What a waste! This is what we hear when we have spent more time, money or energy than was really necessary... It is disturbing to realize that we use the same word to indicate materials that have been used but are no longer wanted, either because they don’t work or the valuable part has been removed. In both cases, the word “waste” is related to the way we behave in the context of the consumer society. In order for communities to function smoothly, people assume and accept the generation of a certain level of waste. A whole business has developed around waste management, in certain cases contrary to the preservation of the environment and natural resources, leaving little incentive to permanently reduce the volume of waste generated.

**Definitions:**

**Waste according to the Basel convention:**

Wastes are substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national laws.

**the United Nations Statistics Division (UNSD):**

Wastes are materials that are not prime products (that is products produced for the market) for which the generator has no further use in terms of his/her own purposes of production, transformation or consumption, and of which he/she wants to dispose.

Wastes may be generated during the extraction of raw materials, the processing of raw materials into intermediate and final products, the consumption of final products, and other human activities. Residuals recycled or reused at the place of generation are excluded.

**OECD definitions for selected categories of waste**

**Municipal waste** is collected and treated by, or for municipalities. It covers waste from households, including bulky waste, similar waste from commerce and trade, office buildings, institutions and small businesses, yard and garden, street sweepings, contents of litter containers, and market cleansing. Waste from municipal sewage networks and treatment, as well as municipal construction and demolition is excluded.

**Hazardous waste** is mostly generated by industrial activities and driven by specific patterns of production. It represents a major concern as it entails serious environmental risks if poorly managed: the impact on the environment relates mainly to toxic contamination of soil, water and air.

**Nuclear (radioactive) waste** is generated at various stages of the nuclear fuel cycle (uranium mining and milling, fuel enrichment, reactor operation, spent fuel reprocessing). It also arises from decontamination and decommissioning of nuclear facilities, and from other activities using isotopes, such as scientific research and medical activities.

Waste is generated in all sorts of ways. Its composition and volume largely depend on consumption patterns and the industrial and economic structures in place. Air quality, water and soil contamination, space consumption and odors all affect our quality of life.

**Waste data: Handle with care**

Waste is a complex, subjective and sometimes controversial issue. There are many ways to define, describe and count it depending on how you look at it. Citizens, technicians, businessmen, politicians, activists; all of them use a different approach, and this explains why it is often a challenge to gather comparable data. From one country to the next, statistical definitions vary a lot. It is notably difficult, for example, to compare waste in rich and poor countries. The topic is also sometimes political, especially when it comes to the trade and disposal of hazardous and nuclear wastes. All waste data should therefore be handled with care.
Different approaches

**Origin**
what human activities generate waste?

- Extraction waste
- Tailings
- Manufacturing waste
- Military waste
- Recycling waste
- Agricultural waste
- Industrial waste
- Garbage
- Nuclear waste
- Pesticides
- Sewage sludge
- Yard trimmings

**Composition**
what is waste made of?

- Mercury
- Tyres
- Cyanides
- Organic waste
- Packaging waste
- Plastics
- Glass
- Solid waste
- Ashes
- Textile
- Lead
- Dirt
- Bulky waste
- Metal
- Wood
- Food
- Paper
- Yard trimmings

**Toxicity**
how dangerous is it for human health and the biosphere?

- Hazardous vs. non-hazardous waste
- Toxic
- Infectious waste
- Special waste
- Stabilized waste
- Ecotoxic
- Poisonous
- Explosive
- Corrosive
- Flammable
- POPs
- Radioactive

**Management**
how is waste handled? who is in charge?

- Waste collected
- Municipal waste
- Urban waste
- Waste
- Transported
- Recycled
- Composted
- Dismantled
- Incinerated
- Landfilled
- Waste water
- Waste reduced
- Waste disposed of
- (deep-well, surface disposals...)

Overlapping Definitions

**Toxicity**

- Hazardous waste streams
- Organic solvents
- Wood preservatives
- Clinical wastes
- Pharmaceutical waste
- Household waste
- Incineration residues
- Sewage sludge
- Waste-rock
- Logging waste

**Origin**

- Compost
- Radioactive waste
- E-waste
- Arsenic
- Cadmium
- Cyanides
- Phenols

**Composition**

- Wastes requiring special consideration
- Wastes containing having as constituents

**Management**

- Waste reduced
- Waste disposed of
- (deep-well, surface disposals...)

NB: In the following pages the boxes contain examples not exhaustive lists.