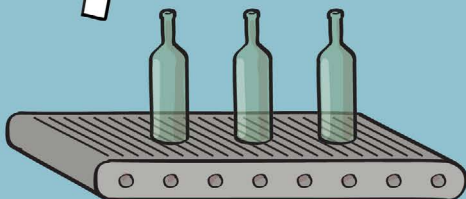
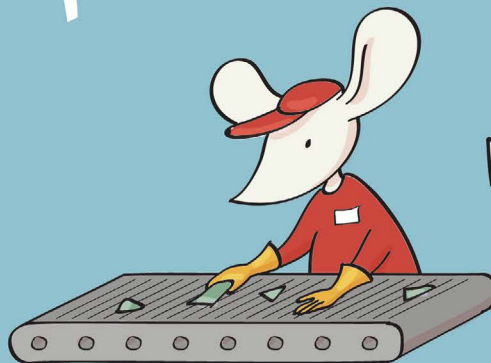
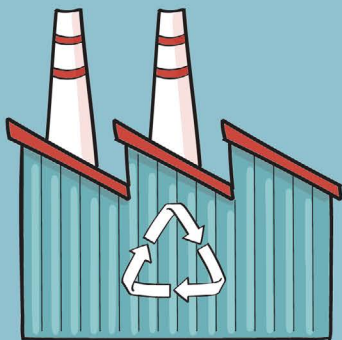
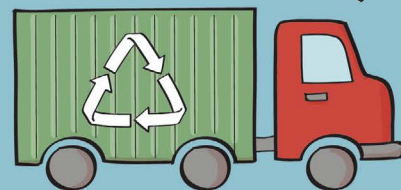




Aware Animals



RECYCLING  
little  
BOOK  
about



# Content:

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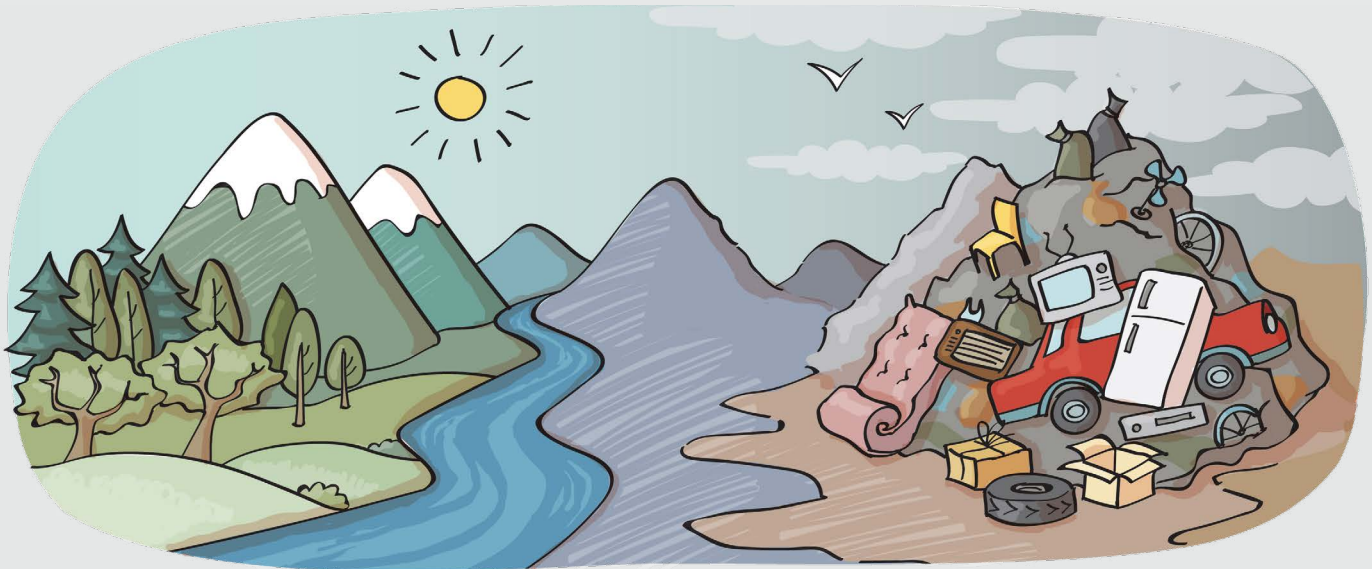
# Why should we recycle?

