

# The plastic pollution on the Baltic Sea and rivers: step by step plastic inventory

**Interreg**



Co-funded by  
the European Union

**CoCoRiCo**

**Estonia – Latvia**

# What is plastic pollution?

- Plastic pollution is plastic items used in daily life and after usage it is left in nature, especially water.
- It comes from:
  - plastic single-use plastic items and packaging
  - fishing nets
- Plastic does not break down easily. Instead, it stays in the environment for hundreds of years and it breaks into smaller pieces. These tiny pieces are called microplastics.



# Why plastic pollution is a big problem

## **Damage to ecosystems**

Pollutes land, rivers, and oceans. It can block waterways, harm plants, and destroy natural habitats where animals and plants live.

## **Harm to biodiversity**

Many animals mistake plastic for food or get trapped in it. This can injure or kill them. As a result, different species are at risk, and the balance of nature is disturbed.

## **Effects on human health**

Microplastics enter our bodies through food, water, cosmetics, and even the air we breathe, leading to long-term chemical accumulation.

# Microplastics – a hidden danger

Microplastics are very small pieces of plastic, less than 5 mm in size.

There are two types of microplastics:

- primary microplastics are made small on purpose, for example in cosmetics like scrubs and creams.
- secondary microplastics come from bigger plastic items that break down over time due to weather and use, such as plastic waste or tiny fibers from clothes.

Microplastics are a silent danger because:

- animals eat them
- they are almost impossible to clean up
- they can enter the human body

# Facts you should know

The average usage time of a plastic bag is just 12 minutes, and it takes about 20 years to break down.

Plastic packaging accounts for 36% of plastic waste.

100,000 marine animals are killed by plastic waste each year.

The average person consumes 20 kg of plastic in their lifetime due to food and drink packaging microplastics.

*Source: [cleanhub.com](https://www.cleanhub.com)*

# Small actions = big change

Avoid single-use plastic items and packaging in daily life

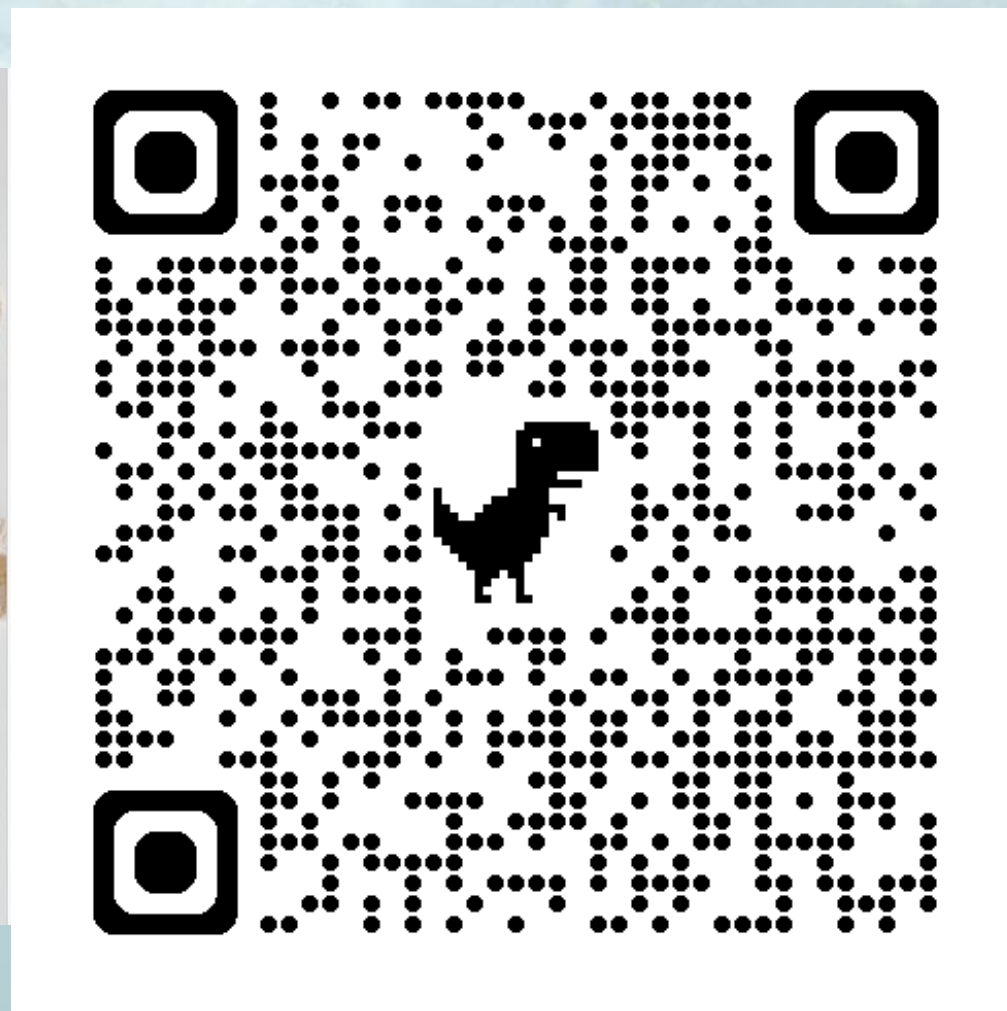
Recycle plastic waste properly

Choose natural fabric clothes – cotton, linen, wool.

