E-Waste Management in Pakistan

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Government of Pakistan

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Ministry of Environment is responsible for National Environment Policy, Planning and International Environment Coordination.
PAKISTAN: STATUS OF ENVIRONMENT

- Constitution of the Pakistan Environmental Protection Council (PEPC) headed by the Prime Minister of Pakistan is the highest forum responsible for strategic policy decision in environment and sustainable development.

- Establishment of Federal & Provincial Environmental Protection Agencies (EPA),

- Enacted the Pakistan Environmental Protection Act 1997.

- Prepared and enforced the National Environment Quality Standards (NEQS) for monitoring of the industrial and other environment pollution.
PAKISTAN & MULTILATERAL ENVIRONMENTAL AGREEMENTS (MEAs)

Pakistan is party to the following chemicals and waste related conventions:

- Basel Convention on the Control of Trans-Boundary Movement of Hazardous waste and their Disposal
- Rotterdam Convention on Prior Informed Consent for Certain Hazardous Chemicals
- Stockholm Convention on Persistent Organic Pollutants
- Vienna Convention and Montreal Protocol on Ozone Depleting Substances (ODS)
POLICY AND LEGAL FRAMEWORK REGARDING ENVIRONMENT

National Environment Policy:

- Environment Policy of Pakistan was approved on 29 June 2005.

- National Environmental Policy is an overarching framework for addressing all sectors of environment at national level.

- It also gives directions for addressing the cross-sectoral issues as well as underlying causes of environmental degradation and meeting international obligations.
Pakistan Environmental Protection Act 1997 focuses on:

- Protection, conservation, rehabilitation and improvement of environment
- Prevention and control of pollution
- Promotion of sustainable development.
National Legal Instruments that Cover E-Waste in Pakistan

- Section 13 of The Pakistan Environmental Protection Act 1997, prohibits the import of hazardous waste and Section 14 disallows handling of hazardous elements.

- Government of Pakistan imposed 25 percent tax on computer screens.

- National Environment Policy 2005

- Hospital Waste Management Rules

- Solid Waste Management Rules

- Draft Hazardous Waste Management Rules
CHEMICALS & WASTE MANAGEMENT IN PAKISTAN

• National Technical Advisory Committee on Chemicals (NTACC) has been established to review and evaluates concerns of industrial chemicals and waste to take appropriate decisions.

• FBR is managing import / Export control system related to different chemicals and waste.
CHEMICAL MANAGEMENT IN PAKISTAN

- A National Disaster Management Authority (NDMA) is also established for Emergency Coordination in case of chemical disaster in the country.

- NDMA is being assisted by Ministry of Industries, Ministry of Foreign Affairs, Federal Board of Revenue (FBR), Ministry of Environment and Ministry of Commerce.

- The matters related to pesticides industry are being managed by the Ministry of Food & Agriculture.
CHEMICAL MANAGEMENT IN PAKISTAN-(Activities/Projects)

- Inventories on sources of PCBs, Dioxins, Furans and POPs pesticides have been developed in accordance with guidelines of Stockholm Convention on POPs

- Kasur Tannery Pollution Control Project (KTPCP) (Treating 12700 M³ tannery waste water of 237 leather industries).

- Cleaner Production Center (CPC-Sialkot) for introducing CP technologies and chrome recovery plant.

- Individual waste water treatment plants are working in different industries like Textile, Dairy, Paper and Pulp etc.
CHEMICAL MANAGEMENT IN PAKISTAN

- UNITAR Pilot Project (2006-09) for SAICM Implementation in Pakistan to Develop and integrated National Programme for sound management of chemicals and waste.
- Mercury Inventory Pilot Project (2008) has been successfully completed.
Electronic Waste in Pakistan

- In Pakistan, the computers and other obsolete electronic goods are imported under the pretext of 'second-hand equipment. A small percentage of the items imported are usable. In practice, after removing the working machines and usable parts, the bulk of the consignment is sent to the recycling industry.

- Hundreds of workers, including teenage children, earn their livelihoods by dismantling the electronic scrap and extracting valuable components.

- E-waste has Environmental repercussions of the various highly toxic elements like lead, cadmium, barium, mercury and chromium which are released during the dismantling of these used computers.

- There is no proper system to recycle and dispose e-waste in Pakistan, which is a serious issue.
The circuit boards originate from all over the world, including the US, Kuwait, Australia, Japan and the UK. Only 2 percent of the computers can be reused; for the remaining computers, all of the metals and plastics are taken out to be re-sold, according to Silicon Valley Toxics Coalition and Basel Action Network. All of the work is done by hand and no protective equipment is used.

