ALL YOU NEED TO KNOW ABOUT PLASTIC BOTTLES
WHAT DIFFERENT KINDS OF PLASTIC CAN BOTTLES BE MADE FROM?

**MATERIAL SOURCES**
- Fossil Fuel
- Bio-based
- Recycled

**PLASTIC BOTTLE**

**MATERIAL PROPERTIES**
- Recyclable
- Biodegradable*

*Only for some bio-based materials and under specific conditions.
Plastic material can come either from fossil fuel or from renewable raw materials. Various types of plastic materials are used by the food and beverage industry. Most of these plastics are polymers derived from non-renewable, fossil-based resources such as coal, coal products, natural gas, derived gas, crude oil and petroleum products.

The polyethylene terephthalate, commonly abbreviated as PET, is the preferred type of plastic packaging material in the water beverage industry. PET combines the optimal protection of a product’s qualities with characteristics such as safety, lightness, resistance and transparency. PET is a material that is fully recyclable and can be widely recycled in multiple applications, including bottle-to-bottle.

When a plastic material is recyclable (such as PET) and goes through collection, sorting and recycling process, or ‘rPET’ in the case of recycled PET.

The bio-based plastic is mainly made from renewable plant based material, called ‘biomass’, such as starch or sugar’s by-products, vegetable oils or cellulose. When it is bio-based, PET has exactly the same properties as its fossil-based counterpart. After collection, bio-based PET can be processed in any existing recycling facility and can be reused to make something new as recycled plastic. Some of the bio-based plastic could be biodegradable, however bio-based PET is not biodegradable.

Biodegradable plastic is material that can decompose with the help of microorganisms. Depending on the type of biodegradable material, the process of decomposition would need to happen under specific conditions including home or industrial composting, soil, marine or anaerobic digestion. rPET and bio-based PET are not biodegradable.

Plastics are made of different by-products from fossil fuel or from renewable raw materials. The term ‘bioplastic’ is often used to describe a plastic that is either bio-based or biodegradable.
02 What is the difference between recyclable, recycling and recycled?

Recyclable

From design to recycling

Recycling

Process

Recycled

End result
A plastic packaging is considered recyclable (such as PET) if it is designed for recyclability and its collection, sorting and recycling is proven to work successfully in practice and at scale.

This is the process where the material is transformed into new plastic products.

During the recycling process, the material is converted into new plastics products which can be used instead of virgin plastics. This newly-created material is called recycled plastic or ‘rPET’ in the case of recycled PET.
Plastic Circular Economy for our bottles means that plastics bottles never become waste; rather they are designed for recyclability and they get collected, sorted and recycled to re-enter the economy as valuable components such as new bottles or new plastic products.

IN DETAIL

Plastic Circular Economy is, in line with the vision of the Ellen MacArthur Foundation New Plastics Economy, when plastics never become waste; rather, they re-enter the economy as valuable component. Reusing, creating a viable economy for the recycled plastic reducing the leakage of plastics into natural systems and separating from fossil feedstock are the three success factors to ensure Plastic Circular Economy.

PET can be created either from fossil fuel or from renewable raw materials. In both cases, PET remains a material that is 100% recyclable by design and can be widely recycled in multiple applications, including bottle-to-bottle. Since it has a high economic value, it has the potential to achieve a circular economy model if properly collected.
04 What materials make up Nestlé Waters’ packaging portfolio?

- **80%** PET
- **17%** Other Plastic
- **2%** Glass
- **1%** Aluminium
04. WHAT MATERIALS MAKE UP NESTLÉ WATERS’ PACKAGING PORTFOLIO?

We have a portfolio that contains different packaging materials such as plastic, aluminum, glass and formats which serve different purposes and functionalities. We use PET plastic, including recycled PET, to make most of our bottles and globally 20% of our water is packed and sold in returnable packaging. This returnable packaging proportion goes up to 40% in Asia and Africa where collection and recycling rates are currently low.

MATERIALS

- Today, PET represents 80% of Nestlé Waters’ packaging use globally. This material combines optimal protection of product’s qualities with characteristics such as lightness, resistance and transparency. In addition, PET is a material 100% recyclable by design.
- Other plastic such as High Density Polyethylene (HDPE) or polycarbonate (PC) represent 17% of our bottle material portfolio. These plastics due to their rigid, tough and strong resin properties represent a large part of our large format returnable plastic containers materials.
- Glass material represents 2% of water volumes sold in 2018. Because these formats are heavier they are used mainly for 0.5, 1 or 1.5 litre formats for restaurants and premium packaging.
- Other materials in our portfolio include aluminum, which currently represents 1% of our water volumes sold, it is also a fully recyclable material.

