



Introduction to IETC's waste management activities and their relevance to implementation of Basel Convention

This document is prepared for the information of participants in the eighth meeting of the Open-ended Working Group of the Basel Convention, Geneva, Switzerland, from 25 to 28 September 2012.

I. Introduction

1. Since 1992 the UNEP International Environmental Technology Centre (IETC), in Osaka, Japan, has promoted the application of environmentally sound technologies in order to help developing countries and countries in transition to achieve sustainable development. IETC is a branch of UNEP's Division of Technology, Industry and Economics and its programme is currently focused on waste management including through capacity-building, demonstration projects, guidance materials and research and policy analysis. Further information on the work of IETC can be found at www.unep.org/ietc.

2. The present document highlights some of IETC's main waste management activities and their contribution to the implementation of the Basel Convention. The highlighted activities relate to the Global Partnership on Waste Management (GPWM), national waste management strategies (NWMS), private sector engagement and electrical and electronic waste (e-waste).

II. The Global Partnership on Waste Management

3. The Global Partnership on Waste Management (GPWM) is an open-ended, voluntary and collaborative relationship between various international stakeholders, in which all participants agree to work together to coordinate activities on waste management in a systematic way. Launched in November 2010, the GPWM aims to enhance international cooperation among stakeholders, identify and fill information gaps, share information and strengthen awareness, political will, and capacity to promote resource conservation and resource efficiency.

4. The GPWM provides a coordinating forum for international organizations, partnerships, Governments, private sector, and other non-governmental entities, to build synergies and to increase cooperation among stakeholders. It thereby assists in avoiding duplication of efforts, in providing coherent international policy and technical advice, in complementing the already existing work, and in improving the efficiency of resources and efforts required to address the challenging issue of waste management.

5. The secretariat of the GPWM is hosted by UNEP's International Environmental Technology Centre (IETC) in Osaka, Japan. UNEP, as the voice for the environment in the United Nations System, has been requested to address waste management issues as reflected in UNEP's Governing Council decisions 24/5 and 25/8, calling for a holistic and integrated approach on waste management. In 2011, UNEP's Governing Council noted the launch of the GPWM in its decision 26/3, affirming the need for concerted and coordinated efforts on waste management.

6. The main elements of the GPWM organizational structure are as follows:
- (a) Sponsored focal areas: There are currently six sponsored focal areas, as set out below. Lead participants develop work plans in consultation with other participants of the respective sponsored focal area. Activities are defined, coordinated and implemented through a working group.
 - (i) Waste and climate change (led by the International Solid Waste Association—ISWA)
 - (ii) Waste agricultural biomass (led by IETC)
 - (iii) Integrated Solid Waste Management - ISWM (led by IETC)
 - (iv) Electronic waste (led by the United Nations Industrial Development Organization – UNIDO)
 - (v) Marine litter (led by UNEP’s Division of Environmental Policy Implementation – DEPI)
 - (vi) Waste minimization (led by UNEP’s Sustainable Consumption and Production branch – SCP)
 - (b) Partnership: The GPWM provides a coordinating forum by: gathering and sharing information on existing activities in waste management; supporting exchange of information and networking among participants; and facilitating the implementation of activities of the sponsored focal area working groups.
 - (c) Steering committee: The steering committee is the governing body of the GPWM and is open to core GPWM participants to review and provide guidance on the overall work plan of the GPWM and the progress made.

7. The GPWM and the Basel Convention share the objective of minimizing adverse effects of wastes and chemicals in products issued from hazardous waste on the environment and human health. Chemicals in hazardous and other wastes are being tackled by several sponsored focal areas under the GPWM. For the e-waste focal area, for example, more sustainable product design and the environmentally sound management of e-waste is an important topic, whereas promotion of cleaner production is part of the work plan for the waste minimization focal area. Similarly, preventing marine litter from land-based sources and the adverse effects endocrine disruptors contained in plastics can have on ecosystems and biodiversity is a topic being tackled by the marine litter focal area. The focal area on ISWM, for its part, also addresses, among others, the significance of hazardous chemicals as part of the overall mix of wastes to be dealt with by municipalities.

8. The GPWM as a coordination and information sharing mechanism also shares a similar approach with Basel Convention in that it is open to all relevant stakeholders and aims to enhance synergies and cooperation between the activities of Governments, international institutions, multilateral organization secretariats, development agencies, the private sector and civil society at the national, regional and global levels in pursuit of the sound management of chemicals, waste and hazardous waste.

III. Guidelines for National Waste Management Strategies

9. IETC, in collaboration with UNITAR, is working on a new initiative to develop guidelines for national waste management strategies. It responds to UNEP Governing Council decisions 25/8 and 26/3 calling on IETC to support national implementation of integrated waste management and to the Rio+20 call for development of comprehensive national waste management strategies (paragraph 218 of the outcome document, “The Future We Want”). These objectives are relevant for Basel’s objectives that call for the establishment of international action plans, cooperation and regulations to control the movement of hazardous waste between countries, since waste management strategies can help preventing flows of potentially toxic hazardous waste.

