

The logo for pladis, featuring the word "pladis" in a lowercase, sans-serif font. A white arc with a small star at its end is positioned above the letter "i".

Sustainability Report

2022

Foreword

Across pladis, we're determined to do more to demonstrate our purpose – happiness with every bite – to our customers, our teams and to our communities we call home.

Through our biscuits, chocolate and snacks, we have a wonderful ability to bring moments of happiness. But, at a time when the natural world is under increasing pressure, we know living up to this purpose means going beyond simply making and baking our products for our consumers.

There is work underway that shows the direction we want to travel on important issues such as ingredient sourcing, the use of plastic packaging and decarbonisation. While we are proud of these efforts, we know that we still have a way to go. That's why we're building on these actions and priorities with global and local roadmaps. For each of those priorities, we have also highlighted how our actions will contribute to supporting specific United Nation's Sustainable Development Goals (SDG). By working together, there is more we can achieve and we will be open and humble about the challenges as we continue our journey.

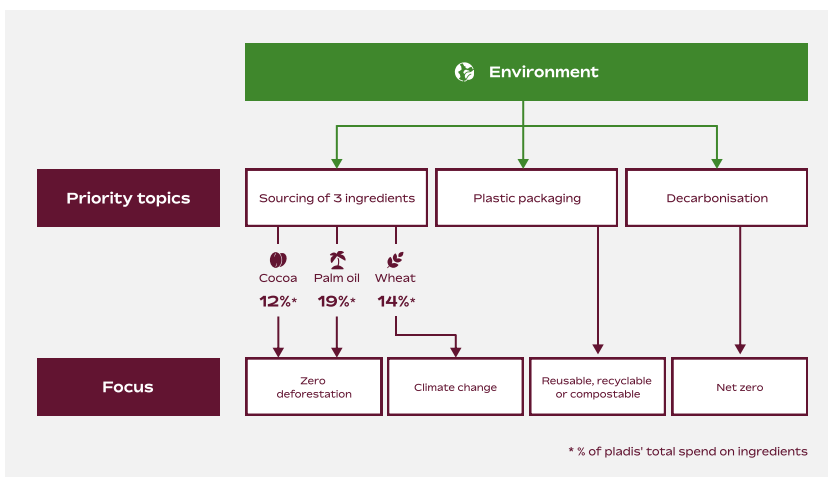
To that end, I am pleased to share our first pladis sustainability report. This 'sustainability snapshot' sets out our areas of focus and progress to date, and will be published annually.



Anisa Missaghi
Chief Corporate Affairs and Sustainability Officer



Sustainability is a key ingredient in our recipe for happiness and a responsibility we take seriously.



◀ **Fig 1.**
An overview of pladis' environmental topics and focus

Cocoa

Global commitment

100% deforestation-free verified¹ by 2030²

2022 results

15%

of total volumes monitored with satellite technology and already confirmed as deforestation-free.

22.5%

of pladis' total volumes traceable back to farm gate

¹ Using traceability and satellite monitoring systems

² Or earlier in the countries where regulations or customer requirements are stricter

Expert partners

Earthworm

Earthworm is an impact-driven global non-profit working on the ground to create scalable solutions for nature and people to thrive. In the field, Earthworm creates, tests, and scales new ways of production and doing business.

Did you know?

For the 2021/22 season, Önem, our pladis-owned grinding facility located in Türkiye, bought 13,000 tonnes (30% of its total volumes) of cocoa beans from three qualified cooperatives and are fully traceable to thousands of smallholders. The sustainability practices of the cooperatives and associated members have been externally assessed by our partner Earthworm to verify they are aligned with Önem's Beyond Cocoa sustainability programme.

SUSTAINABLE DEVELOPMENT GOALS



Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Palm oil

Global commitment

100% deforestation-free verified³ by 2030⁴

2022 results

95%

Traceability back to mills

- 96% for crude palm oil
- 89% for palm kernels

47%

Traceability to plantations

- 48% for crude palm oil
- 38% for palm kernels

40%

of total palm volumes confirmed as deforestation-free (with 80% of supply chain investigated)

³ Using traceability and satellite monitoring systems

⁴ Implementation will be cognizant of specific regulatory requirements in specific geographies

Expert partners

Earthworm

Did you know?

