

# Thai Union

## Sustainable Packaging Progress Report 2025



### SDG goal



Commitment	Target year	Progress
<ul style="list-style-type: none"> <li>100% of branded products packaged sustainably by 2025</li> </ul>	2025	86%*
<ul style="list-style-type: none"> <li>Advocate for at least 60% of private label products sustainably packaged by 2030</li> </ul>	2030	N/A**

Note: \*Ambient Branded databased

\*\*Thai Union serves a global customer base. We are improving our systems to enable this information to be captured and accurately reported in the Sustainability Report 2025.

At Thai Union, we recognize that developing packaging for greater sustainability is a complex, long-term endeavor - one that requires coordinated innovation, evolving infrastructure, and strong collaboration across the value chain. As part of our SeaChange® 2030 strategy, we have continued to invest in developing packaging that supports a more circular economy, reduces our environmental impact, and aligns with growing global expectations around recyclability, reuse, and responsible materials use.

The packaging industry as a whole continues to face significant challenges in balancing sustainability with critical requirements like food safety, performance, and cost - particularly for flexible multilayer pouches. While progress is being made, innovation takes time, and there are no one-size-fits-all solutions. At Thai Union, we remain fully committed to this journey and are taking tangible steps to advance our packaging roadmap.

Over the past year, we have focused our efforts on three priority areas: improving the sustainability of flexible pouches by moving this into mono-material recyclable material, transitioning multilayer cup lid films to mono-materials too, and integrating post-consumer recycled (PCR) content where feasible. These are some of the most technically complex packaging formats in our portfolio, but they also represent the greatest opportunity for impact.

Flexible multilayer pouches remain a challenging packaging type to transition toward sustainability due to their multilayer construction, which is critical for preserving product shelf life. Our teams have focused on developing recyclable mono-material pouches that maintain durability and food safety standards. We are collaborating with key partners and launching new collaborations in our pet food portfolio with support from our Global Procurement Center, Global Innovation Group and ITC Global and BU R&D teams.

Significant testing is underway on alternative pouch structures with the goal of achieving a minimum shelf life of 18 to 24 months. This is particularly challenging in categories where food safety and quality are paramount. Our early trials have shown promise, but further work is needed to optimize performance and address market variability in material grade availability. We expect to conclude testing on at least two packaging alternatives in 2025.

Another packaging format we are targeting is the multilayer lid film used on plastic cups. Similar to pouches, these films require both heat resistance and durability to ensure safe sealing and storage. Our Global Innovation and Business Unit R&D teams are working together to transition this component to a recyclable mono-material structure. Innovations from this stream could help establish consistency across multiple packaging types, streamlining our materials portfolio while improving environmental performance.

We continue to evaluate how post-consumer recycled (PCR) content can be integrated into our packaging formats without compromising food safety or shelf life. Current trials on some specific less sensitive formulas have achieved a shelf life of up to 12 months (based on accelerated tests), and we are working to extend this to 18–24 months. In parallel, we are also assessing alternative materials including biodegradable solutions and early-stage paper-based concepts. While these developments are still in the research phase, they form a key part of our longer-term roadmap to reduce single plastic use.



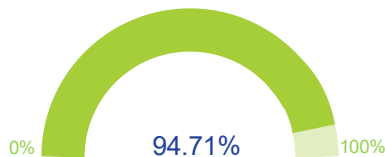
As part of our public commitments, Thai Union aims for 100% of branded products to be in sustainable packaging by 2025, and at least 60% of private label products by 2030. However, meeting the 2025 goal is becoming more challenging. As such, we are taking a pragmatic and transparent approach to achieving these goals - driving innovation in materials, strengthening supplier partnerships, and ensuring regulatory alignment in our key markets.

We will continue to communicate openly about our journey, including where we face delays or technical limitations, and how we plan to overcome them. Our Global Innovation Center is playing a central role in these efforts, working with internal teams and external partners to develop packaging solutions that are scalable, safe, and truly sustainable.

Thai Union's approach continues to support our corporate purpose of 'Healthy Living, Healthy Oceans' and contributes to the United Nations Sustainable Development Goal 12 on responsible consumption and production. As we look ahead, our focus remains on delivering real-world progress - grounded in science, supported by innovation, and aligned with our broader sustainability strategy.

## Thai Union's Group-Wide Commitments (2024 progress)

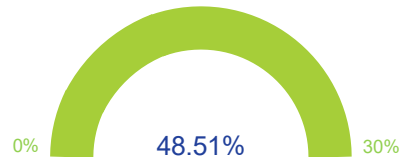
% of progress - Reusable, Recyclable or Compostable Packaging



**100% of our branded packaging is reusable, recyclable or compostable by 2025**

- To promote packaging circularity and ensure zero usage of unsustainable packaging
- To eliminate hard-to-recycle packaging and increase the use of reusable and/or recyclable and/or compostable packaging
- To increase the use of reusable packaging
- To systematically reduce single-use plastic and volume of packaging