10. The strategy guidelines are intended to foster a holistic and overarching approach to national waste management planning. They will build upon and cross reference the many valuable materials that have previously been developed to provide technical support for management of

individual waste streams or parts of the waste life-cycle, and to support planning in related fields such as chemicals management. The strategy guidelines will also take account of recent policy emphases relating, for example, to “green economy” objectives, linkages between waste management and climate change, and the potential for greater resource recovery from waste.

11. In order to ensure the quality and usefulness of the guidelines and their complementarities in relation to previous guidance materials, the drafts of the guidelines, will be made available via IETC networks for all interested stakeholders to review. In addition, IETC is establishing a core "reference group" to engage more closely in the process. If resources allow, a workshop will be held in the fourth quarter of 2012 for the group to assist in finalizing the guidelines and preparing for their implementation.

IV. Public-private sector cooperation

12. There is an increasing policy support for waste prevention and resource recovery options that protect the environment and human health while generating green business opportunities and green jobs. In October 2011, the 10th meeting of the Conference of the Parties to the Basel Convention expressed high-level support for this approach through the Cartagena Declaration on Prevention, Minimization and Recovery of Hazardous Wastes and Other Wastes. The outcome document “The Future We Want” (see above) of the Rio+20 Summit in June 2012 calls for a life-cycle approach to chemicals and waste management. Resource and energy recovery from waste may become a model area for a Green Economy, which is recognized in the Rio+20 outcome document as a tool to promote sustainable development.

13. Recognizing the importance of private sector involvement in promoting this approach, IETC is engaging with the different stakeholder groups to promote public-private cooperation. In particular, IETC will shortly initiate the development of a set of guidelines for private sector participation in waste management through a multi-stakeholder process. Taking into account existing arrangements and experiences, including under the Basel Convention, the guidelines will be designed to assist stakeholders in establishing successful private-public cooperation in order to explore and promote opportunities arising from the relevant operations. Given the close link with work carried out within the framework of the Basel Convention, IETC looks forward to engaging with the Convention in this effort.

V. E-waste activities

14. One of the waste streams that IETC is addressing and which has attracted considerable international attention in recent years is e-waste. Electronic waste has been recognized several times in the Basel Convention context, since it contains many hazardous substances including heavy metals such as mercury and lead, and endocrine disrupting substances such as brominated flame retardants. In addition, e-waste includes materials of strategic value, for example indium, palladium or metals such as gold, copper and silver that should be recovered and recycled, thereby serving as a valuable source of secondary raw materials, reducing pressure on scarce natural resources and minimizing the overall environmental footprint.

15. IETC has been working on e-waste since 2006 and has developed guidelines on e-waste inventories, e-waste management, and take-back systems. It has also provided training to governments and other stakeholders, including the private sector. International training workshops were held in Osaka in 2009 and 2010 to provide training on e-waste inventory and e-waste management. IETC has also implemented a project to build capacity of national and local governments in Cambodia while developing an e-waste management plan for Phnom Penh and supporting actively all the activities organized by partners and other international, regional and

national institutions.

16. Recently, a Multi-Stakeholder Policy Dialogue on “Addressing e-waste challenges and opportunities through public-private sector cooperation” was organized by UNEP-IETC from 18 to 20 July 2012 in Osaka, Japan. The dialogue was attended by approximately 70 participants from governments, the private sector, intergovernmental organizations, academia and public interest groups. The outcome document is entitled “The Future WEEE Need: A Call for Action”. It highlights the complementary roles of the different stakeholder groups and encourages enhanced cooperation to address the e-waste management challenge is reproduced in the appendix to the present document.

17. Upcoming IETC activities on e-waste include :

- (a) Follow-up on “The Future WEEE Need: A Call for Action” and design and undertake the activities with other partners
- (b) Publication of e-waste manual, volume 3, on “Take-back systems for WEEE/E-waste management”
- (c) Pilot project and capacity building on take-back system in Malaysia
- (d) ISWM focal area session during the biennium conference of the GPWM in November 2012.
- (e) Launching of publication “Sustainability Assessment of Technologies (SAT) Manual” in November/December 2012 during planned Eco-town workshop.
- (f) E-learning modules for webinar by IETC during 2013-2014.