In the UK, for more than 10 years, we have been buying crude palm oil almost exclusively from one supplier sourcing this oil from eight mills and thousands of smallholders on the Island of New Britain, in Papua New Guinea. This oil has already been 100% deforestation-free verified using satellite monitoring systems, and our supplier has also implemented methane capture facilities to process the methane coming from the mills' effluents into energy, which contributes to decreasing our scope 3 (indirect emissions) carbon footprint.

SUSTAINABLE DEVELOPMENT GOALS



Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Wheat

Global commitment

Partner with local farmers to tackle climate change

2022 results

Türkiye
14%

of the wheat sourced is aliağa, a new wheat variety more resistant to climate change

UK
41%

of flour volumes come from pladis UK&I's Back to Farm sustainability-sourced wheat programme

Expert partners

Earthworm

bcsd Türkiye

BCSD Türkiye's purpose is to increase the awareness of businesses about sustainable development and to extend their influence. With this purpose in mind, BCSD Türkiye focuses its activities on the five areas within the framework of the UN's Sustainable Development Goals, including sustainable agriculture and access to food, and works with the leader companies of Türkiye on sustainability.

Did you know?

pladis introduced our Back to Farm programme in 2013, which allows us to source 40% of the wheat we use across the UK from dedicated UK farmers. This reduces emissions, and the premium we pay helps to fund valuable biodiversity initiatives.

Since we introduced Back to Farm in 2013, our UK wheat farmers in Northumberland have introduced 457 bee hives (= 10 million bees), managed and maintained 660 miles of hedgerows and collected 57 tonnes of plastic to be recycled.

SUSTAINABLE DEVELOPMENT GOALS



Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Plastic packaging

Global commitment

100% plastic packaging reusable, recyclable⁵ or compostable by 2025

Latest result (end of 2020)

Türkiye

96%

UK

72%

Western Europe

94%

⁵Or 'recycle-ready' in the countries where collection and/or recycling capacity are not readily available

SUSTAINABLE DEVELOPMENT GOALS



Ensure sustainable consumption and production patterns



Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Expert partners



The UK Plastics Pact brings together businesses from across the entire plastics value chain with UK governments and NGOs to tackle the scourge of plastic waste.



TerraCycle® is the world's leader in the collection and reuse of non-recyclable post-consumer waste that would otherwise be destined for landfills. It repurposes that waste into new eco-friendly materials and products.



The Fund intends to improve flexible plastic recycling and reduce plastic pollution by giving the material a stable value. It's also working to increase the supply of recycled plastic so the industry becomes more circular.

Did you know?

In Türkiye, we are committed to using a total of 1,000 tonnes less plastic and a total of 1,500 tonnes less paper by 2025 compared to 2020, and to increasing the percentage of recycled plastic to 50% in rigid plastic by 2025.

Decarbonisation

Global commitment

Net zero by 2050

2022 results

Scope 1, 2 and 3 emissions⁶ (pladis' value chain in Türkiye and the UK)

Total scope 1 + 2 + 3 emissions⁶:

In the UK
950 kilo tonnes
 of CO₂e

In Türkiye
2,300 kilo tonnes
 of CO₂e

scope 1+2 emissions accounted for less than 10% of pladis' greenhouse gas emissions in our value chains in both countries.

85%

of pladis' total (scope 1+2+3) emissions were product-related emissions, of which ingredients accounted for an average of 89%.

Approx.

55%

of pladis' total emissions came from 2 ingredients: cocoa and palm oil.

Science-based targets

Combined (Türkiye & UK) near-term science-based targets to become net zero by 2050:

42%

decrease in our scope 1 and 2 emissions from 2021 to 2030. We also need to reduce our scope 3 emissions by between 25%-42% based on current temperature targets outlined in the Paris agreement.

⁶Scope 1 covers direct emissions from owned or controlled sources. Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the reporting company. Scope 3 includes all other indirect emissions that occur in a company's value chain.

Expert partners



The Carbon Trust's mission is to accelerate the move to a decarbonised future. They are the expert guide to turn climate ambition into impact. They have been climate pioneers for more than 20 years, partnering with businesses, governments and financial institutions to accelerate their route to net zero.

Did you know?

In the UK, we have been purchasing 100% renewable electricity across all our sites since April 2018.

SUSTAINABLE DEVELOPMENT GOALS



Take urgent action to combat climate change and its impacts.

Appendix

Introduction

As a global company, we operate in many countries – all with different levels of maturity with regard to sustainability. Therefore, pladis has decided to focus on the sustainability priorities that are most relevant, based on the risk and importance to our business, across all our markets.

