

ALPLA



THE MYTH OF
THE EVIL
PET BOTTLE



THIS IS OUR MISSION. AND HAS BEEN FOR MORE THAN **70** YEARS.

PRESENTING PLASTIC IN A BAD LIGHT
DOESN'T SOLVE ANY PROBLEMS.

BUT MAKING PLASTIC BETTER DOES.

Plastics don't have it easy – they come under fire from all sides. And yet a lot of the claims made about the harm to the environment caused by plastic packaging are negative preconceptions or only half-truths.

It is an indisputable fact that the majority of the products we need in our daily lives are dependent on functional packaging. There are stringent requirements to be met regarding hygiene, durability and consumer safety – and it is the positive properties of plastic packaging in particular that contribute significantly to these requirements being met.

If plastic is used responsibly and is recycled as frequently as possible after use and for as long as possible, it is more sustainable than the alternative packaging materials. Developing and realising solutions of this kind is our area of expertise – and this has been the case for more than 70 years.

ALPLA is a pioneer in the development and production of sustainable packaging solutions using plastic and leads by example to this day. We operate our own recycling plants around the world. We also engage in partnerships that seek to optimise the use of resources, further advance the production of high-quality recyclates and develop reuse solutions.

Those who demonise plastics do them an injustice. We are therefore combating the 'myth of the evil PET bottle' with robust facts. Prepare to be surprised! Some of the facts will prompt you to revise your opinion and perhaps even rethink your own actions.

This is precisely what we too continue to do, thereby continuing to develop.

GLASS, PAPER AND METAL ARE MORE SUSTAINABLE THAN PLASTIC.

01



IN FACT: PET IS A SUSTAINABLE PACKAGING MATERIAL.

In a comparison of the environmental footprints of various packaging materials, plastic usually performs better than glass or metal.

Glass has a melting point of 1,600°C, whereas for PET it is just 260°C. Less energy is therefore used and less carbon is emitted during the production of PET beverage bottles than when glass bottles are produced.

Plastic is very light and therefore causes fewer carbon emissions than other packaging materials when being transported.

A major advantage of PET is its resource-conserving recyclability. Bottles with a high proportion of recycled PET therefore have a clear edge in terms of their environmental footprint.

INFLUENCE ON THE CLIMATE

[g CO₂]



