

CO-CREATING SUSTAINABLE SOLUTIONS

ROADMAP TO CIRCULARITY



oerlemans packaging group
the **sustainable** innovator

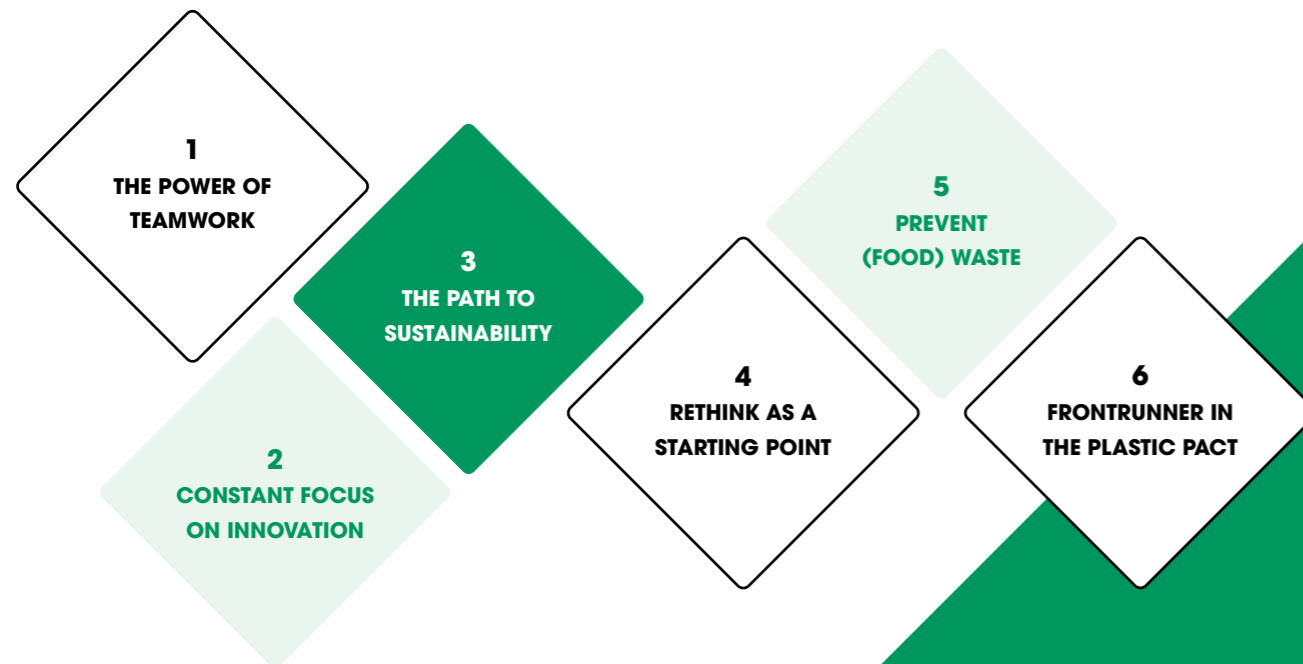
THE SUSTAINABLE INNOVATOR

Sustainability - once just a buzzword, nowadays - an imperative for both people and businesses. One key aspect of that is sustainable packaging, something people have become increasingly aware of.

Just by reviewing the daily headlines, you will find an overload of information featuring complex facts and figures. What does sustainability mean to you? Would you define it as being 'environmentally aware', or is it a way of saving resources? Or do you see the bigger picture of Corporate Social Responsibility (CSR) and future-proofing? The Oerlemans Packaging Group has

been working on sustainable solutions for over 30 years - from reducing material usage to its 1992 introduction of biodegradable horticultural film.

New developments at the Oerlemans Packaging Group are based on the principle of circularity. After all, circular design is the only way forward! Our slogan 'The sustainable innovator' shows that we take this vision for the future seriously. Sustainability and circular economy principles determine the path we take. We are gradually making truly sustainable plastic packaging a reality. So how do we do this? By deliberately focusing on six key areas as listed below:



WASTE MANAGEMENT

OUR KEY CHALLENGES:

- Facilitate the development of better quality waste management systems that can reduce the risk of plastic leaking into the natural environment by facilitating higher waste collection and recycling rates.

