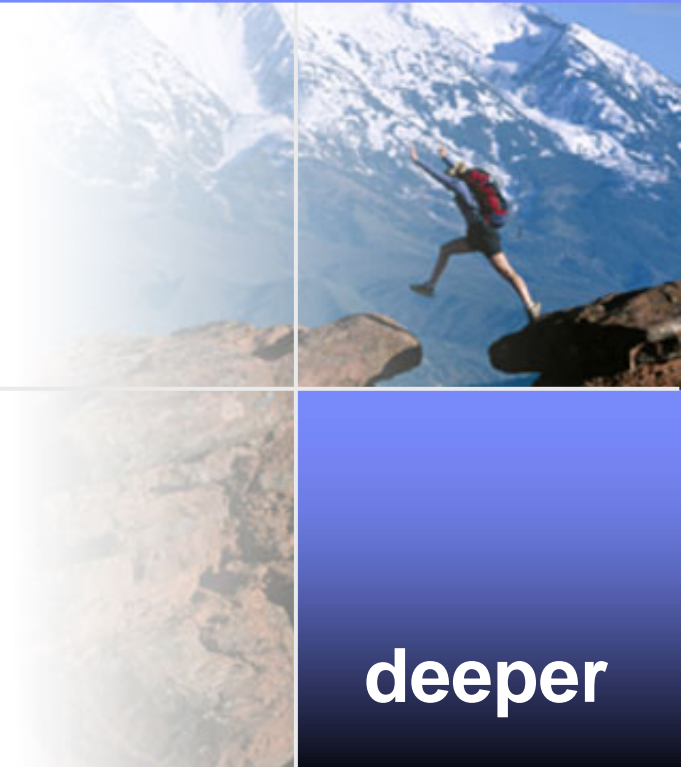




IBM Corporate Environmental Affairs

IBM e-waste management policies and practices



e-waste Management Forum
9 - 10 February 2009, Cairo, Egypt

deeper

Longstanding Commitment to Corporate Responsibility

- IBM's "founding family" – T.J. Watson Sr. and Jr. - were great visionaries on the role of corporations in society
- Being a good corporate citizen was one of the IBM Principles established in 1969
- Excerpt from that Principle:
 - **"We accept our responsibilities as a corporate citizen in community, national and world affairs; we serve our interests best when we serve the public interest.... We want to be at the forefront on those companies which are working to make our world a better place." (Thomas J. Watson, Jr.)**
- Thomas Watson Jr. first formally established IBM's corporate policy on environmental protection in **1971**
 - **Called for IBM to "be continuously on guard against adversely affecting the environment. This effort must include constant attention not only to the waste incident to producing the product but also to the consequences of the processes established during product development."**

Corporate Environmental Affairs Policy

Committed to environmental leadership in all business activities

-
- **Conserve natural resources by reusing and recycling** materials, purchasing recycled materials, and using recyclable packaging and other materials.
-
- Policy is supported by **Corporate Instructions, Practices and Standards** that govern IBM's worldwide operations
- See details under

<http://www.ibm.com/ibm/environment/policy/>

IBM Product End of Life Management (PELM)

- IBM began offering product take back programs in Europe in 1989
- Extended and enhanced them over the years
- IBM's Global Asset Recovery Services organization now offers

Asset disposal solutions

to commercial customers in all **57 countries** in which IBM Global Financing operates today

IBM owned EOL Product Scrap/Waste

- End-of-lease returns
 - Resale/Reuse
 - Scrap/Waste
- Warranty & Field Parts Returns – Inventory -
 - Scrap/Waste
- Field Returns for Upgrade
- IBM Retired/Replaced Equipment
- Surplus Products, Assemblies, & Parts