Source:
c7-consult, January 2024

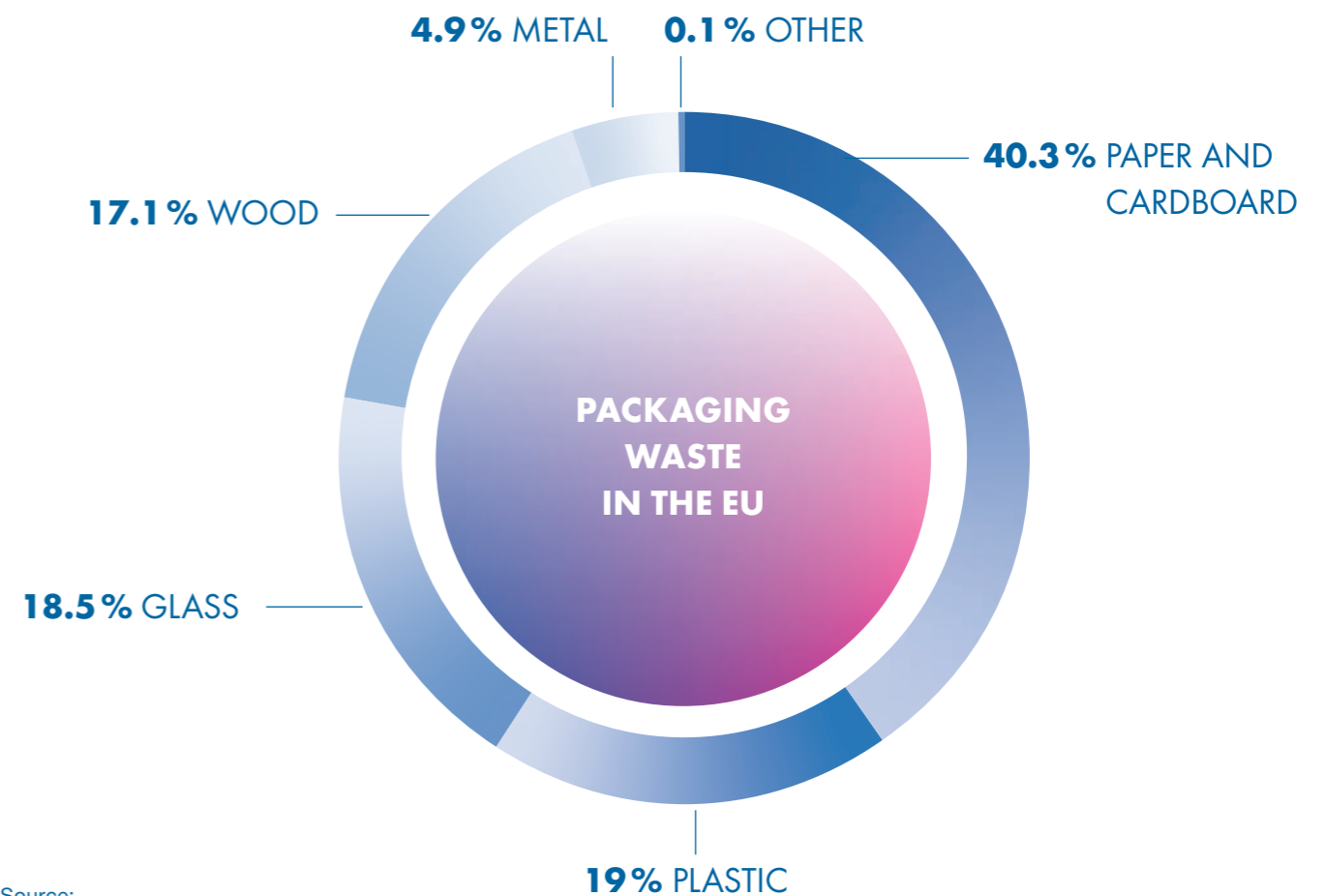
EXAMPLE: 1 l OF MINERAL WATER IN AUSTRIA

THE MAJORITY OF PACKAGING WASTE IS PLASTIC.



IN FACT:
PLASTIC PACKAGING
ACCOUNTS FOR JUST A FIFTH
OF ALL PACKAGING WASTE.

- ▶ Plastic packaging accounts for just 19% of all packaging waste in the EU, closely followed by glass at 18.5% and wood at 17.1%.
- ▶ Significantly larger proportions of total packaging waste are attributable to paper and cardboard.



Source:
Eurostat, 2021

PLASTIC PACKAGING IS PREVENTING US FROM ACHIEVING CARBON TARGETS.



IN FACT:

PLASTIC PACKAGING ACCOUNTS FOR ONLY A VERY SMALL PROPORTION OF A PERSON'S CARBON FOOTPRINT.

- › Every person in the EU causes approximately 7.4 tonnes of carbon emissions a year. Plastic packaging causes only a fraction of these in comparison to transport, energy and food – just 0.5%!
- › Just one return flight from Vienna to Majorca and back causes as much carbon to be emitted as using plastic packaging for approximately eleven years!

CARBON EMISSIONS



Sources:
Eurostat, 2021; German Environment Agency (UBA)