As a result of this process, we decided to focus on three main global sustainability priorities:

- Sourcing of ingredients, with a specific focus on cocoa, palm oil and wheat
- Plastic packaging
- Decarbonisation

This does not mean that we will not focus, locally, on additional topics. For example, in the UK we made the commitment to source 100% cage-free eggs by 2025 and are already sourcing 100% cage-free liquid eggs.

Sourcing of ingredients

Cocoa

Why is cocoa one of pladis' sustainability priorities?

There are still many issues related to deforestation in cocoa production. According to The Guardian, it is estimated that around 90% of the forests of Ivory Coast, the world's largest cocoa producing country, have been destroyed since independence in 1960¹, forcing species like forest elephants and chimpanzees to near extinction. There are also issues related to human rights abuses: according to the U.S. Labour Department, there are still an estimated two million children working in cocoa production in Ivory Coast².

pladis' cocoa supply chain

Approximately 30% of the cocoa products (liquor, nibs, powder, butter or chocolate) that pladis buys come from five major suppliers, which are international trading companies. Those trading companies' supply chains can be quite complex, with sometimes up to six or seven middle-men between cocoa producers and

pladis. To this end, pladis regularly engages with its tier-one suppliers of cocoa products and chocolate on the environmental and social achievements and challenges that are inherent to their supply chains and the products delivered to pladis. While full traceability can be challenging to attain in such complex supply chains, one way to get reassurance that the cocoa is produced under recognised environmental and social standards, is to use certifications. For example, in the Netherlands, the cocoa used in 100% of our Verkade-branded products is Fairtrade certified.

pladis owns a grinding facility which the group leverages from a sustainability perspective

The remaining 70% of pladis' cocoa products are sourced by Önem, a pladis-owned grinding facility located in Turkey. Being a grinder, Önem buys beans, instead of processed cocoa products, directly from suppliers located in Western Africa. Önem then processes those beans into cocoa powder, liquor and butter at Önem's grinding facility before having them shipped to several pladis factories around the world.

¹ <https://www.theguardian.com/environment/2019/oct/16/ivory-coast-law-could-see-chocolate-industry-wipe-out-protected-forests>

² <https://www.dol.gov/agencies/ilab/our-work/child-forced-labor-trafficking/child-labor-cocoa>

In 2021/2022, Önem purchased approximately 32,500 tonnes of cocoa beans.

For more information on Önem, please visit: <https://www.onemgida.com.tr/en>

For its journey on cocoa sustainability, pladis decided to work with the Earthworm Foundation

In 2020, pladis and Önem partnered with the Earthworm Foundation to work on cocoa sustainability. Earthworm is an impact-driven, global, non-profit organisation working on the ground to create scalable solutions to help nature and people to thrive. In the field, Earthworm creates, tests, and scales new ways of production and doing business.

Traceability improvement is the cornerstone of Önem's sustainability journey

Key to the partnership is improving traceability, back to both the cocoa cooperatives and then to farm gate, where possible. Without traceability, we cannot fully understand the environmental conditions in production, nor can we be sure that there are no human rights abuses and that working conditions are up to standard.

Önem's Beyond Cocoa is the company's sustainability journey

In 2020, Önem defined its cocoa sustainability journey, called Beyond Cocoa - or *au-delà du cacao* in French. It is based on three pillars: people, planet and product, and tackles issues such as farmers' welfare, the protection of children, local community development, deforestation and agroforestry, climate change, responsible chemical use, traceability and transparency, product quality and responsible sourcing. Beyond Cocoa is being deployed in production, with the support from the Earthworm Foundation.

Engagement with cocoa beans suppliers on traceability and Beyond Cocoa

60% of the beans purchased by Önem come from three tier-one suppliers, who are well established and have advanced sustainability programmes and field experts who can support the deployment of Beyond Cocoa. Some of those suppliers can also provide full traceability back to the cocoa cooperatives and increasingly back to the farm gate, for the cocoa coming from their direct supply chains. In 2022, 30% of the beans coming from those suppliers were traceable back to coop, and of those, 20% traceable back to the farm gate. It is Önem's objective to increase those percentages by working closely with suppliers.

Önem, through Fildişi, can also leverage a direct connection with cocoa cooperatives

The remaining 40% of the cocoa beans purchased by Önem are sourced through Fildişi, a trading company based in Ivory Coast and owned by Yıldız Holding, pladis' parent company. In 2020, pladis and Önem started to leverage their special relationship with Fildişi.

