
**Open-ended Working Group of the Basel Convention
on the Control of Transboundary Movements of
Hazardous Wastes and Their Disposal**
Sixth session
Geneva, 3–7 September 2007
Item 10 (c) of the provisional agenda*
Strategic partnerships: E-waste

Implementation of decision VIII/2 on creating innovative solutions through the Basel Convention for the environmentally sound management of electrical and electronic wastes

Note by the Secretariat

I. Introduction

1. Under the Basel Convention, electrical and electronic wastes (e-wastes) are classified under Annex VIII entries A1180, A1190, A1150 and A2010 and also under Annex IX as B1110. E-wastes are characterized as hazardous wastes under the Convention when they contain components such as accumulators and other batteries, mercury switches, glass from cathode-ray tubes and other activated glass, PCB-containing capacitors or when contaminated with cadmium, mercury, lead or PCBs. Also, precious-metal ash from the incineration of printed circuit boards, LCD panels and glass waste from cathode-ray tubes and other activated glasses are characterized as hazardous wastes. To address the environmental issues related to the increasing transboundary movements of these wastes, and to ensure that their storage, transport, treatment, reuse, recycling, recovery and disposal is conducted in an environmentally sound manner, a proactive approach is essential. The plastics associated with e-wastes may also be covered, under Annex II of the Basel Convention.

2. The theme for the eighth meeting of the Conference of the Parties to the Basel Convention, held from 27 November to 1 December 2006, was “Creating Innovative Solutions Through the Basel Convention for the Environmentally Sound Management of Electronic Waste”. The high-level segment featured an in-depth discussion on the theme during a one-day World Forum on E-wastes. Ministers, corporate officials, civil-society representatives and other participants explored solutions for advancing the objectives of ensuring the environmentally sound management of e-waste. Subsequently, the Nairobi Declaration on the Environmentally Sound Management of Electrical and Electronic Waste and decision VIII/2 were adopted by the Conference of the Parties at its eighth meeting (see UNEP/CHW.8/16*).

* UNEP/CHW/OEWG/6/1/Rev.1.

3. In paragraph 3 of decision VIII/2, the Conference of the Parties mandated the Open-ended Working Group, beginning at its sixth meeting, to develop a work plan for consideration by the Conference of the Parties at its ninth meeting on the environmentally sound management of e-waste focusing on the needs of developing countries and countries with economies in transition, which should include:

(a) The preparation of technical guidelines for the environmentally sound management of e-waste through the involvement of all stakeholders;

(b) Monitoring of developments in the environmentally sound management of e-waste.

4. In the following paragraph of the decision, the Conference of the Parties encouraged Parties to develop further strategic partnerships targeting e-waste.

5. In paragraphs 10–13 of decision VIII/2, the Conference of the Parties also agreed to review progress at its next meeting to guide future work for the environmentally sound management of e-waste; requested the Secretariat to initiate work on relevant activities above for consideration by the Open-ended Working Group at its sixth session; and also requested the Secretariat to report on progress at the ninth meeting of the Conference of the Parties.

6. The present document is intended to provide information to Parties on past, ongoing and future activities on e-waste under the Convention.

II. Implementation

A. Activities implemented since the sixth meeting of the Conference of the Parties

1. Mobile Phone Partnership Initiative (MPPI)

7. The Mobile Phone Partnership Initiative was launched in 2002, during the sixth meeting of the Conference of the Parties to the Basel Convention. At the sixth meeting, the Initiative constituted the establishment a sustainable public-private partnership for the environmentally sound management of used and end-of-life mobile phones to the benefit of the partners and the environment. Since the start of the Initiative, the Mobile Phone Working Group has successfully finalized five guidelines that address the refurbishment of used mobile phones; the collection of used mobile phones; the material recovery and recycling of end-of-life mobile phones; raising awareness on design considerations; and on the transboundary movement of collected mobile phones. These guidelines serve as vital information to recovery and refurbishment operations, governments, manufacturers and telecom operators. In addition to the five guidelines, an overall guidance document on environmentally sound management of used and end-of-life mobile phones was finalized in 2006 and was adopted provisionally by the Conference of the Parties at its eighth meeting. In that regard, a Chairman's paper prepared by the Chair of MPPI Project Group 2.1 that highlights some issues to be considered by the Parties is reproduced in document UNEP/CHW/OEWG/6/19.

