ACCELERATING THE TRANSITION TOWARDS THE CIRCULAR ECONOMY

DANONE PACKAGING POLICY

OCTOBER 2018
INTRODUCTION

Packaging is fundamental to our ability to provide people around the world with nutritious, high-quality food and drinks – but we recognize that this cannot come at the expense of the health of the planet. We have a responsibility to help preserve and protect the planet’s resources, and our approach to packaging plays an important part in this.

Today’s mainstream packaging system is unsustainable because it is still primarily linear. Raw materials are used to make packaging for a product, and after the product is consumed, the packaging is thrown away. This model is creating important environmental challenges, particularly where plastics are concerned.

There is a global focus on plastics for obvious reasons: while the global recycling rate for paper is estimated at 58%, and aluminum at 69%, only 14% of all plastic packaging materials produced worldwide is collected for recycling, and 10% is actually recycled. As a result, large amounts of plastic are flowing into our natural environment, particularly our oceans, and the global economy is losing $80-120 billion (USD) of resources each year\(^1\).

As a company committed to protecting and nourishing the health of the planet and people, we want to play our part in accelerating the transition from a linear to a circular economy of packaging, where products and materials remain in use and stay in the economy; waste and pollution are eliminated; and natural systems are regenerated.

In November 2016, we published our Packaging Policy affirming our commitment to co-building a circular economy of packaging by sourcing sustainable materials and creating a second life for all plastics. Since then, we have made progress thanks to internal transformation, alliances with new partners, including the Ellen MacArthur Foundation and its New Plastics Economy Initiative, and brand engagement that has helped us pilot innovative solutions.

This updated version of our policy reflects the progress we have made and sets out how we will accelerate our journey, supporting the global transition to the circular economy of packaging. This roadmap will continue to evolve as we do more to promote greater collaboration, harness innovative technologies and invest in new solutions.

---

1 Source: Ellen MacArthur Foundation New Plastics Economy report.
OUR AMBITION & GUIDING PRINCIPLES

We want to offer nutritious, high-quality food and drinks in packaging that is 100% circular.

This means eliminating the packaging we don’t need; innovating so all the packaging we do need is designed to be safely reused, recycled or composted; and ensuring the material we produce stays in the economy and never becomes waste or pollution.

We will take a full-system approach, working to ensure that, in driving circularity, we avoid unintended consequences for greenhouse gas emissions, shelf life, food waste and water use, etc.

In working to achieve our ambition, we will adhere to three guiding principles:

1. **Brand leadership is key for positive change**

   Our brands will pilot innovative solutions that will allow us to raise consumer awareness and guide their engagement in a circular economy. Some of them will serve as activists, going further, faster to lead the way.

2. **Collaboration is the cornerstone of success**

   A circular economy approach to packaging requires a new way of working across the entire system. It means we must build and leverage strategic partnerships with a whole range of actors - start-ups, NGOs, research institutions, public authorities (international, regional, national or local) and other private companies. This includes taking a pre-competitive approach, meaning that - subject always to applicable competition laws - we work with our competitors to develop new, commercially viable technologies.

3. **Circularity should drive innovation and inclusion**

   The circular economy is not just about eliminating waste; it is also about driving innovation, social inclusion, and economic development. The potential is tremendous: estimates say the circular economy is a trillion-dollar opportunity for the global economy\(^2\). By 2030, it could create 1.2 to 3 million jobs in Europe alone\(^3\). As we work to deliver on our commitments, we will, in parallel, look to strengthen innovation and inclusion. We will lean on cutting-edge technologies, new formats and delivery models, fundamentally re-designing certain products to achieve circularity.