CO2 REDUCTION

- Make CO2 reduction a basic principle for your packaging decisions. The choice of packaging material, as well as the total environmental impact of the product value chain, should be driving the CO2 footprint.

- Minimise the use of raw materials and maximise the use of recycle to reduce consumption of natural resources. Packaging downgauging is a prime example of this.

REDUCE CONSUMPTION OF RAW MATERIALS

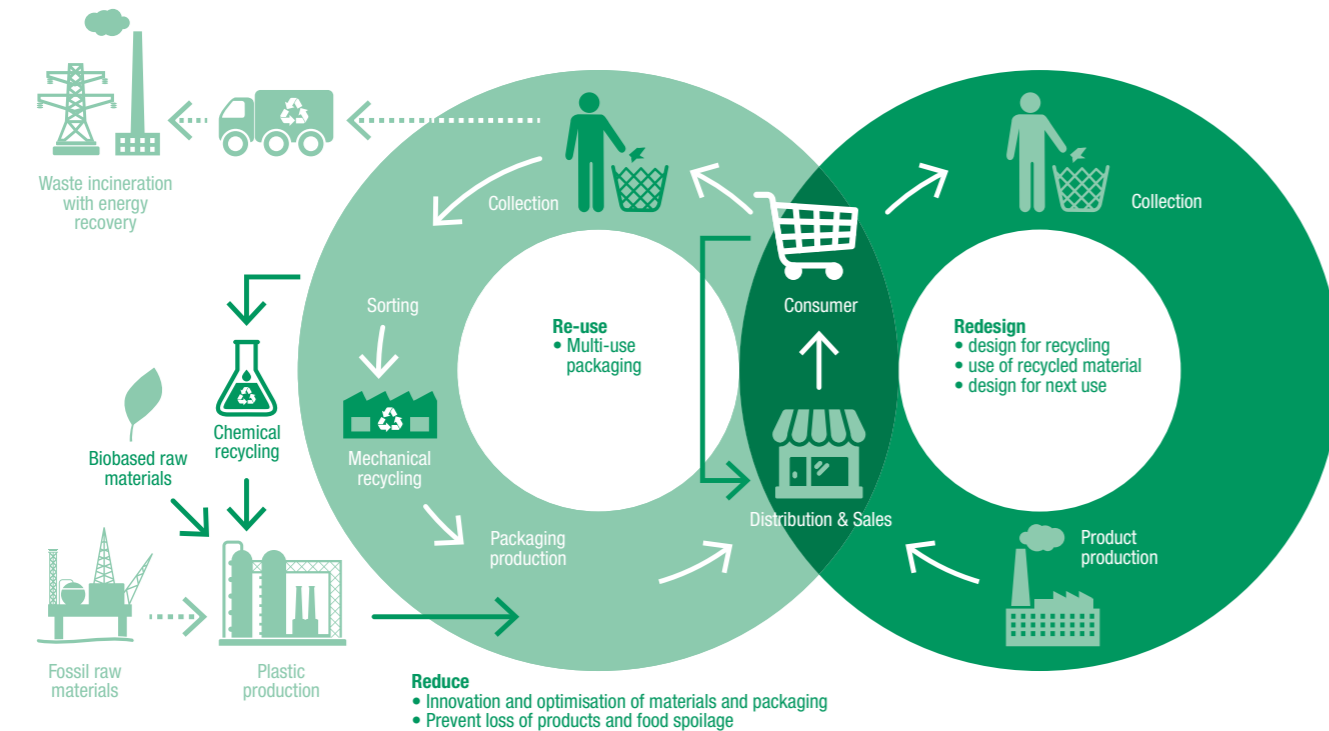
WHAT IS A CIRCULAR ECONOMY?

A circular economy is a closed-loop system which aims to minimise the use of virgin materials and focuses on value preservation through the design of long-lasting, reusable and easily recyclable products. Circular economy principles also reduce environmental impact in terms of energy use, CO2 emissions and the use of raw materials.

1. THE POWER OF TEAMWORK

At the Oerlemans Packaging Group we believe that value chain cooperation is key to accelerate the transition to a circular economy.

