

Sixth plenary session

15 December 2014

Report on waste management at local and regional level in the Mediterranean region

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(Morocco), was adopted on 15 December 2014 at the 6th ARLEM plenary session, held in Antalya (Turkey).
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1. **Introduction**

The conjunction of industrial development, demographic pressure and consumption trends has led to an increase in the volume of solid municipal waste. In the Mediterranean region the amount of solid waste could rise from 174 million tonnes in 2000 to 396 million tonnes by 2025¹.

In the context of changing consumption patterns, urbanisation and industrial development, the issue of sustainable waste management, which is a major aspect of urban infrastructure, is extremely important because without sustainable waste management there would be risks to the environment, human health, quality of life and the economy. In view of the large influx of inhabitants expected in urban areas -72% of the population of the Mediterranean region will probably be living in urban areas by the year 2025^2 – sustainable urban development is now a priority in the Mediterranean region.

It is therefore becoming necessary to find sustainable and innovative methods of selective waste collection and disposal³, with a view to meeting the challenges of climate change, atmospheric and water pollution, and marine debris, so as to ultimately promote sustainable development in the Mediterranean⁴. Excellent waste management means involving all decision-making levels in a concerted effort because the objectives can only be attained if there is a joint commitment as part of a shared vision. This makes it essential to work with local and regional authorities to reduce waste production and increase waste recovery.

To promote sustainable development in the partner countries, ARLEM has continually emphasised the need for integrated environmental sustainability and appropriate infrastructure. Waste management is considered essential in this context,

The UfM Ministerial Meeting on Environment and Climate Change held in Athens on 13 May 2014 emphasised the need to switch to sustainable forms of consumption and production and to increase resources and enhance energy efficiency so as to avert the negative effects of climate change. This shift towards a green economy would open up opportunities for preserving natural resources, creating jobs, improving quality of life and ensuring a sustainable future. Ministers are thus planning to launch the political reforms needed to accelerate transition to sustainable forms of consumption and production. ARLEM welcomes the meeting and its results, and is proud that has been able to play an active part and contribute to the debate.

¹ Information on the 2005 Plan Bleu, presentation given by Oliver Keserue on 29 March 2012 in Marseille.

² http://www.medcities.org/docs/b8_trumbic_small[11].pdf.

³ Although waste management requires a comprehensive approach, this report looks only at the management of solid waste.

This is also included in the priorities of the Union for the Mediterranean's Horizon 2020 initiative to depollute the Mediterranean Sea by (H2020), as an aspect of capacity-building and mainstreaming of environmental issues.

There have also been positive initiatives from the European Commission, which on 2 July 2014 adopted proposals aimed at transforming Europe into a more circular economy and boosting recycling in the Member States⁵.

2. Current state of play with waste management at local and regional level

Considerable disparities exist between the two sides of the Mediterranean: the Member States of the European Union (EU) and the EU candidate countries must comply with numerous harmonised strategies and rules⁶: it is very likely that by 2020 the majority of Member States will be treating at least 50% of their municipal waste for re-use and recycling, and will be recycling 70% of building or demolition waste, landfilling less than 35% of biodegradable waste, and recycling at least 55% of packaging waste. Even more ambitious targets could be set after reviewing these objectives, with very positive effects on the economy and job creation, as well as climate and environmental factors. By contrast, although there have been major initiatives at regional level, waste reduction in the countries on the southern shore of the Mediterranean is still limited: there is virtually no sorting of waste at source, and households have little incentive to sort their waste. Many waste management strategies have been introduced or are being framed, in patchwork fashion, at national, regional or local level. Most quantitative targets relate to recycling; often information on the methods for achieving these targets is unavailable and deadlines are not all realistic. Currently the recycling rate for municipal waste is 8% in Morocco (2010) and 7% in Algeria (2012), and the targets for these two countries are 20% (by 2020) and 25% (by 2015) respectively⁸. All the Euro-Mediterranean countries must therefore have as a basic goal the adoption of general waste management policies at local and regional level and the introduction of selective collection systems and waste treatment complying with health and environmental standards.

The following observations can be made about the current state of waste management in the Mediterranean region:

• Since the urban population in the Mediterranean region is expected to increase significantly by 2025, a sustainable development strategy is needed that is systematic and fully implemented, and that includes sustainable waste management.

