



# PACKAGING LIFECYCLE MANAGEMENT



In response to the growing urgency of plastic waste concerns, Betrimex acknowledges our critical role in minimizing the environmental footprint of our packaging. Packaging lifecycle management is not only a core pillar of Betrimex's sustainable development strategy but also a reflection of our long-standing commitment to protecting the planet for future generations. ”

**60 tons** **100%** **55%** **100%** **13 types**

Packaging waste recycled<sup>(1)</sup>

Recyclable pulp content in secondary packaging

Recyclable pulp content in primary packaging

Pallet space utilized

Eco-friendly secondary packaging introduced

<sup>(1)</sup> In collaboration with professional recycling service providers

## SUSTAINABLE PACKAGING COMMITMENT AND STRATEGIES TO REDUCE ENVIRONMENTAL AND SOCIAL IMPACT

Packaging plays a crucial role in protecting, preserving, and transporting products while delivering important information to consumers. However, the environmental challenges posed by packaging waste - such as the rise in plastic pollution, greenhouse gas emissions, and harm to biodiversity - cannot be ignored.

Betrimex's sustainable packaging strategy is centered around **the 3R principle: Reduce - Reuse - Recycle**. This principle guides the company through every phase of the packaging lifecycle, from design and material selection to production, use, and post-consumer collection and recycling. Key initiatives include:

- **Minimizing ink usage and eliminating unnecessary material layers.**
- **Gradually phasing out non-essential single-use plastic packaging.**
- **Optimizing packaging designs to reduce wasted space in pallet stacking and shipping containers.**
- **Transitioning to recyclable and reusable packaging.**

## PRODUCT PACKAGING OVERVIEW

Packaging is a critical element in Betrimex's product value chain. Beyond our fundamental roles of protection, preservation, and quality assurance, packaging also enhances logistics efficiency, elevates the consumer experience, and contributes to the company's efforts to reduce our carbon footprint. As such, the selection, design, and continual innovation of packaging are integral to Betrimex's sustainable development strategy..

Currently, Betrimex utilizes three main packaging categories, each serving a distinct role across the production and distribution cycle:

### 1. Primary packaging

This is the first layer of packaging in direct contact with the product, including formats such as Tetra Pak cartons and PET plastic bottles. Primary packaging plays a crucial role in ensuring food safety and hygiene while acting as the initial point of engagement with consumers. It also serves as a medium to convey the brand's image and identity.

### 2. Secondary packaging

This layer comprises cardboard boxes, shrink wraps, paper trays, and similar materials used to group individual product units. Secondary packaging facilitates efficient transportation, storage, and retail display, while providing added protection throughout the logistics chain and helping to optimize distribution costs.