A long-term relationship with cooperatives

In 2020, Önem started to work with Fildişi on the development of a portfolio of cocoa cooperatives to be qualified to supply Önem on a multi-year basis. The rationale of this strategy is that Önem's Beyond Cocoa is a sustainability journey, which requires long-term partnerships based on continuous improvement.

The coops were initially qualified based on their readiness and willingness to embark on Önem's Beyond Cocoa sustainability journey and Earthworm carried out an initial assessment, through field visits, to identify the cooperatives' gaps against Beyond Cocoa.

Those visits resulted in the qualification of three cooperatives for the 2020/2021 season. Additional cooperatives have been qualified since then, in order to accompany Fildişi's increasing demand.

The deployment of Beyond Cocoa started with a specific focus on traceability and deforestation-free verification

In order to deliver pladis' commitment to have 100% of its cocoa originating from deforestation-free verified plantations by 2030, pladis has worked with Earthworm, the coops in Fildişi's portfolio and their farmers, to check traceability availability and accuracy, back to farm gate. For 100% of the volumes sourced by Fildişi (13,000 tonnes for the 2021/2022 season), we now have 100% traceability back to farm gate. In 2022, based on this traceability, supported by the farms' geo-coordinates, we started to pilot, the use of satellite monitoring systems with DAKUA, one of the main coops supplying Fildişi (7,500 tonnes for the 2021/2022 season). This monitoring confirmed that no deforestation practice had occurred between 2016 (earliest date satellite systems can go back) and 2022.

Earthworm is now providing support to the coops to comply with the additional Beyond Cocoa requirements

Based on the gaps identified during the initial assessments, Earthworm is providing field support to the coops and farmers in additional areas, including chemical use, agroforestry or child labour remediation.

Support to local communities in Ivory Coast

Since 2021, pladis has also been supporting a landscape programme managed by Earthworm in the Soubré area, Ivory Coast. This programme is mainly focused on improving farmers' resilience, including through the creation of Village Savings and Loans Associations (VSLA), as well as restoring and protecting forests.

More information about Earthworm's landscape programme in Soubré and progress made by pladis and Önem in their cocoa sustainability journey is available in [pladis' 2022 palm oil and cocoa](#)

[sustainability progress report](#), as produced by Earthworm.

Palm oil

Why is palm oil one of pladis' sustainability priorities?

Due to its physical characteristics and as a very efficient crop, palm oil has been increasingly used by some industries as a key vegetable oil. Those industries include the food industry, but palm oil is also widely used in personal care, cleaning products and biodiesel. As a result, palm oil production is now 35 times higher in 2020 than it was in 1970, according to the Food and Agriculture Organisation (FAO) of the United Nations³.

In the past, this production increase has led to deforestation practices. The European Commission has estimated that palm oil production could have contributed to over 2% of total worldwide deforestation⁴. This deforestation has also been associated with biodiversity loss. According to National Geographic, just under 150,000 Borneo orangutans were lost between 1999 and 2015, roughly half the population⁵.

pladis buys approximately 150,000 tonnes of palm oil every year and as such, we are conscious that we have a role to play by working with our suppliers to take necessary steps to ensure no palm oil coming from deforested areas enters our supply chain.

The palm oil industry has also been accused of some human rights abuses, like recently, in case of the treatment of some migrant workers in Malaysia.

pladis' palm oil supply chain

pladis buys palm oil and palm oil kernels from 27 tier-one suppliers. Two of those suppliers account for 60% of pladis' sourcing. Those supply chains can be complex when it comes to tracing palm oil products

³ <https://ourworldindata.org/palm-oil>

⁴ <https://palmoilalliance.eu/palm-oil-deforestation/>

⁵ <https://www.nationalgeographic.co.uk/video/tv/nearly-150000-orangutans-lost-to-logging-palm-oil-and-human-conflict>

back to palm oil plantations. pladis has largely been working with the same portfolio of palm oil suppliers for some years and has noticed that the palm oil industry has made huge efforts to become more transparent and provide manufacturers like pladis with information on palm oil traceability and to become more open about their investigation of open public grievances related to alleged deforestation practices or human rights abuses.

pladis’ long history of responsible palm oil sourcing started with RSPO

In the UK, through United Biscuits, pladis joined the Roundtable on Sustainable Palm Oil (RSPO) in 2008 and has been using 100% palm products supporting the RSPO sustainability programme (90% of which is segregated certified).

