

Roadmap for Greece (GR)

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 (82.7 %), 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. 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.**
- 3. Implement the bio-waste strategy including specific measures to divert biodegradable waste from landfill.**
- 4. Extend and improve the cost-effectiveness, monitoring and transparency of existing EPR schemes and eliminate free-riding.**
- 5. Establish and control separate collection infrastructure and schemes. Implement door-to-door separate collection as soon as possible.**
- 6. Extend and enforce PAYT scheme. Provide incentives and support for households to participate in separate collection.**
- 7. Include all packaging waste from households and similar sources into the data on generation and treatment of municipal waste.**

National waste management situation

Administrative structure: The Ministry of Environment, Energy and Climate Change (MEECC) is responsible for the development and implementation of environmental policy at the national level. It is responsible for policy making, national planning, technical matters, as well as licensing of waste treatment facilities. In addition, 13 Administrative Regions represent the second level of local self government, responsible for licensing and elaborating waste master plans. The implementation of the objectives of the Regional WMP lies within the territorial jurisdiction of the respective 13 Regional Waste Management Associations (RWMA). Municipalities are responsible for some aspects of planning [EEA 2010b]; [RETech 2009].

Waste generation and collection: In 2010, the total amount of municipal waste generated was 5,891 kt, representing about 2 % of the total municipal waste generated within the EU-27. The total amount of annual municipal waste generated per capita corresponds to 460 kg/y which is lower than the EU27 average [EUROSTAT 2012b]. The collection coverage for municipal waste is 100 %, even in islands and remote rural/mountainous areas [EC 2012b]. The collection of packaging waste is done by bring systems [GR HERRCo 2012]. Kerbside collection of packaging waste is not common in Greece and generally only practiced for municipal waste other than packaging waste. Producer responsibility or equivalent systems in place are not able to cover the full costs of separate collection and recycling of main waste streams [EC 2012f]. No separate collection of biodegradable waste is applied. The recent economic situation in Greece has affected the waste management sector. The reduced consumption of products resulted in reduced budget for the Recovery Organisations to subsidise the negative balance of the recycling network (collection, transport and operation of recycling facilities). At the same time, municipalities experienced reductions in the required budget and personnel for the collection services, etc.

Instruments applied to move up the waste hierarchy: Currently, there is no specific tax on municipal waste going to landfills [EC 2012]. However, requirements for the introduction of a landfill tax have been recently adopted by Law 4042/2012, transposing the WFD. Starting from 2014, organizations/enterprises disposing untreated municipal waste into landfills will have to pay a landfill tax which is planned to start with the high rate of 35 €/t. It is envisaged to raise the tax annually by 5 €/t until 60 €/t is reached. The current landfill gate fees are on a low level (i.e. 10-48,5 €/t). No incentive systems to favour prevention and participation to separate collection (PAYT schemes) are in place [EC 2012] and no deposit refund systems are applied. There are no restrictions for landfilling municipal waste.

Waste treatment: Greece is not considered to be self sufficient for disposal of municipal waste even if this was reported. It is estimated that sufficiency reaches 90 %. Landfilling is the most common method for waste management in Greece. Currently, 79 landfills for municipal waste are in operation, whereas 63 illegal dumpsites were recorded as still active. Landfilling is still the main treatment option (82.7 % in 2010). 28 large scale material recovery facilities are in operation [GR HERRCo 2012], whereas two recycling facilities are currently under construction [RWMP of Crete]; [RWMP of Ionian Islands]. Four MBT plants are in operation (Attica, Chania, Heraklion, Kefallonia) and additional installations are planned. New integrated waste management systems are planned to be constructed under PPP and operated from the private sector at: (a) Prefecture of Aitolokarnania – Municipality of Agrinio, (b) Prefecture of Helia - Municipality of Ilida, (c) Region of Peloponnese, (d) Region of Western Macedonia and (e) Prefecture of Serres. Furthermore, IWMS are expected to enter into tendering phase in the next period through PPP for Region of Attica and Prefecture of Thessaloniki.