FORMATS

We have a portfolio that contains different packaging materials and formats which serve different purposes and functionalities. Despite a few exceptions that we are currently working on, all of our bottles are designed to be recycled and 100% of our packaging will be recyclable or reusable by 2025.

Globally, 20% of our water is packed and sold in returnable packaging.

For large formats in our Home & Office Delivery systems, like for Ready Refresh (five gallons) in the US, we are systematically using returnable plastic containers. However, for smaller formats, there are only a few places where the use of refillable plastic bottles can be technically and economically feasible.

In Asia, Oceania and Africa, where waste management systems are not yet well developed, 40% of our water sold is in returnable packaging.
05 Why are you using PET plastic in your bottles?

- Water quality protection
- Resistant
- Lightweight
- Recyclable
PET plastic is safe, lightweight, durable, resistant, and best of all, recyclable.

For more details...

Plastic materials are regularly criticised as they are perceived to have a low environmental performance: petroleum-sourced, single-use, poor recycling and littering ... however, there are good reasons why plastic is widely used to package products in the food and drink industry.

For Nestlé Waters, the main purpose of the bottle packaging is to protect the water we are producing. PET is currently the most used packaging material because it protects the product’s qualities as well as being light, resistant and transparent. This packaging is preserving the natural quality and characteristic of its content. It is a barrier of any sort of cross contamination of the water contained. It is also a fully recyclable material (for bottles) that can be widely recycled in multiple products including bottle. As such, PET is a high value plastic that has the potential to achieve a circular economy model. When collected and recycled, the material is incorporated again in our bottles as recycled PET.

In addition, we systematically apply recyclable-by-design principles to ensure our product can be processed in recycling facilities. We carry out life-cycle analysis (studies which look at the whole impact of product, from its packaging raw materials to the production, transportation, consumption and end of life of the product) to minimise the environmental impact of all our PET bottles.

Over the past 10 years we have reduced the quantity of PET by 22% needed for each litre of bottled water we produce.
06
WHY DON'T YOU USE GLASS PACKAGING FOR ALL YOUR PRODUCTS?
**WHY DON’T YOU USE GLASS PACKAGING FOR ALL YOUR PRODUCTS?**

Bottles made out of glass are used mainly for 0.5, 1 or 1.5 litre formats for restaurants and premium packaging because glass bottles are heavier and easily breakable during transport.

**FOR MORE DETAILS**

We have a portfolio that contains **different packaging materials and formats which serve different purposes and functionalities.** Because they are heavier, bottles made out of glass are used mainly for 0.5, 1 or 1.5 litre formats for restaurants and premium packaging.

To compare the environmental footprint of the two different packaging options we use Life Cycle Assessments (LCA). These are studies which look at the whole impact of products.

For water bottles, the impacts are calculated per litre of water produced through all the Life Cycle phases:

- Packaging (raw materials and production of the packaging)
- Product production (transport of the packaging and all processes linked to bottled water filling)
- Distribution (transport of the bottles to the consumers)
- Use phase (consumer use phase and end-of-life of the packaging)
WHAT IS THE ECOLOGICAL FOOTPRINT OF EACH TYPE OF PACKAGING? IS GLASS MORE ENVIRONMENTALLY-FRIENDLY THAN PET?

Environmental impact of 1L of mineral water, incl. shopping trip in Switzerland

Eco-points: Ecological scarcity method 2013

Sourced from a Swiss study, therefore results are only valid in Switzerland.
07. WHAT IS THE ENVIRONMENTAL FOOTPRINT OF EACH TYPE OF PACKAGING MATERIAL? IS GLASS MORE ENVIRONMENTALLY-FRIENDLY THAN PET?

At Nestlé Waters, since we use various packaging materials and formats as they serve different uses, there is no single answer when comparing them. In addition, studies comparing materials environmental performance can vary depending on the countries, packaging transportation methods, material recycling rates etc. To compare two packaging materials, the same methods must be used for both packaging materials.

IN DETAIL

There is no single answer from the scientific community. The life cycle assessments of both PET and glass led to various conclusions depending on the scope of the study (country of production, country of distribution, transport used, etc.)

