Development cooperation for e-waste recycling:
A Swiss contribution to the implementation of the Basel Convention

Switzerland is supporting developing and newly industrialising countries – China, India, South Africa, Peru and Colombia – in the establishment of environmentally sound, resource-conserving recovery systems for electronic waste (e-waste), thanks to funding by the State Secretariat for Economic Affairs (SECO) and technical assistance from the Swiss Federal Laboratories for Materials Testing and Research (Empa). In addition Switzerland is using its experience as a pioneer of electronic waste recycling and is collaborating in the UN Initiative “Solving the E-waste Problem” (StEP) and in Basel Convention projects.

Hazardous traditional recycling in developing countries

Traditionally, the recycling of electrical and electronic waste in developing and newly industrialising countries is often carried out by the informal sector, where improper handling results in the release of hazardous substances such as lead, mercury and dioxins and thus in damage to workers’ health and to the environment. The electrical and electronic waste is frequently generated in the country itself, but also comes from industrial countries. Under the terms of the Basel Convention the export of discarded electrical and electronic equipment (televisions, computers, printers, etc.) i.e. waste, to developing countries is banned. However, in practice it is almost impossible for the customs authorities to establish whether the equipment is just waste or is destined for re-use. In developing countries, computers, in particular, tend to be repaired and given to schools, for example. But the market for new electronic goods is also growing rapidly in developing countries: according to the OECD, in 2004 trade in IT equipment already amounted to 8% of the gross world product. In Latin America, for instance, the volume of trade is expected to more than double in five years – that also means a sharp rise in quantities of e-waste in the near future.

Swiss development cooperation is promoting technology transfer

Since 2003 SECO has contributed 4 million Swiss francs to fund international knowledge partnerships to set up environmentally sound and efficient recycling systems for e-waste in China, India and South Africa. The programme includes the provision of advice in the areas of regulation (legislation, standards), organisation of collection systems, and recycling technologies (contact with Swiss recycling operators).

On the basis of the positive experiences, SECO is supporting private and public partners in Colombia and Peru in 2009-2012 in setting up modern e-waste recycling (contribution of 1.8 million Swiss francs). This project is being carried out as part of the SECO strategy to strengthen cooperation with the two priority countries Colombia and Peru while promoting clean technologies and climate change mitigation in particular.

The aim of all these projects is not only to protect the workers’ health and the environment, but, primarily through recycling e-waste, to open up new opportunities for trade and create valuable jobs in the recovery of secondary resources. For instance, specialist global companies achieve a 95% recovery rate for precious metals contained in circuit boards, three times more than informal recycling businesses in developing countries. Thus Switzerland is contributing to poverty reduction and at the same time to overcoming global resource scarcity.
**Integrating the private sector and knowledge transfer via a global platform**

The institutions implementing Switzerland’s e-waste system – SWICO Re-cycling, SENS, SLRS and INOBAT – as well as Empa as controller are widely recognised as centres of expertise and are making this available to other countries via the knowledge platform “STEP – Solving the E-waste Problem”. Participants in STEP, which is based at the UN University, include UN institutions such as UNCTAD, UNIDO and UNEP, technology producers such as Cisco, Dell, HP, Microsoft, Nokia and Philips, and various research institutions. Switzerland is a founder member. STEP has agreed a systematic programme of cooperation with the Basel Convention. Moreover, the Secretariat of the Basel Convention recently commissioned Empa to undertake exploratory studies on the modernisation of e-waste recycling in Ghana and a number of other African countries.

**Objective of the e-waste programme:**
Switzerland wants to seize the opportunities and mitigate the risks that information and communication technologies bring to e-waste management in developing and newly industrialising countries.

Putting trade in IT products on a sustainable footing helps to reduce poverty owing to the creation of secure jobs and the improvement of resource efficiency.

**Outcomes which were advanced considerably by the programme:**
- Establishment of national e-waste strategy groups in India and in South Africa, where the group has meanwhile developed further to become the system operator eWASA (analogous to SWICO and SENS).
- Establishment of the local e-waste agency and launch of pilot e-waste management schemes in Bangalore, India.
- Input into the drafting of national e-waste legislation in China, and training in its implementation.
- Development of e-waste management systems in Colombia and Peru.
- Establishment of an international platform bringing together research, technology suppliers and UN institutions for global knowledge management in the field of e-waste.

**Some key websites developed with the support of the programme**
- STeP Initiative: [www.step-initiative.org](http://www.step-initiative.org)

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