In 2018, the RSPO rules required companies to elevate membership to their parent companies and pladis’ RSPO certified volumes are now consolidated in the report submitted by Yildiz Holding, pladis’ parent company.

In 2018, pladis partnered with the Earthworm Foundation on palm oil sustainability

Since 2018, pladis has been a member of the Earthworm Foundation, a non-profit organisation, and has been working with the NGO to implement transformation programmes in palm oil production.

Traceability is the cornerstone of pladis’ sustainability journey

Key to the partnership is traceability improvement, back to palm oil mills and now back to palm plantations. Without traceability, we cannot fully understand the environmental conditions in production, nor can we be fully sure that there are no human rights abuses and that working conditions are up to standard.

As a result, pladis has been engaging on a yearly basis with its tier-one suppliers of palm oil products (crude

palm oil and palm oil kernels) to collect information on the traceability of the palm oil entering its supply chain, back to mills and, since 2022, back to plantations.

In 2022, through this partnership, pladis Global was able to increase the traceability, back to mills, of its palm oil products (crude palm oil + kernels) to over 95%. This percentage is in-line with others in the industry and up from 84% in 2018 and 93.5% in 2020.

Earthworm assists pladis in investigating potential breaches of pladis’ policies

Based on the traceability information collected from our tier-one suppliers, Earthworm provides pladis with a list of potential breaches of its ‘No Deforestation’, as well as ‘Human Rights’ policies.

To this end, Earthworm uses the public grievance systems, as published by some NGOs or suppliers themselves, and assists pladis when engaging with suppliers on those grievances.

Earthworm’s network on the ground can also raise alerts when they have suspicions of breaches, including when those suspected breaches are not related to pladis’ direct sourcing but are coming from a company owned by a group pladis is sourcing from.

pladis also relies on satellite monitoring systems to verify if its sourcing is deforestation-free

In order to deliver pladis’ commitment to have 100% of its palm oil originating from deforestation-free verified plantations by 2030, pladis relies on the Starling satellite monitoring system. This innovative initiative, developed by Earthworm and Airbus -the global aerospace corporation - verifies that the plantations in its portfolio have not contributed to deforestation.

pladis piloted Starling in 2020 with its main palm oil supplier and expanded its use to cover 80% of pladis’ palm oil volumes in 2022.

In 2022, pladis had 40% of its total palm oil volumes

deforestation-free verified. This does not mean that the remaining volumes are associated with deforestation: in order to reach 100%, supplier engagement will be essential to collect additional information such as data on plantation boundaries and their connection with mills, as well as extending the analysis to cover the rest of pladis' suppliers. Supplier engagement on no deforestation topics will unlock missing information and enable investigation of deforestation alerts that are detected.

More information about progress made by pladis in its palm oil sustainability journey is available in [pladis' 2022 palm oil and cocoa sustainability progress report](#), as produced by Earthworm.

Wheat

Why is wheat one of pladis' sustainability priorities?

pladis is, directly or indirectly, a large buyer of wheat. A significant percentage of the wheat used is sourced via local coops and/or farmers which pladis has built partnerships with. As such, pladis supports local farming communities, including in France, Türkiye and the United Kingdom.

In addition, wheat is an essential commodity to produce biscuits and those partnerships have helped pladis to secure access to local volumes of specific wheat varieties used for biscuit production, by incentivising farmers to extend the planting of existing varieties, like in the UK, or working with research institutes on the development of new varieties bringing higher yields under changing local conditions, like in Türkiye.

pladis' wheat supply chain

In Türkiye

In Türkiye, pladis, through Önem Gıda, one of its local entities, has been producing flour, a key raw material for biscuit and cake products, since 1978. The

production of flour requires the sourcing of wheat, and the 250,000 tonnes of wheat that pladis Türkiye purchased in 2022 accounted for over 40% of pladis Türkiye's total volumes of raw materials.

pladis Türkiye prioritises local wheat suppliers as a means of reducing logistics-related greenhouse gas emissions and contributing to support local production.

In the United Kingdom

In the United Kingdom, pladis UK&I does not own a flour factory. pladis UK&I buys flour from local millers. For example, our Carlisle biscuit factory has been sourcing flour from the nearby Silloth mill since 1860. In turn, those millers source wheat from local cooperatives and producers. In 2022, 100% of the flour used in the pladis biscuits manufactured in the UK, was produced with locally sourced wheat.

