

## Roadmap for Bulgaria (BG)

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 (100 %), the following recommendations are made:

### Main recommendations

1. Increase progressively the existing 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:** The Ministry of Environment and Water (MoEW) is responsible for the development and implementation of the national waste management policy. The MoEW performs some of the activities by the Executive Environmental Agency (EEA) and a network of 16 Regional Inspectorates of Environment and Water (RIEW) controlling the implementation in the 55 waste management regions, set by the National Waste Management Program (2009- 2013). However, limited enforcement capacity of the Inspectorates will make closing all of the 200 non-compliant dumps challenging. Under the new mechanism for development of infrastructure with the support of the OP Environment 2007- 2013, the funds for regional investments are now being allocated by central level decision making. The 264 municipalities also play an important role and the Regional Municipal Associations (RMA) are responsible to implement the national waste management policy.

**Waste generation and collection:** The total amount of municipal waste generated was 3,091 kt/y in 2010, (410 kg/year and capita). The Waste Management Act obliges the municipalities to deliver service for collection of MSW. The collection coverage was about 98.2% in 2010. In most cases, the activities for waste collection are performed by private operators which are selected under the Public Procurement Act. Each municipality established its own collection scheme. There are no systems for separate collection of bio-waste. Typically, there are three collection bins for metal and plastic, paper and glass. Settlements with a population higher than 5,000 inhabitants are obliged to contract with an authorised RO. Since December 2011, 215 municipalities have been covered (~84 %), whereas an increasing number of municipalities (also smaller ones) have signed contracts.

**Policy instruments applied to move up the waste hierarchy:** BG has introduced intermediate targets up to 2013 for waste recycling and recovery (i.e. 33 %). A landfill tax has been introduced to municipal waste starting from 1.5€/t in 2011 and increasing to 17.5 €/t in 2014. The waste management fees for citizens set by the Municipalities are currently based on the value of the real estate and included in municipal taxes and are therefore not taking into account the generated waste quantities. However, legal bodies (companies, institutions, hospitals, etc.) are able to optimize the waste management fee by declaring the number of containers in use and the proposed collection frequency. There is an on-going project for the development of regulations on bio-waste management and establishment of a system for ensuring quality. The EC is referring BG to the EU Court of Justice for failing to meet the December 2010 deadline to transpose the WFD. The Waste Management Act has been voted in the Parliament in July 2012.

**Waste treatment:** Nearly 100 % of municipal waste was landfilled in 2010 (the highest rate in the EU-27). At present, 32 regional landfills are in operation and 5 under construction (one for Sofia). Some areas are served by 124 active, non compliant landfills (official deadline 16<sup>th</sup> July 2009 not met). However, recycling of especially packaging waste increases and 29 separation facilities exist; another 12 are planned with funds from OP. The recycling market is very active and there is sufficient capacity for recycling of cardboard/paper, plastic, glass and metal. Two MBT plants have been constructed in Varna (140,000 t/y) and Plovdiv (125,000 t/y) under PPP; an MBT and a compost plant for Sofia is under tender procedure. There is no waste incineration, whereas some co-incineration takes place. The biodegradable waste going to landfills in 2008 was 70.3% (compared to the 1995 figure).