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^{5 &}lt;u>http://europa.eu/rapid/press-release_IP-14-763_en.htm?locale=en.</u>

Thematic strategy on the prevention and recycling of waste, Roadmap to a resource efficient Europe, Seventh Environment Action Programme, the circular economy package, which reviews EU waste-related targets (currently going through the legislative process), etc.

⁷ See Appendix II for a list of institutional and legislative initiatives.

Presentation given by Jacques Dohogne, Association of Cities and Regions for Recycling and Sustainable Resource Management (ACR+), at the sixth SUDEV meeting, available at: http://cor.europa.eu/en/events/Pages/6th-SUDEV-Meeting-.aspx

- A worrying trend has been observed towards unsustainable types of consumption⁹. Thus Tunisia is seeing an annual increase in waste volume of 3%, while in Morocco 5 million tonnes of the 6.5 million tonnes of waste produced is of urban origin, with only 15% disposed of in regulated landfills¹⁰.
- Imports, especially of manufactured products, are causing consumption to increase, which is also bringing about changes in the composition of waste ¹¹. In the southern and eastern Mediterranean, municipal waste contains twice as much organic waste and two times less cardboard waste than European dustbins ¹². The mix of waste is shifting towards large amounts of packaging and advertising flyers ¹³. The amount of plastic waste is also increasing significantly ¹⁴.
- Generally speaking, local and regional authorities do not seem to be adequately equipped to manage waste sustainably. The countries on the southern side of the Mediterranean have insufficient data on trends in the coverage rates of municipal waste collection activities. What is lacking in many cases is a medium- to long-term strategy, availability of financial resources and adequate legislation or monitoring of such legislation, as well as and above all –an awareness of the implications for sustainable development.

3. Issues and outlook in relation to the challenges of sustainable waste management in the Mediterranean region

3.1 **Economic issues**

One of the main issues here is undoubtedly how to ensure economic growth in the Mediterranean countries without exponential growth in the volume of waste and how at the same time to contain the worrying trends in the composition and nature of waste ¹⁵.

12 Ibid.

13 Ibid.

14 Ibid.

Such as the increase in plastic waste, which is essentially due to excessive use of packaging techniques that use plastic. N.B. The main indicator used by the EU here in the next few years will be resource productivity, defined as GDP divided by consumption of raw materials.

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In Europe, for example, twice as much municipal waste seems to be produced than in the Maghreb countries: 500 kg per inhabitant per year compared with 250 kg per inhabitant per year. (Blue Plan, Technical Report: Urban waste and material flow analysis outline in the Mediterranean; State of the Environment and Development in the Mediterranean, MAP Plan Bleu, 2009; and World Urbanization Prospects, 2008 revision, UN Population Division).

Plan Bleu: Technical Report: Urban waste and material flow analysis outline in the Mediterranean. Sylvain Houpin, July 2012, http://planbleu.org/sites/default/files/publications/dechets_urbains_mediterranee.pdf.

¹¹ Ibid.

Improving waste management thus means making better use of resources; this could also create new markets and new types of job by reducing dependence on imports of raw materials¹⁶. In addition, sustainable waste management could boost job creation¹⁷ through the processes of preparing waste for reuse, selective collection, recycling and composting¹⁸.

3.2 **Social issues**

The absence of sustainable waste management can be seen to have a very negative impact on disadvantaged communities in particular, affecting above all living conditions and public health, and being associated with a regrettable lack of civic consciousness. In the majority of countries on the southern and eastern shores of the Mediterranean, selective collection and sorting, and sometimes also recycling, are traditionally carried out in the informal sector. The many jobs of this type are often carried out under wretched conditions because workers tend not to be organised in cooperatives or associations.

3.3 Environmental issues

Given rapid population growth and the fact that landfill is still the commonest form of disposal for urban waste, the absence of sustainable waste management is having a very negative impact on the environment. This effect is compounded by the way changes in consumption have also led to an alarming trend in the type of waste produced, for instance the greater dependence on plastic packaging, which can have an extremely long life after discarding. "In terms of climate change, the production, collection, transport and treatment of waste may increase the concentration of greenhouse gases (GHGs) in the atmosphere." In order to prioritise environmental issues, it is thus necessary to mainstream sustainable waste management in climate change strategy. Finally, the "three Rs" rule reduce, reuse, recycle – should be a guiding principle for reducing the impact of waste on the environment and climate.

