Guidelines for Framework Legislation for Integrated Waste Management

United Nations Environment Programme

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PART 1: GUIDELINES

Introduction

The purpose of these Guidelines is to support countries with clear advice for their efforts to introduce or enhance their waste management legislation. The principles these the Guidelines are based on consider ways that waste can be diverted from release into the environment while providing for economic development that enhances social development to reinforce good environmental management within a supportive governance framework.

The Guidelines are not designed to be an exhaustive list of legislation from around the world. Instead, the Guidelines introduce a legislative framework for integrated waste management in Part 1, illustrated by some relevant examples in Part 2. The examples in Part 2 are chosen from the existing and tested practice (legislation), with the intent to demonstrate how some countries manage their legislative issues, and to provide discussion on aspects of different approaches. It is up to each country to devise legislation that is appropriate to their own situation. A wholesale 'cut and paste' is not recommended since it has been shown that it is doomed to failure.

It is paramount that each country embarking on development of the legislation goes through a process of establishing:

- The reason for development of the legislation (Why do we need it?)
- The purpose of the legislation (What do we want to achieve?)
- The best approach as appropriate for that country (How do we frame it best for OUR situation?)

It is hoped that the examples presented in part 2 might help to avoid the pitfalls that other countries have experienced in their journey towards sustainable waste management and a circular economy.

These legislative framework Guidelines can be used by countries at any stage of development of their legislative programme, from the very initial move from 'dumping to disposal', through to implementing a circular economy.

The Guidelines are presented in a way that mirrors sections commonly found in this type of legislation. The Definition section is in alphabetical order and the other sections have provisions listed in a suggested order of appearance in legislation.

A fuller discussion of the definitions and provisions introduced in Part 1 of the Guidelines is given in Part 2: Technical Reference Material. The material in both parts is set out in an order that mirrors recommended order for potential sections in legislation.

These Guidelines were produced with the input from legal and policy experts from the following countries: Bhutan, Cambodia, Ghana, Honduras, Jamaica, Mauritius, Mongolia, Myanmar, Nepal, St Lucia, Thailand, Uganda and Uruguay.

Objective of the Guidelines

To build capacity in legislative development in the critical area of integrated waste management leading to a circular economy.

Scope

These Guidelines take an integrated approach by including solid, liquid, gaseous and energy wastes.

Target Group

The target group for these Guidelines are those responsible for development of waste legislation, as well as everyone involved in the life cycle of products: politicians and officials in national and local government; non-government organisations; manufacturers and importers; consumers; and the waste industry.

Principles

These Guidelines adopt the following principles, guided by the United Nations Sustainable Development Goals¹, especially Goal 12 (Sustainable Consumption and Production):

- Adopting a **sustainable development** approach including climate change considerations and implementation of cleaner production;
- Taking actions that move society towards a circular economy;
- Operating proactively by using the precautionary principle "where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation"²;
- Embracing **intergenerational equity** so that the Earth is held in trust for future generations while, at the same time, current beneficiaries are entitled to use and benefit from it;
- Supporting **polluter pays**, so that those who cause pollution pay for it;
- Internalising externalities by paying for all the associated environmental costs of polluting activities;
- Encouraging **stakeholder participation** to give those who are affected by actions a voice to influence decisions;

¹<u>https://sustainabledevelopment.un.org/?menu=1300</u>

² http://www.unep.org/Documents.multilingual/Default.asp?DocumentID=78&ArticleID=1163

- Enabling increased **access to information** for people to be better informed about waste management activities in the country;
- Supporting **environmental justice** with respect to the development, implementation, and enforcement of waste management laws; and
- Adopting a life cycle approach to waste management.

For a full listing of the contribution of integrated waste management legislation to the sustainable development goals see Appendix 1.

Definitions

Definitions are a cornerstone in the development of legislation and regulations. Hence, definitions need to be clear, certain and precise. Definitions vary between legislation between countries, and even within a country, depending on the needs of the legislators. For example, the definition of waste is crucial to applicability of proposed legislative coverage. The definition also needs to ensure compliance with relevant international conventions and treaties. Different countries have defined waste in different ways to minimise the problems in the areas they find important. An extensive discussion on waste and other definitions is found in Part 2.

Provisions

Waste Strategy

States should include provisions for mechanisms to manage implementation of their waste strategy. A waste strategy is a policy document designed to foster a move to sustainability in waste management. The salient provisions cover: responsibility and content; consultation; environmental protection; infrastructure requirements; transboundary considerations; the waste management hierarchy; and information.

- 1. Responsibility for strategy preparation rests with national government officials or the minister and the strategy should include details on the waste(s) to be managed, technical requirements and special requirements for particular wastes.
- 2. Consultation during the development of the strategy is vital for developing a coherent and workable strategy. Dialogue needs to include stakeholders in the sectors contributing to waste management, including non-traditional actors (e.g. criminal elements where they are significant contributors).
- 3. Environmental protection should be included encompassing all media as well as climate change considerations.
- 4. The infrastructure needed to deliver on the strategy is an important aspect.
- 5. Transboundary considerations are relevant where countries border one another or are close to one another. This not only includes forests and rivers, but also consideration of economies of scale to process materials (e.g. e-waste) regionally in accordance with relevant international treaties and conventions.