---

\(^2\) See World Bank resources: [https://olc.worldbank.org/content/circular-economy](https://olc.worldbank.org/content/circular-economy)

\(^3\) [http://www.wrap.org.uk/content/economic-growth-potential-more-circular-economies](http://www.wrap.org.uk/content/economic-growth-potential-more-circular-economies)
OUR APPROACH

1. PACKAGING DESIGNED FOR CIRCULARITY
   - Using 100% reusable, recyclable or compostable packaging
   - Streamlining our use of materials and developing new delivery models

2. REUSED, RECYCLED OR COMPOSTED IN PRACTICE
   - Co-building effective, efficient and inclusive systems for collection and recycling
   - Engaging consumers

3. PRESERVATION OF NATURAL RESOURCES
   - Reintegrating recycled materials
   - Boosting renewable materials
A. Using 100% reusable, recyclable or compostable packaging

The transition to a circular economy starts with us and the way we choose and design our packaging.

We want to ensure that our packaging is both:

- Functional in that it protects the safety and the nutritional benefits of our products;
- Compatible with circular economy principles in that it is fully reusable, recyclable or compostable.

This means our packaging should be designed:

- To accomplish a maximum number of trips or rotations in a system for reuse; and/or
- With materials that can be successfully collected, sorted and recycled in practice and at scale; and/or
- With materials that undergo degradation by biological processes during composting at a rate consistent with other known compostable materials, without leaving any harmful residue.

**Our status in 2018**

As of 2017, 86% of our total packaging (77% of our plastic packaging) is reusable, recyclable or compostable.

---

4. Based on the New Plastics Economy. See Appendix for full definitions.
5. Total packaging put in the market, based on sales volumes.
2018 overview of our packaging materials and their level of recyclability
(based on Ellen MacArthur Foundation definitions)

- **PET**: 400kt in Bottles, 5kt in Cups
- **HDPE**: 55kt in Bottles, 50kt in Cups
- **PP**: 33kt in Bottles, 7kt in Cups
- **PS**: 110kt in Bottles, 1kt in Cups
- **PVC**: 7kt in Bottles
- **PLA**: <1kt in Bottles
- **LDPE**: 34kt in Bottles
- **PC**: 10kt in Bottles
- **Paper based**: 100kt in Bottles, 500kt in Other
- **Glass**: 125kt in Bottles, 45kt in Cups
- **Metal**: 45kt in Cups

**Share of plastic packaging in Danone**

**Recycled today in practice and at scale**

**Not recycled at scale today**

**Not recycled and disrupts the recycling of other packaging**

**Materials**:
- PET
- HDPE
- PP
- PS
- PVC
- PLA
- LDPE
- PC
- Paper based
- Glass
- Metal
How we will go further

By 2025, we are aiming for 100% of our packaging to be reusable, recyclable or compostable.

Achieving 100% circular packaging requires breakthrough innovation in order to offer circular yet affordable options.

As part of this process:

- We will explore shifting packaging for certain product lines from plastic to materials with higher recycling rates (paper, glass, etc.).

- For polystyrene (PS) packaging, we will follow a dual strategy: significantly reduce our dependency on this material while collaborating to develop the first recycling streams.

- We will phase out all PVC packaging by 2021, since it interferes with the recycling process for PET.

B. Streamlining our use of materials and developing new delivery models

We will design our products in a way that optimizes material use and eliminates waste. This means:

- Looking into the development of alternative delivery or reuse models which eliminate the need for single-use packaging;

- Applying eco-design principles with a view to ensure that we do not use more packaging than we need;

- Addressing items which are problematic or unnecessary in that they are impossible or unlikely to be recycled and do not bring additional value to the product or its protection.
Our status in 2018

- We are systematizing eco-design principles for packaging renewals and new product development. We are seeking new ways to optimize packaging performance at right weights across our product ranges.

Over 50% of Danone’s water volumes are sold in reusable packaging (e.g. AQUA, Bonafont, Hayat, Sirma, Villa del Sur).

evian® has piloted an innovation to eliminate non-recyclable shrink film. It has applied eco-design principles to develop a new way of multipacking PET bottles using specially designed adhesive and tape handles.