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Commission roadmap Review of Waste Policy and Legislation: http://ec.europa.eu/smart-regulation/impact/planned_ia/docs/2014_env_005 waste review en.pdf

In Europe, for example, some 400 000 new jobs could be created if the objective of recycling 70% of waste by the year 2020 is achieved.

The SCOW project: http://www.enpi-info.eu/medportal/news/latest/33258/Low-cost,-low-tech-and-high-quality-bio-waste-management-in-focus-at-CBCMed-project-launching-conference.

^{19 &}lt;a href="http://planbleu.org/sites/default/files/publications/dechets_urbains_mediterranee.pdf">http://planbleu.org/sites/default/files/publications/dechets_urbains_mediterranee.pdf.

4. Promoting sustainable waste management in the Mediterranean region

Objectives

The vision of achieving "a zero-waste society ... through optimising waste prevention and seeing waste as a resource within a circular economy based on a materials cycle" could also become an objective for the Mediterranean region.

In the Mediterranean partner countries, a harmonised and transnational legislative and regulatory approach to waste management on the southern and eastern shores could be useful in the medium term to achieve synergies. This joint framework should reflect regional particularities and be supported by authorities at every level of government in the partner countries. Regulation should include quantitative targets and be backed up by instruments for achieving the targets as well as systematic follow-up.

The capacity and resources of local and regional authorities to collect, dispose of and utilise waste must be improved²¹. It is also essential to be able to count on existing European and other funding²² and on support for decentralised cooperation to encourage the sharing of information, know-how, technology and experience between partner countries. As ARLEM underlined in its report on urban development, the role of local and regional authorities is extremely important here ²³. Specific measures are also called for:

- waste management plans must be implemented at local and regional level taking account of the different types of waste, including plastic, and organic and hazardous waste;
- platforms must be set up to facilitate the exchange of expertise, good practice and techniques;
- the concepts of reuse and cost-efficiency should be boosted and local and regional capacity expanded;
- programmes should be implemented to strengthen capacity with a view to developing formal strategic instruments for local and regional authorities for sustainable waste management based on training programmes, targeted awareness-raising campaigns and informationsharing.

At the ministerial meeting of the UfM in Athens, education and awareness-raising were recognised as prerequisites for meeting environmental challenges and addressing climate change. ARLEM supports

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²⁰ See CoR opinion on A resource-efficient Europe. Rapporteur: Michel Lebrun, CdR 140/2011 fin, 11-12 October 2011.

^{2.1} As proposed in the MED-3R project, ENPI data: http://www.enpi-info.eu/mainmed.php?id_type=1&id=35447&lang_id=450

²² The Horizon 2020 initiative for depollution of the Mediterranean, SWITCH-Med and the Horizon 2020 research and innovation programme should target the Mediterranean partner countries as much as possible.

²³ ARLEM report on urban development. Rapporteur: Khalid Al-Hnaifat. Adopted at the 2nd plenary session of ARLEM, held on 29 January 2011 in Agadir. CdR 62/2011.

the Mediterranean Strategy on Education for Sustainable Development and draws attention to the key role which local and regional authorities have to play here through their proximity to ordinary people.

Measures to be taken

The mid-term review of the Horizon 2020 initiative at the ministerial meeting in Athens and the political support given for the next stage of work should be used to promote further progress with this initiative over the next few years, as well as progress in the solid waste sector. It is therefore necessary to:

