LET'S LEARN ABOUT

PROPER WASTE MANAGEMENT

WASTE

YOU CAN FIND MANY DESCRIPTIONS OF WHAT IS WASTE, HERE ARE SOME OF THEM:

“ANY SUBSTANCE OR OBJECT WHICH THE HOLDER DISPOSES OF OR IS REQUIRED TO DISPOSE OF PURSUANT TO THE PROVISIONS OF NATIONAL LAW IN FORCE.” – EU

"ANY GARBAGE OR REFUSE, SLUDGE FROM A WASTEWATER TREATMENT PLANT, WATER SUPPLY TREATMENT PLANT, OR AIR POLLUTION CONTROL FACILITY AND OTHER DISCARDED MATERIAL, INCLUDING SOLID, LIQUID, SEMI-SOLID, OR CONTAINED GASEOUS MATERIAL RESULTING FROM INDUSTRIAL, COMMERCIAL, MINING, AND AGRICULTURAL OPERATIONS, AND FROM COMMUNITY ACTIVITIES.“ – EPA

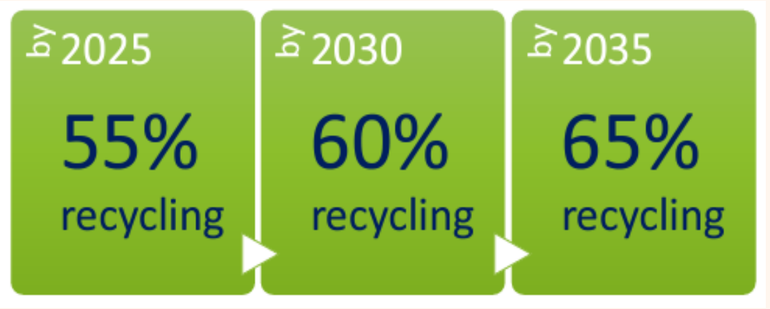
Waste types

THERE ARE MANY TYPES OF WASTE, BELOW ARE LISTED THE MAIN ONES:

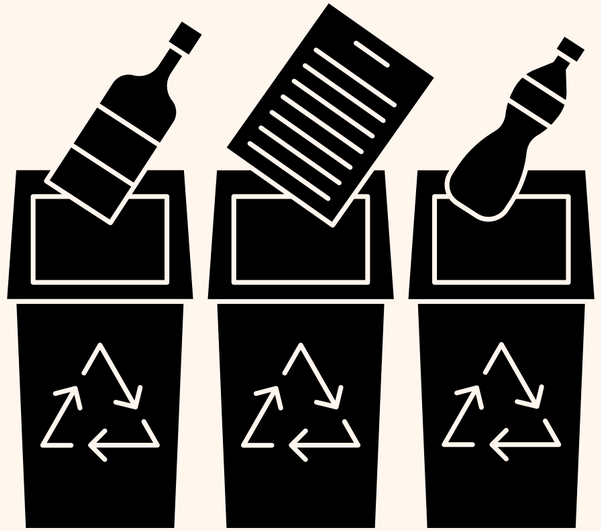
MUNICIPAL SOLID WASTE	HAZARDOUS WASTE	INDUSTRIAL WASTE	AGRICULTURAL WASTE	CONSTRUCTION AND DEMOLITION WASTE
Waste that is generated from homes, offices, and public places.	Waste that poses a significant threat to human health and the environment due to its toxic, corrosive, or flammable nature	Waste produced by industries such as manufacturing, construction, and mining.	Waste generated by farming activities.	Waste generated during the construction and demolition of buildings and infrastructure
Food scraps, paper, plastic, and other	Batteries, electronic waste, chemicals, and medical waste.	Such as scrap metal, chemicals, and manufacturing by-products.	Animal manure, crop residues, and pesticides.	Such as concrete, bricks, and wood.

