

WASTE CARDS

You need to have solutions for all waste types: bio-waste (🌿), energy waste (🔥) and recyclables (♻️).



♻️ up to 500 000
👤 150

Recycling centre & plant
Recyclable wastes are separated and recycled.
Pros:
- Extends the life time of functional products
- Creates jobs for people
- Secondary raw materials for industry
- Decrease the need of primary raw materials
Cons:
- Impurities reduce the quality of secondary raw materials
- Only profitable in large scale

(1 grid)



👤 10 000 - 50 000 👤 20

Anaerobic digestion
Biodegradable wastes are treated anaerobically to produce biogas.
Pros:
- Reduces the need for fossil fuels
- By-product (digestate) can be used as fertilizer
Cons:
- High investment and operating costs

(2 grids)



👤 200 000
👤 100

Waste incineration plant
Combustible and biodegradable wastes may be incinerated to decrease the volume of waste for final disposal.
Pros:
- Produces electricity and heat
- Substitutes primary (fossil) fuels in energy production
Cons:
- Transportation costs
- Ashes contain various hazardous substances
- Only economic in a large scale

(1 grid)



👤 10 000 - 50 000 👤 20

Composting plant
Biodegradable wastes are treated aerobically to produce compost.
Pros:
- The end-product (compost) can be used as fertilizer
Cons:
- Moderate need for land area
- Release of greenhouse gases (CO₂)

(2 grids)

Waste transfer station



 10 000
 100
 

Waste transfer station
 Recyclable and combustible wastes are separately collected and transported outside the city for treatment and utilization.

Pros:


- No need to have recycling facilities within the city




Cons:

- Transportation and labour costs
- Wastes need to be clean and properly sorted

(1 grid)

Landfill with gas extraction



 10 000 - 100 000
 50
 


Landfill with gas extraction

All waste fractions are disposed to landfill. Due to disposal of biodegradable wastes, landfill gas (CH_4 and CO_2) is formed, which can be collected and use as source of energy.

Pros:

- Biogas can be collected and used for electricity and heat production

Cons:

- Possible leachates to the ground and/or water

(4 grids)