

Recycling Process Infographic - Visual Guide

THE COMPLETE RECYCLING PROCESS

Recycling transforms waste materials into new products through a systematic process. This infographic illustrates each step of the recycling journey, from collection to manufacturing, highlighting the environmental and economic benefits of recycling programs.

STEP 1: COLLECTION

Waste materials are collected from households, businesses, and public spaces through curbside pickup, drop-off centers, and special collection events. Proper segregation at source ensures higher quality recyclables.

STEP 2: SORTING

Materials are sorted manually and mechanically by type, quality, and composition. Advanced sorting facilities use optical scanners, magnets, and air classifiers to separate different materials efficiently.

STEP 3: PROCESSING

Contaminants are removed through washing, shredding, and cleaning processes. Materials are prepared for transportation to manufacturing facilities through baling, compacting, and size reduction.

STEP 4: MANUFACTURING

Recycled materials become feedstock for new products. Paper becomes new paper products, plastics become new containers, metals become new metal products, creating a closed-loop circular economy.

STEP 5: DISTRIBUTION

Finished products reach consumers through retail channels. Recycled content products are indistinguishable from virgin material products in quality and performance.

STEP 6: NEW LIFE CYCLE

Products are used, eventually becoming waste again. The cycle continues as these materials are collected and recycled, reducing the need for virgin resources and minimizing environmental impact.

KEY ENVIRONMENTAL BENEFITS

- Reduces energy consumption by up to 80%
- Conserves natural resources and reduces mining
- Decreases greenhouse gas emissions
- Prevents pollution of land and water
- Supports biodiversity conservation
- Reduces waste sent to landfills

ECONOMIC IMPACT STATISTICS

- Recycling supports over 1 million jobs globally
- Recycling 1 tonne of plastic saves 5,774 Kwh of energy
- Recycling 1 tonne of paper saves 17 trees
- Recycling creates 36 billion in economic activity annually
- Recycling reduces waste management costs by 50%

RECYCLING IN KENYA

Kenya's recycling sector is growing rapidly, contributing to SDG 12 (Responsible Consumption and Production). The circular economy approach supports sustainable development and job creation in the waste management sector.