Environmental footprints are measured through Life Cycle Assessment (LCA) Studies including raw materials production, bottled water production, distribution, consumer use and end-of-life of the packaging.

To compare two packaging materials, the same methods must be used for both packaging materials. A Swiss local authority (OFEV) released one study*, using same methods to compare various bottles packaged in glass and PET from different formats. The study concludes that using PET bottles in any format has better environmental performance than glass bottles, when producing and selling bottled water in Switzerland.

Environmental impact is measured through Life Cycle Assessment (LCA) Studies. They look at the whole impact of products. For water bottles, the impacts are calculated per litre of water produced through all the Life Cycle phases:

- Packaging (raw materials and production of the packaging)
- Product production (transport of the packaging and all processes linked to bottled water filling)
- Distribution (transport of the bottles to the consumers)
- Use phase (consumer use phase and end-of-life of the packaging)

Generally speaking, returnable packaging has better environmental performance than single-served without distinction of packaging materials. In addition, higher formats also result in better environmental performance.

Since we are using various packaging materials and formats as they serve different purposes and functionalities it has no clear benefit of comparing them. However, we systematically apply recyclable-by-design principles to ensure our product can be processed in recycling facilities. We also carry out life-cycle analysis to minimise the environmental footprint of all our bottles.

Source: *Ökobilanz Getränkeverpackung, Carbotech AG im Auftrag Bundesamt für Umwelt Schweiz, 8.7.2014
WHAT IS THE END-OF-LIFE JOURNEY OF A PET BOTTLE?

Once consumed, a PET bottle can have two very different journeys:
- If collected for recycling, they are sorted, crushed into bales and sent to the recycling process where the material is then converted into new plastics products.
- If not collected for recycling, bottles in the best case are incinerated with energy recovery, otherwise are put in landfill and have the risk of leaking into the environment. This is why it is very important that after usage, the bottle is thrown in the recycling bins.

**CONSUMER SORTING:**
**COLLECTION FOR RECYCLING**
The bottle is returned by consumers in the recycling bin.

**COLLECTION**
Depending on the country, municipalities, collection organisms, retailers or waste pickers collect the material.

**PRE-SORTING**
Once collected, used plastic bottles are sorted and separated from other materials, unsuitable items are usually sent to incineration with energy recover.

**PRODUCT MANUFACTURING**
Pellets are then sent to companies that makes new products out of these recycled PET material. As an example, the PET can become new bottles or lifestyle products such as teddy bears, clothing, pillow, duvet, etc.

**RECYCLING PROCESS**
Pre-sorted bales are delivered to a facility that tears them apart using a machine called bale breaker. The mechanical recycling process is composed of grinding, washing, separating, drying, re-granulating the collected plastics to transform them into flakes or pellets.

**BALES**
Pre-sorted bottles are compressed into bales. These bales are big cubes containing between 5,000 and 10,000 bottles, which makes them more economical to send to the recycling facility.
How does the recycling process work?

Step 1: PET bottle in a recycling plant

Step 2: Sorting by colour

Step 3: Pre-washing

Step 4: Bottles cut into small pieces (flakes)

Step 5: Material separation

Step 6: Drying flakes

Step 7: Extrusion

Step 8: Pellets

End of the recycling process and creation of new products
HOW DOES THE RECYCLING PROCESS WORK?

Currently, recycling is a mechanical process where the collected plastic bales are transformed into small pieces called pellets after being through different mechanical steps. There is also new recycling technologies, currently under development called ‘enhanced recycling’, which is likely to chemically transform the collected plastics into basic building blocks.

IN DETAIL

The recycling process can be done mechanical by grinding, washing, separating, drying, re-granulating and compounding the collected plastics:

**Recycling process and its mechanical steps:**

- Pre-sorted bales are delivered to a facility that tears them apart using a machine called bale breaker.
- Bottles are manually or automatically sorted by colours and each batch of the same colour bottles runs the following process.
- Bottles are washed: the soapy water removes the labels, dirt and debris.
- The bottles (including caps) are cut into small pieces called flakes. Since bottle and caps are made with different plastics, they must be separated.
- Flakes are placed in a large water tank. Since PET and polypropylene (caps material) have different densities, the bottle flakes sink in water while the cap flakes float, which separates them for differential recycling.
- PET plastic flakes are dried (same process for the caps flakes) and then heated and extruded to be transformed in long tubular strands that look like spaghetti.
- These strands are cooled in water and chopped into small round pieces called pellets.
- Pellets are then shipped to companies that makes new products out of this recycled PET material.