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

No	Deficit/Problem	Description of the problem	Reasons
1	<b>Waste management largely diverting from waste hierarchy - significant dependence on landfilling</b>	<p>Nearly 100% of the municipal waste was landfilled in 2010 – the highest rate within the EU27. At present, 32 regional landfills are in operation, whereas 5 are under construction. The landfill gate fee ranges typically from 10-20 €/t, plus 5 €/t for future recultivation plus the applicable landfill tax (4.50 €/t in 2012 increasing to 17.50 €/t in 2014). The “polluter pays principle” is not fully implemented, partly due to the fact that municipal waste fees are fixed by elected bodies; tariff development is very politicized. As a result, fees for waste management remain low and no financial incentives exist to separate or reduce household waste.</p> <p>Alternative waste treatment infrastructure such as MBT plants (with the exception of Varna), incineration facilities (energy recovery) and composting plants are still missing.</p> <p>On the other side, the recycling sector had a late start and has evolved to a satisfactory stage, boosted by a number of recycling plants. The separate collection coverage is 84 % (focusing on packaging waste). The packaging waste targets are expected to be achieved during the next year (Bulgaria was granted a targets derogation for 2013). A large number of Recovery Organisations operate but there are complaints for market distortion [BG EcoBulpack 2012], [BG Ecopack 2012], [BG MoEW 2012]. There is lack of control (even political will to implement strict control) on operation of Recycling companies [BG BAMEE 2012].</p>	<ul style="list-style-type: none"> <li>• Bulgaria is a new EU Member State and is currently implementing its IWMS for the 55 regions via National and EU funds</li> <li>• The capital Sofia MBT project has been on hold for various reasons (initially expected to be operational in 2013), and is now expected to enter soon to the tendering phase</li> <li>• Low landfill gate fee that hardly covers operational cost and maintenance</li> <li>• Landfill tax in place since 2011, however the value is still low</li> <li>• Regular change of experts in public head positions, such as after elections</li> <li>• Lengthy procedure of project approval, permitting and land use approval</li> <li>• No incentive systems to favour prevention and participation to separate collection (PAYT schemes) are in place</li> <li>• Municipalities are reluctant to increase the waste management tax because of marginal affordability and low willingness on behalf of the citizens</li> <li>• Not good understanding from municipalities of the importance of waste hierarchy</li> <li>• Use of independent auditors for verification of recycling quotas, requirement of bank guarantee for RO functioning and more regular inspections</li> </ul>
2	<b>High share of biodegradable waste disposed of in landfills and missing separate collection of bio-waste fraction</b>	<p>Bulgaria is currently implementing its integrated solid waste management (ISWM) system via EU funding and the OP Environment 2007-2013 with a focus to construction of landfills. At this moment, there are 4 regional IWMS projects under construction and another 14 under evaluation (mainly MBTs – composting plants). The total budget available under OP Environment for new waste management infrastructure is 367 million € for 22 project regions (excluding the Sofia Project).</p> <p>The third (2009-2013) national WMP has been elaborated and needs to be implemented</p>	<ul style="list-style-type: none"> <li>• Delays are experienced in the procurement and implementation of the waste management systems. It is unknown whether infrastructure will be operational until the end of eligibility period, i.e. end of 2014</li> <li>• No separate collection of bio-waste in place yet</li> <li>• A compost market does not exist</li> <li>• Waste management is low on the political agenda; Lack of will to implement alternative options for waste management due to “political cost”</li> </ul>

No	Deficit/Problem	Description of the problem	Reasons
		and enforced within the next years so as to move higher to waste hierarchy.	<ul style="list-style-type: none"> <li>Limited information provision, including guidelines or manuals on separate collection of bio-waste, guidance on promotion of home composting, etc.<sup>1</sup></li> </ul>
3	<b>Administrative and Institutional drawbacks</b>	<p>In Bulgaria a high number of 55 regions and a high number of 264 municipalities exist. The municipalities also play an important role in the implementation of management policy. Inter-municipal associations have been formed but do not always function to the required optimum degree due to the lack of experience in the procurement procedure. A recent change in the respective law had the result that all members of the Associations were replaced. There is no sufficient staff available and sufficient expert knowledge to implement large projects.</p> <p>A national data base for waste data and reporting exists in the Executive Environmental Agency. However, data collection on waste statistics, recovery or disposal activities is poor or duplicating or incorrect [BG WMP 2009-2013] [BG BAMEE 2012]. This hinders thorough forecasts and planning of future waste collection and treatment infrastructure.</p> <p>Further, the capacity and knowledge of the involved authorities especially at regional/local level is often not sufficient.</p>	<ul style="list-style-type: none"> <li>Not sufficient administrative absorption capacity for EU funds, especially on municipality level</li> <li>The personnel would benefit from a significant input of technical assistance services especially for legal and contractual issues</li> <li>Procurement, supervision (mostly FIDIC rules) and general technical capacity is reduced compared to the project complexity needs</li> <li>Regular change of experts in public head positions, such as after elections</li> <li>No sufficient means or resources for data measurement and recording</li> <li>Complicated system for providing information on waste as well as duplicating of reported data; Lack of control on the credibility of the reported information.</li> <li>Missing precise indicators on national level to enable better forecasts/planning</li> </ul>

<sup>1</sup> This problem is expected to be remediated in the near future with the aid of the "Development of regulations on management of bio-waste and establishing a system for quality assurance of compost and the National Organization for Quality Assurance of compost", Contracting Authority: MoEW