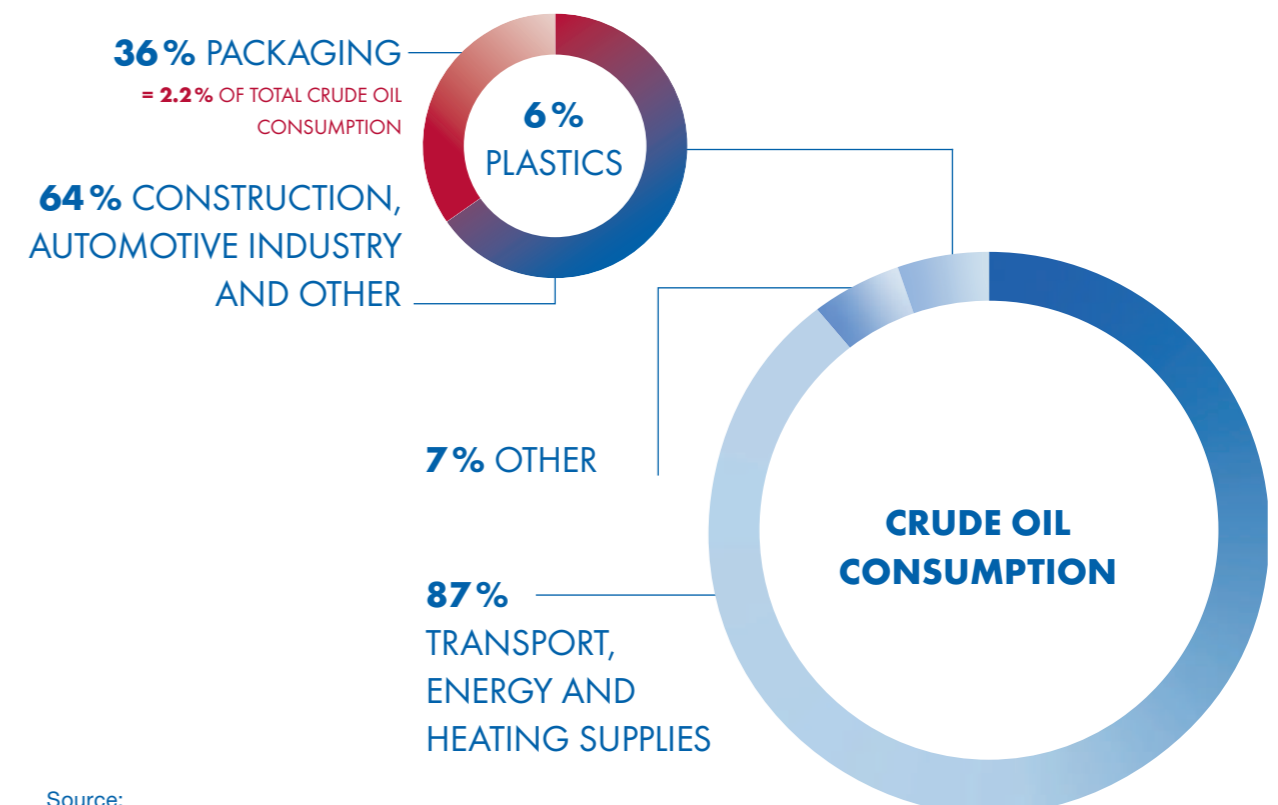
PLASTIC PACKAGING CAUSES EXTREMELY HIGH CRUDE OIL CONSUMPTION.



IN FACT:

JUST 2.2% OF THE CRUDE OIL PRODUCED GLOBALLY IS USED FOR THE PRODUCTION OF PLASTIC PACKAGING.

- › It takes far fewer fossil resources to produce plastics than people think.
- › What's more, unlike 'burnt' fuel, used plastics can be recycled multiple times, thus conserving resources.
- › There are also sustainable alternatives in the form of bio-based plastics which are made of renewable resources.



Source:
BPF, reviewed in 2024

IT WOULD BE BETTER FOR THE ENVIRONMENT TO REPLACE PLASTIC.

05



IN FACT:
IT'S NOT THE MATERIAL THAT'S THE PROBLEM, BUT HOW IT IS HANDLED.

- ▶ Plastic is a valuable material which guarantees safe, affordable and sustainable supplies for the global population. It is crucial that the material be given a value and be recycled.
- ▶ ALPLA therefore actively



establishes global infrastructures for the collection, sorting and recycling of plastics,



raises awareness that plastic is a valuable resource rather than a waste product and



supports various initiatives that combat environmental pollution.

PLASTIC PACKAGING ALWAYS ULTIMATELY ENDS UP AS LANDFILL.