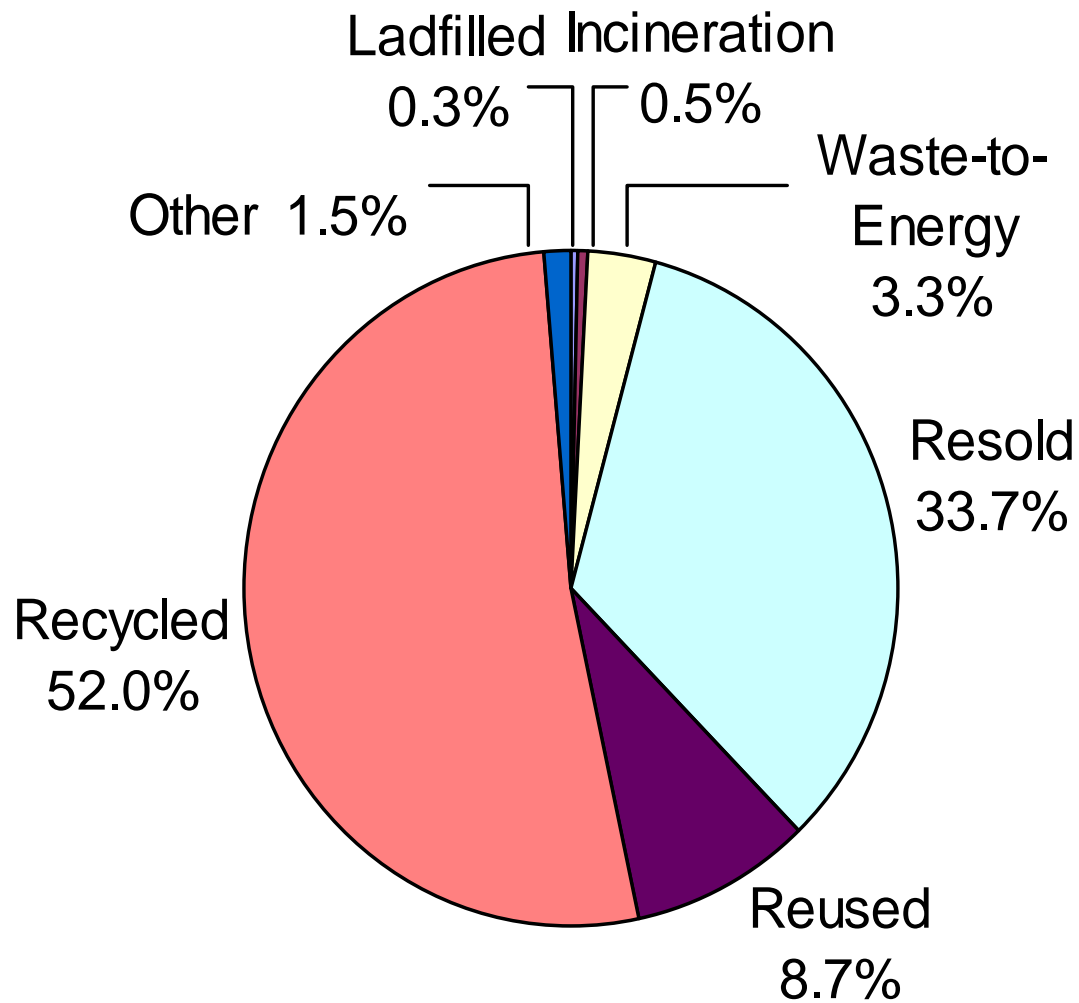
Product End of Life Management Activities

- Resale of machines "as-is"
- Resale of refurbished machines
- Demanufacturing
- Part recovery
- Part sales
- Part reuse
- Materials recycling
- Incineration w/energy recovery
- Incineration as treatment
- Landfill for disposal

