

Sustainable packaging category: structurally managing sustainability criteria for packaging in procurement

The sustainable packaging category describes the procurement of packaging materials and packaging solutions under explicit ecological and social criteria. For industrial buyers it covers transport packaging, product packaging, ancillary materials such as adhesive tape and cushioning material, as well as the associated disposal and circular processes. Since packaging often accounts for a high volume share of the procurement portfolio and is closely tied to regulatory obligations, it is one of the most important categories for the sustainable transformation of the supply chain.

Key facts

- Packaging is generally high-volume indirect spend with a direct impact on the carbon footprint, disposal costs and customer perception.
- Key levers are material reduction, use of recycled content, reuse and circular-oriented design of the packaging hierarchy.
- Regulatory requirements such as packaging licensing, documentation obligations and labelling must be anchored as a compliance point in the procurement process.
- In practice, engaging specialists and cataloguing can often reduce packaging costs by 5 to 15 per cent while improving sustainability goals.
- Supplier selection and supplier evaluation should include fixed sustainability criteria, which are also contractually stipulated.
- For effective sustainability management, clear KPIs, a risk register and regular supplier meetings are indispensable.

Definition: sustainable packaging category

The sustainable packaging category encompasses the systematic procurement of packaging taking ecological, economic and social aspects into account across the entire life cycle. It is part of the company's procurement policy and category strategy.

Distinction from classical packaging procurement

While classical procurement focuses primarily on price, quality and delivery capability, the sustainable packaging category extends the evaluation dimensions to include material efficiency, recyclability, recycled content, transport efficiency and disposal costs. The buyer thus views packaging as part of the value chain rather than a mere ancillary cost item. In practice, this often means closer collaboration with packaging, logistics and product development, because packaging decisions almost always involve interfaces along the entire supply chain.

Types of packaging and typical procurement items

The category includes transport packaging such as boxes, pallets and mesh boxes, product packaging such as cartons, bags and blisters, protective materials such as foam and paper cushioning, as well as closures, labels and tapes. For industrial companies, returnable systems, so-called reusable transport containers, and leasing-based pallet and container systems are added. Each of these subcategories has its own sustainability levers and requires a differentiated assessment.

- Transport packaging: focus on volume optimisation and reuse
- Product packaging: focus on material selection and recyclability
- Protective materials: focus on substitutable, fossil-free alternatives
- Labelling and labels: focus on solvent-free printing processes

Strategic importance and category management for packaging

Packaging is particularly well suited to structured category management, since demand is frequently standardised, high in volume and recurring across multiple locations.

Packaging analysis and demand consolidation

It begins with a packaging analysis: which packaging is used in what quantities at which locations, at what prices and with what disposal costs? It is frequently found that similar packaging is sourced from several suppliers in parallel. Consolidation onto fewer specifications and suppliers creates economies of scale, and sustainability requirements can be enforced far more easily. This analysis should form part of a regular risk analysis.

Packaging strategy and target picture

A packaging strategy is derived from the analysis, which interlinks material goals such as a defined recycled content or the gradual substitution of certain plastics with cost and process goals. It is important that the goals are measurable and anchored in framework agreements with suppliers. The procurement policy and compliance with procurement guidelines provide the binding framework by which supplier selection is also guided.

Make-or-buy and packaging design

In practice, the question often arises whether packaging is designed in-house or supplied by the supplier. Where the supplier holds design responsibility, material and transport optimisations can often be implemented better, though with less direct control over sustainability characteristics. Both routes require clearly defined specifications and a suitability assessment of potential partners.

Methods and approach in sustainable packaging procurement

The path from demand analysis to effective sustainability management follows in practice a proven approach that interlinks traditional procurement processes with sustainability requirements.

Sustainability criteria in tenders and tender questionnaire

Sustainability requirements must be formulated concretely, measurably and verifiably. A structured tender questionnaire helps to systematically enquire about recycled content, material origin, CO2 data and disposal concepts. Blanket phrases such as "environmentally friendly" rarely lead to measurable results in practice. Instead, specified requirements have proven effective, for example a minimum share

of recycled material or a defined recyclability in line with recognised design-for-recycling principles.

