

LANDBELL AS A DUAL SCHEME: SIMPLY ON THE SAFE SIDE

Introduction

In Germany, the private sector has been responsible for the collection of used packaging since 1991. With the introduction of the Packaging Ordinance (VerpackV), in view of the ever-increasing packaging waste, the distributors of packaging were obliged to take back and recycle their packaging.

For this reason, a second disposal system, a “dual collection scheme”, was set up in parallel to the public waste disposal system for the separate disposal of sales packaging.

Since then, sales packaging generated close to households, such as the much-cited yogurt pot, has been collected via this dual scheme and then recycled in accordance with legally prescribed quotas.

At the time of its introduction, this approach to packaging disposal was organized on a monopolistic basis. After years of effort to break the prevailing monopoly position, LANDBELL entered the market as the second provider, and other systems followed.

With the Packaging Act (VerpackG) coming into force in 2019, far-reaching measures to increase transparency and legal certainty and tighten controls were implemented with regard to compliance with take-back obligations. For example, the Stiftung Zentrale Stelle Verpackungsregister (ZSVR), or “Zentrale Stelle” for short, was created as a body that performs corresponding tasks to fulfil the VerpackG.

This means that clear legal regulations and framework conditions exist in the German market to ensure that packaging is taken back and sent for recovery or recycling.

As a dual scheme, LANDBELL plays an important role in fulfilling the legal requirements and helps manufacturers and distributors to implement their take-back obligations.

This paper explains the work and responsibilities of LANDBELL as a dual scheme and provides an overview of important background information.

Background and legal basis

In Germany, waste disposal was long the responsibility of the public sector. The increasing amounts of waste or packaging waste presented the municipalities with ever greater challenges. For this reason, the Packaging Ordinance (VerpackV) was introduced in 1991, and with it the principle of so-called “extended producer responsibility” for the first time:

The person who puts (sales) packaging on the market must also ensure that it is taken back and recycled, i.e. that it is collected, disposed of and recycled.

By obliging the distributors of packaging, the private sector was thus involved in waste management for the first time and was responsible for the collection and disposal of used packaging. On the other hand, private end consumers were given the opportunity to return their used packaging free of charge.

Subsequently, a second collection system, a “dual scheme”, was set up alongside the public waste disposal system. To set up the necessary collection, sorting and recycling structures, industry initially established a monopolistic dual scheme with the connivance of the Federal Cartel Office, the so-called “Duales System Deutschland”, known as the “Green Dot”.

In 2003, the monopoly was ended and the packaging disposal market was opened to competition (and thus to other possible providers). LANDBELL entered the market as the second dual scheme. In the following years, further dual schemes were approved or established.

Since the introduction of the VerpackV, there have been numerous amendments, for example, in order to implement the EU requirements, which were first established in 1994 for the disposal of packaging, in the German market. In addition, weaknesses had to be eliminated that had become apparent and uncovered since the opening of the market.

The last adjustment was made through the creation of a Packaging Act (VerpackG), which came into force “in full” on 01.01.2019. In order to minimize distortions of competition and to strengthen recycling, the (two) following requirements in particular were newly anchored:

1. The creation of a Zentrale Stelle to curb „free-riding“ and provide more transparency and legal clarity.
2. The promotion of recycling by increasing recycling quotas and incentivizing the production of recycling-friendly packaging

On the Role of LANDBELL as a Dual Scheme

Due to extended producer responsibility, producers and distributors are responsible as initial distributors for the collection and disposal of used packaging that is considered to be „subject to scheme participation“.

Since the entry into force of the VerpackG, whether packaging is subject to participation is regulated by the Zentrale Stelle's catalogue for packaging subject to system participation.¹ The catalogue is a fact-oriented aid for the classification of packaging and represents administrative regulations that provide information on how the Zentrale Stelle will probably decide in the context of an application for the classification of packaging.

LANDBELL assists companies in fulfilling this responsibility and takes a central role in doing so, as graphically shown in the chart below.

For example, a producer brings packaged products to market and sells them to private consumers. The consumer, in turn, disposes of the used packaging via the yellow garbage can or the yellow bag.

