



Basel Convention Regional Centre for Training and Technology Transfer for Arab States in Egypt

BCRC-Egypt and E-waste Activities In the Arab Region

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Background

- ▶ BCRC-Egypt is one of 14 Basel Convention Regional Centers
- ▶ BCRC-Egypt is hosted in Cairo University.
- ▶ BCRC-Egypt is serving the 22 Arab countries in the region.
- ▶ BCRC-Egypt is operational since 1998.
- ▶ BCRC-Egypt has been concerned with the growing e-waste problem since 2005.
- ▶ With funds from the Finnish government to raise the capacity of the member Arab countries to manage hazardous wastes and efficiently implement the provisions of the Basel convention, BCRC-Egypt had a chance to channel small funds to carry out e-waste training session in 2007 and to start related assessment in selected countries; Egypt, Algeria, Jordan and Saudi Arabia.



Background

- ▶ Following the Nairobi Declaration on the environmentally sound management of electrical and electronic wastes, much awareness and interest in touching base with the e-waste problem grown and BCRC-Egypt started to focus on the problem in its web site and in the biannual newsletters distributed to all Arab countries.
- ▶ With a contribution from a Swiss government BCRC-Egypt was able to translate and publish the MPPI guidelines on used and end of life mobile phone
- ▶ In 2008 BCRC-Egypt signed an agreement with UNEP/MAP to carry out e-waste assessment in the Arab Mediterranean countries including the Palestinian authority territories.
- ▶ BCRC-Egypt is participating in the ongoing PACE initiative.



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E-waste Training session 12-13 March 2007

- ▶ International Consultant utilized to introduce basic concepts regarding e-waste assessment, assessment of recycling facilities, and e-waste policies.
- ▶ Participants included consultants from Saudi Arabia, Egypt, Algeria, Jordan and United Arab Emirates. Participants from Egyptian Ministry of Industry and trade also attended.
- ▶ Concepts of useful life span of personal computers were also introduced during the training session.



Results of the Training Session

- ▶ E-waste assessment in Algeria, Egypt, Jordan and Saudi Arabia are brought into focus and initiated.
- ▶ Egypt Minister of Trade and Industry issued a decree to ban the import of used computers older than 5 years.
- ▶ Initiation of work with other regional organizations (like CEDARE, UNEP/ROWA and UNEP/MAP) and member countries (like Qatar) towards solving the e-waste



E-waste Assessment in Mediterranean Arab Countries

- ▶ The Activity is undergoing in collaboration with UNEP/MAP and the FPs of the Basel Convention.
- ▶ The assessment is covering Egypt, Syria, Lebanon, Libya, Tunisia, Morocco, Algeria and the areas governed by the Palestinian authorities.



Assessment Activities

- ▶ Identification and or estimation of current and future waste streams: materials composition of current and future flows streams
- ▶ Reuse possibilities: current levels of reuse of different EEEW, opportunities for greater reuse products or parts of products, barriers to greater reuse, example of best and worst practices in re-use schemes.
- ▶ Collection and collection scheme operation: organization of national collection schemes, cost of the schemes, Economic instruments to facilitate the collection, administrative requirements
- ▶ Sorting and sorting scheme operation: organization of national sorting schemes, cost of the schemes, Economic instruments to facilitate sorting, administrative requirements
- ▶ Recycling and recycling scheme operation: organization of national recycling schemes, cost of the schemes, Economic instruments to facilitate the recycling, administrative requirements
- ▶ Disposal and disposal scheme operation: organization of national disposal schemes, cost of the schemes, Economic instruments to facilitate the environmental sound disposal, administrative requirements
- ▶ Technology to treat, process or dispose of EEEW: capacities and inputs/outputs for existing technologies for sorting, treatment including recovery, recycling and disposal.



Cooperation with the Swiss Government

- ▶ A contribution was pledged from the Swiss government to assist BCRC-Egypt to translate, publish and disseminate MPPI guidelines on used and end of life mobile phones:
 - 1- Guidelines on the Refurbishment of Used Mobile Phones
 - 2- Guidelines on Collection of Used Mobile Phones
 - 3- Guidelines on Trans-boundary Movement of Collected Mobile Phones
 - 4- Material Recovery and Recycling of End-of-Life Mobile Phones
 - 5- Awareness Raising and Training on the Environmental Design of Mobile Phones.



