

Packaging management: strategically planning, procuring and optimising packaging

Packaging management refers to the systematic planning, procurement, steering and optimisation of packaging along the entire value chain. It covers product packaging, transport packaging and diversion business, and links procurement strategy, logistics, quality requirements and sustainability and regulatory obligations. Professional packaging management reduces material and freight costs, cuts damage and complaints, and creates transparency in a procurement category that in practice is often 'orphaned' between procurement, logistics and engineering.

Key facts

- Packaging management steers packaging as a distinct procurement category across the entire lifecycle – from design to disposal.
- Typical levers are standardisation, packaging reduction, return systems and freight optimisation; savings of 10 to 20 per cent are considered realistic in practice.
- Legal obligations arise in particular from the Packaging Act, the EU Packaging Regulation (PPWR) and applicable labelling and take-back requirements; implementation in each individual case should be legally reviewed.
- Key KPIs are packaging costs per unit, packaging material consumption, damage rate in transport and reusability share.
- Key interfaces exist with supplier classification, terms management, category playbook and supplier performance evaluation.
- Sustainability and the circular economy are transforming packaging management from a secondary category into a strategic topic.

Definition: packaging management

Packaging management is the holistic, process-oriented steering of all packaging activities of a company – from demand planning and specification through procurement, quality assurance and logistics to disposal and recycling. It treats packaging as a managed category with clear responsibilities, KPIs and supplier strategies.

Distinction: packaging as a category vs. a secondary topic

In many industrial companies, packaging is treated as a secondary 'C-part' and procured decentrally via the plants. This leads to a multitude of specifications, duplicate orders and insufficient market power. Professional packaging management consolidates demand in a category-oriented manner, defines a category vision and lays down the approach and supplier portfolio in a category playbook.

Types of packaging at a glance

In practical terms, a distinction is made between primary packaging (product wrapping), secondary packaging (bundling, cartons) and tertiary or transport packaging (pallets, containers, crates, stretch

wrap). In B2B industry, transport and export packaging dominates, which significantly influences freight costs, damage rates and customs clearance – for example via correct details on the commercial invoice.

- Primary packaging: product contact, labelling, protection
- Secondary packaging: handling, bundling, labelling
- Transport packaging: load securing, stackability, export suitability
- Multi-trip packaging systems: pallet pools, container systems, load carriers

Methods and approach in packaging management

The set-up typically begins with a spend- and specification-based baseline analysis, followed by a sourcing strategy and supplier selection. Agile procurement methods help to respond quickly to new material, legal or logistics requirements.

Analysis of spend, specifications and requirements

First, packaging specifications, volumes, costs and suppliers are centrally recorded. A data owner should ensure consistency of master data. The analysis often reveals that dozens of carton and crate specifications exist for functionally identical requirements – an immediate standardisation lever.

Standardisation and value analysis

Using value engineering workshops with engineering, logistics and suppliers, packaging is reduced to the functional minimum: wall thicknesses, material substitution (e.g. corrugated board instead of wood), stacking dimensions and container sizes. The goal is to maximise load space (cube utilisation) and harmonise towards a few standard formats.

Supplier strategy and contracts

Suitable suppliers are evaluated through supplier classification based on criteria such as capacity, material expertise, sustainability credentials and proximity to the site. Framework agreements with a clearly defined contract term, price adjustment clauses (indexation of waste paper, oil, film) and service levels secure supply and prices. A preferred supplier programme promotes favoured partners.

Key KPIs in packaging management

Packaging management is steered using cost, quality and sustainability KPIs. The KPIs should be collected in a standardised way per site and category and reviewed regularly by procurement, logistics and controlling.

Cost and efficiency KPIs

Core metrics are packaging costs per unit sold or per pallet, material consumption per pack and freight cost intensity. The ratio of packaging volume to product volume (pack ratio) is also revealing: values well above 2 frequently indicate optimisation potential.

Quality and logistics KPIs

The transport damage rate (proportion of damaged consignments) and the completeness and on-time delivery performance of packaging suppliers (delivery performance) are key quality indicators. Inventory coverage of packaging stocks and the number of emergency orders due to packaging shortages also indicate process stability.

Sustainability KPIs

Relevant metrics are recycling share, reuse rate, the CO footprint of packaging per unit and the quantity of non-recyclable materials. This data is increasingly flowing into sustainability reporting and customer enquiries and should be mandatorily defined and collected.

Risks and controls in packaging management

Typical risks are raw material price fluctuations, supply bottlenecks, quality defects, regulatory changes and an outdated state of specifications. Countermeasures are taken through clear responsibilities, approval processes and contractual provisions.

Supply, price and quality risks

Corrugated board, film and wood are subject to strong market price cycles; shortages can – especially for export packaging – lead to short-notice rush orders and additional costs. Price adjustment clauses, second-source strategies and agreed safety stocks mitigate these risks. Quality defects (e.g. insufficient stacking strength) are controlled through incoming inspections, certificates such as the certificate of analysis for material specifications and defined series release.