How we will go further

- Our goal is to develop alternative reuse or alternative delivery models where relevant by 2025, to streamline and optimize our use of packaging materials.

We will launch alternatives to plastic packaging or single-use packaging in all our major water markets by 2025.

- We will take action towards eliminating problematic or unnecessary plastic packaging of our products.

We are assessing alternatives to plastic straws, which we will pilot with our Indonesian brand AQUA in 2019.
While we are working hard to ensure our packaging is designed to be fully circular, the reality is that it cannot be reused, recycled or composted without effective waste management systems in place.

Systems for reuse, collection and recycling can take many forms. Some countries where we operate have formal, regulated systems on the principle of Extended Producer Responsibility (EPR), including Deposit Return Schemes (DRS). In countries where waste management systems have not yet been fully developed, collection is managed through an informal economy, with an estimated 16 million individuals worldwide picking waste and then selling what they gather to recycling operators. These workers are key actors in the circular economy, and yet waste pickers often work in underpaid, informal and unsafe conditions.

While there is no single solution, we believe reuse, collection and recycling systems should:

- Be developed in partnership with all relevant stakeholders: governments, NGOs, private companies, etc.;
- Be effective at reintegrating waste into the economy and preventing pollution;
- Make efficient use of collective resources; and
- Be drivers of social inclusion.

A. Co-building effective, efficient and inclusive systems for collection and recycling

While we are working hard to ensure our packaging is designed to be fully circular, the reality is that it cannot be reused, recycled or composted without effective waste management systems in place.

Systems for reuse, collection and recycling can take many forms. Some countries where we operate have formal, regulated systems on the principle of Extended Producer Responsibility (EPR), including Deposit Return Schemes (DRS). In countries where waste management systems have not yet been fully developed, collection is managed through an informal economy, with an estimated 16 million individuals worldwide picking waste and then selling what they gather to recycling operators. These workers are key actors in the circular economy, and yet waste pickers often work in underpaid, informal and unsafe conditions.

While there is no single solution, we believe reuse, collection and recycling systems should:

- Be developed in partnership with all relevant stakeholders: governments, NGOs, private companies, etc.;
- Be effective at reintegrating waste into the economy and preventing pollution;
- Make efficient use of collective resources; and
- Be drivers of social inclusion.

Our status in 2018

In all countries where we operate, Danone works with relevant stakeholders to strengthen collection and recycling systems.

Today, we systematically look to collaborate with public authorities (international, regional, national or local) and private companies to optimize Extended Producer Responsibility (EPR) including Deposit Return Scheme (DRS) systems. In fact, Danone helped pioneer the concept of EPR in France through the founding of Eco-Emballages (today known as CITEO).

In countries where collection systems for recycling are informal, we work with local communities, governments and partners like the Inter-American Development Bank to improve standards for waste collection and invest in recycling infrastructure. Danone and the Danone Ecosystem Fund have launched projects to support waste pickers in seven countries in different ways, such as by ensuring they work in a safe environment, are paid appropriate wages and afforded greater social protection. As of 2018, close to 6,000 waste pickers have been professionally empowered, and more than 45,000 tons of waste are recycled each year through these projects.
Danone AQUA has played a key role in building collection and recycling infrastructure in Indonesia, starting with the launch of AQUA PEDULI. Through this initiative, AQUA has worked with waste pickers to establish a network of recycling business units, including in Aceh, Bandung, Tohpati, Lepang, Pasuruan and South Tangerang. This system allows AQUA to ‘close the loop’, and reintegrate rPET into its packaging. Today, AQUA is using 10% rPET in its bottles; and aims to reach 50% by 2025.

In addition, Danone is working to ensure that its production sites follow circular economy principles. In 2016, we set a goal of zero plastics to landfill for our industrial waste by 2020 in countries with developed collection systems, and by 2025 globally.

How we will go further

We want to ensure our packaging is recycled, reused or composted in practice. To achieve this:

• We will work to help meet or go beyond the collection targets set by regulators worldwide by proactively supporting the most efficient formal collection and recycling systems. For example, we will pledge to support the EU in reaching at least 90% beverage bottles collection by 2025.

