

## Activity 10: Waste Management

### Description

Europe still generates large amounts of waste: construction and demolition waste, food and gardening waste, mining waste, sludge, industrial waste, old cars, batteries, old TVs, plastic bags, paper, sanitary waste, old furniture, old clothes ... and the list goes on.

There is still the unpleasant and harmful habit of people to throw waste on the ground or in the water. It is important to talk to adults in non-formal activities so that they know: to classify waste; to identify ways to stop this phenomenon based on their own knowledge; be aware that waste is harmful to the environment; to selectively collect waste; to notice the need for waste recycling.

### Teaser activity

Ask the participants to read the text:

*Selective collection and recycling often reduce the negative impact of waste affecting the environment and society.*

*Selective waste collection involves the management of waste, by their temporary storage, by categories, in specially arranged places, for recycling.*

*Recycling is the collection, separation and processing of products / materials already used or some of their components to be transformed into new useful goods.*

- *Paper recycling saves about 25% of the amount of electricity and 90% of the amount of water used to produce one kilogram of paper;*
- *Cardboard boxes used for packaging beverages (milk, juices, for example) are made of paper protected by thin layers of plastic (polyethylene). Aseptic boxes have a thin layer of aluminium that makes it easier to keep the contents fresh for longer, without the need for preservatives, as this prevents oxygen and light from entering the package. Boxes of this kind can be recycled.*
- *A wide range of products can be manufactured from recycled PETs: roof insulation films, components for the automotive industry or for lighting fixtures, kerosene for aircraft, textiles, etc. At the same time, very large spaces are required for PET storage. So, it is best to contribute to their recycling.*
- *Waste spends different periods of time in the process of natural grading biodes, aided by moisture, bacteria, lack of light, etc .:*
  - *fruit and vegetable peels - 2-5 months;*
  - *a paper bag - 3-5 months;*
  - *newspapers - 3-12 months;*
  - *a matchstick - 6 months;*
  - *chewing gum - 5 years;*
  - *a leather shoe - 25-50 years;*
  - *a dose of aluminum - up to 100 years;*
  - *a PET - over 500 years;*
  - *a credit card - about 1000 years;*
  - *a glass container - 1,000,000 years old.*

## Activity 10: Waste Management

### Competences addressed

#### Ecological competences:

- Development of documentation and communication skills
- Demonstrating an understanding of the consequences of one's behaviour in relation to the environment
- Demonstrating an ecological way of thinking in making decisions
- Understanding the importance of using waste as a raw material to obtain other goods.
- Developing a proactive attitude towards identifying simple solutions for waste recycling at home.

#### Social competences:

- Ability to collaborate with specialists in other fields.
- Developing interpersonal relationships and strengthening the skills needed for teamwork.
- Ability to appreciate diversity and multiculturalism
- Stimulating creativity and developing a competitive and innovative spirit, as well as teamwork.

### Learning objectives

- Training and cultivating adults' interest and responsibility for waste.
- Promoting and stimulating healthy behaviours towards the elements of the environment.
- Training and consolidation of selective waste collection and recycling skills.
- Training and cultivating adults' interest and responsibility for waste.
- Development of the skill of selective waste collection in the community.
- Empowering adults to keep their community spaces clean, selectively collecting waste.
- Stimulating the critical and self-critical spirit regarding the attitude towards waste collection and recycling.
- Creating the necessary premises for adults to be able to consider waste a resource.

### Group characteristics

Activity to be done in groups of 4 to 6 trainees.

### Preparation for the activity

Prepare a box in which you put different cardboard and plastic packaging, papers, food scraps, plastic bags and bottles, metal objects, textiles, bottles.  
Prepare gloves for trainees, scarves to blindfold them.  
You need to give paper and pen to the groups of trainees you train.

## Activity 10: Waste Management

### The activity / the content

#### Ice-breaker: The price is right

- Divide the trainees into four groups.
- Ask each group to choose a representative.
- Cover the eyes of the four representatives with scarves. Each one, in turn, will take out of the box, touching the objects, which they will recognize. They will name the package, describe it, then take it out of the bag and show it to colleagues. The others from the group must write down the duration of their decomposition and the effects on the environment, as well as the methods of reduction and the ways of recycling them. Is this package nature friendly?
- Compare the results they found with those provided on the internet.

#### Group reflection: Highlighting the most common types of waste in the environment

- The most common wastes will be written on the board and on white sheets, in random order: papers, food scraps, plastic bags and bottles, metal objects, textiles, glass etc.
- The trainer lists the waste that can be collected selectively: glass, paper, plastic and specifies the color of the container for selective storage.
- The trainees are divided into groups and are asked to sort the waste in 3 baskets (paper/ glass/ plastic-metal – depending on the country, there might be more baskets necessary).
- They are also invited to write in teams messages to encourage recycling (messages for each type of waste: paper/ glass/ metal). They will do advertising about recycling.

#### Group research: What the science says

- The group discusses the negative effects of hard degradable waste on the health of the environment during the period until it is completely degraded.
- Trainees list some of their ideas on stopping this phenomenon: selective waste collection for recycling, fines, more garbage cans, reducing the amount of waste through lower consumption, more posters with environmental urges, the power of personal example.
- The purpose of waste recycling is established together with the trainees:
  - protecting the environment.
  - protecting people's health.
  - reducing the costs of obtaining new products.
  - maintaining public cleanliness.
  - conservation of the natural resources from which the products are obtained.

#### Conclusion

To reduce means to diminish, to decrease. When we talk about reducing our waste, it means producing less garbage. Purchasing products with less packaging helps us reduce the amount of waste we generate. We could turn organic materials into compost instead of throwing them in the trash. We should also rethink more carefully if we need everything we intend to buy.

We often use certain objects only once and then get rid of them. But if we intend to reuse them, it means that we have identified certain ideas and ways to reuse them. Older

## Activity 10: Waste Management

clothes, books, toys could be given to friends or second-hand shops. Some people can get work done this way, and others can benefit from goods they cannot afford to buy. Instead of throwing things away, we can find ways to have fun, be creative, generous, or use them again.

Recycling is only a small part of rethinking the way we use our natural resources. Almost half of the things we throw away could be recycled. Recycling involves transforming old objects into new ones. Materials such as paper, aluminum, glass, plastic, etc. can be transformed into new products. Some of them can be recycled in the same material (glass can only be turned into glass), while others can result in new products (PET plastic can be turned into mats or synthetic yarns!). Recycling consumes less energy or less natural resources to obtain the new product, pollutes less air or water than if we manufacture goods from scratch.

### Questions for reflection, self-assessment and conclusions

- What did today's activity consist of?
- How did you feel when you were confronted with scientific information?
- What information was the most surprising?
- How can we apply what we have learned in our daily lives?

### Recommendations on how to adapt to different target groups

If the group doesn't have a lot of time available, only one of the steps of the tool can be performed.

### References

<https://www.tetrapak.com/content/dam/tetrapak/publicweb/ro/en/sustainability/Brochure-Environment-Project.pdf>