Results of PELM operations

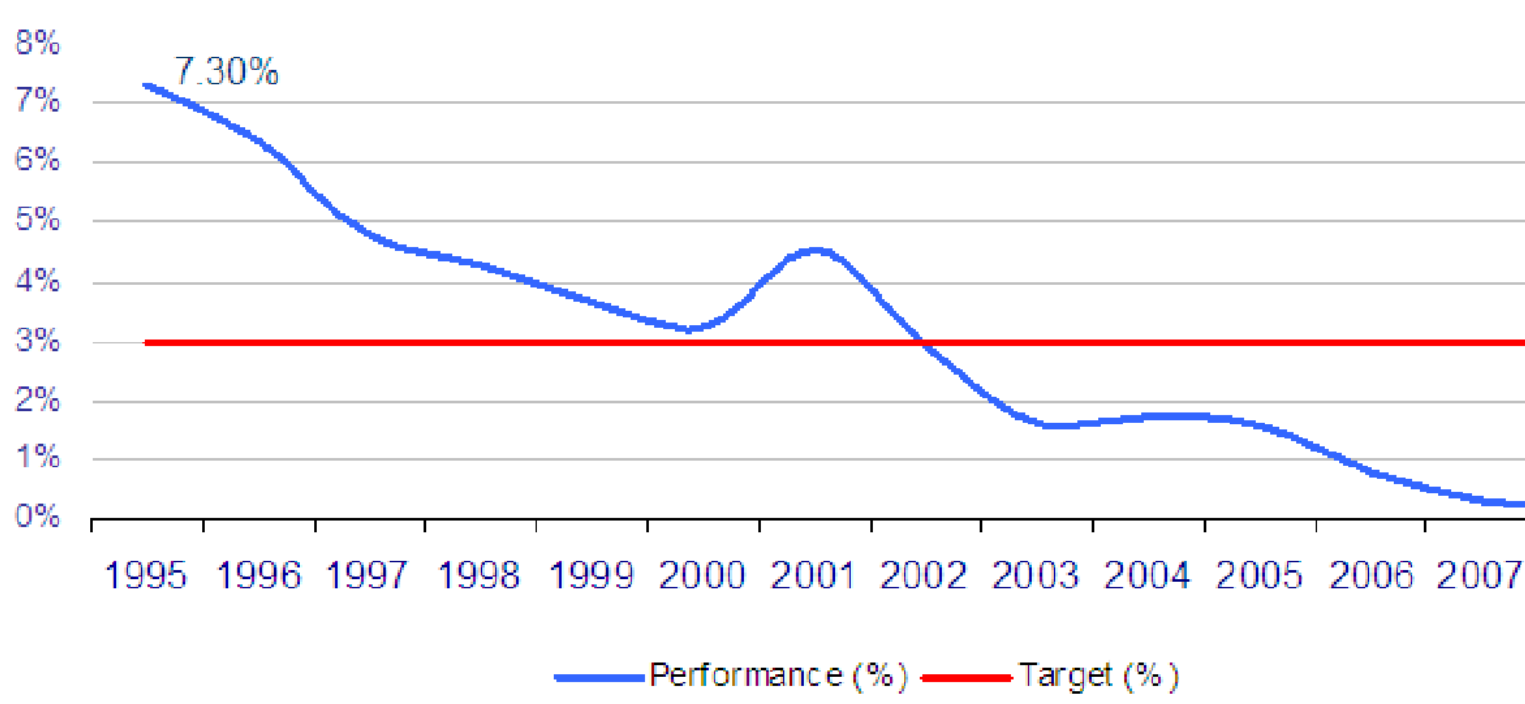
- The total weight of end-of-life products and product waste processed by these operations YE 2007 was 44332 metric tons
- Of the 44332 metric tons processed by IBM PELM operations worldwide, **52 % was recycled as materials**, 33,7 % was resold as products, **8,7 % was reused** by IBM, 3,3 % was incinerated with waste-to-energy recovery, 0.3% was sent to landfill, 0.5% was incinerated as treatment and 1.5% received other treatment (storage).
- IBM's global product end-of-life management (PELM) operations sent less than 1% (0.8 %) of product waste directly to landfill or incineration vs. a target of not-to-exceed 3%.

Product End-of-Life Management Operations YE 2007 - Percentage by weight



Landfilling

- Since 1995, IBM has documented the collection and recovery of more than 1.5 billion pounds (686,9 million kilograms) of product and product waste worldwide through year-end 2007.
- 2007 only 0,3% went to landfill



PELM service supplier selection

- Responsibility for PELM service supplier selection
 - IBM process worldwide

- Supplier can only be contracted if approved by IBM Corporate Environmental Affairs (CEA)
 - Approval need on site review by CEA
 - Report to and approval by Director CEA

- Reason: Avoidance of sending e-Waste to not appropriate treatment or disposal

- Problem:
 - Available PELM service infrastructure in various countries
 - Review in systems with network of supplier

Focus area for supplier evaluation

- ISO 14001/ Plans to obtain in 1 yr. / Env. Mgmt. Plan
- Demonstrated favorable processing and disposition of parts and products.
- Site with favorable history, secure and with a disaster recovery plan
- Location:
 - proximity to natural receptors, surrounding land use, accessibility, ground water, etc.
 - Safety, security, emissions control, flooring and docking, secondary containments, waste and storm water, chemicals and waste treatment, etc.
- Permits and licenses
- Environmental Insurance
- Tracking of waste stream generated. Percentage of fractions
- Supplier's "supply chain"

Other product recycling activities

- Legally required product take back (e.g. EU, Switzerland, Norway ...)
 - Use existing infrastructure, programs or networks
 - Economical and environmental feasible solutions

- Financing:
 - Preferred advanced recycling fee
 - Other options based on legal framework

- Looking for further opportunities to recover e-Waste locally

Your questions?