## TO SAVE NATURAL RESOURCES

Waste sorting and recycling could reduce energy and raw materials consumption by 70 to 90%.

## TO REDUCE LANDFILL VOLUME

Each recycled piece of garbage means one less in a landfill. And this way we don't lose a valuable resources.



## CLEAN NATURE

We reduce environmental pollution which leads to fewer carbon emissions, fewer chemicals released from production, fewer released microplastics, cleaner air, water and soil. This will result in a cleaner planet and a safer and brighter future for both us and our children.

## MORE PROFITABLE

When purchasing a product, we pay in advance a fee for its recycling. It is not profitable not to take advantage of a service for which we have already paid. In addition, we are a subject to a fine if we do not dispose of a particular type of waste in the containers specifically designated for it.

# When do we begin?

Recycling does NOT BEGIN the moment we start emptying the trash can.

Recycling BEGINS the moment we are choosing what product to buy and what its packaging is made of.

Not all materials are recycled equally easily, equally cheap or an equal amount of times. The differences are staggering, as you might find out in the following pages. For this reason, it is much more sensible and conscientious to choose packaging from a material that would have a longer life in the recycling cycle.

In this book, we will give you a brief overview of each of the recyclable materials, how to identify them, sort them and prepare them for disposal in the appropriate containers. We hope this will help you navigate more easily through the number of choices we are facing daily as consumers.

And if creating zero waste might often seem daunting and even impossible, the step towards choosing packaging that can be recycled more efficiently requires only little information and organization.

## WE HAVE THE POWER TO CHOOSE WHAT WE BUY

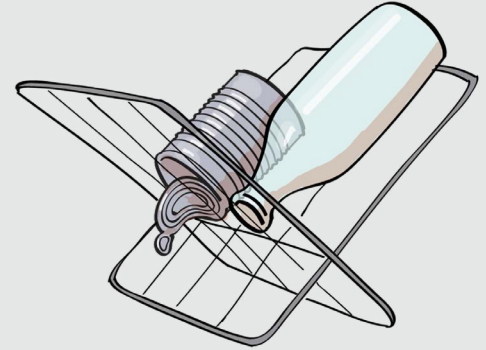


# How to prepare the waste?

It is IMPORTANT that the WASTE disposed of in the recycling containers is:

## EMPTY, CLEAN AND DRY

...so as not to contaminate the remaining waste in the container / transport truck / landfill and thus obstruct the recycling of the entire batch. Also, empty packages are lighter, therefore this saves transport resources.



## FOLDED AND CRUSHED

...to take up less volume in containers, but mostly in trucks during transport. This way we save fuel and reduce releasing harmful emissions into the air when transporting waste.



## NO BAG

...to take up less space in the container, but mostly so as not to interfere with the sorting process. Whether the different types of materials are sorted by machine or by hand, removing them from the bag speeds up and smooths out the process.

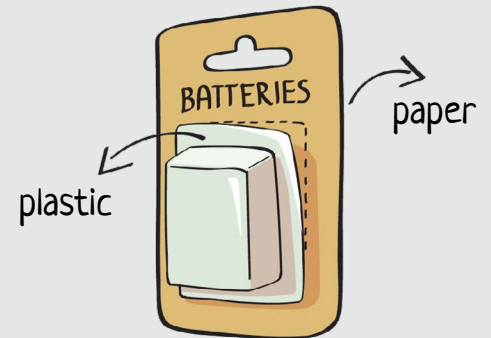


# How to prepare the waste?

It is IMPORTANT that the waste is NOT:

## FROM TWO DIFFERENT MATERIALS

...because this confuses the sorting process (whether it is done by hand or by a machine). For example, if we have a package consisting of a paper and a plastic part, we can separate them and dispose of each part in the appropriate container.