Our partnerships with local producers to secure volumes of specific wheat varieties

In Türkiye

The climate crisis changes the conditions of agricultural areas and increases the risks of drought in many regions, meaning there has sometimes been a need to transition to new agricultural varieties of wheat.

For this reason, in 2007, pladis Türkiye decided to develop a new wheat variety suitable for biscuit production and more resistant to climate change. This decision resulted in a partnership with the Bahri Dağbaş International Agricultural Research Institute in Konya. This partnership materialised in the development of a new variety, called Aliağa, a high-quality, climate-, disease- and drought-resilient variety. The new variety successfully passed the tests in different locations and conditions and was registered by the Variety Registration and Seed Certification Center of the Turkish Ministry of Food, Agriculture and Livestock.

Some benefits of the Aliğa biscuit wheat variety:

- the variety provides 17 to 20% more yield per hectare in wetlands and 35 to 40% in dry lands, compared to existing varieties,
- farmers are expected to enjoy a minimum, revenue increase of 20%,
- this new variety has a higher yield but also requires less water.

Aliğa was cultivated for the first time in 2019 and harvested in 2020. In 2022, Aliğa accounted for 35,000 tonnes harvested in nine provinces: Konya, Çankin, Kirikkale, Kirşehir, Yozgat, Kayseri, Eskişehir, Tekirdağ and Çorum.

In the United Kingdom

The need to have access to a specific wheat variety

Biscuit production requires a specific soft wheat variety called the Group 3 variety. The Group 3 soft wheat characteristics make an extensible dough which does not shrink back when rolled out, an attribute necessary to make the perfect biscuit. In addition, Group 3 soft wheat varieties produce a flour that has a relatively low water absorption, compared to other

The wheat is carefully tested by our millers to ensure that it has:

- a protein level of between 10 to 13% to ensure the finished flour has the required extensibility,
- a moisture level of less than 15%, so that it can be stored safely,
- the correct specific weight to ensure that enough flour is actually in the grain to provide the colour, appearance and yield required, in addition to ensuring that it is clean and free from pests and other contaminants.

varieties. This characteristic, combined with milling techniques, provide a finished flour that has the required quality to make perfect biscuits.

A variety that became endangered in the UK in the 2010s

While the UK has some of the best soft wheat varieties, especially in the Northern countries of England, the Group 3 soft wheat variety had fallen out of fashion among British growers: from approximately half of the UK wheat production at the end of the 1990s, to just ca. 5% at the beginning of the first decade of this century.

For this reason, in 2013 pladis introduced Back to Farm

The objective of Back to Farm, when it was implemented in 2013, was to turn the tide and persuade more farmers to return to biscuit wheat. pladis UK&I started by holding forums with growers from across the UK, sharing its long-term goals and vision for wheat production in Great Britain and directly addressing perceived barriers. The company also introduced two-year rolling contract agreements to give growers the peace of mind – and financial security – needed to commit to the scheme.

Today, Back to Farm is a key element of pladis UK&I's wheat sourcing strategy

In 2022, approximately 40% of the 270,000 tonnes of wheat used in pladis UK&I's products every year was still produced as part of the Back to Farm programme, totalling 216 farmers. Some of those farmers also reinvested part of the revenues into environmental initiatives. For example, our group of wheat farmers in Northumberland have planted over 600 miles of hedgerows, reintroduced 10 million bees and had over 50 tonnes of plastic recycled since the introduction of Back to Farm. Some of our farmer cooperatives also support local communities, providing employment opportunities to students who would have otherwise struggled to find employment, or to released

offenders.

Back to Farm is an important example of how close relationships between farmers and food producers can support British agriculture and reduce the environmental impact of food production while supporting local communities.

The way forward

In Türkiye

pladis Türkiye now plans to use the Aliğa biscuit wheat to source a significant portion of its biscuit wheat needs in the coming years. Moreover, pladis Türkiye launched the Biscuit Wheat Development Programme, still in collaboration with the Bahri Dağbaş International Agricultural Research Institute. The objective of this programme is to develop additional new biscuit wheat varieties. It will enable pladis Türkiye to offer local farmers the opportunity to choose among the varieties with the highest yield, depending on climate conditions and soil structure. This programme will contribute to expand the cultivation of biscuit wheat and the continuity of its production.