## Action plan

### Horizontal measures addressing several problems

MEASURE	Type of the instrument	Responsibility	Indicative time scale	Estimated costs	Estimation of achievable result
<b>MEASURE 1: Increase the existing landfill tax</b>					
<b>Increase progressively the current landfill tax</b> (from 17.5 €/t in 2014 to 30 €/t in 2015 or higher)	Economic/fiscal	MoEW, MoF	Short-term	Low	<ul style="list-style-type: none"> <li>- Impetus to alternative management; reduction of untreated municipal waste going to landfills</li> <li>- Improved waste management</li> </ul>
<b>Utilize revenues from the landfill tax</b> to further develop infrastructure for source separated collection (incl. home composting) as well as awareness campaigns	Legal Administrative	MoEW; MoF	Short-term to mid-term	Low	
<b>MEASURE 2: Introduce restrictions in landfilling certain waste streams</b>					
<b>Introduce restrictions/ bans in landfilling</b> certain waste streams, such as paper, glass, wood, textiles, recyclables, etc. This instrument should be applied after extensive consultation and in case alternative treatment infrastructure is in place. Timescale for successful implementation is 5-10 years or longer.	Legal	MoEW; MoF	Long-term	Medium to high depending on the extent	<ul style="list-style-type: none"> <li>- Potentially high benefits</li> <li>- Increase resource efficiency</li> <li>- Avoidance of GHG emissions</li> <li>- Biodegradable waste landfilled reduced;</li> <li>- Increase in composting/ anaerobic digestion</li> </ul>
<b>Introduce restrictions/ban on landfilling non-pretreated municipal waste</b> 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	MoEW; MoF	Long-term	High	
<b>Introduce study and extensive consultation on content</b> (identifying most promising waste streams/contents), schedule, responsibilities of enforcement for landfill restrictions /bans	Economic	MoEW; MoF	Mid-term	Medium	
<b>Introduce penalties for non-compliance with specific targets or restrictions/ban</b>	Legal	MoEW; MoF	Long-term	Medium	
<b>MEASURE 3: Implement PAYT scheme</b>					
<b>Implement PAYT</b> as soon as appropriate collection and treatment infrastructure are in place, starting with pilot projects	Economic/fiscal	Municipalities MoEW	Mid-term	Medium	<ul style="list-style-type: none"> <li>- Increase of separately collection</li> </ul>

MEASURE	Type of the instrument	Responsibility	Indicative time scale	Estimated costs	Estimation of achievable result
<b>Support municipalities by introducing PAYT scheme by providing information on how to set up/introduce such systems</b> by making available guidance, support experience exchange, conferences, buddy systems, awareness on benefits and costs	Informative	Municipalities MoEW	Mid-term	Medium	<ul style="list-style-type: none"> <li>- Reduction of landfill dependency</li> <li>- revenues available for local waste management</li> </ul>
<b>Inform households/support information provision</b> 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	Municipalities MoEW	Mid-term	Medium	
<b>MEASURE 4: Enforce Extended Producer Responsibility (EPR) schemes</b>					
<b>Set in place and improve the performance of EPR</b> or voluntary agreement schemes for the main waste flows (i.e. glass, plastics, paper and metal)	Economic/fiscal	MoEW	Short- to mid-term	Low	<ul style="list-style-type: none"> <li>- Increase potential for longer life cycle, reuse and recycling</li> <li>- Lower waste generation during production</li> <li>- Improved performance of deposit refund systems</li> </ul>
Set in place and improve the performance of <b>deposit refund systems for packaging</b> (glass, plastic, metal, etc.) in combination with EPR schemes	Economic/ Fiscal	MoEW	Short- to mid-term	Low	
<b>Undertake inspections and controls in the area of fulfilment of EPR obligations</b> via environmental audits	Administrative	MoEW RIEW	Short-term to long-term	Medium	
<b>MEASURE 5: Increase regulation, inspection and enforcement</b>					
<b>Provide for inspections</b> by the local and regional authorities and fine illegal dumping	Administrative	RIEW, RMA, Ministry of Interior	Ad – hoc to short -term	Low	<ul style="list-style-type: none"> <li>- Control illegal operations and shipments of waste</li> <li>- Assure sound waste management by controlling documents and activities</li> <li>- Assure common rules for all market players</li> <li>- Transparency</li> </ul>
<b>Implement penalties and fines</b> for illegal dumping activities (addressing all actors involved: municipalities, citizens, waste producers and waste management companies) as well as other environmental offences	Administrative, Legal	RIEW, RMA, MoEW	Ad – hoc to short -term	Low	
<b>Thorough monitoring and regulation</b> of waste management companies at the stage of permitting/licensing and periodically during operation	Administrative	RIEW, RMA, MoEW	Ad – hoc	Low	
<b>Enforce regulation and control</b> of R.O.s, including use of independent auditor for verification of recycling quotas; control of recovery operations	Administrative	MoEW	Ad-hoc to short-term	Low	
<b>MEASURE 6: Improve waste management planning and revision of national &amp; regional WMPs</b>					
<b>Elaboration of national/regional WMP(s)</b> on the basis of the new WFD and the Waste Management Act (WMA) that transposes the Directive	Legal	MoEW	Ad – hoc to short-term	Medium	<ul style="list-style-type: none"> <li>- Elaboration of strategic documents that illustrate National commitment to</li> </ul>