We factor in not only functional and logistical requirements, but also consumers, recycling, end-of-life packaging and choice of raw materials. True industry collaboration can facilitate open innovation and data sharing between all parts of the supply chain - from resin producers through to converters, recyclers, retailers and end consumers. Such open conversations are important for us so we can understand better the total environmental impact of our products over their entire lifecycle. Oerlemans has invested substantial time and resource in building sustainable partnerships over the years, resulting in many successful projects and new product launches.



WINNER OF THE 2019 RETHINK AWARD

Oerlemans Packaging has won the 2019 Rethink Award in the chain cooperation category. From the jury report: "Bag2Bag, the Circular Shrink Hood and ProLiFex are examples of how Oerlemans believes in chain collaboration. The company really is turning its ambitious promises into reality. The jury has a great deal of respect for this level of commitment."

Photo: Oerlemans CEO Joan Hanegraaf (left), Rethink Awards chairman for the day Jort Kelder, and Director of Sustainability Rob Verhagen at the Rethink Awards.



"WE ARE STRONG IN CO-CREATING SUSTAINABLE SOLUTIONS"

Joan Hanegraaf, CEO of the Oerlemans Packaging Group

Source: Roadmap making plastic packaging material sustainable / NRK - Plastics Europe - Berenschot

2. CONSTANT FOCUS ON INNOVATION

SUSTAINABILITY & INNOVATION

The Oerlemans Packaging Group produces and supplies a full range of specialised, flexible, single-layer and multi-layer plastic films and packaging. Of course we are aware that manufacturing this plastic packaging has an environmental impact.

On the other hand, our packaging often helps to ensure that products are used more sustainably throughout the whole chain. This is the challenge we face, but at the same time it does offer many opportunities. We have been running our own recycling department for more than 30 years. It recycles and transforms film remnants from our companies into polyethylene pellets, which are then used to make new film. We also support Operation Clean Sweep®. The continuous focus on minimising waste is, reducing our environmental impact, one positive side effect being lower logistics and production costs.

Sustainable innovation is the common theme throughout the history of our family business. Oerlemans Packaging continuously invests in production and process innovations. In 1992, we were the first company to introduce biodegradable horticultural films. Oerlemans Technology Centre (OTC) and Oerlemans Repro Centre (ORC), which are part of the group, test products for both customers and suppliers, and develop innovations in materials, applications and printing. These centres help others in the chain to achieve a sustainable competitive advantage with their product packaging.

OTC 

Oerlemans Technology Centre

[OTCPACKAGING.NL](https://otcpackaging.nl)

ORC 

Oerlemans Repro Centre

[ORCPACKAGING.NL](https://orcpackaging.nl)

Operation Clean Sweep® (OCS) is an international program designed to combat industrial litter around the world. All companies manage their waste to ensure that factory areas are kept litter free where possible. With this commitment, Oerlemans Packaging is actively contributing to a healthier environment and preventing waste from entering our oceans. This involves the group investing in its business operations with sustainable changes to its business infrastructure, sites, machinery and staff training. OCS was launched in the Netherlands by the Dutch Federation for the Rubber & Plastics Industry (NRK) in partnership with the Plastics Europe NL.

THE VALUE OF PLASTIC PACKAGING:

3. THE PATH TO SUSTAINABILITY

The Dutch plastic packaging federation (NRK Verpakkingen) and Plastics Europe Netherlands published the *Roadmap towards increasing the sustainability of plastics packaging*. We are proud that Joan Hanegraaf, Chairman of NRK Packaging, is co-author of this pragmatic, solution-orientated document, published in the form of a roadmap.

There is no standard formula for making packaging more sustainable. The plan describes all measures that stakeholders in the packaging chain can take to make packaged products and packaging materials more sustainable. It helps us all with decision-making and implementing the most suitable improvement options.

The *Roadmap towards increasing the sustainability of plastics packaging* is in alignment with with the Rethink program and our ambitions. Before taking the next step, keep the next four points in mind.

- Sustainability is the result of continuous innovation, often in small steps, sometimes in large ones.
- It is essential to work on all areas of improvement simultaneously.
- Innovations are only successful and sustainable if they are initiated and adopted by the market.
- Coordination and promotion are crucial to keeping the change process running and steering it in the right direction.