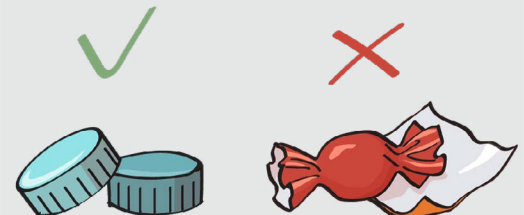
## TOO THIN

...so that it can be easily pierced or punctured. This is true, for example, of the thin plastic bags in which we often purchase fruit and vegetables, because it has been found that they can cause serious problems for the mechanisms of the recycling machines.



## TOO SMALL

...and volatile because they have been found to cause serious problems for the mechanisms of the recycling machines. Exceptions are small items made of harder and heavier materials, such as plastic caps.



# Symbols and codes

Recycling symbol of the packaging and the type of material from which it is made:
























The symbol contains numbers and an abbreviation, indicating the type of material from which the packaging is made.

A packaging **MUST** have this symbol in order to be recyclable.

However, there are products marked with this symbol that will **NOT** be recycled for technical or geographical reasons.

That is why it is **IMPORTANT** to be informed about the recycling opportunities in our specific country, city and municipality.

PLASTIC						
 01 PET polyethylene terephthalate	 02 HDPE high-density polyethylene	 03 PVC polyvinyl chloride	 04 PE-LD low-density polyethylene	 05 PP polypropylene	 06 PS polystyrene	 07 OTHER other plastics
PAPER			METAL		ORGANIC	
 20 PAP cardboard	 21 PAP paperboard	 22 PAP paper	 40 FE steel	 41 ALU aluminium	 50 FOR wood	 51 FOR cork
TEXTILE		GLASS			COMPOSITES	
 60 COT cotton	 61 TEX textile	 70 GL clear	 71 GL green	 72 GL brown	 84 C/PAP paper + aluminium/plastic	 90 C/LDPE plastic + aluminium

# Paper

## General information:

- clean, it can be recycled up to 5-7 times;
- if it is contaminated with food waste, it can be composted and thus not load the landfills;
- it is biodegradable and it is proven to be one of the most harmless materials to humans.

## Important:

- fold the packages so that they don't take up extra space in the truck. In this way we save fuel and reduce harmful emissions released into the air during transportation;
- don't throw dirty paper in the container, because this can compromise the contents of the entire container (this includes used napkins, sanitary materials, greasy pizza boxes, sandwich paper bags, etc.)

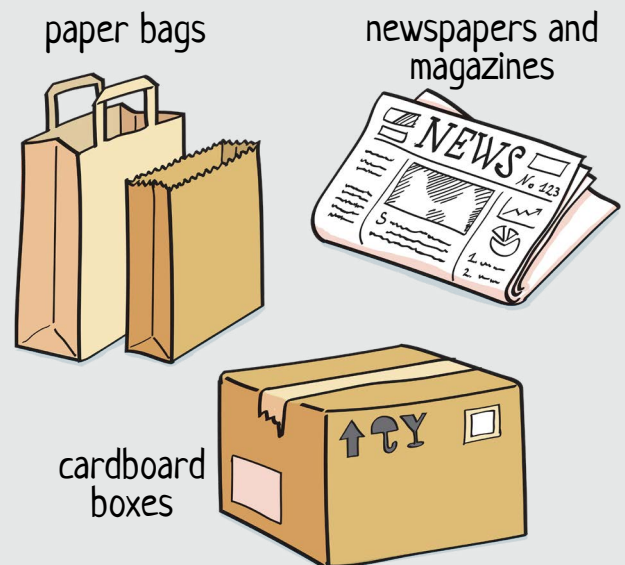


## Interesting facts:

1 ton of recycled paper saves:

- approximately 13 trees;
- 2.5 barrels of oil;
- 4,100 kilowatt hours of electricity;
- 4 cubic meters of the volume of a landfill;
- 31,780 liters of water.\*

## Examples:





# Glass

## General information:

- the most environmentally friendly and safe for human health and the planet;
- it can be recycled infinitely many times without compromising its quality;
- no BPA (bisphenol A) and other harmful chemicals.

## Important:

- remove caps and plugs;
- empty the item of its content;
- the glass for bottles and jars is different from the glass for windows, so it is not good to mix the two types;
- PORCELAIN does not melt at the same temperature and therefore it is very important not to throw it in these containers so as not to interfere with the process.