• We will step up our investment in private initiatives that strengthen collection and a circular infrastructure, especially in countries where formal systems are absent or in development, or where there is a high risk of leakage into the environment or the oceans.

Specifically:

• We recently invested in the Closed Loop Fund, a voluntary private initiative that develops large scale recycling and circular economy infrastructure in the United States. We are looking to invest in similar initiatives, for instance through Circulate Capital in South East Asia.

By 2025, our goal is to have initiated or supported collection and recycling initiatives in each of our top 20 markets (by sales volume, representing around 90% of our total sales).
Curbing marine littering

Much of the plastic packaging that leaks into the environment ends up making its way into our oceans. Today, 8 million tons of plastic leaks into the ocean each year, creating tremendous challenges for marine life.

When packaging from our products escapes management systems and leaks into our oceans, we want to be proactive, and help recover and reintegrate it into the economy. For Danone, this is a way to ensure we are fully circular, even when systems are not.

We believe that our brands have a role to play, both in mobilizing consumers to address this issue and in building partnerships to support cutting edge research and innovation.

- evian® is taking part in a research mission with The Ocean Cleanup, a Dutch non-profit start up that has developed scalable advanced technologies to help rid the oceans of plastic.

- Lanjaron donates all profits from its 100% rPET Red bottle to fund projects that combat ocean littering and support conservation.

- Danone AQUA has pledged to recover more plastic than it uses in Indonesia by 2025, including through interception of marine littering.

B. Engaging consumers

Consumers have an important role to play in the circular economy of packaging. Yet access to information on how circular systems work, and the actions people can take to help eliminate waste, is not always readily available. Using the power of our brands, we want to equip more people with knowledge and tools, so they can participate in the circular economy too.

Our status in 2018

To engage consumers, we have been changing the way we label our products. We provide clearer information on sorting and recycling, and we are investing in media outreach to improve understanding of the circular economy of packaging.
For instance:

• Danone North America, has been working with the How2Recycle consumer education program since 2017, to help consumers understand how to recycle packaging. More than 300 products are now labeled with the How2Recycle recommendations.

• When it launched its Rebotella bottle—the first in Argentina to be 100% recyclable and made with 50% recycled plastic—Villavicencio created a television campaign starring a popular local actor to promote the importance of collection and recycling.

• As part of its circularity initiative, evian® is collaborating with VICE Impact to create educational documentaries about plastic usage and waste, in order to raise consumer awareness about the need for systemic change.

How we will go further

We will sharpen our focus on consumer education in markets with a high risk of leakage.

• In Indonesia, Danone AQUA is committed to leading a nationwide educational campaign on recycling, with dedicated programs in 20 major cities by 2020. To contribute to raising awareness, it aims to scale up the use of special drop-boxes for plastic bottles, to reach up to 100 million consumers by 2025.
A. Reintegrating recycled materials

The success of the circular economy of packaging depends in part on our collective capacity to boost demand for recycled material. This in turn will create greater demand for collection and recycling systems, helping to create a “closed loop” where material is used, recycled and reused continuously, and there is no need for newly created plastic. At Danone, we want to play our part to close the loop by increasing the amount of recycled material we use in our packaging.

### Our status in 2018

- In 2017, we reached 34% recycled content on average in our packaging, mainly coming from recycled paper, glass, metal and PET. Our water bottles contained an average of 14% recycled PET (in countries where allowed).

- In 2017, we forged a partnership with LOOP Industries. LOOP has developed a ground-breaking technology that enables a continuous loop for recycling at large scale, transforming all types of PET waste into high quality plastic.

- In 2018, our Lanjaron mineral water brand in Spain launched Lanjaron Red, a bottle made of 100% recycled PET.

- Our U.S. VEGA brand also launched plastic bottle made of 96% recycled HDPE.