However, we are working with the industry to develop the new generation recycling. This new process called ‘enhanced recycling’ will chemically transform the collected plastics into its basic components. This would allow the industry not only to recycle PET bottles but also use materials that mechanical recycling cannot treat like dark colours, multi layers or opaque packaging and even textiles. These new recycling technologies do not yet exist at industrial scale, but they will allow higher rPET percentage content in our bottles since the recycled material will have the same quality as the virgin one.
What is the benefit of recycling plastic bottles?

Preserve the planet:
- 1 tonne of recycled PET saves:
  - 11,100 kWh
  - 670 L of water
  - 2 tonnes of CO₂
  - 33 cycles
- 1 year of energy consumption for 2 houses in France
- 21,500 km

Give a second life:
- 4 → 3
- 6 → 15 → 20 → 67

French data from Citeo
10. WHAT IS THE BENEFIT OF RECYCLING PLASTIC BOTTLES?

PET plastic was never designed to be thrown away. If a PET plastic bottle is recycled properly, that plastic can be used to create new bottles again and again. More recycled bottles mean more recycled materials, and less need to make new fossil based plastic which has a bigger environmental footprint than using recycled plastic.

IN DETAIL

PET bottle is a packaging that is fully recyclable and can be widely recycled in multiple applications, including bottle-to-bottle. Benefits of recycling plastic bottles include reduced waste in landfills, conservation of natural resources and reduced energy and greenhouse gas emissions. Indeed, recycling plastics reduces the amount of energy and resources (such as water, petroleum, natural gas and coal) needed to create new plastic.

To give concrete facts and figures, according to Citeo, French Waste Management Organism, 1 tonne of PET recycled in France saves:

- 11,100 KWh which is the equivalent of 1 year of energy consumption for 2 houses in France
- 670L of water which is the equivalent of 33 cycles of a dishwasher
- 2 tonnes of CO2 or 21,500km run with a car in France

Therefore, this is very important that after usage, the bottle is thrown in the recycling bins with the cap on it to help us fully embrace our responsibility in helping to unlock the full economic, social and environmental benefits of PET bottles as a reusable resource.
Are you using recycled PET in your bottles?

2018

- Buxton: 20% RPET
- Nestlé Pure Life® USA 700mL: 100% RPET
- Henniez: 30% RPET
- Arrowhead: 50% RPET

35% RPET by 2025
ARE YOU USING RECYCLED PET IN YOUR BOTTLES?

At Nestlé Waters, we are already incorporating recycled PET into our bottles where and when feasible and will continue by increasing the rPET content in our bottles to 35% at global level by 2025. We have then different regional targets according to the local rPET regulation, rPET supply, available feedstock and brands strategies.

IN DETAIL

PET represents 80% of Nestlé Waters’ packaging use in term of water volume sold. This material combines optimal protection of our product’s quality and is fully recyclable, notably for bottle-to-bottle use.

For example, Nestlé Waters in the United States commits to using 50% recycled PET in our bottles by 2025 with a specific focus on Poland Spring. Our European brands Acqua Panna, Buxton, Henniez and Levissima will also reach 50% rPET by 2025.
WHY IS NESTLÉ WATERS NOT USING 100% RPET IN ALL BOTTLES?

- Separated collection for PET beverage bottles
- High collection rate

100% rPET
12. WHY IS NESTLÉ WATERS NOT USING 100% RPET IN ALL BOTTLES?

Companies like ours want to use that material, but there isn’t enough high-quality food-grade rPET to meet the demand in many parts of the world. The main challenge today lies in the limitations of the existing waste management systems to exploit this potential, despite years of continuous progress. We believe that the priority of our industry should be to boost PET collection and recycling rates to unlock the full potential of PET bottles.

We aim to pilot scalable innovative PET collection projects with other actors of the plastic industry value chain (like governments, beverage producers, recyclers, non-profit organisations, etc.) In the USA, we have recently signed new agreements with companies to supply our brands with rPET to achieve a global 50% recycled content by 2025 in the USA.

IN DETAIL

In order to increase the sustainable sourcing of our bottles, we are supporting the use of rPET where it is technically feasible and when the feedstock is available. Indeed, bottled water requires rPET that undergoes a thorough sorting and cleaning process in order to meet food contact standards. The ability to guarantee the sustainable supply of this high-quality rPET is very variable depending on local contexts, which may render its sourcing difficult.