GL  
clear



GL  
green



GL  
brown

## Interesting facts:

- 1 ton of glass crumbs saves 1.1 ton of raw materials;
- 1 recycled glass bottle saves electricity for 1 bulb of 100 watts to glow for 4 hours.\*

## Examples:



# Metal

## General information:

- can be recycled over and over again without compromising the quality of the final product;
- making new steel from recycled cans uses 75% less energy than producing it from raw materials.

## Important:

- empty the packages of their content;
- rinse and remove food waste and grease so as not to contaminate the contents of the entire container;
- this also applies to kitchen aluminum foil and plates made of the same material. If they are clean, there is no reason not to recycle them.



## Interesting facts:

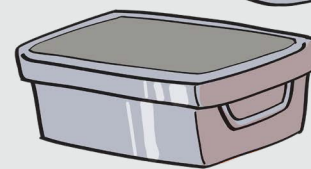
- from 1250 kg. aluminum secondary raw materials, 1 ton of aluminum is obtained;
- recycling 1 ton of steel saves 1.5 tons of iron ore, 40% water, 75% energy and 85% less carbon emissions into the air.\*

## Examples:

cans from food



cans from beverages



containers

# Plastic

## General information:

- petroleum based material;
- depending on the type, it can be recycled, but with each subsequent cycle the quality is lost, due to which it is recycled once or twice if at all;
- decomposes into microplastic, which is extremely harmful to the environment and human health.

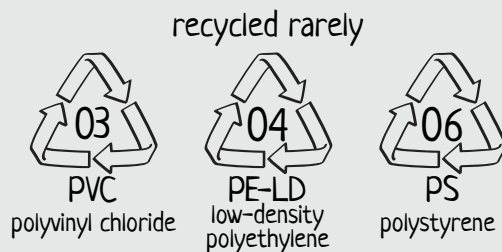
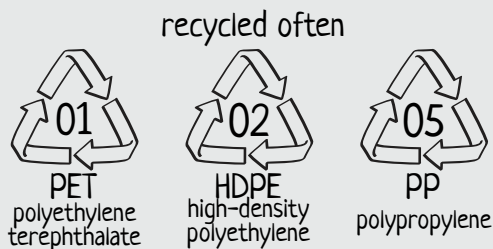
## Important:

- empty the packages of their content;
- rinse and remove food waste and grease so as not to contaminate the contents of the entire container;
- crush plastic bottles to take up less space in transport trucks. In this way we save fuel and reduce harmful emissions released into the air during transportation.

## Interesting facts:

- 56% of recycled PET (polyethylene terephthalate) is utilized by carpet and clothing manufacturers;
- the energy saved by recycling 1 plastic bottle will power a computer for 25 minutes.\*

## Examples:



# Composite packaging

## General information:

- also called multilayered, composite packaging the one composed of more than one material. (e. g. Tetra Pak is made of paper, plastic and aluminium);
- often difficult and expensive to recycle because the packaging has to be divided in its composite materials.

## Important:

- empty the packages of their content;
- rinse and remove food waste and grease so as not to contaminate the contents of the entire container;
- the paper used to make the Tetra Pak cannot be recycled. That is why fresh paper is always used for each new batch.
- C / LDPE, from which most toothpaste tubes are made, is often non-recyclable.