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

No	Deficit/Problem	Description of the problem	Reasons
1	Lack of infrastructure and waste treatment largely diverting from the waste hierarchy	<p>According to MEECC (2012) 82.7 % of municipal waste is subject to disposal, and only around 17.3 % of the municipal waste is recycled and a negligible percentage of the municipal waste is composted (3 %). Greece is highly depending on landfilling municipal waste as alternative waste treatment infrastructure is limited (no incineration, small number of MBT facilities and composting facilities). However, some alternative treatment infrastructure is available and not fully used: The capacity of the MRF plants is sufficient, but their location is not always optimal in part due to geographic particularities; long distance transport to the nearest MRF is required from various municipalities [GR HRA 2012].</p> <p>Further, economic and legal instruments are not properly used to drive waste up the hierarchy. In addition, the waste fee system is problematic: the polluter-pays-principle is not implemented as fees are connected to the number of inhabitants and to the size of households (surface of the property). There is no direct connection between the fees paid and the amount of waste disposed of, hence there are no incentives for households to participate in separate collection or to reduce their waste. The waste fee usually covers the expenses for all municipal services and is not related to waste items.</p> <p>Currently, it is considered to amend the tariff system and set fees directly based on the amount of waste produced. With the introduction of new waste treatment facilities, constructed mainly via PPP and operated by the private sector, it is expected that the waste management fees will increase significantly [EC 2012]; [BiPRO 2007-2011].</p> <p>Most probably, under present conditions, the recycling targets laid down in the WFD will be difficult to reach. Extraordinary efforts will be needed to better implement the waste hierarchy and to meet the Directive's targets.</p>	<ul style="list-style-type: none"> • The new national WMP is under elaboration according to WFD 2008/98 EC. 13 RWMP are currently under implementation but have to be also updated. • Limited municipal waste treatment infrastructure available and slow progress in developing appropriate infrastructure [GR HRA 2012]; [GR HSWMA 2012] • Lack of proper use of economic or other instruments to move up the waste hierarchy (<u>no landfill tax is in place</u> and gate fees are very low (in the range of 10-48.5 €/t), no PAYT scheme) • Municipalities do not differentiate between waste management expenses and other services, since they aim to balance the projected overall municipal expenses. Thus, citizens cannot evaluate the quality of the services provided by the municipality and no incentive to reduce the waste quantities is being offered [GR MEECC 2012]; [GR HSWMA 2012] • Local tariffs are insufficient to cover the operational costs. A cost increase and the partial cost recovery reached through current user charge system could lead to a financially unviable situations. This becomes even more relevant in the context of the financial crisis and as result insufficient attention has been given to medium-term economic sustainability [GR MEECC 2012]; [GR HSWMA 2012] • There are no binding targets on minimum recycling or maximum landfilling at the local level to be met by municipalities • Limited cooperation between municipalities to coordinate fees for municipal waste services [GR MEECC 2012] • Limited waste prevention initiatives and information provision and awareness raising campaigns regarding the importance of separate collection [GR HRA 2012], [GR MEECC 2012]; [GR HSWMA 2012]