CHIPS

PRODUCT PROTECTION

CO2 REDUCTION IN MATERIALS AND PRODUCTION

EFFICIENCY IN LOGISTICS

PREVENT FOOD WASTE



08



09

Reduce

Reuse

Recycle

Redesign

Renew

4. RETHINK AS A STARTING POINT

Plastic packaging makes valuable and sustainable contributions across the entire chain, protecting products and keeping them fresh. This is not only important for food safety, but prevents food waste as well.

Plastic is light, compact and strong, which makes it an efficient material for packaging and allows transportation of products at low logistics costs. Another key point is that plastic is increasingly recycled for new applications. To promote the circular economy, Oerlemans Packaging Group is continuously reviewing options to make packaging more sustainable by applying Rethink's five sustainability REs:

RE duce - reduce thickness and materials usage.

RE use - reuse packaging as often as possible.

RE cycle - use as much recycled raw material as possible.

RE design - design packaging that can be recycled after use, for instance using mono-materials.

RE new - use less finite raw material, but more renewable raw material.



The Oerlemans Packaging Group is a partner of Rethink. For more information rethinkplastics.nl.

5. PREVENT FOOD WASTE



Today, one third of all food is being wasted globally with fruit and vegetables waste as high as 45%. What a waste! Working together to reduce food waste is crucial and selecting the right packaging for your product is an essential part of the journey. This puts us in a better position to feed the world's rapidly growing population. And it also helps us to contribute to the reduction of CO2 emissions related to food waste. This puts us in a better position.

The Oerlemans Packaging Group is an active stakeholder in the initiative **Together Against Food Waste**. This foundation focuses on the prevention, reduction and revaluation of food waste throughout the food chain.



**PACKED
SHELF LIFE EXTENDED
BY 7 TO 10 DAYS**



The foundation brings together companies, government agencies and knowledge institutions to combat waste by joining forces and committing to a single common goal: Together we will make the Netherlands one of the first countries in the world to reduce food waste by 50%! This would ultimately make the Netherlands a frontrunner and a global example in achieving Sustainable Development Goal 12.3.



the Dutch written logo of the Together Against Food Waste initiative.

Our smart packaging solutions contribute to this goal by extending shelf life and preventing losses during transport.



A quarter of the food is wasted annually in the Netherlands.

1/4



Food waste in Europe is responsible for 6% of total greenhouse gas emissions from human activity.



That is **105-152 KG** per capita per year in the Netherlands.

**2015 - 2030
50%
reduction**

Wasting less food = contributing to the achievement of climate targets and sufficient good food for a growing world population.

BIOBASED **VS** BIODEGRADABLE

Bioplastic, biobased plastics, recyclable, or perhaps compostable? How do you find the best solution in this maze of terms for your specific challenge? It all depends on what the packaging is used for, and how it is discarded. If compostable packaging does not offer any benefits in the chain, you are better off using biobased or recycled raw material. Sometimes a thin film of virgin, fossil-based plastic is the best choice, such as with food or pharmaceuticals. The main options in a nutshell:

Fossil-based means that a package is made from oil. These packages can often be made very thin and recyclable.

Biobased specifically refers to the source of the raw material. Biobased packaging is made from vegetable or animal raw materials, such as potato starch or sugar cane. The term biobased does not necessarily imply that the raw material or packaging is compostable.

Compostable or **biodegradable** material degrades naturally, through moulds or bacteria, for example. The rate of decomposition depends on external conditions (e.g. temperature, humidity, oxygen presence), with the end products being CO₂, water and biomass. The speed of decomposition varies though. Compostable packaging is usually not recyclable, so the raw material is only used once.

Recyclable means the materials can be recovered from waste flows or residues and made suitable for use again.

CHOOSE CAREFULLY!

OUR EXPERTS WOULD LOVE TO HELP YOU FIND THE BEST SOLUTION FOR YOUR PRODUCTS

OUR ADVICE:
CHOOSE
CAREFULLY!