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Multi-Stakeholder Policy Dialogue: Addressing E-waste Challenges and Opportunities through Public-Private Sector Cooperation

The Future WEEE Need: A Call for Action

OSAKA, JAPAN, 20 JULY 2012

Introduction

The Multi-Stakeholder Dialogue on Addressing E-Waste Challenges and Opportunities through Public-Private Sector Cooperation, held in Osaka, Japan, from 18 to 20 July 2012, considered ways to support, strengthen and improve mechanisms of effective cooperation between all sectors to promote environmentally sound management (ESM) of used and end-of-life electrical and electronic equipment (EEE) to and minimize environmental and human health impacts and hazards arising from waste EEE (WEEE) - commonly known as e-waste - while taking advantage of the opportunities it presents. On this basis, and bearing in mind the commitment expressed in the Outcome Document of the Rio+20 Summit to promote a life-cycle approach - including reduction, reuse and recycling of waste (3Rs), increasing energy recovery from waste, and use as a resource where possible¹; as well as the support expressed for meaningful cooperation between all Major Groups in promoting sustainable development², - the present Call for Action is intended to further promote, enhance and upgrade public-private cooperation in WEEE management.

Vision

Used in a responsible manner, EEE supports social and economic growth, knowledge and development. At the end of its useful life, EEE can create risks to human health and the environment if not properly managed; it can also create new opportunities if properly managed. Against this background, environmentally and socially sound management of EEE through to its end-of-life stages should become a flagship activity for green economy development, integrated into the entire life-cycle of responsible materials utilization, through promoting cooperative action between governments, the private sector, international organizations, academia, and civil society. The vision of the participants in this Policy Dialogue is that ESM of end-of-life EEE and WEEE, an exponentially growing global waste stream containing valuable and recoverable resources, will become an exemplar of private and public sector synergies to create sustainable and efficient use of resources in a global context.

¹ Paragraph 218 of the Outcome Document

² Paragraph 43 of the Outcome Document

Call for Action

Taking into account the Basel Convention, the Stockholm Convention, and the Vienna Workshop on Hazardous Substances within the Life-Cycle of Electrical and Electronic Products in 2011, relevant actions should cover the entire life-cycle of EEE (upstream, midstream and downstream). The participants in the Dialogue believe that government authorities, the private sector, intergovernmental organizations, academia and non-governmental organizations must complement each other, each fulfilling their specific roles according to their responsibilities, capabilities and capacities.

The participants call upon these entities to undertake their respective roles in a spirit of cooperation, including promotion of the actions set out below.

Government authorities

A core role of government authorities at all levels (global, regional, national and local) is to develop and foster the establishment, implementation and enforcement of an integrated system for the management of EEE throughout its life-cycle. This may include:

- Regulatory measures, including:
 - Local and national legislation with clear definitions, distinguishing between what is waste and what is not, and including hazardous properties and potential as secondary resources / raw materials or feedstock
 - Definition of roles and responsibilities of stakeholders
 - Collection and recycling targets
 - Measures to ensure security and transparency of WEEE flows
 - Registration and licensing of WEEE recyclers
 - Environmental Health and Safety (EHS) protection measures for the formal and informal sectors
 - Progressive landfill and incineration bans
 - Application of the polluter pays principle, the precautionary principle, and the integrated life-cycle approach while respecting the hierarchy of waste
- Extended Producer Responsibility (EPR)
- Design for end-of-life management
- Use of economic instruments, including:
 - Tax incentives and disincentives
 - Disincentives for non-compliance with regulations
 - Grants
 - Market awareness, including instruments to address market failures and market barriers
 - Soft loans for investment in plants and equipment
- Development and implementation of incentives for voluntary initiatives and Public-Private Partnerships (PPPs); strategies and guidelines for building such partnerships
- Promotion and use of third-party EHS certification standards as a means of identifying an environmentally sound facility
- Minimization of barriers to trade, within regions and internationally, taking cognizance of transboundary movement requirements of the Basel Convention and other applicable treaties
- Development and promotion of ESM guidelines for collection, transportation, recycling, and safe final disposal
- Collecting and making available reliable data
- Promotion of research and development
- Maximizing/optimizing the use of resources
- Conclusion and implementation of voluntary agreements

- Establishment of financial mechanisms
- Provision of incentives for the design of end-of-life management by promoting sustainable government procurement strategies
- Implementation and enforcement of laws and regulations, including through
 - Networking and cooperation among and between international, regional and national agencies
 - Evidence-based approaches to support compliance
 - Professional intelligence-led enforcement
 - Training programmes
 - Encouraging the use of non-regulatory tools, e.g. certification schemes
 - Transparent compliance and enforcement regimes with regular reporting systems
- Establishment of effective and meaningful consultation mechanisms with key stakeholders, e.g. the private sector (manufacturers, designers, recyclers, traders, waste managers), workers, communities affected by WEEE, NGOs, scientific organizations, and academia
- Adoption of measures to integrate the informal sector, including opportunities for formalization; and mechanisms for technical and financial assistance to help the informal sector become part of the formal ESM chain
- Cooperation with other stakeholders to promote and enhance effective, efficient and easily accessible collection, transportation and logistical systems
- Raising public awareness, including through campaigns and education
- Development of opportunities for technology transfer and technical assistance (enhancing industry support for knowledge-sharing, capacity-building and technology transfer)