PapPet  
plastic +  
paper



C/PAP  
plastic +  
paper + aluminium



C/LDPE  
plastic +  
aluminium

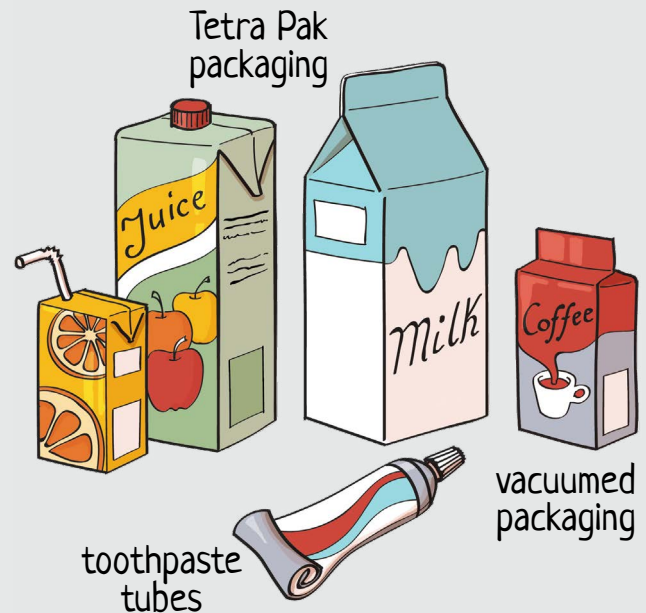


TEX  
plastic +  
tinplate

## Interesting facts:

- only 29,9% of the materials in Tetra Pak are recycled;\*
- the positive side of Tetra Pak packaging is that they are lighter, which makes them easier to transport and this reduces their carbon footprint.

## Examples:



# Textile

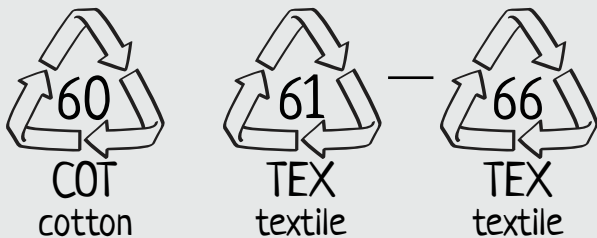
## General information:

The most common materials in the textile industry can be divided in three groups:

- SYNTHETIC ( polyester, acrylic, nylon );
- SEMISYNTHETIC ( viscose, modal, lyocell );
- NATURAL ( cotton, linen, wool, silk ).

## Important:

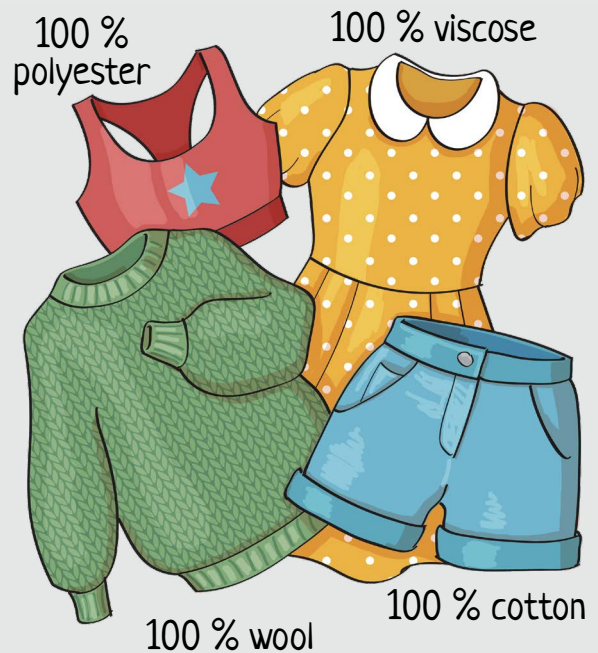
- BLENDED fabrics are a mix of different percentage of any of the above.  
( e. g. 53% viscose, 42% cotton, 5% elastane )  
Blended fabrics are NOT recyclable;
- NATURAL ( plants and animal based ) and SEMISYNTHETIC ( from natural raw materials that are then chemically modified ) materials are biodegradable, while SYNTHETIC ( petroleum based ) ones degrade between 20 and 200 years and decompose into microplastics.



## Interesting facts:

- $\approx$  60 million tons of textiles are dumped in landfills or burned worldwide annually;\*
- when washed, the synthetic materials release microplastics, which cannot be captured by the treatment plants.

## Examples:



# Organic

## General information:

- represents any biodegradable waste materials;
- this includes both plant food residues (such as husks, nuts, stones) and garden waste (such as cut grass, dry leaves and branches)