No	Deficit/Problem	Description of the problem	Reasons
2	Insufficient source separated collection of municipal waste	<p>Only co-mingled collection of packaging waste is in place for far. Separate collection infrastructure for bio-waste is currently not in place. At the end of 2011, ca. 240 local authorities were covered by separate collection scheme for packaging waste which account for about 3/4 of the total population (8 million inhabitants). The system provides mainly co-mingled collection of recyclables in a dry bin and recycling centres in urban areas with separate collection for the fractions [GR HERRCo 2012]. Kerbside collection has not been applied, mainly due to the limited availability of space in larger cities.</p> <p>In the previous years the performance of separate collection has been evaluated as good, although it can be further improved (quality of the collected material, capture rates of materials and real separate collection not only co-mingled collection). It was observed that in addition to the increased problem of scavenging, the performance of co-mingled collection decreased and more impurities in separately collected recyclables.</p>	<ul style="list-style-type: none"> • Lack of proper infrastructure for separate collection and not optimal siting of Sorting Plants • Limited awareness of the public of the importance of separate collection also due to lack of targeted information and awareness campaigns • No use of economic instruments to encourage separate collection (no PAYT scheme, no deposit refund systems) • Thermal recovery 0%
3	High share of biodegradable waste going to landfills	<p>A large amount of biodegradable waste is landfilled and only a negligible percentage of the municipal waste is composted (i.e. 3%) [MEECC 2012]. So far there is no separate collection of bio-waste and treatment is not provided which would ensure that less biodegradable waste is landfilled.</p> <p>Greece has benefited from a derogation regarding the obligation to reduce the quantity of municipal biodegradable waste disposal. The reduction targets are to be achieved in 2010 (75 %), 2013 (50 %) and 2020 (35 %) [Ernst & Young 2011]. On the basis of EUROSTAT data it is calculated that compared to the 1995 data, even more biodegradable waste was landfilled in 2009 (i.e. 108.1 %) [EC 2012a]. However, the national Competent Authorities communicated that the reference year 1995 would not apply to Greece (but 1997) due to availability of data. Nevertheless, the problem stays the same. According to [Ernst & Young 2011], in 2010 Greece's allowance to dispose of biodegradable municipal waste was 1,580 kt and it is estimated that this quantity was exceeded by 200 kt in 2009 and by 700 kt in 2010.</p> <p>The planned MBT facilities will produce outputs such as compost of different quality which cannot be used as a real product for agriculture etc.; for solid recovered fuels (SRF) and refused derived fuels (RDF) there are no markets yet well developed in Greece. Separate collection of bio-waste and alternative infrastructure will be crucial to increase the quality of compost and to properly treat bio-waste. Without recycling of</p>	<ul style="list-style-type: none"> • Lack of infrastructure for separate collection • Regional and local authorities are not legally obliged to introduce separate collection of bio-waste • No infrastructure for separate collection of bio-waste in place [GR HERRCo 2012] • Alternative treatment infrastructure for biodegradable municipal waste is not in place or only to very limited extent [GR HRA 2012]; [GR HSWMA 2012] • Establishment of infrastructure have been on hold for various reasons and tendering phase need to be launched [GR HRA 2012]; [GR HSWMA 2012] • Limited information provision, including guidelines or manuals on introduction and operation of separate collection of bio-waste [GR HRA 2012]; [GR HSWMA 2012] • No promotion of home-composting • No PAYT scheme is applied [GR HRA 2012]; [GR HSWMA 2012] • Outdated quality criteria for compost [GR HRA 2012]; [GR HSWMA 2012], due to lack of separate collection bad quality of compost and hence no market for compost.

No	Deficit/Problem	Description of the problem	Reasons
		bio-waste it will be even more difficult to reach the targets of the WFD.	<ul style="list-style-type: none"> No real strategy on how to reduce the amount of bio-waste going to landfill
4	Administrative and Institutional drawbacks	<p>The waste sector is in the responsibility of different ministries (Ministry of Environment, Ministry of Interior, and Ministry of Development), causing difficulties to central administration in coordinating and providing leadership for the sector [GR MEECC 2012]. Furthermore, the new administrative reform, “Kallikratis”, has foreseen the establishment of 13 new Regional WMAs within 2011 (one in each), which would take over responsibilities and assets from the existing Inter-municipal WMAs. During this transitional period, difficulties in the operation of existing systems and delays in the implementation of new projects is faced due to oppositions/ difficulties in adapting to the new administrative structures [GR MEECC 2012].</p> <p>The cooperation between municipalities could be improved in the field of waste management to better coordinate the establishment of waste collection and treatment infrastructure as well as application of collection schemes, awareness campaigns and provision of information to households.</p>	<ul style="list-style-type: none"> The national WMP as well as the 13 regional WMPs should be revised in order to comply with the WFD and Section II of the Law 4042/2012 which harmonizes the provisions of the WFD with national legislation [Hellenic Parliament 2012]. Coordination and sector leadership is lacking although an “inter-ministerial committee for waste” has been active for some time now [GR HSWMA 2012] Many of the current Waste Management Authorities (WMAs) are not adequately staffed to be able to prepare complex solid waste management projects in a timely manner [GR MEECC 2012]; [GR HSWMA 2012] The waste debate in Greece is strongly politicised, however, waste management is low on the political agenda and subject of protracted consultation without real progress in the end.