2. Basel Convention partnership on the environmentally sound management of e-waste in the Asia-Pacific region

8. The Basel Convention Partnership on the Environmentally Sound Management of Electrical and Electronic Wastes for the Asia-Pacific Region was officially launched in Tokyo on 25 November 2005. The following Asian countries have supported and are participating in the project activities: Cambodia, China, India, Indonesia, Malaysia, the Philippines, Singapore, Sri Lanka, Thailand and Viet Nam. In addition, the South Pacific Regional Environment Programme has prepared a regional proposal for the Pacific island countries. Activities involving detailed inventories of e-waste in Cambodia, Malaysia, Thailand and Viet Nam are also being carried out. Two sets of technical guidelines were completed under the leadership of the Basel Convention Regional Centre for South East Asia on the methodology of e-waste inventory and environmentally sound management and "3R" (reduce, reuses, recycle) of end-of-life e-products. Annex I to the present note shows the status of implementation of the activities as of June 2007.

9. On 1 November 2006 a memorandum of understanding for the implementation of the Pilot Project on Transboundary Movement of End-of-Life Mobile Phones in South East Asian Countries was signed between the Secretariat of the Basel Convention, the Basel Convention Regional Centre for

South East Asia based in Jakarta and the Dowa Eco-System Co. Ltd., Japan. Under the Pilot Project, Dowa Eco-System Co. Ltd. contributed ¥10 million of seed money to cover the costs of activities for the first stage of the project during the 2006 financial year, which finished on 31 March 2007. The whole project duration is from 1 November 2006 until 31 March 2008.

3. South America

10. As the use of personal computers grows at around 15 per cent a year in the South America, e-waste is becoming a growing concern in the region. The project on the Inventory of Electronic Wastes in the South American Region was aimed at assisting the participating countries to prepare, draft and update a national inventory and to establish technical directives to deal with e-waste in order to achieve the international standards on environmental sound management. This project was completed in 2006 by the Basel Convention Regional Centre for Training and Technology Transfer for the South American Region (BCRC-Argentina) together with the existing regional focal points and competent authorities, and in cooperation with the Secretariat of the Basel Convention.

B. Proposed activities of the Secretariat and the Basel Convention regional centres on the environmentally sound management of e-waste

11. In relation to the mandate given by decision VIII/2 to the Open-ended Working Group beginning at its sixth session to develop a work plan for consideration by the Conference of the Parties at its ninth meeting, in 2008, the Secretariat is proposing the element of the work plan as set forth in annex II to the present document for the consideration of the Open-ended Working Group. The proposals are described in detail below:

1. Mobile Phone Partnership Initiative (MPPI)

12. The second phase of the work under the Mobile Phone Partnership Initiative work programme is disseminating the information in the guidelines to the countries that can use it and to test the guidelines by launching pilot projects on collection and treatment schemes in developing countries and countries with economies in transition. A key aspect of the pilot projects is to test the guidelines and, based on the outcomes of the pilot projects, to modify the guidelines as appropriate. The pilot projects will be very instrumental in raising awareness on environmentally sound management of used and end-of-life mobile phones. In addition, further consideration of the issues raised by MPPI Project Group 2.1 will be undertaken, as appropriate (see document UNEP/CHW/OEWG/6/19).

13. Under MPPI the following activities will be carried out:

- (a) MPPI will begin collecting data on the transboundary movements of used and end-of-life mobile phones. The information will assist Parties in clarifying how used mobile phones should be dealt with and reported upon;
- (b) A pilot project in two or more countries on the collection of mobile phones will be implemented;
- (c) A pilot project will be implemented in some countries on the recycling of used and end-of-life mobile phones;
- (d) The report on the application of the guidelines on the refurbishment of mobile phones will be completed;
- (e) Workshops will be held in a number of regions to get the information from the guidelines into the hands of the country representatives in each region.