### How we will go further

For all of our plastic packaging:
- We plan to reach an average of 25% recycled material for all our plastic packaging by 2025.

For our plastic water and beverage bottles (within our Waters business):
- We plan to reach an average of 50% recycled material for our water and beverage bottles by 2025.
- For bottles under the evian® brand, we will use 100% recycled PET by 2025.
- We will launch 100% recycled PET bottles, to offer consumers more circular choices, starting in 2018 and reaching all our major markets by 2021.
B. Boosting renewable materials

Moving towards a circular economy of packaging includes, over time, decoupling from finite resources. Where plastics are concerned, we are investing in the development and use of renewable materials to help accelerate the transition away from new fossil feedstocks, while ensuring they do not divert resources or land from food production for human or animal consumption.

Our status in 2018

• 84% of our paper packaging is forest footprint compliant, meaning it is either recycled or FSC certified.

• Danone is a founding member of the Bioplastic Feedstock Alliance (BFA) with the World Wildlife Fund (WWF) to encourage responsible development of bioplastics.

• In 2017, Danone launched a partnership with Nestlé Waters and Origin Materials to bring the first 75% bio-based PET bottle to commercial scale by 2021. Danone and its partners will share the technology and processes behind it with the entire industry, with the hope of spurring change on a global scale. In 2018, PepsiCo joined the alliance.

• Danone is working in parallel to transition certain products to bio-based materials. At the end of 2017, our ‘So Delicious’ brand launched a bottle containing 80% bio-based HDPE plastic, made from sugar cane.

How we will go further

• We will continue working to eliminate deforestation linked to paper and board from our supply chain by 2020.

• We aim to offer consumers bottles made of 100% renewable plastic (bioPET) by 2025.
REPORTING
We will publicly report on the progress we make towards our commitments in our Annual Integrated Report, available on [www.danone.com](http://www.danone.com)

DEFINITIONS

Reusable packaging / Reuse models
Packaging which has been designed to accomplish or proves its ability to accomplish a minimum number of trips or rotations in a system for reuse (e.g. water jugs or returnable glass bottles).

Recyclable packaging
Packaging or a packaging component is recyclable if its successful collection, sorting and recycling is proven to work in practice and at scale.

‘In practice and at scale’ means that there is an existing (collection, sorting and recycling) system in place that effectively recycles this packaging (it is not just a theoretical possibility), and that covers significant and relevant geographical areas as measured by population size. Packaging for which the only proven way of recycling is recycling into applications that do not allow any further use cycles (e.g. plastics-to-roads) cannot be considered ‘recyclable packaging’.

Since recyclability is perhaps the most ambiguous term amongst all packaging circularity terminology we are being transparent by communicating which of our packaging is considered recyclable and which is not.

Compostable packaging
Any packaging that undergoes degradation by biological processes during composting to yield CO2, water, inorganic compounds and biomass at a rate consistent with other known compostable materials and leave no visible, distinguishable or toxic residue.

Closed loop
The packaging is collected and recycled, then used to manufacture the same type of packaging. For example, bottle-to-bottle, cardboard-to-cardboard, or cup-to-cup.

Open loop
The product is collected and recycled into other products.

Eco-design principles
Design solutions delivering the 360° holistic performance requirements of a consumer food packaging system while maximizing circularity & minimizing environmental footprint.

Extended Producer Responsibility (EPR)
Extended Producer Responsibility (EPR) is a policy approach under which producers are given a significant responsibility – financial and/or physical – for the treatment or disposal of post-consumer products.

Deposit Return Scheme (DRS)
The Deposit Return Scheme (DRS), also known as deposit-refund scheme or advance deposit fee, is a surcharge on a product when purchased and a rebate when it is returned.
The goals and associated timelines included in this document correspond to current assumptions. Should these assumptions change significantly due to major acquisitions, regulatory changes or other circumstances, we reserve the possibility to review and adjust our goals and/or timelines accordingly.