Sorting is done and only 15 to 40 per cent of these computers can be used and the rest is recycled. The go-downs working condition is terrible and exposed to toxic fumes from burning hardware.
Electronic Waste in Pakistan

Today, mobile usage is growing exponentially in Pakistan both in terms of number of users and the amount of activity. Pakistan would cross the number of 102 million subscribers by the next two years. In the fiscal year 2009-10, the government has extended support to mobile handsets imports while reducing the custom duty. In 2008-09, the cellular mobile companies in Pakistan added over 6.3 million subscribers.
### CELLULAR SUBSCRIBERS IN PAKISTAN

<table>
<thead>
<tr>
<th>Year</th>
<th>Mobilink</th>
<th>Ufone</th>
<th>Zong</th>
<th>Instaphone</th>
<th>Telenor</th>
<th>Warid</th>
<th>Total</th>
<th>Growth Rate %</th>
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<td>2000</td>
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<td>Year</td>
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<td>Ufone</td>
<td>Zong</td>
<td>Instaphone</td>
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<td>Warid</td>
<td>Total</td>
<td>Growth Rate %</td>
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<td>2005</td>
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<td>2,579,103</td>
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<td>835,727</td>
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<td>7,487,005</td>
<td>1,040,503</td>
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<td>3,573,660</td>
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<td>Dec-09</td>
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<td>22,950,858</td>
<td>16,223,201</td>
<td>96,231,229</td>
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**SCO Cellular Subscribers are 285,072**

**Note:** Including AJK & NAs
# CELLULAR SUBSCRIBERS

## CELLULAR MOBILE DENSITY

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<thead>
<tr>
<th>Year</th>
<th>Mobile Density</th>
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<tbody>
<tr>
<td>2000</td>
<td>0.22</td>
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<td>2001</td>
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<td>2006</td>
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<td>2007</td>
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<td>2008</td>
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<td>2009</td>
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<td>Jan - 2010</td>
<td>58.20</td>
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<tr>
<td>Feb - 2010</td>
<td>58.70</td>
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**Note:** Including AJK & NAs
NATIONAL STAKEHOLDERS

- Ministry of Environment
- Electronics Manufactures Association Karachi
- New Allied Electronics Industry (Pvt) Limited/Karachi
- Federal and provincial EPAs
- Federal Board of Revenue
- Ministry of Commerce
- Ministry of Information Technology
- Pak Telecommunication limited (Ptcl)
- Pakistan Telecommunication Authority
- Mobile Zone
- Mobilink
- U-fone
- Paktel
Challenges of E-Waste

- Lack of Awareness regarding E-Wastes
- Inadequate regulatory measures, inadequate strategies and weak implementation of law
- Lack of Technical Expertise in this area
- Lack of coordination among different Stakeholders and Ministries / Departments
- Lack of system to regulate the import of refurbished computers
- The E-waste issue so far has received little attention from government and non-government environmental bodies
- Inadequate funding available for the implementation of the various provisions of the Basel Convention.
- Proper inventories of Hazardous Waste including E-waste are not available.
- Research work has not been done in this area so far.
Actions Required to Cope the Challenges

- Institutional Framework for the implementation of Basel Convention need to be strengthened forthwith.
- Regulatory measures including development of National Implementation Plan and strategies of the Convention need to be prepared and implemented.
- Public awareness is another area of prime importance need to be focused by the Ministry and the other relevant Stakeholders.
- So far no strategy has been devised to tackle e-waste in Pakistan, No one has been appointed to regulate E-waste disposal -- so much so that the issue is not even mentioned in the IT Policy.
General Suggestion for the Solutions of E-Waste Problem

- There is need to establish more effective strategies/legislations for effective E-Waste management in Pakistan.
- Rather than banning the refurbished computers at all, the government should evolve a system whereby it can check the suitability of second-hand/refurbished electronics.
- There is a dire need to determine the detrimental impact of E-waste processing on public health and environment.
- China, India and Pakistan are all parties to the Basel Convention, which means that more enforcement is needed to control filtration of E-waste from one country to other.
- A special fund should be set up by developed countries to educate workers in the industry and law enforcing agencies regarding the hazards from E-waste.
Technical and Financial Assistance for Pakistan

1. Inventory of E-waste in Pakistan.
THANK YOU