European legislation and targets

On February 23, 2018, the European Union approved four legislative proposals known as the Waste Package. These proposals aim to promote increased waste recycling and foster the development of a circular economy. The agreements include binding targets for waste reduction, updated rules to minimize waste generation, improved waste management regulations, promotion of product reuse, and enhanced recycling practices across all EU member countries.



A directive specifically addressing packaging mandates that governments should aim for 70% of product packaging to be recycled by 2030. However, the recycling targets vary for different packaging materials: 30% for wood, 55% for plastic, 75% for glass, and 85% for paper.



WASTE MANAGEMENT CAN BE DESCRIBED AS "THE SET OF PROCEDURES AND ACTIVITIES INVOLVED IN HANDLING WASTE FROM ITS INITIAL GENERATION TO ITS ULTIMATE DISPOSAL.

THE OBJECTIVE OF IT IS TO MITIGATE THE ADVERSE EFFECTS OF WASTE ON HUMAN HEALTH, THE ENVIRONMENT, GLOBAL RESOURCES, AND THE OVERALL AESTHETICS OF THE PLANET.

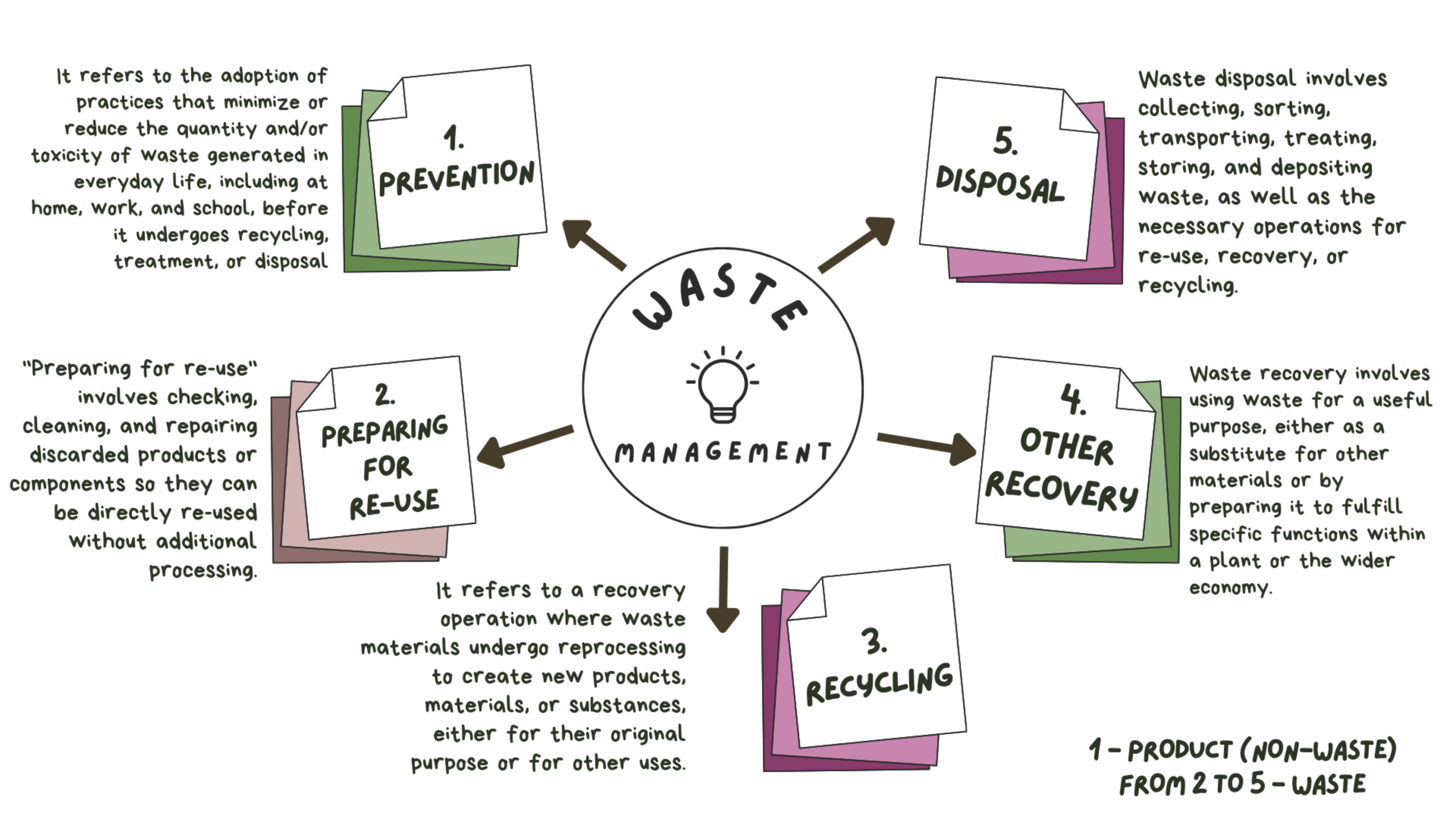
Waste Framework Directive

BASIC PRINCIPLES HOW WASTE SHOULD BE MANAGED:

- WITHOUT ENDANGERING HUMAN HEALTH AND HARMING THE ENVIRONMENT
- WITHOUT RISK TO WATER, AIR, SOIL, PLANTS OR ANIMALS
- WITHOUT CAUSING A NUISANCE THROUGH NOISE OR ODORS