- endeavour to achieve a decoupling of waste production from economic growth;
- adopt a uniform approach by focusing on waste reduction at source, preparation for reuse, recycling, (energy) recovery and controlled landfilling in compliance with the waste hierarchy;
- draw up very clear definitions and guidelines so as to achieve a process of repair, reuse, preparation for reuse, and recycling where waste is treated as a resource (circular economy);
- put in place economic instruments for recycling in order to move the waste stream towards a more appropriate waste management approach (e.g. introducing volume-based pricing, extending producer liability);
- encourage local and regional authorities to play a bigger role in follow-up activities and to evaluate the strategies deployed in relation to sustainable waste management²⁴;
- standardise measures and definitions of waste to establish more relevant comparisons that allow better identification of problem regions;
- introduce medium-term and interim quantitative targets and support Mediterranean platforms for exchanging information and expertise in order to support local and regional authorities²⁵:
- consider taking specific measures to address the volume and composition of waste resulting from changes in consumption patterns, which would also involve raising awareness among consumers and the general public;
- facilitate work on adapting the framework of standards and legislation so as to strengthen local and regional authorities' capacity to invest in infrastructure for sustainable waste management²⁶.
- organise and promote the informal sector so as to involve it in waste management policies at local level.

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Ibid.

See also measures proposed by the CoR for Europe in the opinion on *The review of the European Union's Key Waste Targets*. Rapporteur: Michel Lebrun, 4 July 2013.

²⁶ Ibid.

List of contributors:

- Durrës district (Albania)
- Pogradec Municipality (Albania)
- Algiers Wilaya (Algeria)
- Nicosia Municipality (Cyprus)
- Engomi Municipality (Cyprus)
- Giza Governorate (Egypt)
- Provence-Alpes-Côte d'Azur Region (France)
- Haïfa Municipality (Israel)
- Amman Municipality (Jordan)
- Gdynia Municipality (Poland)
- Kebili Governorate (Tunisia)
- Association of Cities and Regions for Recycling and Sustainable Resource Management (ACR+)

Appendix I – Best Practices

This appendix to the draft report on waste management at local and regional level in the Mediterranean region sets out a list of practices developed by local and regional authorities for solid waste management in the Mediterranean region²⁷

1. *Prevention / production / reduction*

❖ Introducing the concept of ''pay-as-you-throw'' – In Argentona Municipality (Spain), this involves a pay-per-bag scheme for refuse and packaging produced by both households and commercial activities²⁸.

2. Collection / transport / disposal

- Promoting the private sector and consolidating the informal sector Under the pilot project for sorting and recycling waste set up by Greater Amman Municipality (Jordan), the private sector is collecting and transporting recyclable waste.
 In Algeria, training has been provided by ACR+ to enable the informal sector to use technology at each stage of the waste management process.
- ❖ Landfill taxes In Israel, landfill taxes have been applied as part of waste management policy.
- **❖** Introducing economic incentives in order to improve separated waste collection (e.g. in Genoa, Italy)²⁹.
- ❖ Public sector setting an example with sorting In Algiers, Algeria, the Ministry of the Environment retrieves paper waste produced by the administration.
- ❖ *Producer responsibility* <u>In Tunisia</u>, the public packaging recovery and reuse system (ECOLEF) requires every producer and every distributor selling bags or packaged products to organise the recovery of their used bags and packaging for reuse.

3. Landfilling

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❖ *Use of transfer stations* – this method is used for example by <u>Amman Municipality</u> (<u>Jordan</u>). The main advantage of transfer stations, where solid waste is compacted before being moved to landfill, is the reduction in transport costs ³⁰.

Since there are many examples of good practice in cities like Barcelona (prevention, selective collection, circular economy approaches), Nice, Milan and others, this appendix mainly highlights measures in the Mediterranean partner countries.

^{28 &}lt;a href="http://www.wasman.eu/media/uploads/deliverables/Model_Community_Programme.pdf">http://www.wasman.eu/media/uploads/deliverables/Model_Community_Programme.pdf

²⁹ http://www.wasman.eu/media/uploads/deliverables/Model_Community_Programme.pdf

http://www.google.be/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CC8QFjAA&url=http%3A%2F%2Fwww.eng-forum.com%2FRecShow%2FAbstracts%2FSolid%2520Waste%2520Management%2520in%2520Amman.ppt&ei=4RJyU9ybHsniygOYmIHABQ&usg=AFQjCNEOE856ejA6peFyQOaueUzcfvw-5w&sig2=vYMi48aDCd1eTOLBPhtghQ&bvm=bv.66330100,d.bGQ

- ❖ *Objective-setting* In Israel, the government is working on a project to discontinue landfilling by 2020 and drastically reduce the five million tonnes of waste generated annually³¹.
- ❖ Avoiding landfilling At the entrance to the Oum Azza dump in Rabat (Morocco), waste is transferred to a sorting system that is the only one of its type in the country. Organic waste is removed for composting, with materials recovered for recycling and the residue then used as fuel in cement factories.
- ❖ Use of insulation when installing new landfill and the importance of detailed analysis of soil and groundwater In the Gaza strip (Palestine), after analysing the soil and water table in areas where a new landfill site was planned, it was decided to place an insulating layer in the landfill to avoid contamination of the water table. This has illustrated the importance of using insulation for landfill.