% of progress - Recycled Content



**30% recycled content in our branded packaging by 2025**

- To promote packaging circularity
- To increase the use of recycled material
- To reduce product carbon footprint from packaging
- To prioritize sustainably sourced materials

## Packaging Material Reduction Project (2024) - Our ambient business in the EU on material downgauging

At Thai Union, sustainability is at the core of our innovation and operational strategies. We continuously identify opportunities to reduce material usage in all aspects of our packaging and production processes. While some initiatives, such as metal can lightweighting, have been rescheduled, others are already making significant progress. One example is the aluminum tray down-gauging project, led by our Innohub R&D team, which has successfully achieved an estimated 9 % reduction in material thickness. Implementation of this initiative is set to begin in September 2025, contributing to resource efficiency and reducing environmental impact. In parallel, our Procurement team, in close collaboration with the Pet Food business, is working to transition from 4-layer to 3-layer pouches, further reducing material usage without compromising product integrity. These efforts reflect our commitment to responsible innovation, cost efficiency, and advancing our sustainability goals across the value chain.

Packaging format (material)	Factory	Thickness change	Annual volume	Status	Comment
1/4 Plong (Aluminium)	ESIP	0,21 mm -> 0,19 mm	36 million	Completed. Trial has been validated	First PO is Sep 2025
1/6 conical (Aluminium)	DNZ	0,235 mm -> 0,21 mm	16,5 millions	Project had been approved internally <u>to be started</u>	
Hexagonal salad tray (Aluminium+CPP)	ESIP + DNZ	Aluminium foil 110 microns -> 100 microns	22 millions	Project had been approved internally <u>to be started</u>	

## R&D Investment in Sustainable Packaging and Alternative Solutions

Thai Union continues to allocate significant R&D resources to drive innovation in sustainable packaging solutions. Our efforts are strategically focused on transforming technically complex packaging formats (e.g. flexible multilayer pouches and multilayer cup lid films into mono-material recyclable material alternatives. These packaging types are critical for maintaining product shelf life and safety, yet pose challenges for recyclability. Through collaboration across our Global Innovation Group, Global Procurement Center, and Business Unit R&D teams, we are advancing technical development and accelerating trials to address these challenges.

Current R&D projects include extensive testing of alternative pouch structures designed to meet a minimum shelf life of 18 to 24 months without compromising food safety. In parallel, we are working on transitioning multilayer cup lid films to mono-material structures that ensure durability and heat resistance. Beyond recyclability, we are exploring the integration of post-consumer recycled (PCR) content into select product lines and conducting early-stage research on biodegradable and paper-based materials. These innovation streams form a critical part of our long-term roadmap to reduce single plastic use and improve the environmental performance of our packaging portfolio.

In addition to our ongoing work, we have expanded our development efforts to include packaging solutions for frozen seafood and pet food products. These are being designed to achieve a shelf life ranging from 18 to 24 months, based on internal testing. From a packaging format perspective, we have also broadened our recyclable material initiatives to cover a wider variety of formats. This includes larger pouches intended for food service original equipment manufacturers (OEMs) as well as individual sachets, ensuring comprehensive coverage across all key packaging types in our product portfolio.

## Avoiding Where Possible - Program to Increase the Use of Reusable Packaging

- **Plastic Crates** – used as an alternative for corrugated boxes to transport multiple units of canned goods, bottles, or different packaging and raw materials internally
- **Pallets** - Used to stack and transport bulk quantities of packaged foods.



By implementing reusable containers, pallets, and crates to protect and organize primary packaging in our manufacturing facilities and for transportation of finished products can significantly reduce their environmental footprint. This approach not only helps in cutting down the volume of secondary packaging materials but also leads to cost savings in the long run. Effective cleanliness maintenance and quality control are in place which is crucial to ensure that reused packaging maintains the highest standards of hygiene and safety.



## Program to Increase the Use of Recycled Material as Packaging Solutions



Our continuous development aims and collaboration with key suppliers through our procurement process aim to increase the use of recycled material as packaging solutions in primary and secondary packaging across a wide range of products. From the effort of 2024, we boosted the overall recycled plastic content in the total plastic packaging of Thai Union's-branded products, growing from 3.46% in 2023 to 4.91% in 2024. Despite the challenges, we remain dedicated to further increase the use of recycled materials, exploring new technologies and strengthening our supply chain.

At Douarnenez factory, a pilot project targeting 30 percent recycled content in all plastic films was achieved with ongoing studies to replicate the

program in other plants and/or expand to other packaging applications.

John West has been conducting a study to increase recycled material in mono-polymer packaging. The focus is on plastic pots, which are one of the key packaging formats sold in the UK and EU markets. The target is for the addition of 30 percent recycled PP. The expected launch is in 2025.

## Program to Increase the Use of Recyclable Material as Packaging Solutions

To support this initiative, the Thai Union Global Innovation Center and Packaging R&D team, dedicated to work on sustainability of our branded packaging, have put strong efforts into packaging development. Recyclability is being achieved through the research of mono-material solutions for replacing multi-layer or aluminum-containing materials currently utilized for flexible packaging. A key focus is on developing barrier technology that embraces sustainability objectives without compromising food safety and shelf-life targets.