MEASURE	Type of the instrument	Responsibility	Indicative time scale	Estimated costs	Estimation of achievable result
<b>Improve the quality of data/indicators</b> regarding waste quantities generated, collected, recycled, recovered and disposed (see also Proposal 4), improve reporting procedures from local to regional to national level by implement standardised reporting procedures	Administrative	MoEW	Short-term	Low	- waste policy; - Define mixture of technologies, capacities and funding needs in the waste sector
<b>Estimate with a close accuracy the forecast on future municipal waste generation, treatment capacities and modelling</b>	Administrative	MoEW	Short-term	Low	- Transparency and improvement of reporting; - Identification of shortcomings and areas where action is required;
<b>MEASURE 7: Improvement of the utilisation and allocation of available EU funding</b>					
<b>Improve utilisation and allocation of Cohesion Funds</b> by better coordination of the responsible central and local parties, in order to develop alternative waste treatment infrastructure etc.	Administrative	MoEW RMA	Short- to mid-term	Low	- Acceleration of the relevant administrative processes, approval of the documentation, tendering procedures, publicity, allocation of funds, etc
<b>Increase administrative adsorption capacity</b> for EU funding by allocating more resources and technical capacity building	Administrative	MoEW RMA	Short- to mid-term	low	- Improved waste treatment infrastructure
<b>Enhance Decision making at operational level</b> by providing training and/or external consultation	Administrative	MoEW RMA	Ad-hoc	Low	

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

Proposals to address the problem	Type of the instrument	Responsibility	Indicative time scale	Estimated costs	Available EU Funding	Estimation of achievable result	Priority scoring
<b>PROPOSAL 1: Completion/ improvement of waste treatment infrastructure via the OP Environment 2007-2013 or via National Funds</b>							
<b>Construction of regional and a number of small decentralized composting plants</b>	Infrastructural	Ministry of Environment & Water (MoEW)	Short-term to Mid-term	35 Mio €	Cohesion Fund, National	Increase of biodegradable waste diversion and composting of bio-waste to cover at least green, market and bio-waste from urban areas; avoidance of GHG emissions	+++
<b>Construction of 8-15 regional MBT plants</b>	Infrastructural	MoEW	Short-term to Mid-term	100 Mio €	Cohesion Fund, National	Improvement of alternative bio-waste management; bio-stabilisation; recovery of recyclables and RDF/SRF; avoidance of GHG emissions	
<b>Construction of 4-6 anaerobic digestion plants</b> (number and capacities to be specified) and possibly one waste to energy (WtE) plant; final proposals according to the on-going study <sup>2</sup>	Infrastructural	MoEW	Short-term to Mid-term	60-80 Mio €	Cohesion Fund, National	Strong biodegradable waste diversion with potential to organics recycling; generation of renewable electricity and avoidance of GHG emissions	
<b>Establish civic amenity sites in selected areas</b> (2-6 per region) that include collection bins for green/garden/food waste	Infrastructural	MoEW	Ad-hoc to short-term	Low to medium	Cohesion Fund, National	High quality of source separated recyclables/compost/household hazardous waste	
<b>PROPOSAL 2: Establish appropriate infrastructure for reuse and recycling</b>							
<b>Committing local authorities in promoting recycling</b>	Administrative	MoEW, Municipalities, RMAs	Short-term to mid-term	Medium	n.a.	Improved waste management and reduction of disposal	+++
<b>Establishment of sorting facilities</b>	Infrastructural	MoEW	Short-term	Medium	Cohesion Fund, National	Boosting of the recycling market and network coverage; optimize transport distances	+++