Action plan

Horizontal measures addressing several problems

MEASURE	Type of the instrument	Responsibility	Indicative time scale	Estimated costs	Estimation of achievable result
MEASURE 1: Implement and increase progressively landfill tax					
Implement the planned landfill tax (foreseen to start in 2014 at 35 €/t; increase 5 €/a up to 60 €/t). Guidelines for the implementation and types of waste under taxation have to be issued.	Economic/fiscal	MEECC, Ministry of Interior	Short to mid-term	Low	<ul style="list-style-type: none"> - Landfilling made less attractive, switch to other competitive options - Improved treatment of municipal waste; Increased awareness on waste management issues - Increased acceptance of the increase of taxations and transparency
Utilize revenues from the landfill tax to further develop infrastructure for treatment of municipal waste and related activities (awareness campaigns etc.)	Legal Administrative	MEECC, Ministry of Interior	Short-term to mid-term	Low	
Provide information to target groups affected by the introduction of a landfill tax (in advance of introduction of the tax)	Informative	MEECC	Ad-hoc to short-term	Low	
Ensure implementation of provisions and prosecution via intensified controls	Administrative	MEECC Inspectorate	Short-term to mid-term	Low to medium	
MEASURE 2: Restrictions on landfilling certain types of waste (in combination with dissemination of information and promotion of home composting)					
Introduce restrictions on landfilling certain types of waste (potentially recyclables, paper, bio-waste)	Legal, administrative	MEECC, RWMA	Long-term	High	<ul style="list-style-type: none"> - Improved performance in waste hierarchy - Increased recycling quota - Share of biodegradable waste going to landfills reduced; - Increase in composting/ anaerobic digestion - Improved implementation
Introduce restrictions/ban on landfilling non-pre-treated municipal waste (following a thorough consultation; exact conditions, technical details and time plan to be specified; Action on EU level is probably required to assure common rules and harmonisation)	Legal	MEECC	Long-term	High	
Promote home composting via dissemination of information to households (especially via leaflets and brochures)	Informative	MEECC, RWMA	Ad-hoc to short-term	Low	
Introduce penalties for non-compliance with specific targets or restrictions/ban	Legal	MoInterior, MEECC, RWMA	Long-term	Medium	
Introduce penalties for non-compliance with strategy/obligations (e.g. when municipalities continue to landfill non-pre-treated waste to large extent) Amounts of fines to be defined taking into account target groups (households, waste management companies, municipalities)	Legal	MoInterior, MEECC	Long-term	Medium	
MEASURE 3: Implement PAYT scheme					