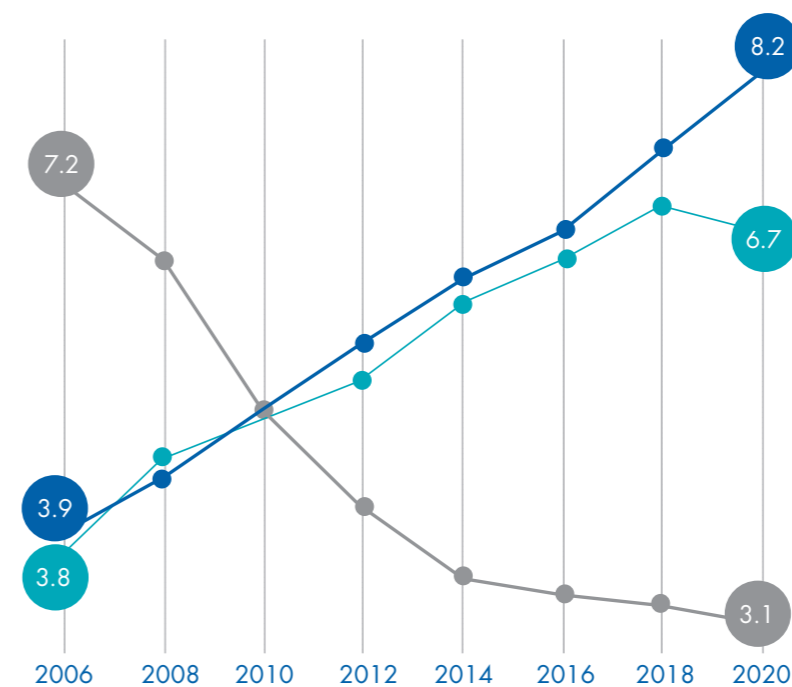
IN FACT:
MORE AND MORE PLASTIC IS BEING RECYCLED.

- ▶ Used plastic packaging is increasingly being collected throughout Europe.
- ▶ Only a small proportion of this is then used as landfill – and this is diminishing all the time. Accordingly, the proportions of recycled and incinerated plastic waste are increasing.
- ▶ When plastics are incinerated, the energy they contain is exploited. In the case of plastics which can no longer be recycled, incineration is preferable over landfilling.



FURTHER PROCESSING OF PLASTIC PACKAGING WASTE IN EUROPE*

million tonnes



+110%
RECYCLING

+76%
INCINERATION

-57%
LANDFILLING

*EU + Norway, Switzerland and the UK.

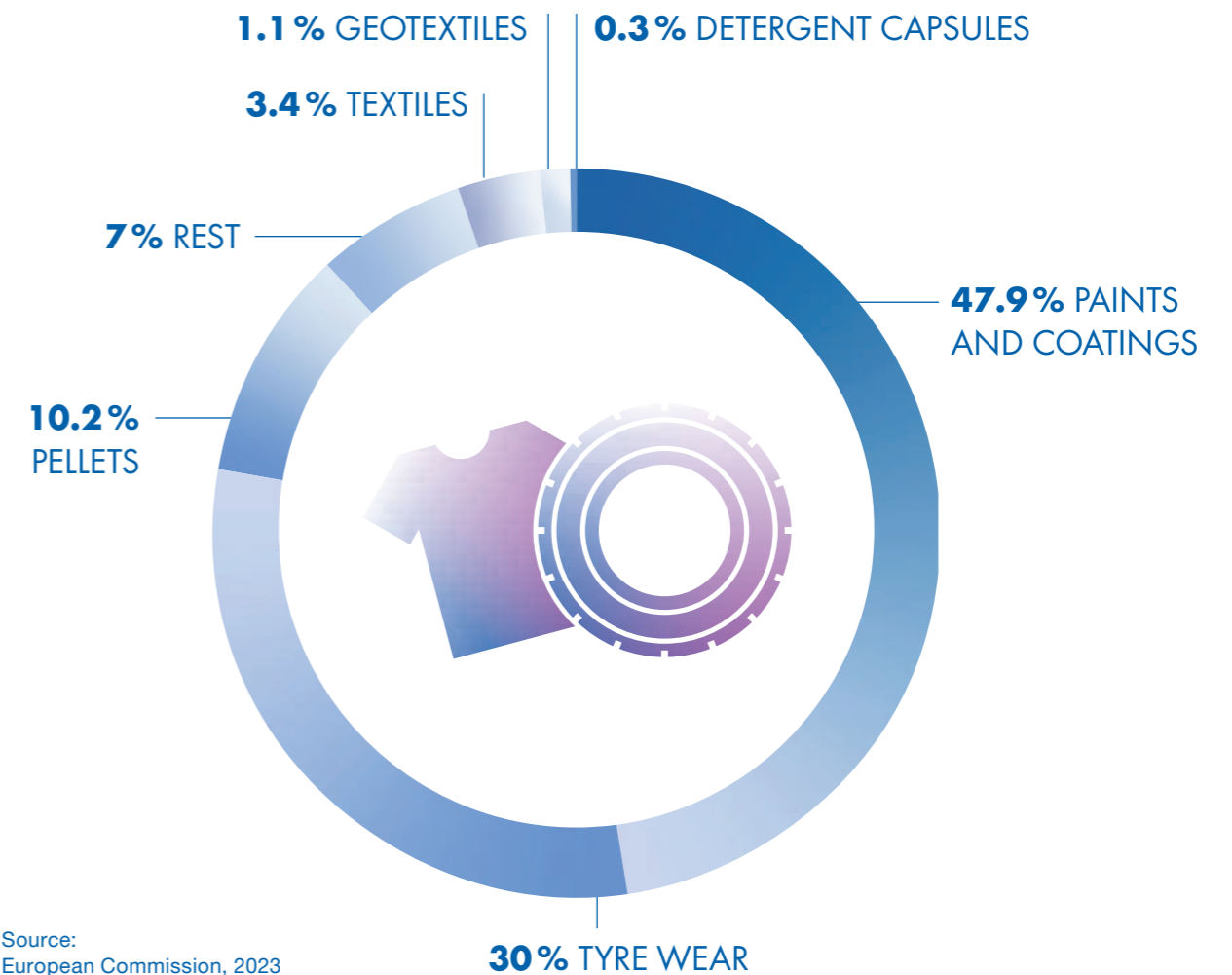
PLASTIC PACKAGING RESULTS IN A LOT OF MICROPLASTICS.