4. Recycling and reuse

- * Encouraging sorting of waste at source through awareness-raising campaigns An awareness-raising campaign has been introduced by the Jordan Environment Society, and under the pilot waste sorting and recycling project in Greater Amman Municipality (Jordan).
 - In <u>Tunisia</u>, Djerba municipality has introduced a selective collection system (biowaste, packaging waste, residual waste) with a view to commercialisation in the working-class area of Djerba Houmt Souk, accompanied by a door-to-door awareness-raising campaign, waste-sorting manual, fact sheets and a checklist.
- ❖ Encouraging separation of organic from non-organic waste There has been a drive in Cairo (Egypt) to encourage residents to sort their waste. In a pilot project, 600 households were asked to sort waste before collection.
- ❖ Mechanical biological treatment The ArrowBio system is used in Tel Aviv, Israel for recovery, recycling and production of renewable energy, while helping to reduce carbon emissions. Water is used to separate by gravity the organic and inorganic fractions of municipal solid waste, making it possible to recover up to 90% of the resources from waste³².

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^{31 &}lt;a href="http://www.comunitapmimediterraneo.org/news/the-mediterranean-and-the-common-cooperation-in-waste-management/">http://www.comunitapmimediterraneo.org/news/the-mediterranean-and-the-common-cooperation-in-waste-management/

³² http://www.wasman.eu/media/uploads/deliverables/Model Community Programme.pdf

- ❖ Encouraging "greener" hotels and sorting of waste in the hotel industry Because tourism is a mainstay of the economy in certain Mediterranean regions and municipalities, this measure addresses the large amount of waste, especially organic waste, produced by hotels. For example, under the GODEM project the municipalities of Mahdia and Djerba (Tunisia) have succeeded in getting large hotels involved in a sorting campaign³³.
- ❖ Using publicly accessible recycling centres for specific types of waste under the GODEM project, Sousse (Tunisia) was the first municipality in the country to develop a reuse and recycling centre for building and garden waste, intended ultimately to be accessible to the general public ³⁴.
- ❖ Partnerships between waste collection centres and businesses The Blida waste collection centre in <u>Algeria</u> complements voluntary efforts with door-to-door waste collection by companies with which it has a contract, thus maintaining various types of waste reuse.
- 5. Training, participation, awareness-raising and exchanging knowledge and know-how
 - Organisation of workshops and drawing up of a practical handbook with the aim of improving solid waste management are measures that have been taken in Morocco. The handbook was intended to serve as a technical guide for municipal engineers and as a tool that would make technical guidelines and concepts more accessible for local decision-makers³⁵.
 - ❖ Creating networks Several networks exist in Morocco in relation to improving environmental performance (including the Network for Environmental Compliance and Enforcement in the Maghreb³⁶, NECEMA, and the Environmental Protection and Management Programme, PGPE).
 - ❖ Involving the general public and awareness-raising In conjunction with the pilot project for waste sorting and recycling in Greater Amman Municipality (Jordan), and after assessment of waste collection, storage, transport and recycling practices, the municipality has adopted an action plan for implementing a new methodology and system in which ordinary people would be involved. An awareness-raising campaign

Guidelines for Mun

Guidelines for Municipal Solid Waste Management in the Mediterranean Region (EN)

http://www.medcities.org/docs/13%20Disposal%20in%20landfills.pdf - see also:

<a href="http://web.worldbank.org/WBSITE/EXTERNAL/ACCUEILEXTN/PAYSEXTN/MENAINFRENCHEXT/0,.contentMDK:22978963~pagePK:146736~piPK:226340~theSitePK:488784,00.html?cid=EXT_BulletinFR_W_EXT_(FR)

36 http://inece.org/regions/middle-east-north-africa/maghreb-region/

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³³ http://www.usuds.org/documents/10180/0/GODEM+Results/8a40709a-a203-4b9c-93b7-3002a2732753 (EN)

Public presentation about Sousse municipality

was thus launched to promote sorting at source³⁷. The main tools of the campaign include seminars, as well as books and brochures.