Private sector

Private sector operators such as producers³, original equipment manufacturers (OEMs), EEE importers and exporters, waste managers, refurbishers, and recyclers involved in the management of EEE at various stages of its life-cycle, should undertake the following:

- Invest in infrastructure for collection, refurbishment, processing and material recovery of used and end-of-life EEE and WEEE
- Conduct Environmental Impact and Risk Assessments and comply with all applicable legal requirements
- Consign exported WEEE to third-party certified environmentally sound facilities as appropriate, while complying with the Basel Convention provisions on transboundary movements, and taking into account the proximity principle
- Recognize and use third-party certified, auditable EHS standards
- Strive to integrate the informal sector and subcontractors into business models along the supply chain
- Make available information to workers, communities and the public about the types of treatment or processes used and measures taken to protect worker safety, human health and the environment
- Undertake capacity building, knowledge and technology transfer
- Participate actively in the development of legislative frameworks

Producers/OEMs in particular should undertake the following:

- Implement effective voluntary take-back programmes in all countries and regions where mandatory programmes do not exist

³ “Producer” means the international and local manufacturer or importer of record of new and used EEE to be placed on the market at first invoice by sale.

- Implement the principle of integrated life-cycle at the design stage of the EEE
- Integrate designs for repair, disassembly and recycling at the product design stage
- Support, advocate and implement EPR and take-back schemes
- Support the principle of collective responsibility for orphan and legacy EEE and WEEE
- Invest in research, technology and innovation that can reduce and substitute the use of hazardous substances, increase the useful life of EEE, simplify dismantling, and allow increased material recovery and recycling
- Provide sufficient data in order to create transparency about real end-of-life flows
- Use recycling facilities that are audited to a third-party EHS certification standard

Waste managers and recyclers in particular should undertake the following:

- Comply with the principles and standards of ESM of WEEE
- Strive for high quality treatment and cooperation along the recycling chain
- Maintain adequate record keeping to verify ESM throughout the recycling chain
- Ensure environmentally sound disposal of non-recyclable wastes
- Operate environmentally sound facilities, meeting the same standards in developed countries, countries with economies in transition, and developing countries
- Establish and implement EHS monitoring systems for facilities, based on risk assessment
- Work with governments to develop model licenses for collectors and recyclers, based on operational best practices for facilities

International Facilitation

International organizations, bilateral and multilateral agencies, scientific organizations, academia, non-governmental organizations, non-profit organizations, and other public interest and civil society groups have the important role of facilitating public-private cooperation on the management of end-of-life EEE and WEEE, especially in countries with economies in transition and developing countries. They should undertake the following:

International organizations and bilateral/multilateral agencies

- Assist governments in the implementation of regional and global legal rules, consistent with and complimentary to relevant international conventions, including multilateral environmental agreements (MEAs) on wastes and chemicals
- Develop guidelines and guidance materials
- Facilitate the development of international standards, and recognize third-party certification in accordance with the requirements of the decisions of the Basel Convention, the Stockholm Convention, and other related international conventions and initiatives, including MEAs on wastes and chemicals
- Facilitate and promote the use of PPPs

Scientific organizations and academia

- Provide a scientific basis for policy-making at all levels, as well as Best Available Technologies and Best Environmental Practices (BAT/BEP) for used and end-of life EEE and WEEE management
- Develop programmes to reduce, eliminate and substitute the use of hazardous substances, and promote innovation and green design
- Training and education
- Awareness raising

- Knowledge and data dissemination
- Carry out baseline evaluation and modeling for prediction of future scenarios
- Develop pilot programmes on new technologies and materials
- Develop scientific capacities through education, as well as North-South and South-South cooperation
- Monitor the performance of WEEE management systems

Civil society organizations and public interest groups

Civil society can contribute in multiple ways and levels by:

- Initiating and engaging in grass root activities, including projects at the community level, with the informal sector, WEEE producers and recyclers
- Participating in consultations with governments, the private sector, and public interest stakeholders in decision-making processes, development of guidelines, and appropriate standards of operation
- Monitoring activities of governments and the private sector
- Advocating and raising awareness on the health, environment and socio-economic impacts of WEEE and promoting sustainable solutions
- Mediating and facilitating conflict resolution between communities affected by WEEE management, decision makers, and the private sector
- Informing consumers about the purchase of EEE products that are designed for end-of-life management
- Promoting sustainable production and consumption of EEE products
- Disseminating information on sustainable EEE products to key stakeholders