Identifying Feasible Strategies for the Environmentally Sound Disposal of Spent Lighting Products in the Caribbean

BASEL CONVENTION

United Na Environment





Saint Kitts and Nevis, Saint Lucia, Suriname, Trinidad and Tobago

Background

- The Revised Draft Practical Manuals for the Promotion of the Environmentally Sound Management (ESM) of Wastes and Fact Sheets were developed by the Expert Working Group on ESM for the Basel Convention (BC) and presented at the 13th meeting of the Conference of the Parties (COP) to the BC.
- The work programme for 2017/2018 requested that the Expert Working Group test and verify the draft manuals and fact sheets, and it was agreed that this would be done through pilot projects conducted by Basel Convention Coordinating and Regional Centres (BCCCs and BCRCs).
- As part of previous work done in the Caribbean, inventories of mercury releases were conducted in Saint Kitts and Nevis, Saint Lucia, Suriname and Trinidad and Tobago which demonstrated a need to improve capacities for ESM of mercury wastes.
- The BCRC-Caribbean, in close collaboration with the Secretariat of the BC and the United Nations Environment Programme, developed a project to assess the national capacities for ESM of spent lighting products containing mercury using four (4) manuals and the "Guidance to Assist Parties in Developing Efficient Strategies for Achieving the Prevention and Minimisation of the Generation of Hazardous and Other Wastes and Their Disposal" Draft Document that was adopted at the 13th COP.

Project Objectives

- To identify and evaluate current disposal and management practices for spent lighting products containing mercury using the Revised Draft Practical Manuals for the Promotion of the Environmentally Sound Management of Wastes developed by the Expert Working Group on ESM for the Basel Convention;
- To assesses the applicability of the revised draft practical manuals to the national waste management frameworks of the project countries with the aim of identifying gaps in the guidelines and making recommendations on how the manuals could be improved.

Manuals to be Tested:

- General Policies and Legislation
- Permits, Licenses or Authorizations
- Certification Schemes
- Waste Prevention

The Manuals Aim to:

• Provide guidance to stakeholders responsible for ensuring the ESM of wastes at a national level through example approaches to developing effective regulatory and institutional infrastructure, procedures and requirements for waste handling facilities, standardization and certification for generators and disposers, and waste prevention principles and strategies.

National Assessments

- Lighting products containing mercury are not produced in any of the four (4) project countries but are imported for use in households, government offices, commercial entities and other buildings, and for street and outdoor lighting purposes.
- Primary disposal mechanisms for spent items include burial at landfills or informal dumping. Some private disposers in Trinidad and Tobago have the capacity to crush bulbs with bulb crushing equipment and treat them through stabilisation and solidification techniques, however, only a small fraction of spent bulbs from large generators are handled by these companies. No private or public disposers capable of handling spent mercury added bulbs were identified in the other participating countries during the timeline for the project.
- There are limited policies and legislation to give effect to the Basel Convention, to ensure the ESM of mercury wastes, and to support the implementation of polluter-pay programmes or extended producer responsibility.
- Agencies responsible for national waste management do not have adequate financial, technical and human resources to discharge responsibilities.
- There is a general lack of public awareness on the risks associated with mercury containing products and environmentally sound procedures for handling these items.

Gaps in the Manuals

- Little considerations were made to the applicability of the practical arrangements for implementing ESM in SIDS which may not readily possess the infrastructure, technology or resources required to ensure ESM.
- Recommendations provided for small and medium sized enterprises assume that all are operating at the same level of human and financial resource capacity.
- There are no practical considerations for managing the informal waste sector which poses numerous socio-economic challenges in SIDS.
- There is no guidance for assessing or estimating the costs of implementing motivation strategies for implementing ESM.
- The Manuals assume that an adequate data management framework to adopt the technological and other measures needed to ensure the ESM of hazardous wastes are in place.
- Audiences in the private sector and the general public may find it difficult to understand the format and language of the Manuals.

Recommendations for Improving the Manuals

- Strategies and criteria for implementing ESM specific to developing countries and countries with economies in transition should be developed.
- Links to case studies or examples of existing practices/policies/instruments in place for ESM specific to SIDS could be provided to enhance understanding of the broad guidelines stated in the Manuals.
- A further categorisation according to the scale of operations for the different stakeholders would assist in the development of appropriate strategies.
- The Waste Prevention Manual should be considered together with the "Guidance to assist Parties in developing efficient strategies for achieving the prevention and minimisation of the generation of hazardous and other wastes and their disposal".
- The structural format and content of the *Certification Schemes* Manual could be applied to the other Manuals to aid in improving the understanding by all types of stakeholders.