Regulatory obligations and compliance

Companies are subject to obligations under the Packaging Act and, increasingly from 2026/2030, the EU Packaging Regulation (PPWR) – such as recycling quotas, labelling, minimum recycled content and bans on certain single-use packaging. For exports, customs and trade compliance are added: correct HS classification, export control and, where applicable, documents such as ATA Carnet for sample shipments. The concrete design should be legally reviewed.

Governance and responsibilities

Effective packaging management requires clear roles: who may change specifications? Up to what amount do procurement approval thresholds apply? Who approves new packaging materials? A delegation of authority governs decision-making powers, while internal controls (e.g. spot checks, dunning process for delivery delays) secure implementation.

Current developments in packaging management

Three developments are shaping the category: regulation, the circular economy and digitalisation. Procurement departments that address these topics early secure cost and compliance advantages.

PPWR and the circular economy

The EU Packaging Regulation tightens requirements on recycled content, recyclability and packaging minimisation. In practice, this means: packaging specifications become compliance objects, supplier selection based on sustainability criteria gains importance, and returnable and return systems (container pooling, pallet pooling) become more significant.

Digitalisation and data basis

Digital tools for specification management, package data capture and freight cost analysis are increasingly replacing Excel lists. Exchanging with suppliers via digital catalogues and IT-supported call-offs also reduces administrative effort and improves data quality for KPIs and reporting.

Load carrier and network optimisation

Through load-optimised packing patterns, consolidated consignments and regional packaging production, freight costs and CO emissions can be reduced. In combination with terms management, freight and packaging costs can be optimised jointly rather than in isolation.

Typical metrics

Packaging costs per unit: Reduction of typically 10–20 % after optimisation

Basis: packaging costs and attributable freight costs per unit produced or sold

Transport damage rate: typically < 0.5 %

Proportion of damaged consignments; should trend downwards

Packaging supplier delivery performance: > 95 % OTIF

On-time and in-full delivery of packaging suppliers

Reusability share: typically 20–50 % within a plant network

Proportion of returnable/recovery systems in total packaging volume; highly industry-dependent

Pack ratio: Target value as close to 1.0 as possible

Ratio of packaging volume to product volume; high values indicate optimisation potential

Practical example

A medium-sized mechanical engineering company with three European plants procured export packaging decentrally via the plants. There were more than 80 crate specifications, three suppliers per plant and no consistent damage statistics. After establishing packaging management, specifications were consolidated, a framework agreement was concluded with two strategic suppliers, and a return system for reusable containers was introduced.

- Consolidation of 80+ specifications down to 12 standard formats
- Framework agreement with index clause (waste paper, wood) and defined procurement approval thresholds
- Introduction of reusable containers for the plant network with return logistics
- Monthly KPI review of packaging costs, damage rate and reusability share

Conclusion

Packaging management is more than buying boxes: it combines cost, quality, logistics and sustainability goals in a strategically managed category. Companies that steer packaging centrally benefit from standardisation, better market power and measurably lower transport damage. The regulatory requirements of the coming years make a structured approach additionally urgent. Clear responsibilities, a well-maintained data basis and supplier relationships at eye level are crucial. Those who establish packaging management as a standalone category typically achieve double-digit cost savings in practice while simultaneously improving compliance.

Frequently asked questions

What does packaging management include?

Packaging management covers demand planning, specification, procurement, quality assurance and

disposal of all packaging – from product packaging to export crates. It also encompasses supplier selection, contract management, KPIs and compliance with statutory obligations. The goal is a cost-efficient, safe and sustainable packaging solution.

How much can you save through packaging management?

In practice, savings of 10 to 20 per cent of packaging costs and attributable freight costs are considered realistic, especially where procurement has previously been decentralised. The main levers are standardisation, material substitution, freight space optimisation and intensified competition. The exact amount depends on the starting position, category and depth of implementation.

What statutory obligations apply to packaging?

In Germany, obligations arise inter alia from the Packaging Act (licensing, take-back, labelling); at EU level, the Packaging Regulation (PPWR) tightens requirements on recyclability and recycled content. For exports, customs and trade law obligations apply in addition. The specific obligations in each individual case should be legally reviewed.

Which KPIs are important in packaging management?

Key KPIs are packaging costs per unit, material consumption per pack, transport damage rate and the proportion of reusable packaging. In addition, delivery performance of packaging suppliers and inventory coverage provide insights into process stability. Sustainability KPIs such as CO per packaging unit are becoming increasingly important.

Who is responsible for packaging management – procurement or logistics?

In practice, it has proven effective for procurement to hold strategic category responsibility (suppliers, contracts, prices), while logistics and engineering steer the specification and operational coordination. Clear interfaces and a delegation of authority for specification changes are crucial. Without clear governance, there is a risk of isolated solutions and additional costs.

How do you start a packaging management project?

A typical approach starts with a spend and specification analysis across all sites, followed by the definition of a category vision and a sourcing strategy. This is followed by supplier consolidation, standardisation workshops and the introduction of KPIs. A category playbook documents the approach and responsibilities.