**COMPOSTABLE,
FOSSIL-BASED**

Materials: Bio polyester, PBAT
Raw material: Oil, gas
Sustainability factor:
Industrially/Home compostable**
Can contaminate regular plastic recycling

**COMPOSTABLE,
BIOBASED***

Materials: PLA, PHA
Raw material: E.g. corn, sugar, starch, sewage sludge
Sustainability factor:
Industrially/Home compostable**
May contaminate plastic recycling processes

**NOT COMPOSTABLE,
FOSSIL-BASED**

Materials:
LDPE, MDPE, HDPE, PP, etc.
Raw material: Oil, gas
Sustainability factor:
Recyclable, optimum thickness reduction

**NOT COMPOSTABLE,
BIOBASED ***

Materials: Polyethylene, natural rubber, nylon types
Raw material: E.g. corn, sugar, starch
Sustainability factor:
Often recyclable

**The terms biobased and biodegradable confuse consumers!
Biobased is sometimes not biodegradable
Biobased is sometimes recyclable
Fossil-based is sometimes biodegradable
Biobased is sometimes biodegradable*

***biodegradable packaging is often not compostable in composters currently available.*

6. FRONTRUNNER IN THE PLASTIC PACT

The Oerlemans Packaging Group has signed the Dutch Plastic Pact together with more than 60 leaders of other industries. The main goal of the Pact is to do more with less plastic in the circular economy. This is in line with our own sustainability ambitions. Cooperation with other stakeholders is the most powerful aspect of the Plastic Pact: **Co-creating sustainable solutions!**

WORKING TOGETHER TO ACHIEVE THE FOLLOWING BY 2025:

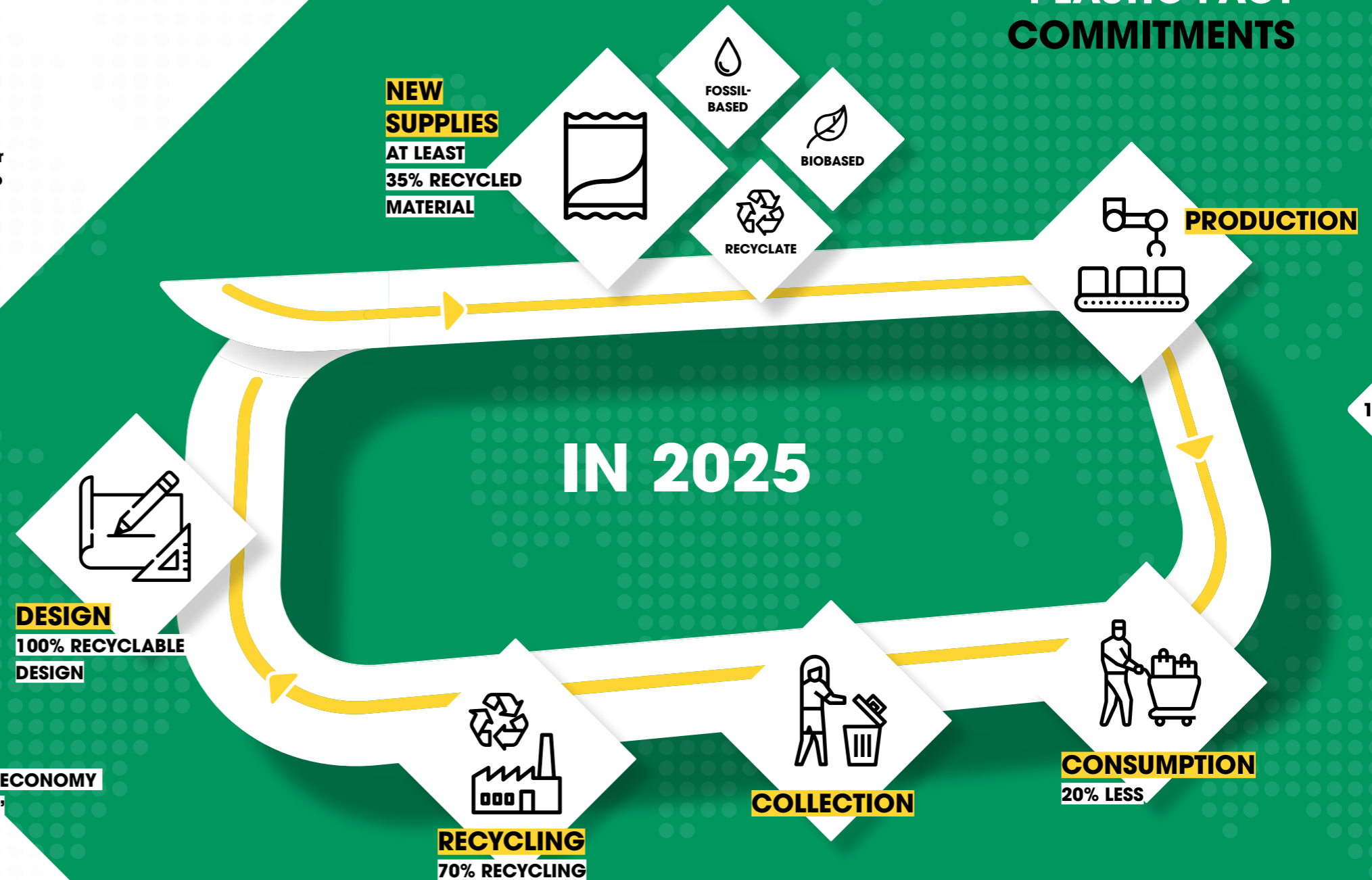
- 20% less plastic usage due to smarter and thinner packaging.
- Application of at least 35% recycled plastic.
- Recycling of at least 70% of all single-use plastic products and packaging.
- Plastic products and packaging are designed to be 100% recyclable