At Nestlé Waters, we have recently announced our packaging commitments to tackle the plastic issue with 2025 targets. However, our brands are actively working with annual milestones to achieve the commitments. For example, thanks to the high recycling rate of California residents, and with help from its strategic partner CarbonLITE, our Arrowhead brand in the United States now ensures that all its bottles made in California incorporate 50% post-consumer recycled plastic content.

Because using 100% rPET in bottles is only currently feasible at small scale, we are launching 100% rPET bottles for specific brands.

In 2018, the Nestlé Pure Life brand in USA already introduced a 700 ml bottle made from 100% recycled plastic on retail store shelves in North America.

However, at a global level, we firmly believe that a sustainable supply that meets the growing demand of high-quality rPET is a necessary condition to increase the use of recycled material in our products. We believe we can best support the achievement of this condition by collaborating along the value chain to boost the PET bottle collection and hence the local supply of food-grade rPET. This is why we also committed to collect as many plastic bottles as we produce by 2030.
Can plastic bottles be recycled continuously?

+ Bio-based

Up to 5 times
13. CAN PET BOTTLES BE RECYCLED CONTINUOUSLY?

- **Theoretically, PET can be recycled an unlimited number of times.**
  With existing mechanical recycling processes, manufacturers blend in a percentage of recycled material with new virgin material to properly maintain the physical properties they need.

- **However, in an ideal world where 100% of bottles sold would be collected and recycled back in new bottles, the material could be recycled for an estimated up to five times with current mechanical recycling technologies.**
  Therefore, Nestlé Waters co-founded the NaturALL Bottle Alliance in 2016 to scale up a next generation of bio-sourced PET, using biomass such as used cardboard and wood pulp (forest waste). This would allow us, in this ideal 100% collection recycled world, to **blend in a percentage of recycled material with new bio-sourced material and properly maintain the physical properties for the recycled PET.**

- **We are also working with the industry to develop new generation recycling.** This new process called ‘enhanced recycling’ will chemically transform the collected plastics into its basic components. These new recycling technologies not yet exist at industrial scale, but would allow to **recycle PET bottles indefinitely** since the recycled material will have the same quality as the virgin one.
Can you create plastic bottles without new fossil-based resources? Are you already doing it?

Today: 30% bio-based material in PET

By 2021: 60% bio-based material in PET

By 2025: 95% bio-based material in PET
14. CAN YOU CREATE PLASTIC BOTTLES WITHOUT USING NEW FOSSIL-BASED RESOURCES? ARE YOU ALREADY DOING IT?

PET can be created from renewable plant based materials and is then called ‘bio-based PET’. It has exactly the same properties as its fossil-based counterpart. After collection, it can be processed in any existing recycling facility and recycled in new plastic products such as PET bottles. Today, existing technology limits the use of bio-based PET in bottles to 30% (currently used in some of our Levissima bottles). That is why, Nestlé Waters is co-founder of the NaturAll Bottle Alliance - with Danone, Origin Material and PepsiCo - which aims to develop 100% bio-based PET bottles by 2023 using only renewable material that does not compete with food and feed usage.

IN DETAIL

As plastic material, PET can be created from renewable plant based materials and is then called ‘bio-based PET’. It has exactly the same properties as its fossil-based counterpart. After consumption and collection, it can be processed in any existing recycling facility and recycled in new plastic products such as PET bottles.

Today, existing technology in the market is limited to 30% bio-based PET resin. We are currently using this 30% bio-based PET resin in Italy in some of our Levissima bottles.

Nestlé Waters is a co-founder of the NaturAll Bottle Alliance (with Danone, Origin Material, and more recently, PepsiCo) which aims to develop 100% virgin bio-based PET bottles by 2025 using only raw material that does not diminish food and feed resources.

The Alliance uses biomass feedstocks, such as previously used cardboard and wood’s sawdust, so it does not divert resources or land from food production for human or animal consumption. The technology being explored by the Alliance represents a scientific breakthrough for the sector, and the Alliance aims to make it available to the entire food and beverage industry.
WHAT ARE YOU DOING TO AVOID ENVIRONMENTAL AND OCEAN POLLUTION FROM PLASTIC BOTTLES?

**Today**

*We partner to clean up plastic already in the environment*

*We engage with consumers and partners to drive new behaviour and understanding of recycling*

**2030**

```
Quantity of plastic bottles sold = Quantity of plastic collected
```
WHAT ARE YOU DOING TO AVOID ENVIRONMENTAL AND OCEAN POLLUTION FROM PLASTIC BOTTLES?