- ❖ Zero-waste strategy focused on the process of public participation Capannori Municipality (Italy) was the first municipality in the country to adopt a zero-waste strategy and to undertake a complete overhaul of the waste management service, focusing on sustainable development and the public participation process³⁸.
- * The European Week for Waste Reduction is an excellent way of promoting enduring measures to reduce waste in the EU and to raise awareness of the issue among the general public and relevant players³⁹.

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^{37 &}lt;u>http://www.medcities.org/english/descpractices.cfm?id=66&show=more</u>

 $[\]frac{38}{\text{http://www.wasman.eu/media/uploads/deliverables/Model_Community_Programme.pdf}}$

^{39 &}lt;a href="http://www.wasman.eu/media/uploads/deliverables/Model Community Programme.pdf">http://www.wasman.eu/media/uploads/deliverables/Model Community Programme.pdf

Appendix II – Legislative context

This appendix to the draft report on waste management at local and regional level in the Mediterranean region provides details about the institutional and legislative framework of the waste sector in Algeria, Morocco, Mauritania, Tunisia, Egypt, Jordan, Lebanon and the Palestinian territories⁴⁰.

ALGERIA

LEGISLATIVE FRAMEWORK

- Law No 01-19 of 12.12.2001 on waste management, monitoring and disposal: sets out the basic principles of integrated waste management, from waste generation to disposal.
- Law No 03-10 of 19.7.2003 on protection of the environment and sustainable development: establishes the general principles of environmentally sound management.
- Law No 04-20 of 25.12.2004 on the prevention of major risks and disaster management in the context of sustainable development: clearly sets out the responsibilities of each player in the sphere of risk prevention at the level of industrial hubs and centres.

INSTITUTIONAL FRAMEWORK

- Ministry of Spatial Planning and the Environment (MATE) through its various bodies, including the National Waste Agency (AND), the National School for Environment Training (CNFE) and the 48 provincial environment offices.
- Ministry of the Interior and Local Authorities (MICL), which provides financial support to municipalities.

MOROCCO

LEGAL FRAMEWORK

- Law 28-00 on solid waste management and the provision adopted in 2006 establishing the bylaws and general framework governing the waste sector in Morocco.
- Implementing decrees and Dahirs (royal decrees) promulgating Law 28-00, some of them specifically concerning solid waste streams.
- Morocco has also adopted international and bilateral agreements on waste and the
 environment, including the Montreal Protocol, the Kyoto Protocol, the Protocols on the
 Prevention of Pollution of the Mediterranean Sea, and the Basel and Stockholm conventions
 on persistent organic pollutants (POPs).

⁴⁰ Information collated by Anis Ismail, senior environmental expert, SWEEP-Net (September 2014).

INSTITUTIONAL FRAMEWORK

- Municipalities are responsible for waste management.
- Ministry of the Interior / Directorate-General for Local Authorities / Department of Water Management and Sanitation (MoI/DGCL/DEA): technical and financial support
- Ministry of Energy, Mines, Water and the Environment / Department of the Environment (MEMEE / DE): coordination, planning, oversight and regulation.
- Ministry of Industry, Trade and New Technologies: promotion of waste recycling industries, control and oversight of cross-border waste flows.

MAURITANIA

LEGAL FRAMEWORK

- Judicial decree No 84-208 of 20 September 1984 on the hygiene code.
- Law No 2000-045 of 20 September 1984 on the environmental code.
- Decree No 190-2008 establishing the remit of the Ministry of the Environment and Sustainable Development and the administrative organisation of the department.
- Decree No 157-2012 banning the import, sale and use of plastic bags in Mauritania.