MEASURE	Type of the instrument	Responsibility	Indicative time scale	Estimated costs	Estimation of achievable result
Introduce and financially support application of PAYT scheme (as soon as appropriate collection and treatment infrastructure in place)	Economic/fiscal	RWMAs, MoInterior	Mid-term to long-term	Low to medium	- Increase of separately collection
Implement a PAYT scheme which incentivises the separate collection of bio-waste (as soon as appropriate collection infrastructure for bio-waste is available); inform on new collection systems	Economic/fiscal Informative	RWMAs, MoInterior	Mid-term to long-term	Low to medium	- revenues available for local waste management
MEASURE 4: Enforce Extended Producer Responsibility (EPR) schemes related to targeted waste streams					
Enforce the provisions related to packaging and packaging waste (Packaging producers and packagers/fillers need to be legally obliging to register in the national EPR data base and to fulfil their obligations according to the requirements) and undertake inspections and controls in the area of fulfilment of EPR obligations via environmental audits	Administrative / Economic/fiscal/ legal	MEECC, HRA	Short-term to mid-term	low	- Creation of economic conditions to launch separate collection and establish sorting infrastructure
Detect free-riders in the EPR system. Inspection and enforcement of the EPR system should get high priority	Legal, administrative	MEECC, HRA	Short-term	Low	- Improved performance of EPR and deposit refund systems
Expand the institution of "Alternative Management" to cover also other streams (printed paper, furniture) according to the "polluter's pay" principle	Administrative	MEECC, HRA	Mid-term	Low to medium	
MEASURE 5: Enhance Regulation, Inspection and Enforcement					
Improve inspections and supervision of compliance (by providing more technical capacity, guidance, etc) and quality of services provided by RWMAs	Administrative, Legal	MEECC, RWMAs	Ad-hoc to short term	medium	- Improved quality of services provided
Set mandatory recycling and recovery targets to be achieved by RWMAs and define penalties for non-compliance or for failure of providing service (termination of contract, reduction on price for service etc.)	Legal, administrative	MEECC, RWMAs	Mid-term to long-term	low	- Better implementation of legal provisions - Revenues through fines - Higher commitment of RWMA/municipalities
MEASURE 6: Improve waste management planning and revision of regional WMPs					
Revise and update the regional WMPs to comply with the WFD and the National WMP	Legal, Administrative	RWMAs, MoInterior	Short-term	3 M. €	- Better planning and forecasting of actions
Set criteria for municipal waste treatment (e.g. % of residual, biodegradable content, etc.) (also for proper implementation of the landfill tax)	Legal, Administrative	MEECC	Short-term	Low	- Complete overview of municipal waste generation, collection schemes and treatment capacity
Decide on a calculation method for the recovery / recycling targets of municipal waste (Commission Decision 2011/753/EU)	Legal	MEECC	Ad-hoc to short term	Low	
MEASURE 7: Improvement of the utilisation and allocation of available EU funding					

MEASURE	Type of the instrument	Responsibility	Indicative time scale	Estimated costs	Estimation of achievable result
Improve utilisation and allocation of the Cohesion Policy Fund (CF) in order to further develop alternative waste treatment infrastructure etc.	Administrative	MEECC, Ministry of Finance	Short-term to mid-term	Low	<ul style="list-style-type: none"> - Better utilisation/ allocation of the CP fund - Improved alternative waste treatment infrastructure - accelerated implementation of waste infrastructure
Increase administrative adsorption capacity for EU funding by allocating more resources and technical capacity building	Administrative	MoInterior	Short-term to mid-term	Low	
Rationalise available funding mechanisms in order to promote the implementation of waste management projects	Economic, Administrative	Ministry of Development	Ad-hoc to short term	low	

PROBLEM 1: Lack of infrastructure and waste treatment largely diverting from the waste hierarchy

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: Use available recycling and recovery capacities and provide for additional appropriate infrastructure for recycling and recovery of municipal waste							
Use available recycling and recovery capacities and provide for the proper framework of recycling and recovery capacities including incineration with energy recovery (R1 compliant)	Infrastructural	MEECC, RWMA	Mid-term to long-term	High	ERDF; CF	More recycling and recovery	+++
Expand and provide for the proper framework of recycling, recovery and stabilisation infrastructure for bio-waste (see below)	Infrastructural	MEECC, RWMA	Mid-term to long-term	High	ERDF; CF		
PROPOSAL 2: Expand infrastructure for separate collection for municipal waste (see measures on separate collection below) – prerequisite to move up the waste hierarchy							
PROPOSAL 3: Set local/regional targets for recycling and/or limits for landfilling to be achieved by municipalities, improve control of compliance							
Make recycling of municipal waste mandatory by targets to be achieved by regions and/or municipalities or define limits for landfilling municipal waste on local level	Legal Administrative	MEECC	Ad-hoc to short-term	Low	n.a.	Higher commitment of municipalities	+++
Encourage cooperation by institutionalized information exchange (covering local, regional and national level. NGOs and industry)	Informative	MEECC	Mid-term	Low	n.a.	Improved cooperation	++