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مركز اتفاقية بازل الاقليمي للتدريب ونقل التكنولوجيا لدول العربية

ترجمة
المسودة البقرة 1.2

الخط الإرشادي لتجهيم الوثائق المحملة المستعملة

الصادر عن
مبادرة الشراكة في الوثائق المحملة
المشروع 1.2



دول العربية

مركز اتفاقية بازل الاقليمي للتدريب ونقل التكنولوجيا لدول العربية

ترجمة
المسودة البقرة 1.4
الخط الإرشادي الخاص بالاعتبارات التصميمية ورقم الوعي

الصادر عن
مبادرة الشراكة في الوثائق المحملة
المشروع 1.4

المركز الاقليمي للتدريب ونقل التكنولوجيا لدول العربية

20 مارس 2006



مركز اتفاقية بازل الاقليمي للتدريب ونقل التكنولوجيا لدول العربية

ترجمة
المسودة البقرة 1.3
الخط الإرشادي الخاص باستعادة المواد
 وإعادة تدوير الوثائق المحملة منتهية العمر الافتراضي

الصادر عن
مبادرة الشراكة في الوثائق المحملة
المشروع 1.3

ل التكنولوجيا لدول العربية

2006



مركز اتفاقية بازل الاقليمي للتدريب ونقل التكنولوجيا لدول العربية

ترجمة
المسودة البقرة 1.1
خطوط إرشادية لتجهيم الوثائق المحملة المستعملة

الصادر عن
مبادرة الشراكة في الوثائق المحملة
المشروع 1.1

المركز الاقليمي للتدريب ونقل التكنولوجيا لدول العربية

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مركز اتفاقية بازل الاقليمي للتدريب ونقل التكنولوجيا لدول العربية

ترجمة
المسودة البقرة 1.2
الخط الإرشادي لنقل الوثائق المحملة المستعملة عبر الحدود

الصادر عن
مبادرة الشراكة في الوثائق المحملة
المشروع 1.2

المركز الاقليمي للتدريب ونقل التكنولوجيا

نوفمبر 2006



Egypt Assessment Example

- ▶ **In 2000, the total number of Mobile Phone subscribers was 1.4 millions.**
- ▶ **In 2002 the number increased to 4.6**
- ▶ **In 2005 the number reached 8.2 millions.**
- ▶ **In 2007 the number increased to about 25,600,000 subscribers,**
- ▶ **Current reports indicate more than 37,600,000 subscribers**
- ▶ **2012 estimates around 45,000,000.**
- ▶ **Estimated end of life mobile handsets at the end of 2008 approximated to 9,000,000.**



Egypt Example

- ▶ Number of mobile phone subscribers increased more than 20 times in 8 years.
- ▶ Use of Personal Computers increased in a similar pattern
- ▶ Use of other electronic and electric equipment (TV sets and satellite) receivers increased dramatically but in a lower rate compared with mobile phones and PCs.
- ▶ Not much e-waste received at landfills and dump sites
- ▶ In the absence of serious national programs for e-waste management and with decreasing sale price of new technologies especially mobile phones and personal computers parts it is anticipated that the amount of e-waste going to landfills will increase in a few years. .











Conclusions

- ▶ Little or no national programs for e-waste publicized
- ▶ Informal sector is slowly entering the e-waste sector
- ▶ current practices are not well known, manual disassembling and recycle of metal and plastic components
- ▶ Circuit boards are collected and most probably shipped abroad.



Recommendations

- ▶ Awareness raising among public, executives, NGOs and policy makers.
- ▶ Assist competent authorities to develop proper legislation for the management of E-wastes
- ▶ Assist the informal sector to establish relevant partnerships and to adopt relevant ESM standards.
- ▶ support and enhance corporate responsibility ethics and apply encouraging incentives.
- ▶ Pursue prepaid recycling fees.
- ▶ Support E-waste collection programmes



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