Supplier selection and evaluation according to sustainability criteria

In supplier selection, sustainability data is evaluated together with price, quality and delivery capability. Proven instruments are questionnaires, certificate requirements and on-site audits. Sustainability criteria should be a fixed component of supplier evaluation and not considered only during initial selection. Only in this way can it be ensured that agreed standards are maintained over the term of the framework agreement.

Price negotiation in the award process from a sustainability perspective

Sustainability requirements can be price-neutral, price-increasing or price-reducing. Recycled material is often cheaper than virgin material, for example in corrugated board, while specialised bioplastics or compostable films are typically more expensive. Price negotiation in the award process should therefore consider total cost of ownership: material price plus disposal costs plus logistics costs plus potential compliance risks. Only in this way can decisions be avoided that are cheap in the short term but expensive in the long term.

Important KPIs and metrics for sustainable packaging

Without robust metrics, sustainability in packaging procurement remains merely a declaration of intent. The following measures have proven particularly meaningful in practice.

Material and volume metrics

Key metrics are the average recycled content across all packaging specifications, the total weight of consumed packaging materials per unit shipped, and the share of reusable packaging in the total volume. These values can be derived directly from procurement and logistics data and should be evaluated quarterly. They are also suitable as a basis for sustainability reporting towards customers and authorities.

Economic metrics

In addition to the purchase price per packaging unit, disposal costs, transport density (payload per cargo volume) and the cost of poor quality (COPQ) caused by damage due to inadequate packaging count. Packaging that is cheap to purchase but frequently causes damage in transport ultimately incurs higher total costs. In practice, an integrated analysis across all these cost blocks pays off.

Supplier and compliance metrics

The share of suppliers with valid sustainability certificates, the catalogue ratio for recurring standard packaging and the data quality score of sustainability data from the supplier portfolio show how reliable the data basis is. If the data quality score is low, data sources and collection processes should be improved first before further sustainability goals are set.

Risks, compliance and control mechanisms

Sustainable packaging procurement is not free of risks. Typical problem areas include regulatory violations, supplier statements at risk of greenwashing and supply bottlenecks for alternative materials.

Regulatory requirements and documentation obligations

Companies are generally obliged to licence packaging, finance take-back systems and meet certain labelling and documentation requirements. The specific obligations depend on the type of packaging, material and sales market and change regularly. Procurement should therefore actively track the status of compliance requirements and monitor adherence as part of procurement guidelines compliance. Legal details should be reviewed by suitable specialist bodies on a case-by-case basis.

Supplier risks and supply security

When switching to sustainable packaging alternatives, there is a risk of supply bottlenecks, especially when only a few suppliers are available. A risk analysis and maintaining a risk register help identify such dependencies early. A risk heatmap has proven effective, in which packaging suppliers are assessed by probability of failure and impact. For critical dependencies, second supply sources or a preferred supplier with backup obligations are sensible.

Control mechanisms and supplier escalation

Contractually agreed sustainability criteria must also be monitored. Proven instruments are supplier audits, regular Quarterly Business Reviews (QBRs) with defined sustainability agendas and clearly defined escalation levels. If a supplier repeatedly fails to meet its obligations, supplier escalation proceeds through documented warning levels up to contract termination. Without such mechanisms, sustainability commitments often remain ineffective.

Current developments and future perspectives

Sustainable packaging procurement operates in a dynamic environment. Regulatory requirements, customer expectations and material innovations continuously change the rules of the game.

Circular economy and reuse

The trend is moving from linear disposable packaging towards circular systems. Reusable transport containers, deposit systems and closed material loops are becoming increasingly widespread, including in the B2B sector. For buyers, this means that usage and return logistics must be included in the overall assessment. Goods receipt plays an important role here, as return processes only work if empty containers are consistently recorded and returned.