We want to take the ‘single’ out of ‘single-use’ plastic bottles by helping to create a circular economy, one in which our bottles not end up in a landfill or ocean. Part of achieving this, means creating bottles that are made entirely from recycled or renewable sources, designed for recyclability, and thinking beyond the bottle to find new technologies and delivery systems that help us achieve the lowest environmental impact. Nestlé Waters wants to further address ocean pollution and the need for shoreline clean-up of plastic waste. In partnership with Keep America Beautiful, Nestlé Waters North America is also supporting waste clean-up projects across the United States. As part of Nestlé, our employees worldwide at all levels will also dedicate volunteering days to the removal of litter and participate in clean-up activities. We are also committed to collect as many plastic bottles as we produce by 2030.

IN DETAIL

Nestlé Waters embraces Nestlé’s vision that none of our packaging should end up in landfill or in oceans and water bodies as litter, and is committed to addressing the growing global plastic packaging issue. PET represents 80% of Nestlé Waters’ packaging use. This material combines optimal protection of product’s qualities and is fully recyclable, notably for bottle-to-bottle use. As such, PET is a high value plastic that has the potential to achieve a circular economy model, but it is not recycled enough today leading to a significant amount of PET bottles ending up in landfills or as marine debris.

Nestlé Waters has taken several actions and commitments to unlock this potential and tackle the plastic waste issue. We will push the boundaries to do more by introducing innovative bottles, increasing collection and recycling rates and doing our part to help clean-up plastic packaging waste and further engage our consumers to drive new behaviour.

Because waste management and recycling varies around the world, Nestlé Waters works together with local governments and communities to develop and implement PET collection adapted to each context and to make available more high quality PET to be recycled into new bottles. Additionally, Nestlé Waters wants to further address ocean pollution and the need for shoreline clean-ups of plastic waste. Nestlé Waters will partner with The Ocean Legacy Foundation, a world leading organisation reducing the amount of plastic pollution in ocean ecosystems. In addition, as part of Nestlé, our employees worldwide at all levels will also dedicate volunteering days to the removal of litter and participate in clean-up activities.

Addressing the plastics challenge to avoid environmental pollution requires behaviour change from all of us. Nestlé Waters is committed to leading lasting, impactful change and helping consumers to understand the value of recycling. We have contributed to raising their awareness through various brand platforms and corporate educational programmes and will continue to leverage the strength of our brands to engage our consumers to drive new behaviours.
What are you doing to minimise the risk of microplastics impact on the quality of bottled water?

**Prevent**

**Clean**

**Control**
WHAT ARE YOU DOING TO MINIMISE THE RISK OF MICRO PLASTICS IMPACT ON THE QUALITY OF BOTTLED WATER?

Recent scientific investigations have shown that micro-plastics are present everywhere in our environment and may be present regardless of the packaging material used. Plastic containers protect and guarantee the quality and safety of the product.

In our bottling process, we apply very strict, certified and state-of-the-art quality systems to prevent any source of contamination, and to provide high quality and safe products.

We also monitor our products for the presence of micro-plastics and, to date, we have not found micro-plastics beyond a trace level in our plastic bottled water products. We assure consumers that our bottled water products are safe to drink.
WHAT DO YOU MEAN BY ‘COLLECT AS MANY PLASTIC AS WE PRODUCE’?

2030

QUANTITY OF PLASTIC BOTTLES SOLD = QUANTITY OF PLASTIC BOTTLES COLLECTED
WHAT DO YOU MEAN BY ‘COLLECT AS MANY BOTTLES AS WE PRODUCE’?

Nestlé has an ambition to stop plastic waste the environment across its global operations. This will help stop further accumulation of plastics in nature. In practice, in countries where there is high leakage, this means collecting as much plastic as Nestlé uses in its product packaging. This is why our commitment as Nestlé Waters is to collect as many plastic bottles as we produce by 2030. In order to achieve this, current challenges associated with the collection and sorting of packaging waste need to be overcome. In countries without formal waste management systems today, this represents a greater challenge.

IN DETAIL:

Over the past few years, new evidence has highlighted the impact of plastic littering on marine ecosystems. 8 million tonnes of plastic enters the ocean every year and unfortunately, despite being fully recyclable, still 50% of PET bottles worldwide are not collected for recycling.

