



**LAND MANAGEMENT, ENVIRONMENT & SOLID-WASTE:
INSIDE EDUCATION AND BUSINESS IN CENTRAL ASIA
ERASMUS-EDU-2023-CBHE Project Number: 101129032**

MICRO-CREDENTIAL

**CIRCULAR ECONOMY
FOR LAND AND WASTE MANAGEMENT**

4.- Solid Waste Streams and Material Flows

Activity 1.- Material Flow Analysis (simplified diagram).



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Activity 1 – Material Flow Analysis (Simplified Diagram)

Objective: Develop a basic understanding of material flows in a local waste management system and identify points of inefficiency.

Task: Create a simplified Material Flow Analysis (MFA) diagram for a selected area (e.g., neighborhood, district, or city).

Instructions:

- Define the system boundary by selecting a specific area such as your neighborhood or a city district. Identify at least three major waste streams, for example organic waste, plastics, and paper/cardboard. Map the main stages of the system, including waste generation (households, businesses), collection, transport, and treatment (such as recycling, composting, or landfill).
- Draw a simplified diagram using arrows to represent material flows and clearly indicate where materials are recovered and where losses occur (e.g., landfill, leakage, informal dumping). Based on your diagram, briefly explain where the largest material losses occur and which waste stream has the highest potential for circular use.

Output: A simple diagram (hand-drawn or digital) accompanied by a short explanation (150–250 words).

Hint: Focus on clarity rather than complexity; this is a conceptual diagram, not a full quantitative MFA.