Metals recycling:
Greenpeace activities to promote sustainable management of resources

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Main underlying factors for Greenpeace activities

Metals are a finite resource
• Reduced consumption
• Reuse of products and materials
• Recycling

Need to avoid impacts, including release of hazardous substances
• Metals
• NOx, SOx, particulates
• Other substances produced by society
Mining of primary ores: impacts & implications

Terrestrial mining
- Finite resource
- Impact:
  - Land degradation
  - Wastewater spills
  - Acid mine drainage

Deep seabed mining

Promote sustainable waste management

Collection of waste streams containing recyclable metals
- Domestic waste collection & separation

Link manufacture/product design & waste management
- Greener Electronics
  - longer-lifespan
  - end-of-life take-back programmes
  - ease of recycling (e.g. component separation)
  - eliminating hazardous substances, for example:
    - Beryllium alloys
    - Brominated / chlorinated materials

Including regional / national regulations (EU, India, Argentina, ...)

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Electronic waste recycling:
using rudimentary techniques

Metal recycling:
Industrial facilities
Adequate regulation, especially related to releases
  • Implementation of regulations

Highlight environmental impacts & risks to human health
  • Recent example;
    Soil & rice contamination in vicinity of non-ferrous metal smelters in Hunan Province, China
International Conventions

Minamata convention on mercury
• Global mercury assessment technical working group
• NGO coalition (Zero Mercury)
  – mercury as a resource (recycle / reuse / terminal storage)
  – mercury emissions from non-ferrous metal processing

Basel Convention
  Bamako Convention, Central American Hazardous Waste Trade Agreement,
  Barcelona Convention Waste Trade Protocol, Waigani Treaty for South Pacific

London Convention
• Deep seabed mining

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