PROBLEM 2: Insufficient source separated collection of municipal waste

European Commission

Roadmap for Greece

Support to Member States in improving waste management based on assessment of Member States' performance

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: Establish appropriate collection infrastructure for separate collection and initiate awareness raising campaigns							
Provide guidelines and manuals on how to implement separate collection to municipalities	Informative	MEECC, HRA RWMAs	Short-term	Low	n.a.	Facilitate implementation	+++
Further establish and modernise civic amenity sites <i>Include civic amenity sites in the WMP and inform households on the location and services of civic amenity sites</i>	Infrastructural	RWMAs, Municipalities	Short-term to long-term	Low to medium	ERDF; CF; LIFE	Higher quality of separately collected waste; prevention of waste via reuse of products	
Enhance the connection to separate collection systems for packaging waste to 100% by implementing in rural areas <i>at least</i> sufficient bring systems (containers, improve civic amenity sites) but preferably improve separate collection by expanding door-to-door collection whenever possible (provide separate containers either free of charge, or with a deposit)	Infrastructural	RWMAs, Municipalities	Short-term to mid-term	Medium	ERDF; CF	Improved separate collection	
Define criteria and obligations in contracts to ensure the provision of sufficient bins/special bags for separate collection of municipal waste - Control implementation of appropriate infrastructure for separate collection by service provider	Administrative/ Infrastructural	RWMAs, Municipalities	Short-term to mid-term	Low	n.a.	More participation in separate collection	
Initiate awareness campaigns for households and economic operators on separate collection (leaflets and brochures, internet, smart phone applications, TV spots)	Informative	MEECC, RWMAs, Municipalities	Ad-hoc to short-term	Low to medium	LIFE	Increased participation in separate collection	
Expand recycling-on-the-go schemes via legal obligations for retailer or via financial/informative support to set up more recycling bins in public places and e.g. shopping centres etc.	Infrastructural Legal Financial	RWMAs, Municipalities	Short- to mid-term	Medium	n.a.	High quality of separately collected recyclate	

PROBLEM 3: High share of biodegradable waste going to landfills

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: Set up infrastructure for separate collection and treatment of biodegradable waste, inform households on importance of separate collection and related infrastructure							
Establish at least one Integrated Solid Waste Management (ISWM) Facility per Region with technology as defined in the RWMP or selected during the tendering phase based on minimum standards set in the tender documents (envisaged to be constructed under PPP)	Infrastructural	RWMAs, MEECC, Ministry of Interior	Short-term to mid-term	400-500 M. €	Mixed (Private/PP and CF)	increase of capacity for treatment of biodegradable waste.	+++
Establish a network of composting plants	Infrastructural	MEECC RWMAs, Municipalities	Mid-term to long-term	20-50 M. €	ERDF; CPF; EIB	Increase of composting	++
Establish AD/ biogas plants	Infrastructural	MEECC RWMAs, Municipalities	Mid-term to long-term	tbc	ERDF; CPF; EIB	Increase of energy recovery from bio-waste	++
Expand infrastructure for separate collection of bio-waste (door-to-door collection, collection points for green garden waste at civic amenity sites or other bring systems (supervised single container collection), undertake pilot projects Information campaigns for households on separate collection of bio-waste via leaflets, brochures, website and available infrastructure. Involve waste operators and establishments in awareness campaigns Promote home composting	Infrastructural/ Informative	MEECC, RWMAs, Municipalities	Ad-hoc to short-term	Low	LIFE	Increased separate collection of bio-waste	+++
PROPOSAL 2: Implement measures to encourage the creation of a market for products from treatment of biodegradable waste							
Revise and establish quality criteria for compost, RDF/SRF in cooperation with relevant stakeholders and aligned to already available standards on EU level	Legal	MEECC	Ad-hoc to short-term	Low	LIFE+	Increased composting and RDF/SRF	++
Promote compost, RDF/SRF via information on quality standards and voluntary agreements with industry on certification systems	Informative	MEECC	Short-term	Low	LIFE+	Increased sales	++
PROPOSAL 3: Administrative capacity building and better cooperation on bio-waste management							
Capacity building of waste management competent authorities, especially for local authorities	Administrative	MEECC, RWMAs, MoInterior	Short-term	Low	LIFE+	Increased capacity	+++
Improve cooperation between all involved stakeholders in bio-waste management	Administrative	MEECC; RWMAs, MoInterior,	Short to long-term	Low	n.a.	Improved cooperation and expertise on bio-	+++