- AND WITHOUT ADVERSELY AFFECTING THE COUNTRYSIDE OR PLACES OF SPECIAL INTEREST

THE FOUNDATION OF EU WASTE MANAGEMENT IS THE FIVE-STEP "WASTE HIERARCHY", ESTABLISHED IN THE WASTE FRAMEWORK DIRECTIVE. IT ESTABLISHES AN ORDER OF PREFERENCE FOR MANAGING AND DISPOSING OF WASTE.

WASTE MANAGEMENT



1. PREVENTION

It refers to the adoption of practices that minimize or reduce the quantity and/or toxicity of waste generated in everyday life, including at home, work, and school, before it undergoes recycling, treatment, or disposal

2. PREPARING FOR RE-USE

"Preparing for re-use" involves checking, cleaning, and repairing discarded products or components so they can be directly re-used without additional processing.

3. RECYCLING

It refers to a recovery operation where waste materials undergo reprocessing to create new products, materials, or substances, either for their original purpose or for other uses.

4. OTHER RECOVERY

Waste recovery involves using waste for a useful purpose, either as a substitute for other materials or by preparing it to fulfill specific functions within a plant or the wider economy.

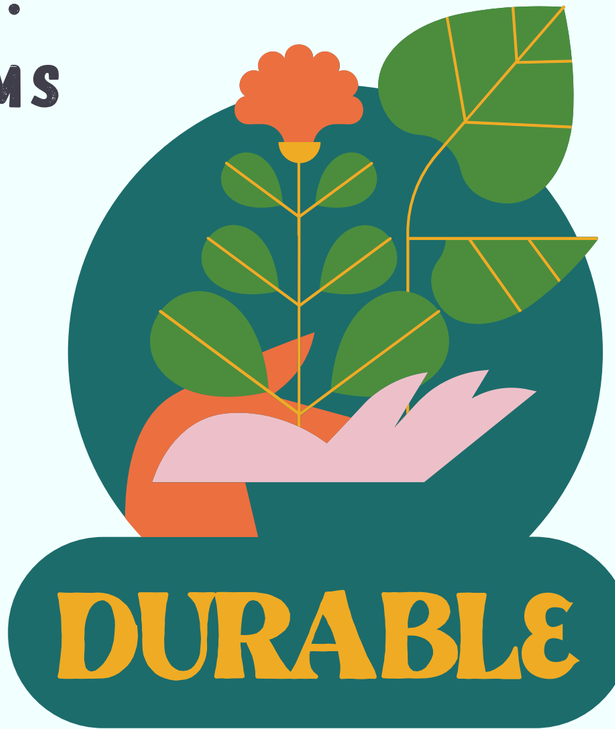
5. DISPOSAL

Waste disposal involves collecting, sorting, transporting, treating, storing, and depositing waste, as well as the necessary operations for re-use, recovery, or recycling.