2. Global partnership on e-waste

14. The first step will be the establishment of a global partnership on e-waste. Under that partnership and forum, regional programmes will be elaborated or initiated. Environmentally sound management of e-waste has been identified as a priority work programme under the Basel Convention strategic plan and under the Basel Convention Declaration on Partnership. The effective involvement and coordination of all stakeholders through public-private partnerships is seen as essential for achieving the aims of the Basel Declaration on Environmentally Sound Management. The Asia-Pacific Programme has made great advances in a short period of time. The next focus area will be the African Region in tandem with the Latin American Region. The global partnership will serve as a coordination mechanism for regional partnership.

3. Global partnership on computing equipment

15. The partnership will begin to take form in 2007. The primary focus of the global partnership would be on the environmentally sound management of used and end-of-life computing equipment, taking into consideration the entire (product) life cycle. In the partnership's first phase, personal computers (in particular CPUs), CRTs and printers will be addressed, given that they reach their end of life at an accelerated pace and the proper management of such equipment presents an environmental challenge that the partners to this initiative wish to address. In addition, there tend to be markets for the recycling and proper treatment of these materials.

16. Based on stakeholder consultations, activities under the work plan would consist of a forum for the exchange of information between all members, regions and the public. Also, it would consist of a phased-in approach of projects with global-, regional- and local-level interests in mind. It can address the immediate needs which can be completed in a relatively short timeframe, while at the same time planning and organizing projects which may provide longer-term benefits. In so doing, the partnership would enhance and ensure the transparency, predictability and traceability of transboundary movements. A few potential projects under the partnership could encompass:

- (a) Development of environmentally sound management guidelines on the dismantling, refurbishment, recovery and recycling of computing equipment;
- (b) Identification of industry green design practices;
- (c) Regional projects as determined.

17. More detailed information on the global partnership on computing equipment is provided in document UNEP/CHW/OEWG/6/20.

4. Programme of activities for the environmentally sound management of E-waste in the Asia-Pacific Region

18. The next phase of this partnership is initiation of pilot schemes on the collection and segregation of e-wastes, including take-back schemes; initiation of pilot repair, refurbishment and recycling schemes; and training of customs and enforcement officers to control or verify export or import of electrical and electronic wastes so as to combat illegal trafficking in such wastes. Development of appropriate methods for evaluation, testing, characterization and classification of electrical and electronic wastes, including the development of environmental management systems, extended producer responsibility (EPR), standards and guidelines or principles for environmentally sound management or certification schemes will also be initiated. The establishment of mechanisms for information exchange at the national and regional level and monitoring of the impacts on human health and the environment of activities concerning or related to the management of electrical and electronic wastes will also be a priority. The proposed work plan for the next biennium is set forth in annex III to the present note.

5. Programme of activities for the environmentally sound management of e-waste in Africa

19. The Secretariat is proposing a three-year programme of activities aimed at reviewing the range of issues currently facing African countries relating to the environmentally sound management of e-waste. The objectives are to:

- (a) Obtain a more precise description of the e-waste-related trade and management issues in West Africa, trade patterns, types, volumes, recycling sites and dumping spots, countries concerned, relevant legal frameworks, and so forth;
- (b) Evaluate existing e-waste management practices in one pilot country and provide guidance for the development of environmentally sound recycling capacity for e-waste;
- (c) Facilitate the development and implementation of a certification scheme on environmentally sound management of e-waste, covering the import of e-waste, in the context of the implementation of the Basel Convention and the Bamako Convention on the Ban of the Import Into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes Within Africa (Bamako Convention);
- (d) To develop a regional monitoring and control mechanism for transboundary movements of e-waste and the prevention of illegal traffic;

(e) To organize a regional conference in Africa on the environmentally sound management of e-waste to share information and experience and to set the pace for the building a long-term Africa strategic partnership on e-waste.

20. The following activities involving Basel Convention regional centres in Africa are planned:

(a) Establishment of an African steering group on e-waste that would, inter alia, facilitate mutual cooperation and information exchange;

(b) Conduct of a regional study on e-waste trade patterns in West Africa;

(c) (c) Implementation of monitoring and control of transboundary movements of e-waste and the prevention of illegal traffic, including such traffic in the disguise of donations, and development of a code of conduct for donations

(d) Public awareness-raising and information sharing with the involvement of non-governmental organizations in Africa and in exporting countries.