In 2022, pladis Türkiye also initiated a partnership with BCSD Türkiye, a local NGO, and the University of Ankara to start a pilot focusing on water risk analysis in wheat production in the Anatolia region.

In the United Kingdom

In 2022, pladis UK&I started a partnership with the Earthworm Foundation on regenerative agriculture in pladis UK's wheat supply. The first stage of this partnership mainly focuses on capturing some of the work which has already been done in this area by some of the Back to Farm producers, defining the metrics which will be collected to measure impact, as well as selecting the tools which will help the partners to collect those metrics.

pladis sees this partnership on regenerative

agriculture as a means of increasing carbon capture into soils, and as such, a good opportunity to engage with local farmers on decarbonisation, which is another of pladis' sustainability priorities.

Plastic packaging

Why is plastic packaging one of pladis' sustainability priorities?

According to the World Wide Fund for Nature (WWF), there could be more plastic than fish in the sea by 2050⁶. In addition, there is a growing trend for governments to legislate to reduce the impact of packaging via new taxation and levies. As a result, companies have an obligation to reduce their overall plastic using, replacing materials that are hard to recycle with ready-to-recycle packaging.

Our approach

To this end, we have adopted a Reduce, Replace and Recycle approach:

- **Reduce** our reliance on fossil fuel derived 'virgin plastic' by:
 - downgauging plastic material and optimising pack design,
 - using recycled plastic content (where commercially viable),
 - investigating/researching bio-derived sustainability-sourced plastic raw materials.
- **Replace** hard-to-recycle materials and design our plastic packaging portfolio to be 100% recyclable⁷, reusable or compostable by:
 - removing problematic materials from pladis' supply chain,
 - replacing complex laminates with mono-material structures to make them 'recycle-ready',

⁶ <https://www.wwf.org.uk/myfootprint/challenges/will-there-be-more-plastic-fish-sea>.

⁷ or "recycle-ready" in the countries where collection and/or recycling facilities are not widely available.

- investing in alternative non-plastic materials and use models for circularity.
- **Promote recycling** and reuse to avoid plastic flowing to landfill by:
 - partnering externally to promote different recycling models,
 - educating consumers through clear on-pack labelling strategy,
 - leveraging membership in industry forums to advance kerbside collection.

Although there are several metrics being used to measure progress, the only target pladis can solely influence at a global level is “100% recyclable⁸, reusable or compostable packaging portfolio by 2025⁹”. Making our portfolio ‘ready’ for plastic circularity is within pladis’ control and not reliant on technology advancements (e.g. % of recycled content) or local external infrastructure (e.g. % of effectively recycled).

Our partnership with TerraCycle and the Flexible Plastic Fund

In the UK, we have been working with TerraCycle since 2012. So far, over 18 million wrappers have been recycled through TerraCycle. Whilst this only represents a small percentage of our total wrappers placed on the market, when we began our relationship with TerraCycle, there were few – if any – viable alternatives for the disposal of our plastic packaging. Our work with TerraCycle has therefore historically provided an option for consumers to dispose of their flexible wrappers over this period while new technologies and solutions were being evolved.

Since that time, a number of additional schemes have been developed that complement our work with TerraCycle and provide a wider range of recycling options. These include the front of store recycling points provided by some major UK retailers including those that are managed by the Flexible Plastic Fund, of which pladis is an active member.

⁸ or “recycle-ready” in the countries where collection and/or recycling facilities are not widely available.

⁹ While this commitment definitely covers our activities in the UK, Türkiye and Western Europe, which account for over 85% of our volumes, it may be delivered at a later stage in the other countries in which we operate and where there are no plans to have kerbside collection and/or recycling facilities available.

Additionally, as local authorities increasingly adopt appropriate collection services, the On-Pack Recycling Label scheme – OPRL – which we fully support, is expected to direct consumers to kerbside recycling options for flexible packaging from 2027.

To commit to having 100% of our plastic packaging reusable, recyclable or compostable by 2025 means that it can be collected both at front of store points available today and at kerbside once this is available, including in the UK.

In addition, pladis also has regional commitments to tackle local issues and deliver a sustainable future. For example, in Türkiye, we are committed to using a total of 1,000 tonnes less plastic and a total of 1,500 tonnes less paper by 2025 compared to 2020, as well as increasing the percentage of recycled plastic to 50% in rigid plastic by 2025.