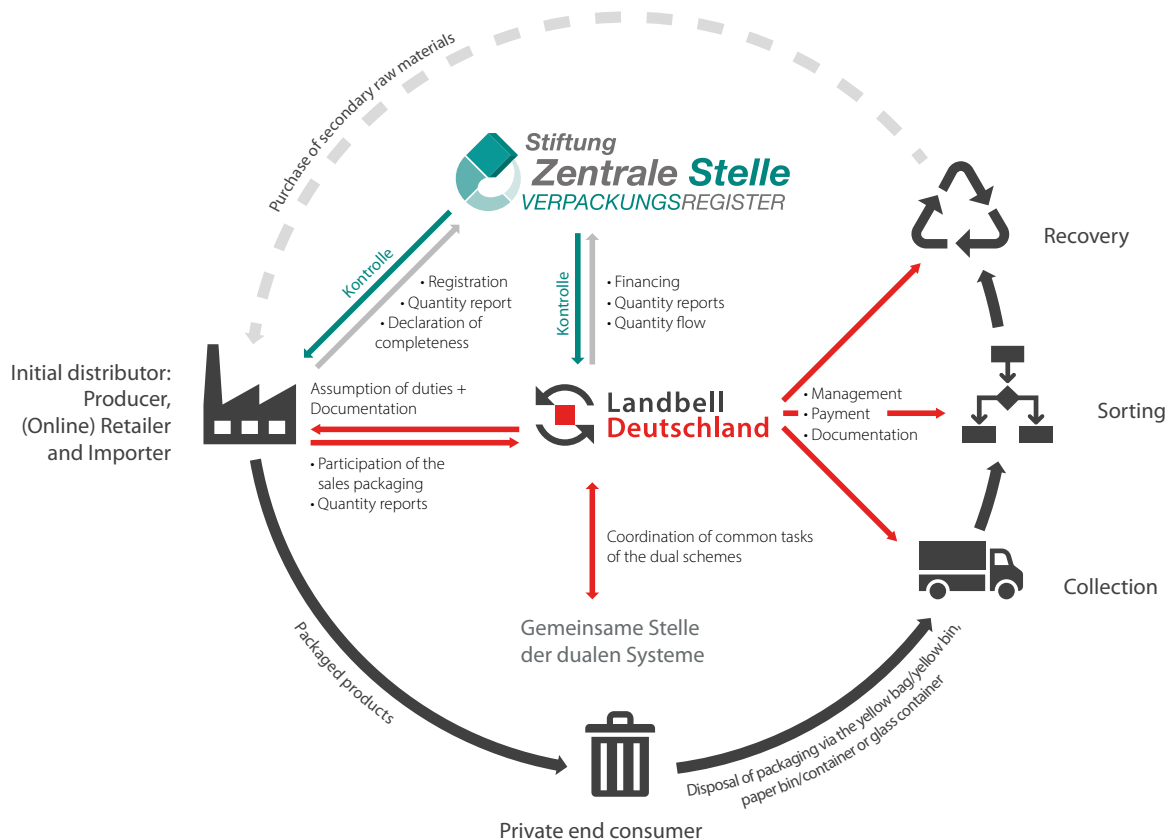
Producer + LANDBELL + Zentrale Stelle

In accordance with its obligation, the producer must ensure that the packaging is recycled. To this end, he participates in a dual scheme, such as LANDBELL, and concludes a corresponding contract.

As a result, LANDBELL assumes important, legally prescribed tasks for the producer, such as documentation and quantity reporting to the Zentrale Stelle.

The producer itself must also register with the Zentrale Stelle and report its quantities of packaging subject to system participation.

In order to verify compliance with the legal requirements, various documentation obligations, as well as audit mechanisms are defined. The interaction of dual schemes, as well as distributors is continuously monitored by the Zentrale Stelle as a control authority and processes that have not been properly implemented are handed over to the enforcement authority.



¹ https://www.verpackungsregister.org/fileadmin/files/Katalog/Inhaltsverzeichnis_Katalog.pdf

LANDBELL + Service provider for collection, sorting and recycling

The sales packaging that the end consumer has disposed of in the yellow bin or the yellow bag is collected or recycled by private or municipal disposal companies. These are commissioned by the scheme operators. All competitors use the collection infrastructure for glass, lightweight packaging (LVP) and paper, cardboard and carton (PPK) that has been coordinated with the municipalities.

The disposal company commissioned with collection is responsible for transporting the collected packaging material to a sorting facility.

Depending on the material, the sorted packaging quantities are transported on to specialized recycling companies. Non-recyclable material is recycled for energy, i.e. energy is recovered as part of the waste incineration process.