6. Programme of activities for the environmentally sound management of e-waste in South America

21. Following the project implemented in 2006 by the Basel Convention Regional Centre for Training and Technology Transfer for the South American Region (BCRC-Argentina) together with the existing regional focal points and competent authorities, pilot projects on collection, storage, repair, repair and refurbishment of e-waste will be initiated in a few pilot countries in the region. The detailed work plan and budget is set forth in annex IV to the present note.

C. Coordination and cooperation

22. The Basel Convention will continue to participate in and consult with other stakeholders regarding activities including programmes on e-waste such as StEP – Solving the E-waste Problem and GeSI – Global e-Sustainability Initiative.

III. Proposed action

23. The Open-ended Working Group may wish to take note of the information provided by the Secretariat in the present note and adopt a decision along the following lines:

“The Open-ended Working Group,

Welcoming the progress made in e-waste management in the development of global partnerships and regional programmes of activities,

Also welcoming the financial support provided to date by Parties to the Basel Convention for e-waste programmes,

1. *Encourages* Parties and signatories to the Convention to provide funding to the Basel Convention Partnership Programme on e-waste and to become actively involved in partnerships and regional programmes of activities established under the Programme;

2. *Invites* countries in position to do so to contribute financially or in kind towards the preparation of technical guidelines for the environmentally sound management of e-waste through the involvement of all stakeholders;

3. *Requests* the Secretariat to continue work on the development of pilot projects on collection and take-back systems, including the environmentally sound reuse, refurbishment and recycling of e-waste, in particular in developing countries and countries with economies in transition;

4. *Agrees* to forward the proposed work plan of the Basel Convention for the environmentally sound management of electrical and electronic wastes, as annexed to the present decision, for consideration by Conference of the Parties at its ninth meeting;

5. *Requests* the Secretariat to report on progress to the Conference of the Parties at its ninth meeting.”

Annex I

Projects activities undertaken under the Basel Convention partnership on the environmentally sound management of e-waste in the Asia-Pacific region

Country/ BCRC	Title of project	Scope	Status
China	Feasibility analysis to develop a centre of excellence of information on the ESM of e-waste in BCRC in Beijing	Regional	Completed.
SPREP, Samoa	Pilot inventory of e-waste in five Pacific island countries	Regional	In progress. To be completed in December 2007.
BCRC SEA, Jakarta	Development of guideline documents on methodology on inventory of e-waste and environmentally sound recycling, reuse, repair, refurbishment/disposal of e-waste	Regional	Completed. See http://www.bcrc-sea.org/
BCRC SEA, Jakarta	Training workshop on ESM of e-waste	Regional	Completed on 13-15 March 2007 in Cambodia. See http://www.bcrc-sea.org/
Sri Lanka	Development of national implementation plan for e-waste management	National	Completed.
India (NGO)	Facilitating partnerships for ESM of e-waste in India (NGO project): Phase I	National	In progress. To be completed in November 2007.
Indonesia	Preliminary inventory of e-waste	National	Completed.
Cambodia, Malaysia, Thailand, Viet Nam	Inventory of e-waste	National	In progress.

Annex II

Work plan on the environmentally sound management of e-waste focusing on the needs of developing countries and countries with economies in transition

Title	Mandate and supervision	Activities	Budget
Preparation of technical guidelines for the ESM of e-waste through the involvement of all stakeholders	Decision VIII/3.3(a) OEWG	To consider incorporating within the work programme of OEWG	\$100,000
Monitoring of developments in the ESM of e-waste	Decision VIII/3.3(b) OEWG	Delegate to SBC the commissioning of a survey	\$30,000
The Mobile Phone Partnership Initiative (MPPI)	Decision VI/31 OEWG	See document UNEP/CHW/OEWG/6/19	\$400,000
Global Partnership on E-waste	Decision VIII/2 Nairobi Declaration OEWG	See document UNEP/CHW/OEWG/6/20	To be determined
Global Partnership on computing equipment	Decisions VIII/2 and VIII/5 OEWG	See document UNEP/CHW/OEWG/6/20	To be determined
Programme of activities for the ESM of e-waste in Asia-Pacific region.		See annex III	\$2,435,700
Programme of activities for the ESM of e-waste in Africa	Decision VIII/2	Draft proposal under preparation	\$1,000,000
Programme of activities for the ESM of e-waste in South America		See annex IV	\$70,000