UK Plastics Pact

We are a member of the UK Plastics Pact and are working together with the industry to deliver, by 2025, the following commitments:

1. Eliminate problematic or unnecessary single use packaging.
2. 100% of plastic packaging to be reusable, recyclable or compostable.
3. 70% of plastic packaging effectively recycled or composted.
4. 30% average recycled content across all plastic packaging.

Decarbonisation

Why is decarbonisation one of pladis’ sustainability priorities?

For many of us, climate change has become a reality. Depending on where we live, we have noticed uncommon and more extreme weather conditions,

including heat waves, droughts, floods, or unprecedented hurricanes, amongst other phenomena.

Many countries, including the UK and EU members have made a commitment to net zero by 2050. This commitment supports the Paris accord on climate change, which is a legally binding treaty on climate change adopted by 196 countries in 2015, and which has the ambition to keep

temperature increase at 1.5°C¹⁰.

Value chain mapping

In 2022, pladis started to work with the Carbon Trust to do the value chain mapping of its scope 1, 2 and 3 greenhouse gas emissions in Türkiye and the UK.

Scope 1, scope 2 and scope 3 emissions

- **Scope 1:** direct emissions released via the operation of owned or controlled assets
- **Scope 2:** emissions associated with energy consumption within owned or controlled assets released indirectly (e.g. power station)
- **Scope 3:** all indirect impact from 'upstream' e.g. suppliers or 'downstream' e.g. use of sold products

The main findings of this mapping are as follows:

- Total scope 1, 2 and 3 emissions accounted for 1,074,000 tonnes of CO₂e in the UK and 1,548,000 tonnes of CO₂e in Türkiye.
- scope 1 and 2 emissions accounted for less than 10% of pladis' greenhouse gas emissions in our value chains in both countries.
- 70% of pladis' total (scope 1, 2 and 3) emissions were product-related emissions, of which ingredients accounted for 85%.
- approximately 50% of pladis' total emissions came from 2 ingredients: cocoa and palm oil.

pladis will be collecting information from its remaining divisions as a means of having the full value chain mapping of the company's scope 1, 2 and 3 emissions.

Science-based targets

Following the mapping of our value chain greenhouse gas emissions in Türkiye and the United Kingdom, the Carbon Trust has defined combined near-term science-based targets which will require a 42% decrease of our scope 1 and 2 emissions by 2030

compared to 2021 and a reduction between 25% and 42% of our scope 3 emissions, depending on scenarios.

Those targets will be further refined in 2023, based on the outcome of the value chain emissions mapping from the remaining pladis regions and the new guidance on science-based targets requiring food companies to also consider specific targets for their FLAG (forest, land and agriculture) emissions.

Decarbonisation roadmaps

To reach those near-term science-based targets, the Carbon Trust has suggested roadmaps for our businesses in Türkiye and the UK, focusing on the reduction of scope 1 and 2 emissions, as well as scope 3 emissions.

We are currently reviewing those roadmaps with our supply chain, procurement and R&D teams and will update this section based on the outcome of this review process.

¹⁰ By 2100, compared to the pre-industrial era.

Identification of risks and opportunities related to climate change

pladis has also mapped some climate change related risks relevant to its business. Some of those risks are as follows:

Risk driver	Potential consequence	Potential impact	Timeframe	Likelihood
Risks driven by changes in regulation	Increased costs of buying carbon credits	Increased operational costs	Medium (3 to 6 years) to long-term (> 6 years)	High
	Product labelling	Increased operational costs (Life Cycle Assessments, various methodologies, etc.)	Long-term (> 6 years)	Very likely
Risks driven by changes in physical climate parameters	Increase of widespread floods	Increased operational costs	Short-term (1 to 3 years)	More likely than not
	Changes in natural resources (warmer temperatures, water availability, increased frequency of extreme weather such as storms or droughts) may decrease availability of critical raw materials	Increased operational costs	Long-term (6 years)	Very likely
Risks driven by changes in other climate-related developments	Reputation	Reduced demand for goods and services	Short-term (1 to 3 years)	More likely than not
	Changing consumer behaviours	Reduced demands for goods and services	Short-term (1 to 3 years)	More likely than not

As part of the task force on Climate-related Financial Disclosures, pladis will soon be reporting, in addition to its risks, its opportunities, its governance, its strategy and its metrics related to climate change.



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