INSTITUTIONAL FRAMEWORK

A Ministry of the Environment was created in 2007. Within this ministry, the Directorate for Environmental Emergencies and Pollution is responsible for:

- promoting and supporting local waste management policies in partnership with local authorities;
- overseeing waste treatment operations, including recycling, recovery, incineration and landfilling;
- encouraging local businesses to take account of the environment in their industrial and business strategies and stimulating the development of clean products and techniques;
- Mauritania's local authorities are very deprived in terms of their technical and human resources;
- their limited financial resources derive almost exclusively from state aid via the regional development fund, which finances their investment and operations, as well as housing taxes, which yield very little revenue;
- there are no specific taxes on waste in Mauritania: the idea of levying a waste tax on water bills was quickly abandoned.

TUNISIA

LEGAL FRAMEWORK

- Law No 1996-41 of 10.6.1996, as amended by Law 2001-14 of 30 January 2001, on waste and oversight of waste management and disposal.
- Law No 92-122 setting up a depollution fund (FODEP).
- Law No 1975-33 of 14 May 1975 promulgating the framework local authority law (local authorities are in charge of waste collection, transport and disposal).
- Law 2002-101 of 17.12.2002 introducing an environmental protection tax.
- Law 2003-80 of 29.12.2003 setting up a Clean Environment and City Aesthetics Fund (revoked in 2012).
- Law No 97-11 of 3 February 1997 promulgating the local tax code, and all the texts amending or supplementing it.
- Law 37-1997 of 2 June 1997 on transport by road of dangerous substances.
- Decree No 2317-2005 of 22.8.2005 setting up a national waste management agency (ANGed) and establishing its remit, administrative and financial organisation, and terms of operation.
- Decree 2001-843 of 14.1.2001 amending Decree No 97-1102 of 2 June 1997 establishing the conditions and procedures for the collection and management of packaging bags and packaging waste.
- Decree 2000-2339 of 10.10.2000 establishing a list of hazardous waste.
- Decree 2005-3395 of 26.12.2005 establishing the conditions and procedures for the collection of used batteries (eco-batteries).
- Decree No 2002-693 of 1.4.2002 on the conditions and procedures for recovery and management of used lubricating oil and oil filters (Ecozit and Eco-filtre), amended and supplemented by Decree 2008-2565 of 7.7.2009.
- Decree 2008-2745 of 28.7.2008 establishing the conditions and procedures for management of healthcare waste.
- Decree No 2007-1866 of 23 July 2007 establishing a list of breaches of the hygiene regulations and fines incurred in areas under local authority jurisdiction.
- Decree No 88-2011 of 24.9.2011 on associations in Tunisia.
- Ministry of the Environment decree of 23.3.2006 establishing a unit for treating hazardous waste and reception, storage and transfer centre.
- Ministry of the Environment decree of 17.1.2007 approving the specifications of nonhazardous waste management.
- Joint Ministry of the Environment and the Ministry of Health decree of 23.7.2012 on the manual of procedures for managing clinical waste.

INSTITUTIONAL FRAMEWORK

Body	Tasks and responsibilities
National level	
Ministry of Equipment and	Framing and implementing national environmental protection policy.
the Environment	Drawing up environmental protection rules.
Ministry of the Interior	Supervisory authority for municipalities and regional councils
	Responsible for monitoring and drawing up municipal budgets, both investment and operating budgets.
National Waste	Involved in drawing up the national waste management strategy and
Management Agency	programmes.
(ANGed)	Implementation of waste projects and investments on behalf of central government.
	Operation of infrastructure and facilities for controlled disposal of non-hazardous waste.
	Operation of infrastructure and facilities specifically for treating
	industrial and special (hazardous) waste.
	Technical assistance to local authorities and industry in the sphere of waste management.
Environmental Protection	Overseeing and ensuring the application of waste management
Agency (ANPE)	regulations.
Ministry of Finance	Developing and introducing financing instruments for waste management and collecting the relevant taxes.
Ministry of Health	Developing and implementing waste management programmes in the healthcare sector.
Minister of Industry	
Ministry of Industry	Developing and implementing programmes for the management of industrial waste.
	Granting permits to operate facilities classified as unsanitary and uncomfortable.
Ministry of Trade	Developing and implementing programmes for the management of waste from commercial activities.
Ministry of Agriculture	Framing rules on protection of the natural environment against
	pollution resulting from waste management.
Local level	
Municipalities	Collection and transport of municipal waste.
	Disposal of waste in local authorities where controlled disposal is not available.
Regional/rural councils	Collection/transport and disposal of waste in rural areas.
Industrial zone maintenance	Collection and transport of non-hazardous waste in industrial zones.
and management group (GMG)	