<sup>2</sup> "Development of regulations on management of bio-waste and establishing a system for quality assurance of compost and the National Organization for Quality Assurance of compost", Contracting Authority: MoEW



Proposals to address the problem	Type of the instrument	Responsibility	Indicative time scale	Estimated costs	Available EU Funding	Estimation of achievable result	Priority scoring
<b>Establish recycling-on-the-go schemes</b> via more recycling bins in public places like shopping centres, squares and avenues	Infrastructural	Municipalities, Regions	Short-term	Medium	n.a.	High quality of separately collected recyclates	++
<b>Encourage prevention, reuse and preparation for reuse options in the country</b> (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	Municipalities, Regions	Ad-hoc to mid-term	Low to medium	n.a.	Saving of materials and energy in all cycles of material; avoidance of GHG emissions	
<b>Promote public-private partnership (PPP)</b> systems for waste projects; promote incentives for small projects to operate in parallel with centralised facilities	Legal / Infrastructural	MoF, Regions	Short to mid-term	Low to medium	n.a.	Optimised involvement of private sector; contribution in local level	
<b>Mobilize municipalities</b> towards the achievement of 2020 50% recycling target <sup>3</sup>	Legal	MoEW, Municipalities, RMAs	Short-term to mid-term	Medium	n.a.	Improved waste management and reduction of disposal	+
<b>PROPOSAL 3: Implement measures to encourage separate collection</b>							
<b>Obligation of waste producers in industrial, commercial and administrative sites/ buildings to separate collection</b> of metal, paper, glass and plastic wastes separately and handling by permitted operators <sup>3</sup>	Legal	MoEW	Ad-hoc	Low	n.a.	Significant catchment of municipal waste from the commercial sector	++
<b>PROPOSAL 4: Enhance optimised operation of recycling schemes</b>							
<b>Enforce regulation and control</b> of R.O.s, including use of independent auditor for verification of recycling quotas; control of recovery operations	Administrative	MoEW	Ad-hoc to mid-term	Low	n.a.	Enforce common rules for all market players; transparency	++
<b>Establish number of collection bins and separate</b>	Legal	MoEW	Ad-hoc	Low	n.a.	See above	

<sup>3</sup> Already envisaged in the new Waste Management Act transposing the WFD

Proposals to address the problem	Type of the instrument	Responsibility	Indicative time scale	Estimated costs	Available EU Funding	Estimation of achievable result	Priority scoring
collection according to legislation in force							
<b>PROPOSAL 5: Initiate awareness raising campaigns on collection and treatment of municipal waste for different target groups</b>							
<b>Information campaigns on separate collection, recycling centres, fee systems, etc.</b> (households, SMEs, retailers etc.)	Informational/ educational	MoEW, Municipalities, Regions	Short-term	Low to medium	n.a.	Awareness rising to public	++
<b>Provide guidelines and manuals on separate collection, recycling, etc.</b>	Informational/ educational	MoEW, Municipalities	Short-term	Low	n.a.	See above	

## PROBLEM 2: High share of biodegradable waste disposed of in landfills and missing separate collection of bio-waste 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
<b>PROPOSAL 1: Create a compost market via safe end product use and by safeguarding end users</b>							
<b>Establish quality criteria</b> and a National Organization for Quality Assurance for compost and digestate (e.g. compost classification, limit values for contaminants) <sup>4</sup>	Legal	MoEW	Short-term	Low	n.a.	Identification of uses for which the compost is fit, minimum compost standards, higher product quality, greater public acceptance	+++
<b>Provide bins/special bags for separate collection of bio-waste</b> (number, design, volume, etc. to be specified in accordance to the on-going study, collection scheme, frequency, rural/urban areas) ;	Infrastructural	MoEW, M. of Finance, Municipalities	Short-term to mid-term	Low to medium	Cohesion Fund, National	Prerequisite for achieving high compost quality, diversion from biodegradable waste from landfills and environmental awareness.	++
<b>Provide guidelines and manuals</b> (best practices, safety procedures) for anaerobic digestion (AD) and composting facilities	Informational	MoEW	Short-term	Low	n.a.	Reduction of nuisances and emissions; setting minimum requirements; implementation of BAT; Greater public acceptance	++