European Commission

Roadmap for Greece

Support to Member States in improving waste management based on assessment of Member States' performance

Proposals to address the problem	Type of the instrument	Responsibility	Indicative time scale	Estimated costs	Available EU Funding	Estimation of achievable result	Priority scoring
		Municipalities				waste management	
Provide guidelines and manuals on separate collection and bio-waste management addressing authorities	Informational/ educational	MEECC	Short-term to mid-term	Low	LIFE+	Facilitate implementation	++
PROPOSAL 4: Actions on food waste prevention							
Initiate a national awareness and information campaign on food waste prevention addressing households including <ul style="list-style-type: none"> - Information on avoidable food quantities ending up as waste - Negative impact of food waste on the environment and related economic costs for households - Possible savings by better planning, food storage, cooking with leftovers, etc. For best practice see http://www.wrap.org.uk/content/household-food-waste-prevention	Legal	MoE	Mid- to long-term	Low	LIFE	Reduced food waste – reduced biodegradable waste	+

PROBLEM 4: 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
PROPOSAL 1: Increase of resources allocated to local authorities							
Provide sufficient human resources to local authorities (technical experts, responsibilities to be determined)	Administrative	MoInterior, RWMAs	Ad-hoc to short term	medium	LIFE; ESF	Improved competence/ technical capacity on local level	+++
Increase involvement of experienced technical assistance services to RWMAs	Administrative	MoInterior, RWMAs	Ad-hoc to short term	medium	ERDF; CF	Improved waste management performance	+++
Provide for capacity building and information exchange for local authorities / regional associations	Information/ Education	MEECC, MoInterior, RWMAs	Mid-term	low	n.a.	Improved knowledge basis	++

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 2: Improve cooperation between different administrative levels and relevant stakeholders							
Involve private sector in all levels of waste management (Administrative)	Administrative	MEECC, MoInterior, RWMA	Short-term	medium	n.a.	Improved services	++
Increase cooperation between MEECC, RWMA and Ministry of Interior via expert knowledge exchange programmes and regular meetings. Establish a joint platform for exchange of experiences and waste management related problems.	Administrative	MEECC, MoInterior, RWMA	Short-term	low	LIFE	Improved coordination of activities of the different administrative levels	+++
Improve the cooperation between the national environmental inspectorate and local authorities involved in supervision of inspection	Administrative	MEECC, MoInterior, RWMA	Short-term	low	n.a.	Improved supervision	
Initiate in-depth consultation with relevant actors from waste management organisations, industry, NGO sector, retailers, etc.	Administrative	MEECC, MoInterior, RWMA	Short term	low	LIFE	Improved transparency and know-how	
PROPOSAL 3: Improvement of the statistical data related to municipal waste management							
Enforce the reporting obligations of RWMA to the MEECC (e.g. introduce penalties/fines for non-compliance and non-timely reporting)	Administrative/ Legal	MEECC	Short- to mid-term	low	n.a.	Overview on municipal waste related data	+++
Harmonise data collection on the national / regional level with the requirements of the EU reporting obligations on targets achieved for municipal waste management (clarification on classifications, etc.)	Administrative	MEECC	Mid-term	Low to medium	ERDF; CF	Improvements in reporting WFD targets	
Develop an open, centralised database on waste statistics in Greece (e.g. composition analysis of waste per region, produced waste quantities, etc.)	Administrative	MEECC	Short-term to mid-term	Low to medium	ERDF; CF	Overview on waste management data	