RECYCLE: RECLAIM THE RAW MATERIALS

By separating items such as aluminum cans and plastic, we can reclaim the raw materials from these items which would have otherwise been thrown away. While recycling takes added effort compared to simply throwing the item in the garbage, there are many benefits in doing so. Recycled materials typically require less energy to process compared to developing new materials altogether

RECYCLE: Recycling means any recovery operation taking place after collection and by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.

Recycle materials to put them back in the product loop and save resources!

In order to ensure that waste materials get recycled, selective collection and the sorting of waste is essential. Successfully establishing selective collection schemes and encouraging citizens to sort their waste are thus crucial for improving recycling rates.

Recycling is the process of converting waste materials into new materials and objects. It is an alternative to "conventional" waste disposal that can save material and help lower greenhouse gas emissions. Recycling can prevent the waste of potentially useful materials and reduce the consumption of fresh raw materials, thereby reducing: energy usage, air pollution (from incineration), and water pollution (from landfilling).

Recycling is a key component of modern waste reduction and is the third component of the "Reduce, Reuse, and Recycle" waste hierarchy. Thus, recycling aims at environmental sustainability by substituting raw material inputs into and redirecting waste outputs out of the economic system.

There are some ISO standards related to recycling such as ISO 15270:2008 for plastics waste and ISO 14001:2015 for environmental management control of recycling practice.

Recyclable materials include many kinds of glass, paper, cardboard, metal, plastic, tires, textiles, batteries, and electronics. The composting or other reuse of biodegradable waste—such as food or garden waste—is also a form of recycling. Materials to be recycled are either delivered to a household recycling center or picked up from curbside bins, then sorted, cleaned, and reprocessed into new materials destined for manufacturing new products.

In the strictest sense, recycling of a material would produce a fresh supply of the same material—for example, used office paper would be converted into new office paper or used polystyrene foam into new polystyrene. This is accomplished when recycling certain types of materials, such as metal cans, which can become a can again and again, infinitely, without losing purity in the product. However, this is often difficult or too expensive (compared with producing the same product from raw materials or other sources), so "recycling" of many products or materials involves their reuse in producing different materials (for example, paperboard) instead. Another form of recycling is the salvage of certain materials from complex products, either due to their intrinsic value (such as lead from car batteries, or gold from printed circuit boards), or due to their hazardous nature (e.g., removal and reuse of mercury from thermometers and thermostats).

"Recyclate" is a raw material that is sent to, and processed in a waste recycling plant or materials recovery facility which will be used to form new products. The material is collected in various methods and delivered to a facility where it undergoes re-manufacturing so that it can be used in the production of new materials or products. For example, plastic bottles that are collected can be re-used and made into plastic pellets, a new product.