As part of Nestlé’s ambition to stop plastic leakage into the environment across its global operations, Nestlé Waters aims to collect as many plastic bottles as it produces by 2030. Because waste management and recycling varies around the world. Nestlé Waters works together with local governments and communities to develop and implement PET collection adapted to each context.
What are you doing to increase the collection rate of PET bottles?

2030

= COLLECT

Quantity of PET bottles sold = Quantity of PET bottles collected

Europe

Support EU & National governments on waste management systems

USA

Invest to develop collection, sorting and recycling infrastructure

Rest of the World

Develop collective collection and recycling initiatives
WHAT ARE YOU DOING TO INCREASE THE COLLECTION RATE OF PET BOTTLES?

As part of Nestlé’s ambition to stop plastic leakage into the environment across its global operations, Nestlé Waters aims to collect as many plastic bottles as it produces by 2030. Because waste management and recycling varies around the world, Nestlé Waters works together with local governments and communities to develop and implement PET collection solutions adapted to each context.

In Europe where a regulation on Single Use Plastic is going to be implemented, we are working with the national government and all actors of the industry to implement either Extended Producer Responsibility (EPR), Deposit Return Scheme (DRS) or innovative systems to achieve a 90% collection for recycling by 2025 for our bottles and caps. For example, Nestlé Waters is a member of the National Deposit Return Scheme (DRS) Working Group in the UK, and has installed reverse vending machines in France through Citeo.

In the US, the current PET collection for recycling rate is close to 30% because of a lack of collection, sorting and recycling infrastructure. In this country, Nestlé Waters North America invested $6 million in the ‘Closed Loop Fund’ to build a circular economy infrastructure and partners with organisations such as ‘The Recycling Partnership’ and ‘Keep America Beautiful’ to support collection, raise awareness on recycling behaviour and develop waste clean-up projects across the United States. The US is considering legislative solutions that are practical and add value in recovering high quality and quantity of plastic bottles.

In the rest of the world and mainly in developing countries, waste management is often handled by the informal sector. Here, we are setting up voluntary collaborative and inclusive local systems to improve collection and recycling efficiency. For example, in Ethiopia, we have been working with the local government and NGOs to establish a PET collection centre in Sululta.

Additionally, Nestlé Waters wants to further address ocean pollution and the need for shoreline clean-up of plastic waste. To do this, Nestlé Waters will partner with The Ocean Legacy Foundation, a world leading organisation devoted to reducing the amount of plastic pollution in ocean ecosystems. In addition, as part of Nestlé, our employees worldwide at all levels will also dedicate time to volunteer on World Oceans Day to aid the removal of litter through clean-up activities.
CLEAR LABELLING & RECYCLING MESSAGES

EDUCATION ON RECYCLING BEHAVIOURS
Addressing the plastics challenge requires behaviour change from all of us. Nestlé Waters is committed to leading lasting, impactful change and helping consumers to understand the value of recycling. We have contributed to raising their awareness through various brand platforms and corporate educational programmes and will continue to leverage the strength of our brands to engage our consumers to drive new recycling behaviours.

IN DETAIL

Addressing the plastics challenge to avoid environmental pollution requires behaviour change from all of us. Nestlé Waters is committed to acting ourselves and leading lasting, impactful change and helping consumers to understand the value of recycling.

We have contributed to raising their awareness through various brand platforms and corporate educational programmes. For example, during the school year 2018-19 Nestlé Vera launched the ‘Drink, Hydrate, Recycle’ project, by engaging kids, families and teachers on the importance of hydration and recycling. The R-Generation programme implemented in Italy, Argentina, United Kingdom and Thailand was developed to excite and educate the next generation about recycling.

At Nestlé Waters, we think that this plastic challenge must be taken seriously, we have a healthy natural product and we believe that our packaging bottles do not belong in the environment; our employees worldwide at all levels will also dedicate volunteering days to the removal of litter and participate in clean-up activities. We believe that we should all play our role in this change and become recycling ambassadors.

We already started clean-up initiatives in many countries, to raise awareness that our bottles do not belong in the environment.

In US for example: In California, we work with Inland Empire Waterkeeper to remove waste from the Santa Ana River. In Florida we work with Keep Tampa Bay Beautiful to remove waste from waterways in the Tampa area and develop solutions to keep waterways free of waste.

Also, in Florida, we sponsored a grant through Keep America Beautiful to help four communities install 220 public space recycling bins, both permanent and for events.

