoc to short-term	Low to medium	Cohesion Fund, National	High quality of source separated recyclables/ compost/ household hazardous waste	
PROPOSAL 2: Create a compost market via safe end product use and by safeguarding end users							
Establish quality criteria and implement End-of Waste criteria for compost and digestate (e.g. compost classification, limit values for contaminants)	Legal	MoEF, Ministry of Agriculture	Short-term	Low	n.a.	Identification of uses for which the compost is fit, minimum compost standards, higher product quality, greater	+++

Proposals to address the problem	Type of the instrument	Responsibility	Indicative time scale	Estimated costs	Available EU Funding	Estimation of achievable result	Priority scoring
						public acceptance	
Provide bins/special bags for separate collection of bio-waste (number, design, volume, etc. to be specified in accordance to the on-going study, collection scheme, frequency, rural/urban areas)	Infrastructural	Public local authorities, economic operators	Short- to mid-term	Low to medium	Cohesion Fund, National, LIFE	Prerequisite for achieving high compost quality and environmental awareness.	++
Promote home composting bins in rural areas	Infrastructural	MoEF, County Councils, public sector	Short- to mid-term	Low	Private, National, LIFE	See above	
Provide guidelines and manuals (best practices, safety procedures) for AD and composting facilities	Informational	MoEF, Ministry of Agriculture	Short-term	Low	LIFE	Reduction of nuisances and emissions; setting minimum requirements; implementation of BAT; Greater public acceptance	
PROPOSAL 3: Initiate awareness raising campaigns on biodegradable waste collection and treatment for target groups							
Information campaigns on separate collection of biowaste , home composting, etc.	Informational	MoEF, County Councils	Short-term	Low	Private, National	Increase resource efficiency; Increased awareness and valuation of compost	++
Development of guidelines and information for Implementation of compost – land-spreading in support of stakeholders - local authorities, laboratories, farmers and others	Informational	MoEF, County Councils	Short-term	Low	Private, National	Increase resource efficiency; establish consumer confidence framework for safe compost use	++
Involve civic amenity sites in ‘recycling event days’ and campaigns	Informational	Local counties, economic operators	Ad-hoc to mid-term	Low	Private, National	Increased awareness and valuation of recycling	+

PROBLEM 3: Incomplete coverage of households with separate waste collection, especially in rural areas

Proposals to address the problem	Type of the instrument	Responsibility	Indicative time scale	Estimated costs	Available EU Funding	Estimation of achievable result	Priority scoring
PROPOSAL 1: Extension of the current separate waste collection networks							
Establishing proper infrastructure (bins, trucks etc.) for separate waste collection	infrastructural	local public authorities, companies authorised for municipal waste collection	Short-term	Medium	Cohesion funds, Private	Increased coverage with separate waste collection services	+++
Committing local authorities in promoting recycling	Administrative	MoEF Municipalities	Short- to mid-term	Medium	n.a.	Improved waste management and reduction of disposal	
Establish Recycling-on-the-go schemes via more recycling bins in public places like shopping centres, squares and avenues.	Infrastructural	Municipalities County Councils	Short-term	Medium	County Councils	High quality of separately collected recyclates	
Mobilize municipalities towards the achievement of 2020 50 % recycling target	Legal	MoEF, County Councils	Short- to mid-term	Medium	n.a.	Improved waste management and reduction of disposal	
PROPOSAL 2: Implement measures to encourage separate collection and recycling							
Enforce the obligation of waste producers in industrial, commercial and administrative sites/ buildings to separate collection of metal, paper, glass and plastic wastes separately and handling by permitted operators	Legal	MoEF County Councils	Ad-hoc	Low	Private	Significant catchment of municipal waste from the commercial sector	++
Set in place (and improve where applicable) the performance of deposit refund systems for packaging (plastic, metal, glass etc.) in case of targets failure	Economic/fiscal	MoEF	Short- to mid-term	Low	Private	Increase potential for reuse	+

PROBLEM 4: Weak capacity to implement projects and other administrative drawbacks

Proposals to address the problem	Type of the instrument	Respon-sibility	Indicative time scale	Estimated costs	Available EU Funding	Estimation of achievable result	Priority scoring
PROPOSAL 1: Increase resources allocated to competent authorities, especially PIU, and ensure cooperation							
Mobilise consultancy and technical assistance services during realisation, procurement and operation of complex waste management projects	Administrative Economic	MoEF County Councils, RMA	Short-term	Not identifiable	ERDF; CF	Provision of expert knowledge from the private sector; increased efficiency	+++
Upgrade the role of PIU by providing more “decision taking” power in the waste sector and enhance cooperation with other local government bodies	Administrative Economic/fiscal	MoEF	Short-term	Not identifiable	National	Effective project management and problem solving	++
Provide sufficient human/economic resources to properly undertake project management	Administrative Economic/fiscal	MoEF	Short-term	Not identifiable	National	Effective project management and problem solving	++
Capacity building of competent authorities in topics such as i) absorption of EU funds, ii) contractual issues and iii) FIDIC implementation of infrastructural projects by <ul style="list-style-type: none"> – Organize trainings and expert knowledge exchange programs, conferences etc. – Establishing a joint platform for exchange of experiences and waste management related problems – Participation in e-learning and continuous knowledge schemes 	Administrative Economic	MoEF County Councils RMA	Short-term	Not identifiable	ERDF; CF	Improved knowledge from through experience exchange; learning from case studies	++
Improve cooperation and coordination of waste management between different regions (e.g. via inter-municipal associations)	Administrative Economic	Ministry of Administration	Short-term	Not identifiable	National	Effective project management and problem solving	+
Develop a FOPIP (Financial and Operational Performance Improvement Programme) for the waste stakeholders (i.e., county councils, IDA, operators).	Administrative Economic	MoEF County Councils Ministry of Administration	Short-term	Not identifiable	National	Reward the most efficient counties	++
PROPOSAL 2: Establish a waste database and related tools for consumers, business and local authorities							
Convert the centralised database on waste statistics and streams (e.g. composition analysis, waste quantities, shipments, special streams (ELVS, WEEE) etc.) to publicly open	Administrative	MoEF	Short- to mid-term	Low to medium	ERDF; CPF	Transparency and improvement of reporting; Overview on waste management	++

Proposals to address the problem	Type of the instrument	Respon-sibility	Indicative time scale	Estimated costs	Available EU Funding	Estimation of achievable result	Priority scoring
						data	
Improve data recording on waste management in local level	Administrative/ Legal	County Councils RMA	Ad- hoc to short-term	–	National	Same as previous	++
Establish an web communication application service with information for consumers and business; FAQ; calls for consultation with stakeholders; responsible behaviour, EPR schemes and eco-labelling; permitting procedures	Administrative	MoEF	Short- to mid-term	200,000 €	National	Transparency, visibility and actions to target	++