1 - PRODUCT (NON-WASTE)
FROM 2 TO 5 - WASTE

PREVENTION

ADAPTATION OF HABITS THAT INVOLVE AVOIDING THE USE OF DISPOSABLE UTENSILS, NAPKINS, PAPER TOWELS, AND OTHER SINGLE-USE PRODUCTS. INSTEAD, OPTING FOR DURABLE ITEMS THAT HAVE A LONGER LIFESPAN COMPARED TO THE LESS DURABLE ALTERNATIVES.

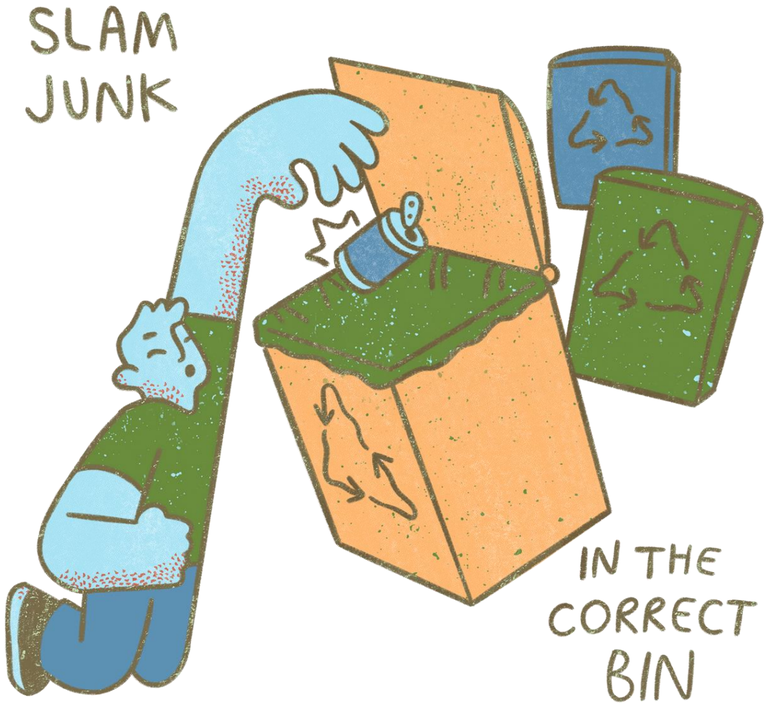


SORTING

WASTE SORTING INVOLVES SEPARATING AND CATEGORIZING VARIOUS TYPES OF WASTE BASED ON THEIR **COMPOSITION**, AIDING IN APPROPRIATE DISPOSAL OR RECYCLING.

THE **OBJECTIVE** IS TO OPTIMIZE THE RECOVERY OF VALUABLE MATERIALS FROM THE WASTE STREAM WHILE MINIMIZING LANDFILL OR INCINERATION DISPOSAL.

SORTING



WASTE SORTING TYPICALLY INVOLVES SEPARATING MATERIALS SUCH AS PAPER, PLASTIC, GLASS, METAL, AND ORGANIC WASTE INTO DIFFERENT CATEGORIES.

CAN BE DONE →

- MANUALLY BY INDIVIDUAL
- THROUGH AUTOMATED SYSTEMS (SUCH AS SORTING MACHINES OR CONVEYOR BELTS)