In 2024, we significantly increased the percentage of recyclable plastic content from the total plastic packaging of Thai Union's-branded products, from 65.87% in 2023 to 86.24% in 2024.

### Recyclable packaging for frozen application



1. This pilot project aimed to replace non-recyclable material (Nylon/PE) with recyclable mono-material (Mono PE) for 'OMG Meat' alternative protein frozen products. Shelf life testing was successfully completed, achieving an 18-month shelf life and meeting the required technical specifications. However, due to a shift in business direction, the packaging was not implemented.
2. By the end of 2022, the mono PE pouch had passed the 12-month milestone in the shelf-life study, with further evaluations underway to reach 18 months. Since then, development has expanded to cover additional formats including pouches, sachets (now including new applications for PET), and lidding films. Current testing shows shelf-life performance of approximately 12 to 15 months, depending on the product formulation, with efforts ongoing to achieve 18 to 24 months. The implementation timeline is aligned with the market plan, with rollout expected between 2026 and 2028 based on product phasing.
3. This, together with other research working in parallel, could potentially eliminate the non-recyclable pouches of more than 500 SKUs across branded and private-label frozen products
4. A new initiative has been launched to develop mono-material packaging for the frozen category, specifically for OEM applications. The current focus is on salmon products in pre-formed bag format, which have successfully achieved an 18-month shelf life based on internal testing. The next steps include planning a commercialization run in alignment with the customer and initiating development of the roll film format. This project is scheduled to progress from 2025 through 2027.

### Recyclable packaging for retort products



1. The ongoing development aims to replace multi-material (with aluminum layer) with recyclable mono-material (mono PP) for shelf-stable ambient products, both human food and pet food.
2. The mono PP pouch has received positive results from a 12-month structural validation and shelf-life evaluation. The development will continue until a minimum 18-month product shelf-life is achieved.
3. The expected launch is in 2025 with potential future application to more than 1,000 SKUs across a wide range of products of Thai Union brands and the OEM business

## Program to Ensure That Recyclable Packaging Is Actually Recycled

In parallel with the R&D efforts to replace multilayer plastic packaging with recyclable mono-material plastic packaging to allow recyclability, Thai Union has developed a Group-wide packaging database for our branded products, which helps us better understand what packaging materials are currently used for all branded product items, as the first step of assessing the extent to which recyclables are actually recycled.

Started in 2022, Thai Union continued its collaboration with SCG Packaging on a pilot life cycle assessment (LCA) project to assess the carbon footprint of carton products sourced from SCG Packaging. The project assessed areas such as raw material extraction (plantation), to pulp and paper production, and to paper packaging manufacturing. This was the first LCA on Thai Union's packaging and was directly related to the Company's obligation in reducing GHG across the supply chain while assessing the extent to which recyclables are actually recycled.

Moreover, we are also exploring solutions that focus on utilizing a single pathway for recycling to achieve a real impact on both the environment and society. The packaging design must facilitate effective collection and fit the recycling infrastructures in the target markets.

## Programs to Reduce Packaging Material and Phase Out Single-Use Plastic Packaging

Thai Union is actively phasing out single-use plastic packaging through multiple initiatives. Their ECOTWIST® innovation, introduced in June 2024, this commitment took a major leap forward with the UK launch of ECOTWIST® by John West, the largest packaging innovation in the ambient tuna category in over two decades.

Developed over three years, ECOTWIST® is a patent-pending multipack format that eliminates unnecessary packaging while making tuna more convenient to store, open, and recycle. Cans are held together by a SmartStrip®, allowing consumers to simply twist off what they need - no shrink wrap or cardboard required.

ECOTWIST® delivers significant environmental savings:

- A redesigned, smaller can reduce material use while maintaining product volume, saving more than 400 tons of steel annually.
- Less oil, water, or brine is needed per pack, avoiding 1,500 tons of unused ingredients.
- By replacing plastic shrink wrap and cardboard packaging, the innovation cuts weight approximately 65 tons of plastic and 300 tons of cardboard from the supply chain each year.



All ECOTWIST® components are fully recyclable through the UK's kerbside collection network, even with the SmartStrip® attached.

ECOTWIST® supports multiple pillars of Thai Union's global sustainability strategy:

- Sustainable Packaging: Moves John West significantly closer to the target of all branded products using sustainable packaging.
- Climate Action: Reduces packaging weight and emissions, contributing to Thai Union's goal of a 42% reduction in Scope 1, 2 and 3 greenhouse gas emissions by 2030.
- Sustainable Sourcing: All no-drain ECOTWIST® tuna products are MSC-certified, supporting Thai Union's Tuna Commitment 2025, which mandates that all branded tuna be MSC-certified, in assessment, or part of an approved Fishery Improvement Project.

ECOTWIST® reflects how smart packaging design can create measurable impact - reducing waste, lowering emissions, and supporting responsible sourcing - as John West leads the way toward a more sustainable future for ambient seafood in the UK.