IN FACT:

THE PRIMARY SOURCES OF THE UNINTENDED RELEASE OF MICROPLASTICS ARE PAINTS AND TYRE WEAR.

- › The biggest source in the area of paints is the shipping industry at 210,000 tonnes per annum.
- › In the area of tyres, cars are comfortably in the lead.
- › The proportion of secondary microplastics (e.g. due to the breakdown of plastic packaging in the environment) can be significantly reduced with collection and recycling. Plastics which are recycled don't end up in the environment and don't result in microplastics.



Source: European Commission, 2023

08



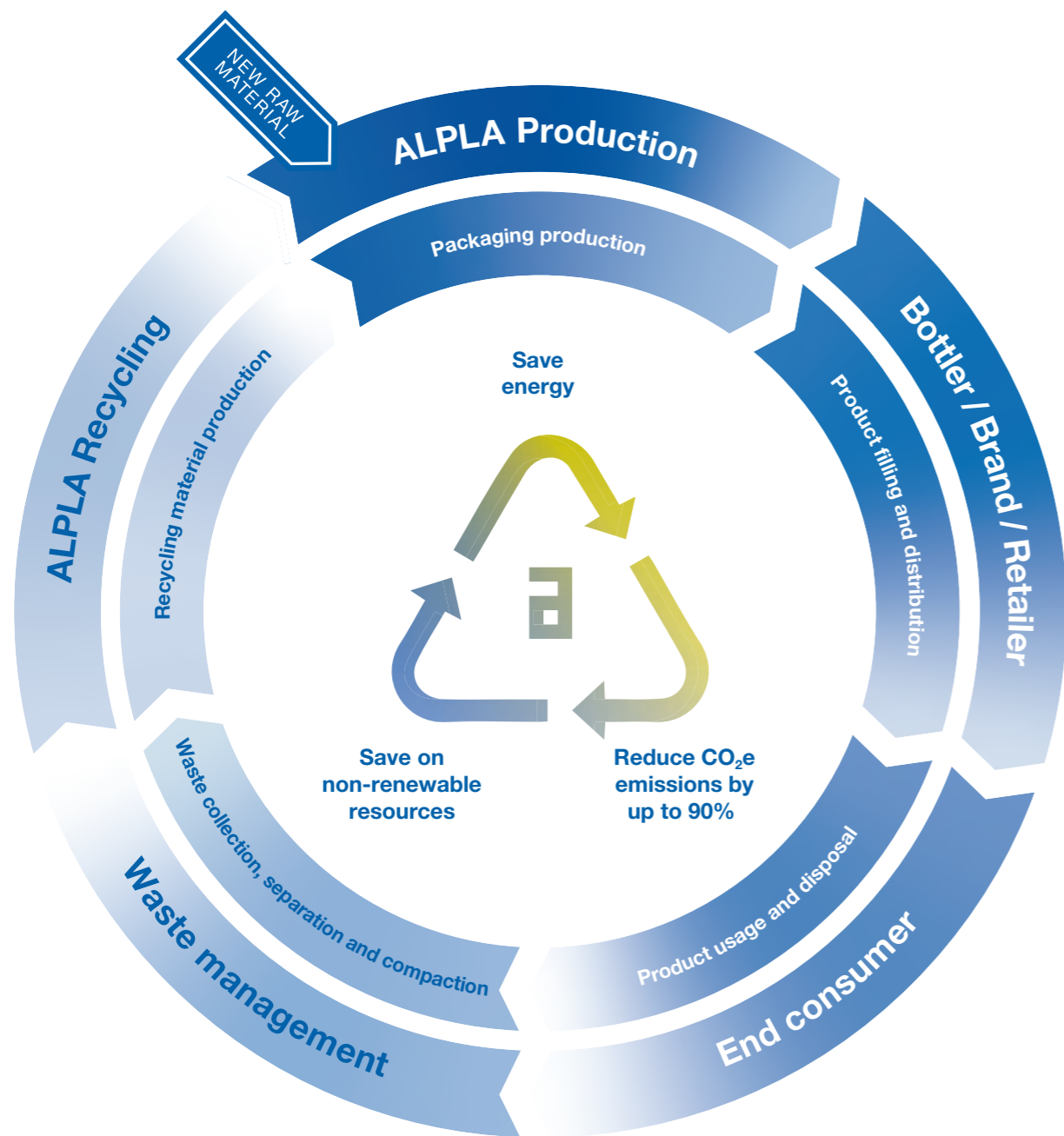
PET BOTTLES
RELEASE
HAZARDOUS
CHEMICALS.