- 6. Waste strategy actions should be considered according to the waste management hierarchy³ preferring waste minimisation processes before disposal options.
- 7. The availability of information on the results of the waste strategy outcomes is important. The use of targets and monitoring progress towards reaching them is encouraged. An appropriate publically searchable database should be part of information availability to provide transparency to the process as well as providing identification of barriers to reaching targets.

Infrastructure Planning

States should undertake infrastructure planning to provide the setting for waste management planning in their areas so that activities that produce harmful environmental effects and the effects of major accidents are separated from the zones used for residential and recreational purposes.

Waste Management Plans

States should encourage local government to develop waste management plans to provide national-local continuity and act as a blueprint to achieve waste management aims in a structured way. The plans should be arrived at through a consultative process and provide an assessment of the current situation as well as planning for future needs and actions based on consideration of the waste management hierarchy. It is important to have timely, relevant plans detailing responsibilities and inbuilt monitoring and evaluation processes.

Waste Management Hierarchy

The waste management hierarchy should be included in legislation to give a common language for a state or group of states. A waste management hierarchy is a prioritising mechanism to encourage business to move their management from products to cleaner production measures. There is no single hierarchy but the UNEP hierarchy⁴ of prevention, reduction, recycling, recovery and disposal is a suitable default one. The guiding philosophy for waste management hierarchies is that those actions at the top are preferable to those lower down. Adoption of cleaner production principles by industry can assist achievement of waste minimisation.

States should encourage business to adopt best available technologies best suited to their situation, to reduce or effectively manage waste materials. For developing states these technologies are often low cost and low maintenance.

Prevention

Prevention is the most desirable waste option since, if waste is not generated it does not need to be managed.

³http://www.unep.org/ietc/Portals/136/Publications/Waste%20Management/UNEP%20NWMS%20English .pdf p18

⁴<u>http://www.unep.org/ietc/Portals/136/Publications/Waste%20Management/UNEP%20NWMS%20English</u> .pdf p18

Reduction

Business should be encouraged to adopt cleaner production practices to reduce waste. Waste reduction is the second most desirable option since this results in less waste needing to be managed.

Reuse

Business should be encouraged to adopt durability in the design phase of products to increase reuse of those products. Consumption-based societies rely on a high throughput of products to maintain the standard of living resulting in higher waste quantities.

Recycling

States should promote recycling of products whereby old products are remanufactured to produce new ones. State procurement can provide a significant lever to encourage the recycling industry. The saving in material and energy resources through recycling can be considerable.

Recovery

States should promote the recovery of materials by separation before disposal operations. Energy recovery comes under this category whereby materials are combusted, pyrolysed or gasified. An alternative to combustion is anaerobic digestion to produce methane which can be used as an energy source.

Treatment

States should promote treatment of waste before disposal. Treatment includes any physical, biological or chemical process to change a waste's volume or character so the waste can be disposed of with no or reduced environmental effects, but does not include dilution of waste.

Disposal

States should promote environmentally sound disposal for unwanted materials when all other waste minimisation options are exhausted. The object of disposal is to remove all unwanted materials from the circular economy for a final, safe storage or release into the environment.

All three media (solid, liquid and gas) should be included in disposal activities which ensure that the transfer of pollutants from one medium to another cannot be a claim for good practice.

Environmentally sound disposal should be priced since a pricing signal is necessary to incentivise waste minimisation by the waste generator. A further measure to encourage environmentally sound disposal is to licence facilities and operators.

Extended Producer Responsibility & Product Stewardship

States should promote extended producer responsibility and/or product stewardship programmes to recognise that someone or group has responsibility for waste and its management. These sorts of programmes provide an opportunity to use multiple tools to best manage products at the end of their lives.

Use of Economic Measures

States should use a variety of economic measures in waste management to improve the efficiency of the system and internalise the costs so that they are borne by those who create the waste, and therefore move towards a sustainable waste management system.

Typical economic measures provide for disposal levies and funding mechanisms which work synchronously to deter waste production and fund waste minimisation programmes.

Environmental Aspects of Waste

States should strive to reduce the environmental burden of business activities. Legislation covering the reduction of adverse environmental effects caused by waste is commonly included in more broad-based legislation, but if not, can be included in specialised waste legislation.

Performance of environmental impact assessments for proposed activities is critical to enable decision-makers in local or national government to assess the potential environmental effects and assist planning for environmental emergencies and disasters, particularly where hazardous substances are involved.

States should be particularly vigilant in managing transboundary waste to eliminate dumping of waste, which often ends up in developing countries producing long term environmental and economic costs on those countries.

Responsibilities in Waste Management

States should ensure that they encourage mobilisation of abilities to address challenges, recognise opportunities and reap the benefits of environmentally sound waste management. Critical to improving waste management capacity is cooperation between national and local government and recognition that the private sector is a key actor.

Auditing and Reporting

States should set up a comprehensive auditing and reporting system to evaluate the effectiveness of programmes and controls and provide data to enable decision-makers to make better choices. Ongoing monitoring of activities provides for timely data which can translate into effective measures to improve the efficiency of the system.

Measures for Compliance and Enforcement

States should set up comprehensive compliance and enforcement measures to ensure that integrated waste management systems are effective. Compliance includes licensing of operators and premises to ensure that best practices are adopted. Enforcement results when compliance measures fail and can include abatement notices, court orders, fines and remediation costs.

PART 2: TECHNICAL REFERENCE MATERIAL

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