We are also working on clear labelling and communication messages on our bottles packaging to ensure consumers understanding on disposal and recycling rules. For example, for many Nestlé Waters USA new launched bottles, the ‘How To Recycle’ harmonized recycling message is now communicated on the bottles.

These are just examples of ongoing actions and we are committed to continue to leverage the strength of our brands to engage our consumers on recycling behaviours.
What is the future of your packaging?

01 Recycled or renewable plastics

02 Alternative packaging materials

03 Alternative water delivery systems
19. WHAT IS THE FUTURE OF YOUR PACKAGING?

We want to take the ‘single’ out of ‘single-use’ plastic bottles by helping to create a circular economy, one in which our bottles never end up in a landfill or ocean. Part of achieving this means creating bottles that are made entirely from recycled or renewable sources, designing for recyclability and thinking beyond the bottle to find new technologies and delivery systems that help us achieve zero environmental impact.

IN DETAIL

In 2018, we have a portfolio that contains different packaging materials and formats which serve different purposes and functionalities. Despite few exceptions that we are currently working on, all of our packaging materials are designed to be recycled.

However, we acknowledge that our consumers’ relationship to plastic bottled water is changing and fast. As leaders, we are working on the challenge and are looking for new alternative packaging materials guaranteed not to end up in the oceans together with new ways of water consumption.

In the short term, we are investigating several plastic alternatives such as aluminum cans, glass, refillable bottles or cartons (where recycling infrastructure exist). We are also developing new water delivery systems.

In the long term, we are also assessing the potential of material coming from agricultural, post-harvest waste - non food competitive such as straw or carton and paper based package that could be biodegradable and compostable.
WHAT ARE YOUR COMMITMENTS TO TACKLE "THE PLASTIC CHALLENGE"?

VISION
NONE OF OUR PACKAGING, INCLUDING PLASTICS, ENDS UP IN LANDFILL OR AS LITTER

AMBITION
100% OF OUR PACKAGING IS RECYCLABLE OR REUSABLE BY 2025

- 35% RECYCLED PET in our bottles by 2025
- INCREASE THE USE OF BIO-BASED PLASTIC IN OUR PACKAGING
- DEVELOP PACKAGING SOLUTIONS ‘BETWEEN PLASTIC AND BOTTLE’
- COLLECT AS MANY PLASTIC BOTTLES AS WE PRODUCE BY 2030
- DRIVE NEW BEHAVIOUR & UNDERSTANDING
WHAT ARE YOUR COMMITMENTS TO TACKLE ‘THE PLASTIC CHALLENGE’?

Nestlé Waters has committed by 2025 to have 100% of its packaging to be recyclable or reusable, and to increasing the amount of recycled PET it uses across its brands globally to 35%. We are already incorporating recycled PET (rPET) into our bottles where it is technically and economically feasible. For example, our Arrowhead brand in the United States now ensures that all its bottles made in California incorporate 50% post-consumer recycled plastic content. Most recently, our Nestlé Pure Life brand introduced of a 700ml bottle made from 100% recycled plastic in North America. Over the past 10 years, we have reduced by 22% the quantity of PET needed for each litre of bottled water we produce. In 2016, Nestlé co-founded the NaturALL Bottle Alliance to scale up a next generation of bio-sourced PET, using biomass feedstocks that do not divert resources or land from food and feed production, such as used cardboard and wood pulp.

Alternative packaging solutions to the single served plastic bottles and for the remaining ones, have the commitment to collect as many plastic bottles as we produce by 2030.

IN DETAIL

Our vision is that none of our packaging, including plastics, ends up in the environment, with an ambition of 100% of our packaging being recyclable or reusable by 2025. Since there is not only one solution to resolve the ‘plastic challenge’, at Nestlé Waters we have a Plastic Packaging Stewardship journey for our brands that is divided into 5 pillars:

- **35% recycled PET in our bottles by 2025**
- **Increase** the use of bio-based plastic in our packaging
- **Develop** packaging solutions beyond plastic and bottle
- **Collect** as many plastic bottles as we produce by 2030
- **Drive** new behaviour and understanding

These pillars are embedded through the need of collaboration, engagement, advocacy and of course, communication.

We are also leading by example by eliminating all non-recyclable single use plastics from our business sites and encouraging our employees to join in a clean-up event on World Oceans Day, aimed at raising awareness and driving new behaviours.