IN FACT:

NO HARMFUL SUBSTANCES
ARE USED IN THE PRODUC-
TION OF PET BOTTLES.

- ▶ Neither plasticisers nor bisphenol A are used in the production of PET bottles.
- ▶ Very small amounts of acetaldehyde are present in PET bottles. This can give drinks a sweet taste if exposed to sunlight for a long time. A larger quantity of this natural substance can also be found in foods and occurs as an intermediate in human metabolism.
- ▶ Plastic can actually be beneficial to people's health: contaminated water can be purified in transparent PET bottles with the help of UV rays. This simple solution can help people living in regions where there is no access to clean drinking water.



ASSUMING
RESPONSIBILITY:
EVERYTHING AT
ALPLA REVOLVES
AROUND THIS.



Plastics are far better than their reputation. As the world's leading specialist in plastic packaging, we work tirelessly every day to make it even more efficient, even more sustainable and even more environmentally friendly:

- ▶ We design our packaging solutions to be 100 % recyclable.
- ▶ The share of PCR in ALPLA's total use of materials has already reached 20 % by 2023.
- ▶ Around 50 million euros per annum have been earmarked for the expansion of recycling activities.

EXEMPLARY!

The proportion of recycled PET (rPET) in new bottles depends on a number of factors such as the material composition and the colour of the recycle.

As a rule, though, bottles containing rPET are more environmentally friendly than bottles made solely of virgin PET, irrespective of the rPET proportion.

If you want to make a positive contribution, you should therefore always opt for the product with the greatest proportion of rPET.



1000% rPET

WE ARE LEADING
BY EXAMPLE.
THE MORE WHO
FOLLOW US, THE
BETTER **FOR THE**
CLIMATE AND
THE ENVI-
RONMENT.



As a family business, we want to ensure that our world remains liveable for future generations too. We therefore continue to optimise our product portfolio with regard to sustainability.

But each and every one of us can play a part too:



When shopping, give preference to reusable plastic packaging and packaging with a high proportion of recycle.



Always dispose of plastic packaging correctly via the recycling system. In so doing, you will keep bottles made of, for example, PET within the material cycle and will help take the strain off the environment.



Pick up packaging which has been carelessly discarded and dispose of it correctly – after all, nothing is more motivational than setting a good example.

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