Annex III

Proposed e-waste projects for the Asia-Pacific region (2007–2009)

Country/ BCRC	Title of project	Activity no. as per project proposal	Amount	Scope
Cambodia	Public awareness-raising programme <ul style="list-style-type: none"> • Workshops for target groups • Development and implementation of an awareness-raising programme on environmentally sound management of used and end-of-life electrical and electronic equipment and products for consumers • Developing brochures, flyers; campaigns in various local papers and radio/TV. 	Activity 2	\$105,000	National
Cambodia	Pilot schemes on collection, evaluation/testing and segregation of e-wastes <ul style="list-style-type: none"> • Conduct a review of existing infrastructure to collect, repair, refurbish and recycle of used/end-of-life electrical and electronic equipment to scope out the country specific situation, and identification of collection points/centres. • Identify successful collection schemes in other countries so that such schemes can be tested. • Develop an activity outline and business plans for setting up pilot collection scheme. • Procure all the necessary containers for each collection point/centre. • Make arrangements to transport collected used and end-of life equipment to an accumulation centre and make arrangements for evaluation and testing. • Make arrangements to deliver collected used and end-of-life equipment to a refurbishment or material recovery and recycling facility. 	Activity 3	\$160,700	National

Country/ BCRC	Title of project	Activity no. as per project proposal	Amount	Scope
Indonesia	<p>Detailed inventory of e-waste in Indonesia:</p> <ul style="list-style-type: none"> Review customs import data sheets and identify quantities (if any) imported, and identify countries from which such imports originate. If possible identify any illegal transboundary movements based on information obtained from bills of lading Establish a level of refurbishment, provide a brief description of such operations, and identify the type of standards and or guidelines being used for refurbishment Prepare an inventory of selected four types of electrical and electronic equipment generated each year and over the last 10 years (if data exist), determine how much generated per country, region and city. Prepare projection of quantities of the four types of electrical and electronic equipment available for recovery in one year, two years and five years. 	Activity 1	\$200,000	National
Indonesia	Public awareness-raising programme	Activity 2	\$50,000	National
Malaysia	<p>Pilot schemes on collection, evaluation/testing and segregation of e-wastes:</p> <ul style="list-style-type: none"> Conduct a review of existing infrastructure to collect, repair, refurbish and recycle of used/end-of-life electrical and electronic equipment to scope out the country-specific situation and identify collection points/centres. Develop activity outline and business plans for setting up pilot collection scheme. Procure all the necessary containers for each collection point/centre. Make arrangements to transport collected used and end-of life equipment to an accumulation centre and make arrangements for evaluation and testing. Make arrangements to deliver collected used and end-of-life equipment to a refurbishment or material recovery and recycling facility, if available in Malaysia. 	Activity 3	\$200,000	National

Country/ BCRC	Title of project	Activity no. as per project proposal	Amount	Scope
Malaysia	Public awareness-raising programme: <ul style="list-style-type: none"> • Workshops for target groups. • Development and implementation an awareness-raising programme for consumers on environmentally sound management of used and end-of-life electrical and electronic equipment and products. • Developing brochures, flyers; campaigns in various local papers and radio/TV. 	Activity 1	\$50,000	National
Philippines	Detailed inventory of e-waste: <ul style="list-style-type: none"> • Prepare a detailed inventory of selected types of electrical and electronic equipment (personal computers, TVs, refrigerators, air conditioners, washing machines, mobile phones and waste batteries) generated. Review customs import data sheets and identify quantities (if any) imported, and identify countries from which such imports originate. If possible identify any illegal transboundary movements based on information obtained from bills of lading. 	Activity 1	\$100,000	
Sri Lanka	Phase III <ul style="list-style-type: none"> • National Implementation Plan for e-waste management developed in line with the National Strategy for Solid Waste Management. • Information system developed to disseminate information and awareness-creation at national, provincial and local authority level Phase IV <ul style="list-style-type: none"> • Mechanism to register informal e-waste repair shops developed and implemented. • E-waste tracking system developed. 	Phases III and IV	\$150,000	National