EGYPT

LEGAL FRAMEWORK

- Egypt does not have a law on solid waste management (SWM).
- Until now, Law No 38/1967 on General Public Cleanliness and Law No 4/1994 on Protection
 of the Environment, and amendments to them, have been the main legislation governing the
 SWM sector.
- The Integrated and Sustainable Waste Management Sector (ISWMS) is to draw up new legislation for waste and then push for its adoption by parliament.
- Law 10/2005 stipulates that all households and business associations must pay fixed waste collection charges by neighbourhood.
- Law 67/2010 on public-private partnerships (PPP Act) will make it easier to develop infrastructure for the solid waste sector.
- Egypt does not have a specific policy and regulatory framework for industrial waste management and hazardous waste.

INSTITUTIONAL FRAMEWORK

The main changes in the institutional framework are as follows:

- The ISWMS will be established as a new sector under the Ministry of State for Environmental Affairs (MSEA).
- The ISWMS will be responsible for developing the new sectoral policy, updating the national SWM strategy and framing new waste management legislation. It will also be tasked with implementing investment programmes in the waste sector and supporting the Governorates and new housing communities.
- The National Solid Waste Management Programme (NSWMP) will support the introduction of new policies, legislation and institutional arrangements for waste management at national and Governorate level, and will serve as an investment pipeline for realising sectoral projects at local and regional levels.
- SWM units will be set up in the Governorates to handle planning infrastructure and services, and to supervise implementation and operations.

JORDAN

LEGAL FRAMEWORK

- Environmental Protection Law No 52 of 2006 and related provisions set out the direct responsibilities of the Ministry of the Environment and establish general environmental protection principles.
- Law 27 of 2005 on Solid Waste Management establishes general requirements in relation to manpower, equipment, surveillance, management of containers, separation of hazardous

- waste, documentation, and final treatment or control of disposal for each party that generates and/or manages solid waste.
- The 2004 directive on the collection of charges for treatment of hazardous waste and disposal
 of such waste, which fixes the charges for transport, treatment and disposal of hazardous
 waste.
- Law 13 of 2011 on municipalities and amendments to it (most recently amendment No 7 in 2012) sets out municipal responsibilities, including for municipal cleaning, and waste collection and disposal.

INSTITUTIONAL FRAMEWORK

The following bodies are involved in waste management:

- Ministry of the Environment
- Ministry of Municipal Affairs
- Greater Amman Municipality
- Ministry of Health
- Ministry of Agriculture
- Ministry of Energy and Mineral Resources

LEBANON

LEGAL FRAMEWORK

- There is no specific legal framework dealing directly with solid waste management (SWM).
- A draft law on integrated solid waste management was approved by the Council of Ministers in 2012 and sent to parliament for final approval under Decree No 8003 of 23.4.2012. It is currently being discussed by parliament.
- A draft law providing for incentives encouraging municipalities to host waste management facilities was drawn up in 2013 and is awaiting approval by the General Committee.
- Law No 444 (August 1988) governs the management of hazardous waste.
- Decree No 8471 of 2012 governs environmental compliance for industry.

INSTITUTIONAL FRAMEWORK

Policy and planning:

- A large number of government bodies are involved: the Ministry of the Environment, Ministry of the Interior and Municipalities, Council for Development and Reconstruction, private office of the Secretary of State for Administrative Reform.
- Remits overlap and task-sharing is opaque.

PALESTINIAN TERRITORIES

LEGAL FRAMEWORK

- Law No 7 on the environment, 1999
- Palestinian environmental evaluation policy, 2000
- Law No/1997 on local authorities in the Palestinian territories
- Law No 20 on public health, 2004
- Law No 1/1998 on promotion of investment
- Basic regulation on Joint Service Councils, 1996, and its updates, the most recent from 2006
- Regulation on the management of clinical waste, 2012

INSTITUTIONAL FRAMEWORK

- Environment Quality Authority
- Ministry of Local Government
- Ministry of Health
- Ministry of Planning and Administrative Development
- Steering Committee for the National Solid Waste Management Strategy
- Local authorities
- Private sector

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