## Important:

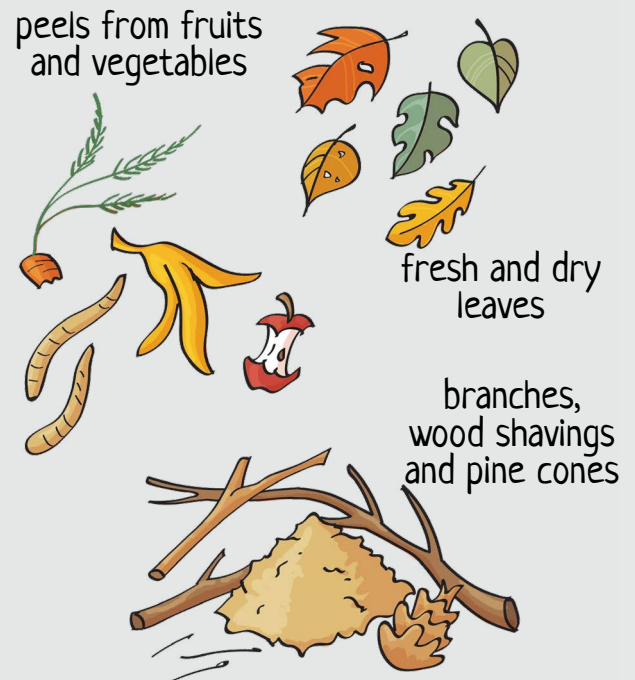
- it is important that organic waste does not end up in the landfills, where it is suffocated by other waste and produces the harmful gas METHANE;
- in many areas there are separate containers for organic waste; if you do not have biodegradable waste containers in your area, you can make your own compost; even if you do not have a garden, there are now many available options for composting in an urban environment.



## Interesting facts:

- METHANE, when released into the atmosphere, has a greater impact on climate change than even CARBON DIOXIDE;
- $\approx 50\%$  of the waste we produce worldwide is organic.\*

## Examples:



# Dangerous and oversized

WASTE that is disposed of ONLY in designated areas:

( check the order and methods of collection of this waste in your municipality )