Choose items from natural materials – wood, glass, steel.

Choose eco-labelled products – they not contain the microplastic.

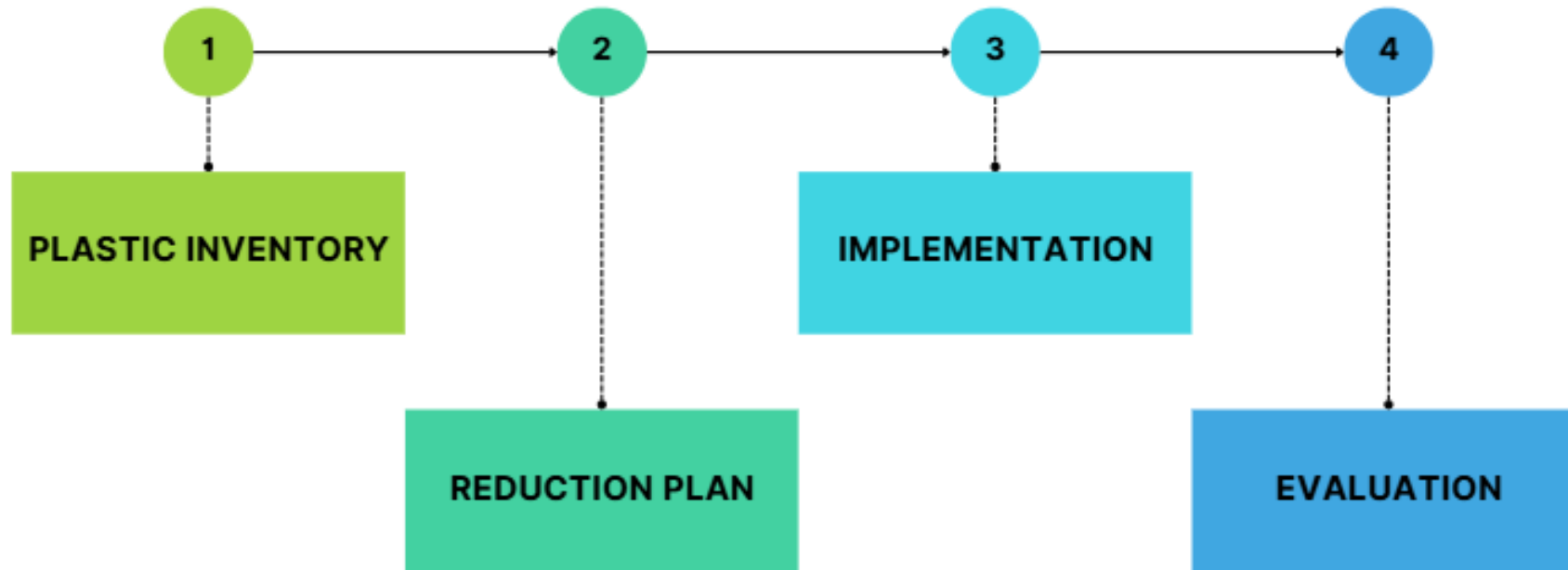
# Read more and be plastic free



# What can I and my mates do?

- You can raise your awareness about plastic pollution by reading the brochure and move forward to be active and change your behavior towards sustainable and environmentally friendly consumption.
- Before reducing plastic consumption, it is wise to conduct a plastic waste inventory to identify the most common plastic items and establish a baseline. This will help track reductions over time.
- For this reason, the plastic inventory tool was created. To carry out the inventory process, you will need a computer, Microsoft Excel, a kitchen scale, and a separate waste bin for collecting plastic waste.

# Step-by-step plastic inventory





# Plastic inventory

Let's start! At the beginning of your reduction journey, it is important to set the ground rules—decide how long you will carry out the inventory and divide responsibilities among the class. For the inventory, set up one plastic bin to be used only for plastic waste.

- If you collect waste for one week, afterwards sort it into groups - bottles, candy packaging, plastic bags, food containers, etc.
- Then weigh each group using a kitchen scale, count the number of items in each group, and divide the total weight by the number of items to calculate the average weight per plastic item.
- Fill in the inventory tool.

# Reduction plan

After obtaining the inventory results, identify which plastic items are most common and look for alternative items to replace them. For example, a plastic bottle can be replaced with a glass or stainless steel bottle.

Write a reduction plan by selecting plastic items that can be replaced with sustainable and natural materials.

Reach an agreement among pupils to reduce plastic use by choosing alternatives or avoiding plastic altogether.

# Implementation

Next period, try to implement your reduction plan and additionally collect plastic waste in your class.

After completing the implementation stage, sort the plastic again by groups, count the items in each group, and compare the numbers with those from the inventory stage.

Calculate the reduction as a percentage. For example, if there were 20 bottles before and 10 after, the reduction is 50%.

# Evaluation

- After filling in the reduction rates, review your results and discuss in class:
- your achievements,
- the clarity of the process,
- what was difficult and what you would do differently if you were to implement an inventory,
- whether this activity has changed your behaviour and if you now choose more sustainable and environmentally friendly items instead of plastic,
- whether you apply your knowledge and share it with your household.

# Congratulations!

## You did a great job and contributed to saving the environment and the Baltic Sea

Presentation prepared and customized in the framework of Interreg Estonia-Latvia programme's project «Community cooperation for rivers and coasts» (CoCoRiCo, NR EE-LV00218)

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