In connection with LANDBELL's contracting of service providers for collection, sorting, and recycling, several complex tasks must be performed. For example, the waste collectors and recyclers document the tonnage collected, sorted and processed each month and provide this data to LANDBELL as a „recycling record.“

In turn, valuable secondary raw materials can be recovered from the packaging that is recycled and returned to the cycle

LANDBELL + „Gemeinsame Stelle“ of the Dual Schemes

LANDBELL exchanges information with the other dual schemes via the „Gemeinsame Stelle“ or coordination system. The Gemeinsame Stelle coordinates the cooperation of the dual schemes (according to §19 VerpackG) including a competition-neutral tender in the disposal areas.

Documentation and testing

LANDBELL performs a number of tasks for or as an interface to various market participants. In doing so, LANDBELL fulfils all obligations defined by the Zentrale Stelle via administrative regulations, which must be demonstrated equally for all schemes.

Quantity reports

The quantity reports of the dual schemes to the Zentrale Stelle are an important task, as they are used to verify the packaging subject to participation. Via the centralized database, the Zentrale Stelle can transparently compare whether all participants report their quantities in compliance with the law:

LANDBELL is then obliged, like every dual scheme, to report the relevant information to the Zentrale Stelle on a quarterly basis. This includes, in particular, the (planned) quantities of the producers and distributors who have participated in LANDBELL's dual scheme and who place the packaging quantities on the market.

In parallel, the producers and distributors report their data in the same way to the Zentrale Stelle.

In this way, the quantities can be reconciled and differences can be tracked and clarified directly during the year. This is done using various checking algorithms based on a centralized database.

At the same time, the volume reports to the Zentrale Stelle are used to allocate costs in line with the participation volumes of the respective dual scheme.

This overall process ensures fair competition among the schemes, with the Zentrale Stelle establishing the rules for this in agreement with the Federal Cartel Office.

By registering in the Zentrale Stelle's LUCID packaging register, the responsible producers and distributors are also visible to everyone

Recycling quotas

As a dual scheme, LANDBELL also assumes the tasks of documenting and auditing packaging quantities in connection with collection, sorting and recycling.

Different quotas apply to recycling (broken down by the materials used), which must be verified. For example, the mechanical recycling rate for plastic packaging increased from 36 percent previously to 58.5 percent initially starting in 2019 and to 63 percent by 2022 (see also the table below).

Development of recycling rates²

| Material | before 2019 | from 2019 | from 2022 |
|--|-------------|-----------|-----------|
| Paper/cardboard/ paperboard | 70% | 85% | 90% |
| Glass | 75% | 80% | 90% |
| Ferrous metals | 70% | 80% | 90% |
| Aluminium | 60% | 80% | 90% |
| Beverage carton pack | 60% | 75% | 80% |
| Other composite packaging | 60% | 55% | 70% |
| Plastics (mechanical recycling) | 36% | 58,50% | 63% |
| Collection rate (lightweight packaging) | ./. | 50% | 50% |

The recycling rates are checked by the Zentrale Stelle. The overriding objective is to achieve as a minimum the recycling rates specified in the law.

The control is carried out on the basis of the „volume flow records“, which are prepared by all dual schemes. The volume flow verification contains data on the proper collection, sorting and recovery of sales packaging, broken down by the individual packaging materials.

„Volume flow“ refers to the different packaging materials whose „flow“ is to be documented. It represents evidence of the fulfilment of their obligations for the sales packaging collected and recovered in Germany. In addition, it documents which quantities have been collected or recycled.

In accordance with regulations and guidelines, LANDBELL prepares the volume flow verification as proof of compliance with its collection and recovery requirements and has it certified by an independent, external auditor.

The auditors are publicly appointed and sworn experts and can only certify the volume flow verification if they are registered with the Zentrale Stelle.

The preparation of the documentation, as well as the audit is a time-consuming process. For example, all quantities from collection to recycling are checked for plausibility using weighing certificate data and permits for sorting and recycling facilities, and the suitability of recycling facilities are verified.

This means that large volumes of data must be processed:

- on the one hand, the (quantities) of packaging from the producers and distributors involved in LANDBELL
- on the other hand, the data on the collected and recycled quantities of the disposers and recyclers.

LANDBELL prepares the documentation annually for the previous calendar year and submits it to the Zentrale Stelle by 1st July at the latest. The Zentrale Stelle then forwards the results of its checks to the enforcement authorities. Since the volume flow records are separated according to material flow, the recycling rate per material can be seen from them.