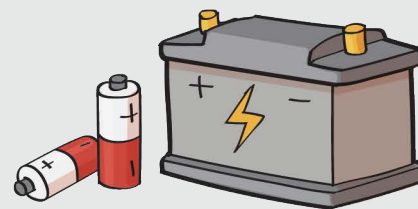
## ELECTRONICS

- smartphones
- kitchen appliances
- tvs, monitors, computers



## SANITARY

- medical supplies
- sanitary waste
- mercury-containing items



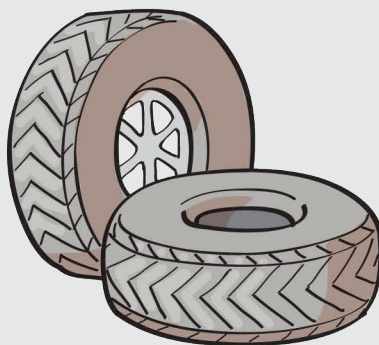
## BATTERIES

- household batteries  
( rechargeable/non rechargeable )
- accumulators



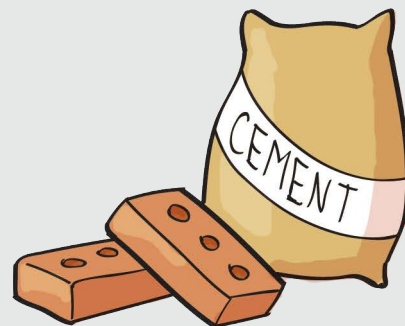
## DANGEROUS LIQUIDS

- motor oil
- varnishes / paints
- cleaning supplies



## TIRES

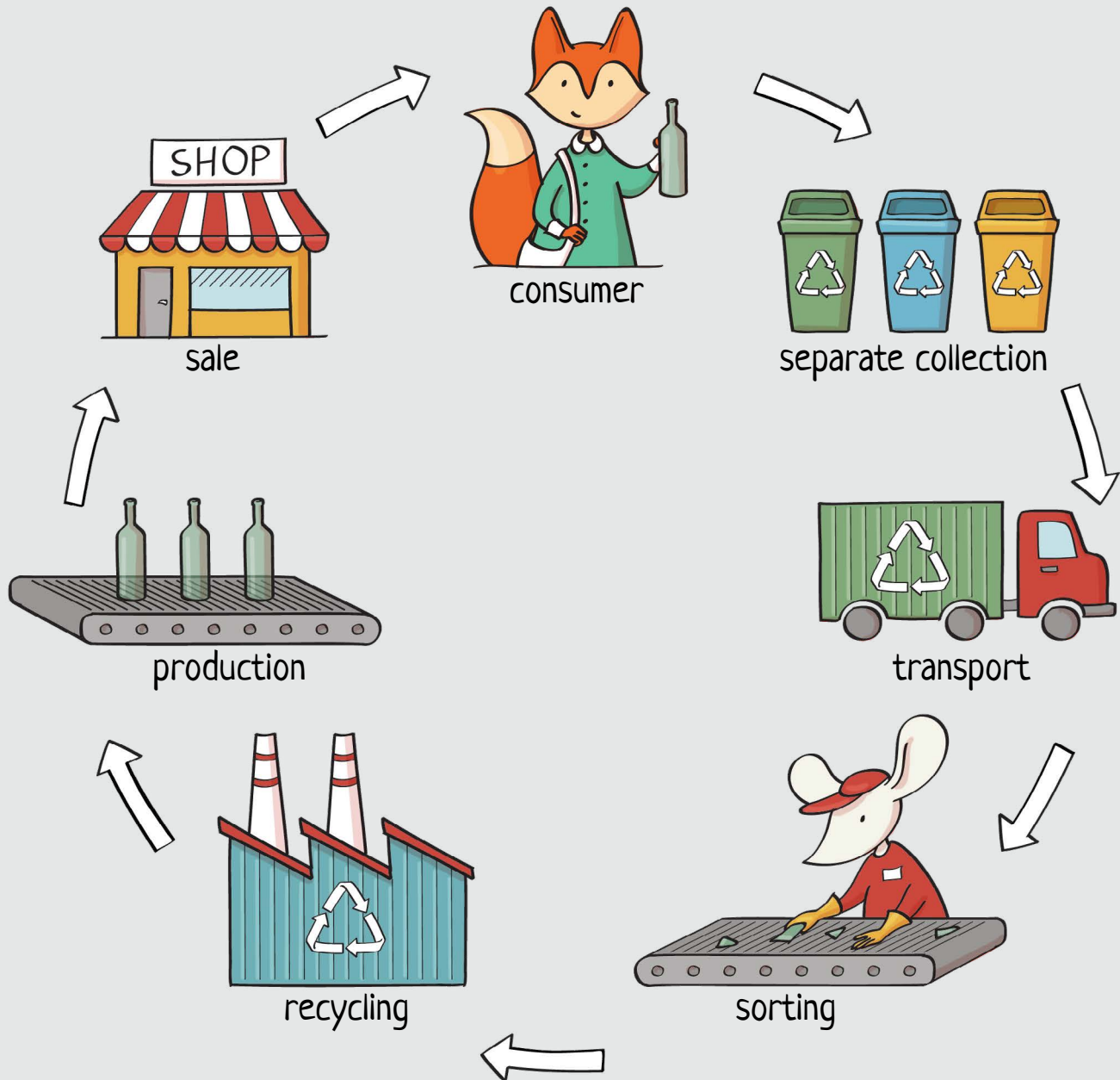
each repair shop is obliged to accept old tires and hand them over for recycling