“THE DUTCH PLASTIC PACT IS GOING TO PUT THE CIRCULAR ECONOMY INTO PRACTICE. WE ARE PROUD TO BOOST IT EVEN FURTHER!”

Rob Verhagen, Sustainability Director of the Oerlemans Packaging Group and member of the Plastic Pact steering committee

PLASTIC PACT COMMITMENTS



QUALITY IS ASSURED TOGETHER

The Oerlemans Packaging Group is one of the largest producers of flexible plastic packaging and films in the Benelux. With more than 600 employees at 8 sites, this family-owned company produces high-quality packaging and films for companies in various sectors including food, non-food, retail and horticulture.

OERLEMANS PACKAGING GROUP INCLUDES:

- Fardem Packaging, Edam
- Flexpak, Geldermalsen
- Oerlemans Plastics, Genderen and Giessen
- Oosterwolde Plastic Industry, Oosterwolde
- Perfon, Goor
- Plasthill, Hillegom


oerlemans packaging group
the **sustainable** innovator



OUR QUALITY SYSTEMS:

- ISO 26000 (corporate social responsibility)
- ISO 14001 (environmental management system)
- ISO 9001 (quality management system)
- BRCGS Packaging certification (food safety of packaging)



WE ARE A MEMBER OF AND ACTIVELY INVOLVED IN (A.O.):

- Leadership network and the council of partners, CSR Netherlands (MVO Nederland)
- Club of 100, Wageningen University & Research
- Together against food waste (NL: Samen tegen voedselverspilling)
- World Cleanup Day
- Plastic Pact
- Dutch Federation of the Rubber and Plastics Industry (NRK)
 - The Board of NRK
 - The Board of NRK Verpakkingen (Packaging)
 - Communications policy group & Rethink
 - Circular economy steering group & working group
- EFTA (European Flexo Technical Association) Benelux
- StiMo (Material Organisations Foundation)
- Board Afvalfonds (Waste Fund) Packaging



Co-creating sustainable solutions! What challenges are you facing in this important domain? We look forward to reviewing the options with you. Contact us, and we will take on the challenge of making your business more sustainable – together!

Oerlemans Packaging Group – Kleibergsestraat 4 – 4265 GB Genderen (NL)

Telephone: +31 (0) 416 35 81 00 | E-mail: info@oerlemanspackaging.nl | [oerlemanspackaging.nl](https://www.oerlemanspackaging.nl)

This brochure is printed on recycled paper



members of the Oerlemans Packaging Group



OERLEMANSPACKAGING.NL