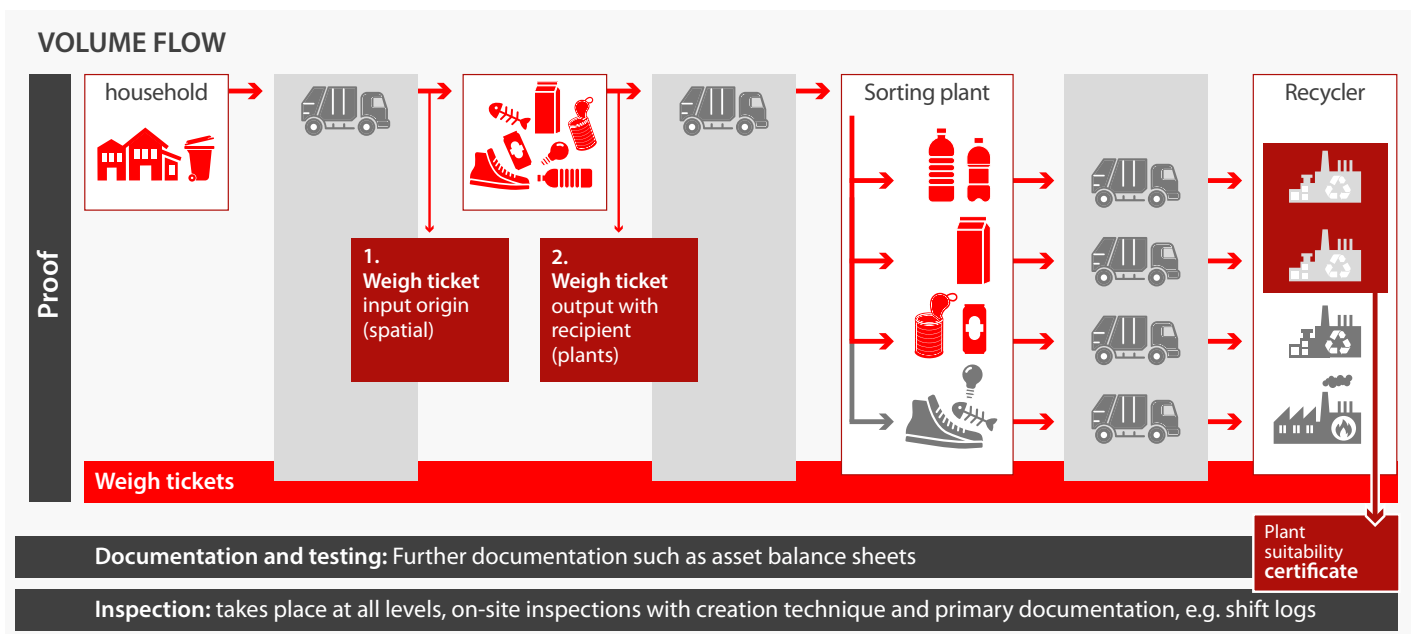
The aim is to be able to trace all the quantities that are transferred from a household in a district/city to the collection system of the dual schemes all the way to the last recipient, for example a steel mill for the recycling of metal packaging.

Recycling routes are only ever recognized here if the recycling facilities are certified. This certificate serves as proof of suitability that the plant is technically capable of processing certain wastes or recycling them as materials, raw materials and/or energy.

The following diagram illustrates the chain of custody and shows which data and documents are relevant for the audit.

² Source: VerpackG § 16

Documentation & verification of the volume flow of lightweight packaging³



Selection and monitoring of service providers by LANDBELL

The annual testing of the volume flow verification and compliance with the prescribed recycling quotas plays an important role for LANDBELL in order to be able to continue to operate on the market as a dual scheme.

Against this background, LANDBELL ensures that all legal requirements are met through contracts with sorting and recycling facilities. For this purpose, LANDBELL has qualified employees who are in close contact with the contracted companies with regard to the sorting and recycling of packaging.

The plants are required to submit their plant balance sheets on a monthly basis, in which the input, production and output quantities are documented. IT systems support data monitoring and enable prompt intervention with regard to the performance of the contract partners.

As part of the volume flow verification, a prescribed scope for the plant inspection is defined by the expert. In this context, more than 40 plants for material sorting, as well as recycling in the areas of glass, PPK and LVP are inspected for the quantities for which LANDBELL is responsible.