Country/ BCRC	Title of project	Activity no. as per project proposal	Amount	Scope
Viet Nam	Detailed inventory of e-waste: <ul style="list-style-type: none"> • Prepare a detailed inventory of selected types of electrical and electronic equipment (personal computers, TVs, refrigerators, air conditioners, washing machines, mobile phones and waste batteries) generated. • Review customs import data sheets and identify quantities (if any) imported, and identify countries from which such imports originate. If possible identify any illegal transboundary movements based on information obtained from bills of lading. 	Activity 1	\$60,000	National
Viet Nam	Pilot schemes on collection, evaluation/testing and segregation of e-wastes: <ul style="list-style-type: none"> • Conduct a review of existing infrastructure to collect, repair, refurbish and recycle used and end-of-life electrical and electronic equipment to scope out the country-specific situation and identify collection points/centres. • Develop activity outline and business plans for setting up pilot collection scheme. • Procure all the necessary containers for each collection point/centre. • Make arrangements to transport collected used and end-of-life equipment to an accumulation centre and make arrangements for evaluation and testing. • Make arrangements to deliver collected used and end-of-life equipment to a refurbishment or material recovery and recycling facility, if available 	Activity 3	\$300,000	National
Thailand	Develop and implement a public awareness-raising campaign (details as for Cambodia)	Activity 2	\$40,000	National
Thailand	Pilot collection scheme (details as for Malaysia)	Activity 3	\$260,000	National
BCRC SEA Jakarta	Technical assistance for pilot collection schemes in four countries: <ul style="list-style-type: none"> • Provide technical assistance in order to encourage and ensure successful implementation of pilot assessment scheme. 	Activity 2	\$200,000	Regional

Country/ BCRC	Title of project	Activity no. as per project proposal	Amount	Scope
BCRC SEA Jakarta	Technical assistance for pilot reuse/ refurbishment/recycling scheme in three countries: <ul style="list-style-type: none"> Provide technical assistance in order to encourage and ensure the successful implementation of pilot reuse/refurbishment/ recycling scheme. 	Activity 3	\$100,000	Regional
BCRCC Beijing	Establishment of centre of excellence of information on e-waste for Asia-Pacific	Activity 2	\$80,000	Regional
BCRCC Beijing	Laboratory and pilot project on e-waste treatment	Activity 3	\$160,000	National
NGO (India)	Phase II and III of project on facilitating partnerships for ESM of e-waste in India	Phase II and III	\$220,000	National
	TOTAL		\$2,435,700	

Annex IV

Projects on the environmentally sound management of e-waste in South America

A. Project timetable and work plan

Inventory on e-waste for South America

	First year												Second year											
<i>Activities</i>	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1. Selection of project coordinator	X	X	X																					
2. Review and collection of countries' data			X	X	X	X	X																	
3. Compilation of countries' information on e-waste					X	X	X	X																
4. Desk study								X	X	X	X	X	X	X										
5. Development of a proposal for the national framework													X	X	X	X	X							
6. Development of the national framework																	X	X	X					
7. Pilot study									X	X	X	X	X	X	X	X	X	X	X	X	X			
8. Final report and evaluation																						X	X	

B. Budget

Estimated budget (two years)

Activity	Subactivity actions	Cost (USD)
1. Project personnel component		
	(Year 1)	6,000.00
	(Year 2)	6,000.00
Subtotal for activity 1		12,000.00
2. Subcontracting component		
	Compilation of information	3,000.00
	Desk study	5,000.00
	Technical report	8,000.00
	National Framework	4,000.00
	Pilot study	25,000.00
Subtotal for activity 2		45,000.00
3. Miscellaneous costs		
	Reporting costs	2,000.00
	Sundry (Year 1)	2,000.00
	Sundry (Year 2)	947.00
Subtotal for activity 3		4947.00
4. Project support costs		
	UNEP PSC (13%)	8,053.00
Subtotal for activity 4		8,045.00
Project grand total		70,000.00