Zero Waste & R-Concept

Zero waste is a philosophy that aims to minimize waste by redesigning systems and processes to prevent waste generation. The **R-Concept** refers to strategies like:

- **Reduce** – Minimize waste production.
- **Reuse** – Extend product life by using items multiple times.
- **Recycle** – Convert waste into new materials.
- **Recover** – Extract energy or resources from waste.
- **Refuse** – Avoid unnecessary consumption.
- **Rethink** – Design processes and products for sustainability.
- **Repair** – Fix items instead of discarding them.

Circular Economy

A circular economy moves away from the traditional linear model (**take → make → dispose**) and focuses on designing products and systems that:

- Keep materials in use for as long as possible.
- Reduce resource extraction.
- Regenerate natural systems.
- Encourage repair, refurbishing, and remanufacturing.

ISO 14000 Series

The **ISO 14000** series is a set of international environmental management standards developed by the International Organization for Standardization (ISO). Key components include:

- **ISO 14001** – Environmental Management System (EMS) framework for organizations to reduce their environmental impact.
- **ISO 14004** – Guidelines for EMS implementation.
- **ISO 14040 & 14044** – Life Cycle Assessment (LCA) standards for evaluating environmental impact.
- **ISO 14064** – Guidelines for measuring and verifying greenhouse gas emissions.