## BUILDING MATERIALS

- old window frames
- bricks and tiles
- old furniture and lumber

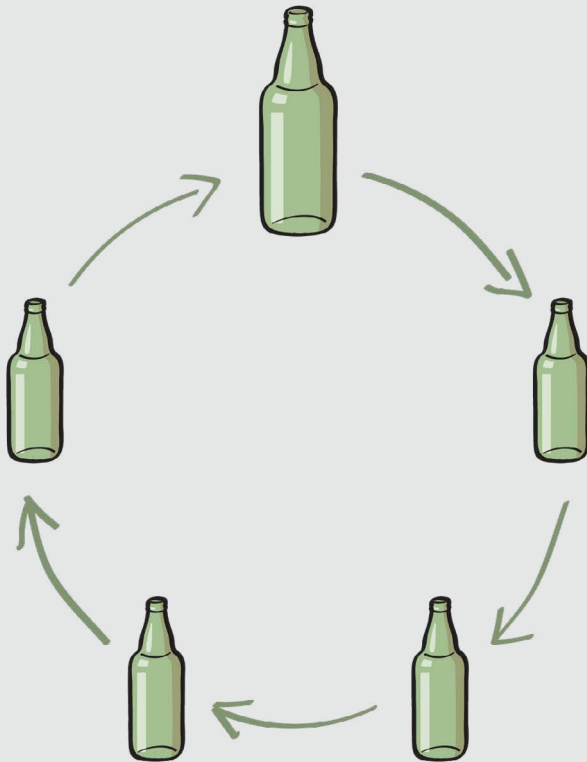
# Recycling cycle





# Types of processing cycles

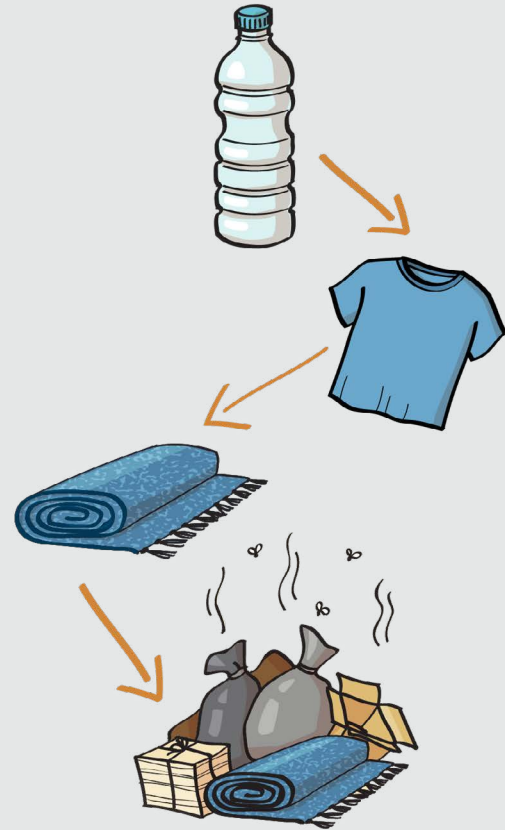
Closed-loop



GLASS

- closed recycling cycle is the conversion of a waste product back into the same product;
- the quality of the material is maintained during each processing cycle.

Open-loop



PLASTIC

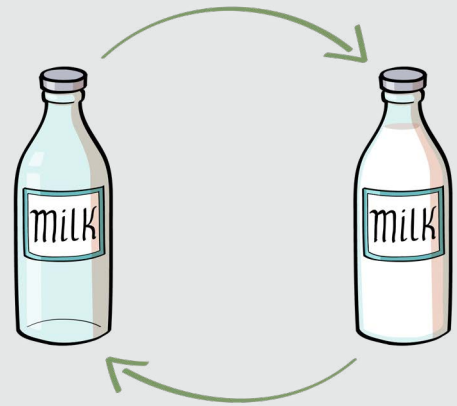
- downcycling - the quality decreases with each processing cycle;
- maximum 1 or 2 processing cycles;
- mandatory addition of new raw material in each processing cycle.

# Alternatives

Recycling can be an extremely important process and save us many valuable resources and energy. Especially that of glass and metal, where we have a closed loop processing cycle. Unfortunately, less than 16% of all waste is recycled worldwide.\* That is why we offer you two alternative methods that do not create any waste.

## DEPOSIT SYSTEM

Under the deposit system, consumers who buy a product pay an additional amount (deposit), which will be refunded upon return of the package or product. The system is based on offering an economic incentive for consumers to return empty bottles and containers to the store so that they can be reused.



## ZERO WASTE PHILOSOPHY

This is a set of principles focused on minimizing the waste we generate. In practice, this means using reusable containers, cups, boxes and utensils instead of disposable ones. Shopping for food, cosmetics and detergents can also take place in bulk in your own containers and jars.



(for more information - [awareanimals.com](http://awareanimals.com))

# Who are we?

## TEAM:

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Borislava Andonova  
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## ACKNOWLEDGMENTS:

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## SOURCES:

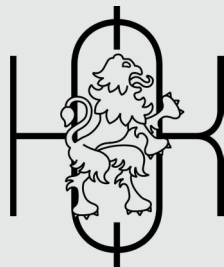
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фонд  
„Култура“

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