Partnership for Action on Computing Equipment

GUIDELINE ON ENVIRONMENTALLY SOUND MATERIAL RECOVERY AND RECYCLING OF END-OF-LIFE COMPUTING EQUIPMENT

Background:

The Partnership for Action on Computing Equipment (PACE) was launched by the ninth meeting of the Conference of the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, which took place in Bali, Indonesia in June 2008. PACE is a multi-stakeholder public-private partnership under the umbrella of the Basel Convention that provides a forum for representatives of personal computer manufacturers, recyclers, international organizations, associations, academia, environmental groups and governments to tackle environmentally sound refurbishment, repair, material recovery, recycling and disposal of used and end-of-life computing equipment. The Partnership is intended to increase the environmentally sound management of used and end-of-life computing equipment, taking into account, amongst other things, social responsibility, the concept of sustainable development, and information-sharing on life cycle thinking.

For the purpose of PACE, computing equipment is defined as: PCs and associated displays, printers and peripherals; personal desktop computers, including their central processing units (CPUs) and all other parts contained in them; personal notebooks and laptop computers, including docking stations, CPUs and all other parts contained in the computers; computer monitors, including cathode ray tube, liquid crystal display and plasma monitors; computer keyboards, mice and cables; computer printers, including dot matrix, inkjet, laser and thermal printers and any computer printer with scanning or facsimile capabilities, or both.

Under PACE one of the project groups, Project Group 2.1 was established with an objective to recognize risks and benefits of collecting, reviewing, and disseminating, and to develop tools (such as guidelines) and activities on environmentally sound material recovery and recycling of computing equipment.

Guideline

The technical Guideline on Environmentally Sound Material Recovery and Recycling of End-of-Life Computing Equipment is divided into 11 parts:

- Parts 1, 2, 3 and 4 provide: executive summary, introduction, identifies the type of material covered, and identifies a number of common materials found in computing equipment.
- Part 5 provides guidance on initial recycling facility practices, supported by series of flow charts.
- Part 6 identifies how materials should be safely stored, and how it should be transported when shipped for further processing.
- Parts 7 and 8 discuss material recovery processes, plus management and disposal for different types of residues derived from the recovery operations.

- Part 9 identifies legal requirements for material recovery and recycling facilities, steps to be taken to comply with all applicable health, safety and environmental laws and regulations.

- Part 10 identifies commercial considerations when establishing material recovery operations that are economically and environmentally sound.

- Part 11 provides a series of recommendations to national authorities regarding programmes and policies which may be implemented to ensure environmentally sound and also an economically efficient material recovery and recycling of end-of-life computing equipment. It includes recommendations relating to: goals and objectives, development of recycling infrastructure, facility-level guidelines, design for recycling, and future collaborative steps.

The guideline on the Environmentally Sound Material Recovery and Recycling of End-of-Life Computing Equipment is available from the Secretariat of the Basel Convention (http://www.basel.int/industry/compartnership/documents.html).