<sup>4</sup> Same as <sup>1</sup>

Proposals to address the problem	Type of the instrument	Responsibility	Indicative time scale	Estimated costs	Available EU Funding	Estimation of achievable result	Priority scoring
<b>Provide subsidies for small scale, local composting plants</b> or similar facilities or equipment for bio-waste treatment	Infrastructural	M. of Finance, M. for Infrastructure, RMA	Short-term to mid-term	Low	n.a.	More efficient and decentralised treatment; Greater public acceptance	+
<b>PROPOSAL 2: Completion/improvement of waste treatment infrastructure via the OP Environment 2007-2013 or via National Funds</b>							
Same as Proposal 1 above							
<b>PROPOSAL 3: Implement measures to encourage separate collection and recycling</b>							
Same as Proposal 5 above with emphasis on paper							
<b>PROPOSAL 4: Initiate awareness raising campaigns on biodegradable waste collection and treatment for target groups</b>							
<b>Information campaigns on separate collection of bio-waste</b> , home composting, etc.	Informational	MoEW, Municipalities	Short-term	Low	n.a.	Increase resource efficiency; Increased awareness and valuation of compost	++
<b>Development of guidelines and information</b> for implementation of compost - land spreading in support of stakeholders - local authorities, laboratories, farmers and others	Informational	MoEW, Regions	Short-term	Low	n.a.	See above	
<b>Promote home composting bins in rural areas</b>	Infrastructural	MoEW, Municipalities	Short-term	Low	Cohesion Fund, National	Reduce amount of bio-waste fraction in mixed municipal waste	

**PROBLEM 3: Administrative and Institutional drawbacks**

Proposals to address the problem	Type of the instrument	Responsibility	Indicative time scale	Estimated costs	Available EU Funding	Estimation of achievable result	Priority scoring
<b>PROPOSAL 1: Increase resources allocated to competent authorities</b>							
<b>Mobilise consultancy and technical assistance services during realisation</b> – procurement of complex waste management projects	Administrative Economic	MoEW, Regions, Regional Municipal Associations	Short-term	Not identifiable	ERDF; CF	Provision of expert knowledge from the private sector; increased efficiency	+++
<b>Provide sufficient human/economic resources</b> to properly undertake project management	Administrative Economic/fiscal	MoEW	Short-term	Not identifiable	National	Effective project management and problem solving	++
<b>Capacity building of competent authorities</b> 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"> <li>– Organizing trainings and expert knowledge exchange programmes, conferences etc.</li> <li>– Establishing a joint platform for exchange of experiences and waste management related problems</li> <li>– Participation in e-learning and continuous knowledge schemes</li> </ul>	Administrative Economic	MoEW, Regions, Regional Municipal Associations	Short-term	Not identifiable	ERDF; CF	Improved knowledge from through experience exchange; learning from case studies	++
<b>Improve cooperation and coordination</b> of waste management between different regions (e.g. via inter-municipal associations)	Administrative Economic	MoEW	Short-term	Not identifiable	National	Effective project management and problem solving	+
<b>PROPOSAL 2: Establish a waste database and related tools for consumers, business and local authorities</b>							
<b>Establish an web communication application service</b> with information for consumers and business; FAQ; calls for consultation with stakeholders; responsible behaviour, EPR schemes and eco-labelling; permitting procedures	Administrative	MoEW	Short-term to mid-term	200,000 €	National	Transparency and visibility; actions to target	++
<b>Establish information systems for waste management control and transportation</b>	Administrative	MoEW	Short-term to mid-term	400,000 €	National	Transparency and visibility; actions to target	

Proposals to address the problem	Type of the instrument	Responsibility	Indicative time scale	Estimated costs	Available EU Funding	Estimation of achievable result	Priority scoring
Improve data recording on municipal and packaging waste management	Administrative	MOEW (EEA), NSI	Ad – hoc to short-term	-	National	Transparency and improvement of reporting; Overview on waste management data	
<b>PROPOSAL 3: Rationalisation of waste management fee</b>							
Apply a proper waste management fee to cover all direct, indirect and future cost categories, following a communication campaign to citizens	Administrative	Regions, Regional Municipal Associations	Short-term	-	-	Transparency and awareness	++