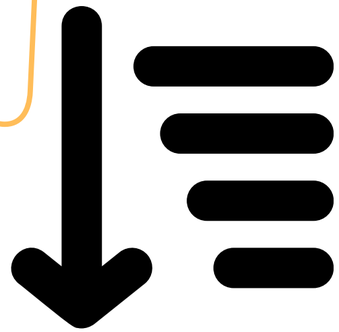
BENEFITS

- REDUCING THE AMOUNT OF WASTE SENT TO LANDFILLS
- CONSERVING NATURAL RESOURCES
- REDUCING GREENHOUSE GAS EMISSIONS ASSOCIATED WITH WASTE DISPOSAL
- REDUCING THE RISKS ASSOCIATED WITH HAZARDOUS WASTE MATERIALS (HELPS TO PREVENT POLLUTION AND PROTECT PUBLIC HEALTH AND THE ENVIRONMENT BY)

REDUCE, REUSE,RECYCLE (3R)

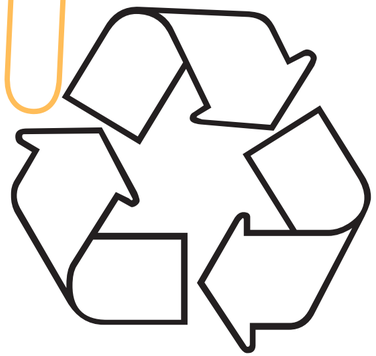
3R POLICIES FORM THE BASIS OF WASTE MANAGEMENT

IMPROPER WASTE MANAGEMENT PRESENTS SUBSTANTIAL HAZARDS TO HUMAN HEALTH, AS WELL AS VARIOUS ADVERSE CONSEQUENCES. IT CONTRIBUTES TO VISUAL POLLUTION, DEGRADES THE AESTHETICS OF SURROUNDINGS. THE BURNING OF WASTE LEADS TO AIR POLLUTION, RELEASING HARMFUL SUBSTANCES INTO THE ATMOSPHERE. INCORRECT DISPOSAL OF WASTE CAN CONTAMINATE WATER BODIES, POSING RISKS TO AQUATIC ECOSYSTEMS AND HUMAN CONSUMPTION. MOREOVER, INADEQUATE WASTE MANAGEMENT CONTRIBUTES TO CLIMATE CHANGE BY DEPLETING THE OZONE LAYER AND EXACERBATING ENVIRONMENTAL CHALLENGES.



REDUCE

REUSE



RECYCLE

REDUCE

FREQUENT UPGRADES OF ELECTRONICS LIKE CELLPHONES RESULT IN WASTEFUL SPENDING AND UNNECESSARY DEPLETION OF NATURAL RESOURCES.

NEED - NOT WANT

REDUCE PACKAGING WASTE BY BRINGING YOUR OWN SHOPPING BAGS OR OPTING FOR PAPER BAGS INSTEAD OF PLASTIC. LOOK FOR REUSABLE BAGS AT STORES OR REUSE PLASTIC BAGS WHEN AVAILABLE.

MINIMUM PACKAGING

CHOOSE HIGH-QUALITY ITEMS FOR LONGEVITY AND SUPERIOR PERFORMANCE. OPT FOR DURABLE ALTERNATIVES LIKE SILVERWARE, REUSABLE CUPS, AND WATER BOTTLES TO REDUCE WASTE.

HIGH QUALITY ITEMS

REUSE AND REPURPOSE

Reuse containers at home or for school projects.

Donate newspapers to pet stores

Donate outgrown clothing to friends or charity.

Offer unneeded furniture and household items to people in need, friends, or charity.

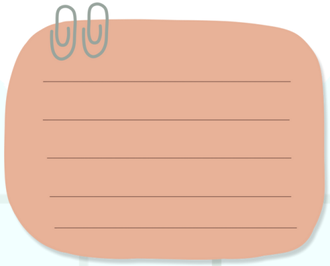
Repurpose old furniture through reupholstering, slipcovering, or modifying the frame.

REUSE AND REPURPOSE

Repurpose wrapping paper, plastic bags, boxes, and lumber.

Donate broken appliances to charity or vocational schools for art classes or repairs.

Utilize one-sided sheets of paper for note-taking or rough drafts.



Cut old towels and sheets into small pieces for use as dust cloths.