In this way, LANDBELL has always succeeded in successfully providing proof of the volume flow since the inception of its take-back system. As the second approved scheme since the opening of competition for the take-back of packaging from private end consumers in 2003, LANDBELL has been a long-standing and stable partner for its customers.

As a dual scheme, LANDBELL has thus been reliably supporting customers in fulfilling their obligations for over 15 years.³

Exports of packaging waste

The export of packaging waste from the dual schemes plays a marginal role. According to the Zentrale Stelle, for example, almost 90 percent of plastic packaging was recycled domestically in 2018. Of the remaining 10 percent, just under 7 percent was recycled in Austria and the Netherlands. Only 0.05 percent of the quota volume was exported to a non-EU country (Switzerland) and verifiably recycled there.⁴

³ Based on: https://www.verpackungsregister.org/fileadmin/Auswertungen/Mengenstrom_von_Leichtstoffverpackungen.pdf

⁴ Based on: <https://www.verpackungsregister.org/information-orientierung/neuigkeiten-presse/pressemitteilungen-aktuelles/detail-ansicht-newseintraege/news/positive-bilanz-nach-10-monaten-verpackungsregister-verpackungsgesetz-entfaltet-beabsichtigte-wirkungen>

Recycling quotas 2018 for plastics exports⁵

| All schemes | |
|---|--------|
| Domestic recycling | 89,91% |
| Recycling abroad | 10,19% |
| EU | 10,14% |
| Plastic types | 8,93% |
| Mixed | 1,21% |
| Non-EU | 0,48% |
| Non-EU Switzerland (after correction by ZSVR) | 0,05% |

Approval as a dual scheme

Initially designed as a monopoly, after the opening up of packaging disposal, various other companies have become active alongside LANDBELL's second dual scheme. Only an approved scheme is allowed to organize the return of packaging for its customers. The relevant prerequisites for obtaining approval from the competent state authority are:

1. Evidence of nationwide collection structures (Conclusion of collection agreements with disposal companies currently involved in the collection of PPK, glass and LVP)
2. Conclusion of coordination agreements with all public waste management authorities on the design of the collection systems and payment of ancillary fees
3. Proof of necessary sorting and recycling capacities (conclusion of sorting and recycling contracts with sufficient capacity)
4. Conclusion of a financing agreement with the Zentrale Stelle (ZSVR)

⁵ Source: Presentation Gunda Rachut, „Recyclingfähigkeit, Ausgestaltung, Lizenzentgelte und Vollzug“ @ DUH Fachgespräch, 27.11.2019, Berlin

Coordination with municipalities and schemes

In addition to fulfilling obligations to the Zentrale Stelle, coordination at other interfaces with market participants is an important prerequisite for LANDBELL's work.

Coordination with municipalities

Within the scope of the approval of the dual schemes, they must coordinate with all public waste management authorities with regard to the type and structure of the packaging collection. In this context, the local authorities have the option of issuing framework specifications.

Coordination systems: Gemeinsame Stelle

The Gemeinsame Stelle was founded by the dual schemes. Among other things, it coordinates a competition-neutral tendering process in the disposal areas and ensures that the costs incurred are distributed in the areas according to the market shares of the scheme operators. In particular, it has the following tasks to coordinate the interaction of the dual schemes, as regulated in §19 VerpackG:

- Allocation of the disposal costs and ancillary fees on the basis of the market shares determined by the Zentrale Stelle.
- Competitively neutral coordination of the invitation to tender for collection services and determination of a tender leader for the collection areas to be put out to tender
- Appointment of the system auditors

Competition-neutral information measures, the costs of which are borne by the schemes, are in turn directed at the private end user. Appropriate information must be provided in particular on the purpose of the separate collection of packaging, the collection schemes set up for this purpose and the recycling results achieved. Detailed information on the dual schemes' communication initiative is available at: <https://www.muelltrennung-wirkt.de>.



LANDBELL GROUP is an international provider of comprehensive take back, consulting and software solutions for environmental and chemical compliance.

Established as a packaging compliance scheme in Germany in 1995 LANDBELL GROUP has since evolved into a global service provider.

Today, LANDBELL GROUP operates in 13 countries producer compliance schemes worldwide for various waste streams, helps over 38.000 customers

in more than 60 countries to fulfil their extended producer responsibilities, and collected over 760.000 tonnes of waste batteries, electronics and packaging in 2020.

Specifically in Germany, Landbell AG operates a certified and independent packaging compliance scheme for producers and retailers to meet their legal requirements.