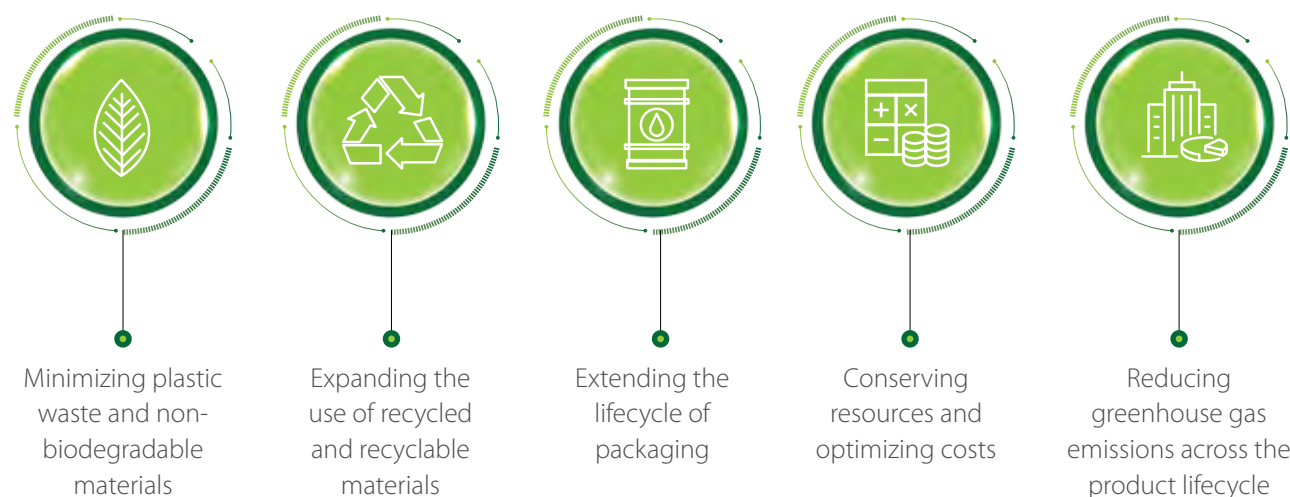
### 3. Tertiary packaging

Tertiary packaging includes materials such as pallets, slipsheets, and strapping bands, which are used to consolidate larger shipments for mass transportation and warehousing. This layer is essential for maximizing container space utilization and minimizing losses and costs in the logistics process.



## PACKAGING INNOVATION STRATEGY FOR SUSTAINABLE DEVELOPMENT

Recognizing the strategic role of packaging in advancing sustainable development, since 2023, Betrimex has actively pursued a range of packaging innovation initiatives focused on:



At the heart of this strategy is the adoption of Tetra Pak packaging technology. Each Tetra Pak carton integrates six layers of materials (paper, aluminum, plastic), designed to protect product quality while offering key benefits:

- 1 High recyclability**  
Up to 50%-55% of the paper pulp content can be recovered and reused, conserving raw materials and energy.
- 2 FSC (Forest Stewardship Council) certification**  
Guarantee that paper materials are sourced from sustainably managed, regenerative forests, supporting ecosystem protection and biodiversity conservation.
- 3 Reduction of CO<sub>2</sub> emissions**  
Compared to traditional plastic packaging, thanks to our lightweight structure, compressibility, and space-saving benefits during transportation.
- 4 Dual compliance with food safety and environmental standards**  
Strengthen brand reputation and enhance competitive advantages in international markets

## LIFECYCLE MANAGEMENT AND SUSTAINABLE PACKAGING DEVELOPMENT DIRECTION

Betrimex adopts a packaging lifecycle management (LCM) model to optimize design, maximize the use of recycled materials, and drive the transition towards circularity.

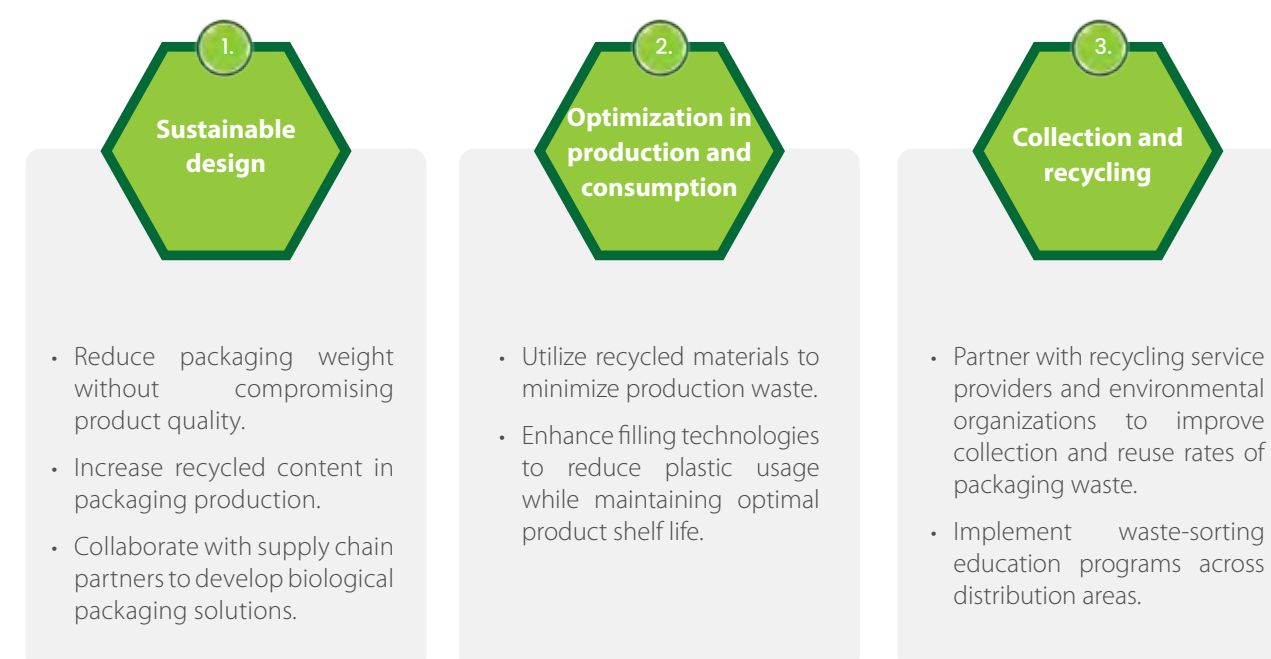
### Lifecycle of primary paper packaging at Betrimex