Digitalisation and e-sourcing

E-sourcing platforms and digital catalogues make managing the packaging category considerably easier. Via punchout integrations, existing supplier shops can be integrated directly into the procurement system, increasing transparency and the catalogue ratio. At the same time, requirements for data quality are growing: sustainability information must be verifiable and machine-readable so that it can feed into reports and risk analyses.

Agile procurement and iterative packaging optimisation

Concepts of agile procurement are also being applied to the packaging category. Instead of conducting a comprehensive tender once a year, more and more companies rely on iterative optimisation cycles: small specification changes are piloted, results measured and scaled if successful. This approach reduces the risk of misinvestment in expensive special packaging and accelerates the achievement of sustainability goals.

Typical metrics

Recycled content: typically 70–90 % for corrugated board

Average across all packaging specifications, evaluated quarterly

Share of reusable packaging: 10–40 % in practice

Based on transport volume, strongly industry-dependent

Number of packaging specifications: reduction of 30–60 % is common

After consolidation as part of a packaging analysis

Packaging cost savings: frequently 5–15 %

Through consolidation, standardisation and total-cost-of-ownership analysis

Data quality score of sustainability data: > 80 %

Share of supplier-related sustainability data with verified source

Practical example

A mid-sized mechanical engineering company with around 300 employees sourced transport packaging from five different suppliers without any sustainability criteria being defined. The head of procurement initiated a comprehensive packaging analysis and found that the range of corrugated board used extended to more than 40 specifications, even though the standard requirement could be covered with around ten types.

- Consolidation from over 40 to 12 packaging specifications and reduction of the supplier base to two preferred suppliers.
- Inclusion of measurable sustainability criteria in the tender questionnaire, in particular a minimum recycled content of 80 per cent for corrugated board.
- Introduction of reusable mesh boxes for internal logistics and shipping to two key customers.
- Anchoring sustainability KPIs in supplier evaluation and quarterly QBRs with key suppliers.

Conclusion

The sustainable packaging category is far more than a passing side topic in procurement. It combines measurable cost savings with regulatory certainty and growing customer pressure for sustainability. The approach only succeeds if sustainability criteria are formulated concretely, measurably and with contractual binding force, and are consistently pursued in supplier selection, evaluation and regular business reviews. Companies that take a structured approach here typically reduce both costs and their ecological footprint at the same time. The best way to start is with a thorough packaging analysis, followed by a consolidated supplier strategy and clearly defined metrics.

Frequently asked questions

What does the sustainable packaging category mean in procurement?

It describes the procurement of packaging taking ecological, economic and social criteria into account across the entire life cycle. The focus is on material reduction, recycled content, recyclability and reuse. The sustainable packaging category is part of the company's category strategy and procurement policy.

How can procurement make packaging more sustainable?

Key levers are reducing specification variety, defining measurable sustainability requirements in tenders,

consolidating the supplier base and gradually switching to reusable or recyclable materials. It is important that sustainability criteria are actively tracked in supplier evaluation and in regular QBR meetings.

What regulatory obligations apply to packaging?

Depending on the country and type of packaging, companies are typically subject to obligations regarding packaging licensing, take-back, labelling and documentation. The exact requirements change regularly and depend on the sales market. Procurement should actively track compliance status and have legal details reviewed by suitable specialist bodies on a case-by-case basis.

Is sustainable packaging also economically worthwhile?

In many cases, yes. Recycled materials are often cheaper than virgin materials, specification consolidation reduces complexity costs, and reusable systems generally pay for themselves within a few years. Decisive is a total cost of ownership view including disposal, transport density and quality costs arising from damaged goods.

Which KPIs are suitable for sustainable packaging?

Proven KPIs include average recycled content, packaging weight per unit shipped, share of reusable packaging, disposal costs and transport density. In addition, supplier and compliance KPIs such as the share of certified suppliers and the data quality score of sustainability data provide valuable indications of data quality.

How is sustainability incorporated into supplier selection for packaging?

Sustainability criteria should be defined as fixed evaluation fields alongside price, quality and delivery capability. Practical instruments are structured questionnaires, certificate requirements and on-site audits. It is important that the criteria are not only considered during initial selection but continuously in ongoing supplier evaluation.