Donate books and magazines to schools, public libraries, or nursing homes.

CREATIVE USES FOR MATERIALS

Save and reuse packing materials like polystyrene and plastic quilting for future packing needs.

Repurpose microwaveable dinner plates for outdoor parties or children's use.

Use old tires in the garden or play yard.

SUSTAINABLE SHOPPING PRACTICES

Choose beverages in returnable containers.

Carry a reusable tote bag or bring your own bags when shopping.

RECYCLE

Recycling leads to increased supply of materials and the emergence of manufacturing facilities that utilize them. This improves our understanding of the recycling process.

GENERATES INDUSTRY

Certain communities have established collaborative partnerships with workshops for individuals with disabilities, created and managed job-training programs, or found employment opportunities for unemployed individuals in recycling initiatives.

CREATES JOBS

Recycling should be seen as a cost-effective disposal option that saves resources, protects the environment, and offers benefits such as lower taxes and energy savings.

COST AVOIDANCE

WASTE AND ENTREPRENEURSHIP

WASTE-TO-ENERGY

Waste-to-energy technologies convert waste into usable energy. Entrepreneurs can develop and operate these technologies, reducing landfill waste and providing renewable energy

COMPOSTING

Entrepreneurs can create composting businesses that collect and process organic waste, reducing landfill disposal and the emission of harmful greenhouse gases.

CIRCULAR ECONOMY

Entrepreneurs can create businesses that repurpose waste materials, reducing waste and conserving resources while adding economic value.

UPCYCLING

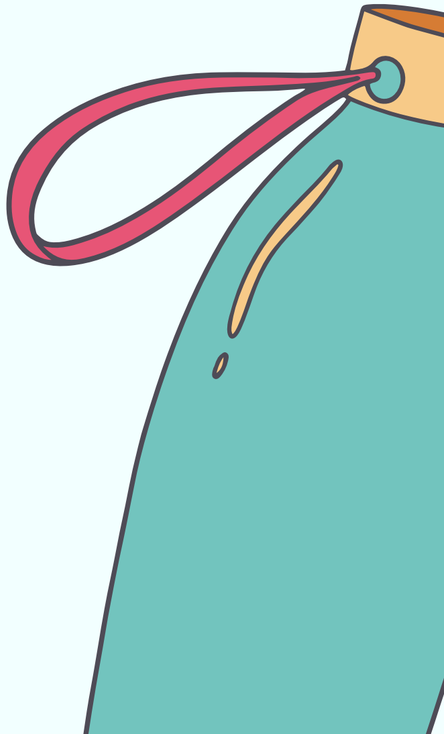
Upcycling involves converting waste materials into new products of greater value. Entrepreneurs can establish businesses that repurpose items like used clothing, old furniture, or discarded plastic, turning them into sellable, innovative products.

GREEN ECONOMY

Entrepreneurs can develop businesses that use sustainable chemistry to produce environmentally-friendly products, including renewable and biodegradable materials like bioplastics.

IMPORTANCE OF ENTREPRENEURSHIP

THESE EXAMPLES HIGHLIGHT HOW ENTREPRENEURSHIP IS INSTRUMENTAL IN ADDRESSING ENVIRONMENTAL CHALLENGES THROUGH INNOVATION, TECHNOLOGICAL ADVANCEMENTS, AND SUSTAINABLE APPROACHES. ENTREPRENEURS CAN DRIVE POSITIVE CHANGE THROUGH RECYCLING, UPCYCLING, WASTE-TO-ENERGY, AND COMPOSTING, EFFECTIVELY CONVERTING WASTE INTO VALUABLE RESOURCES, REDUCING GREENHOUSE GAS EMISSIONS, AND PRESERVING NATURAL RESOURCES.



LET'S DO OUR PART

BY UNDERSTANDING THE PROPER WASTE MANAGEMENT, WE CAN ALL DO OUR PART TO PROTECT THE ENVIRONMENT AND CREATE A MORE SUSTAINABLE FUTURE.