Betrimex works closely with packaging suppliers to ensure all packaging solutions align with sustainability standards, environmental regulations, and customers' expectations. Key focus areas include:

1. Utilizing certified sustainable materials, such as FSC-certified paper and recycled plastics.
2. Conducting research and trials to substitute virgin plastic with bioplastics and other eco-friendly alternatives.
3. Optimizing packaging design to minimize the carbon footprint across the production and logistics processes.

Through a strategic partnership with Tetra Pak - a global leader in sustainable paper-based packaging - Betrimex enhances product preservation while reducing environmental impact. As a result, 50-55% of the pulp content in Betrimex's packaging is both recycled and recyclable. In parallel, to advance a circular economy, Betrimex is investing in the research and development of biodegradable packaging solutions capable of fully decomposing in natural environments.

### Lifecycle of primary non-paper packaging at Betrimex







## WASTE REDUCTION AND TRANSPORTATION OPTIMIZATION INITIATIVES

In addition to enhancing packaging design, Betrimex has implemented a series of initiatives to reduce waste throughout the storage and transportation process. These efforts contribute to cost efficiency while lowering environmental impact:

1.

### Primary packaging

- Successfully commercialize the 1,000ml packaging format
- Ongoing testing of smaller packaging sizes (400ml and 200/250ml), with commercial launch planned for early 2025.

📌 These innovations contribute to increasing the use of recycled and bio-based materials, optimizing shipping volumes, lowering logistics costs, and reducing CO<sub>2</sub> emissions.

2.

### Secondary packaging

- Introduce 13 new product codes featuring material-efficient designs that minimize waste while maintaining aesthetic appeal and protective quality
- Develop secondary and tertiary packaging that can be reused multiple times

📌 Achieve savings of approximately VND 7.9 billion in packaging costs.

3.

### Tertiary packaging and supply chain optimization

- Reduce reliance on wooden packaging, supporting forest conservation, and minimizing solid waste generation
- Optimize container utilization, resulting in lower transportation costs and reduced logistics-related emissions
- Deploy advanced logistics software to optimize product loading on pallets and in containers, minimizing unused space and maximizing transportation efficiency
- Implement the recovery and reuse of packaging materials such as wooden pallets and plastic wrap within factories
- Ensure 100% pallet space is utilized when loading goods, with at least 90% load capacity.

## PACKAGING TRENDS AND DEVELOPMENT DIRECTION

Global demand is rapidly shifting towards environmentally responsible packaging solutions, driven by increasingly stringent regulations in key markets such as the EU, the US, and China. Notable examples include the EU's Single-Use Plastics Directive (SUPD) and the United States' Recycled Content Packaging Law. These frameworks call for higher standards in recyclability, reduced use of virgin plastics, and extended producer responsibility in post-consumer waste management.

To stay ahead of these trends, Betrimex is proactively transitioning to more sustainable packaging materials, including:

- **Sterilized boxes made from recycled plastic and bioplastic, eliminating aluminum film layers to lower carbon emissions.**
- **Unbleached Kraft paper, designed to reduce ink consumption.**
- **FSC-certified corrugated paper, ensuring sustainable material sourcing.**

## PACKAGING LIFECYCLE MANAGEMENT: DEVELOPMENT DIRECTION

- Achieve 100% recyclability or reusability for all primary and secondary packaging, while completely eliminating non-essential single-use plastic materials
- Actively seek and partner with packaging suppliers to develop a long-term transition roadmap towards more sustainable materials
- Collaborating with recycling organizations and local communities to establish a robust ecosystem for packaging collection and recycling

By managing the packaging lifecycle with responsibility and innovation, Betrimex not only reduces our environmental footprint but also reasserts our commitment to sustainable development in collaboration with partners and communities.

