



# CIRCULAR Consulting

Living circular economy: Our circular  
packaging solutions



# Dear manufacturers,



**the recycling of packaging is of immense importance for the environment and climate.**

In Germany alone, the collection, sorting, and recycling of packaging saves around 2 million tons of CO2 equivalents annually. Additionally, over 4 million tons of secondary raw materials are produced, replacing primary raw materials. By bringing recyclable packaging to market and using recycled materials, you as a manufacturer take on an important responsibility.

However, this topic is crucial not only for environmental reasons: the regulatory pressure on manufacturers is increasing. Section 21 of the German Packaging Act (VerpackG) and the upcoming EU Regulation on Packaging and Packaging Waste (PPWR) make it imperative for manufacturers to address recyclability and the use of recycled materials. Neglecting these issues may lead to severe penalties, including bans on placing packaging on the market.

With more than 30,000 packaging assessments, we are your competent partner, not only for system participation but as well for all recycling related questions. As part of the Veolia Group, we also have access to Europe's largest recycling capacities for plastic packaging.

We look forward to working with you to assess the recyclability of your packaging and develop sustainable packaging solutions.

**Waldemar Dederer,**  
**Teamleader Circular Consulting**



## Services

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# Individual Consultation



**Your Path to Recyclable Packaging Solutions:** For a holistic approach to greater sustainability in the packaging world we offer you comprehensive, personalized consultation.

## **A I Recyclability Analysis of Your Packaging**

- Analysis based on the current minimum standard for assessing the recyclability of packaging subject to system participation by the Central Agency Packaging Register (ZSVR)
- Assessment based on key criteria such as sorting/recovery infrastructure, sortability, separability, recycling incompatibilities and recyclable content
- Active consultation with experts, engagement in professional networks, and systematic review of relevant publications
- Consideration of potential future requirements in the design
- Requirement: Detailed information on the packaging composition, weight, size, and images of your packaging



### **B I Packaging optimization to increase the recyclability of your packaging**

- Based on minimum standard methodology
- Well founded recommendations for action by experts from sorting/recycling facilities, networks, publications
- Future oriented by considering possible changes in requirements
- Precondition: Submission of detailed packaging information including images

Our goal is to elevate your packaging solutions to a new level of circularity. Trust our expertise for well founded advice and innovative approaches.



### **C I Recycling Tool: Your solution for an independent recyclability assessment**

- Web-based software for independently determining the recyclability of packaging
- Based on the current minimum standard for measuring recyclability
- Detailed results report with information on recycling obstacles
- Available to BELLANDUAL license customers at special rates

Based on the tool results, you develop tailored optimization strategies for your packaging together with our recycling experts from BellandVision.



## D I Comprehensive evaluation of your packaging inventory

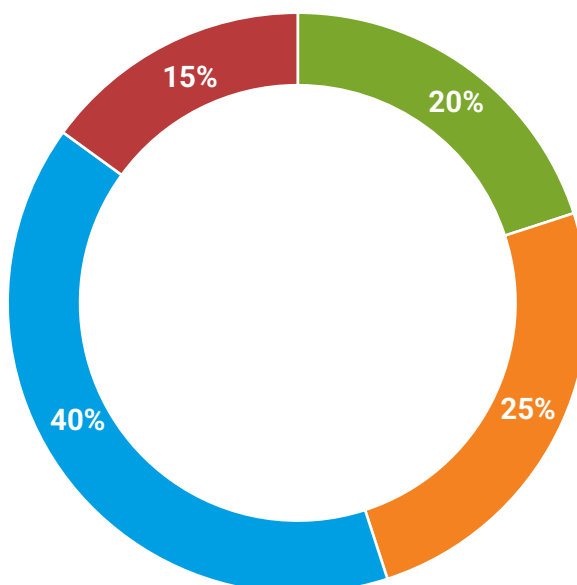
- Professional project management from planning to final presentation
- Provision of a customized online tool for querying the recyclability of your packaging range
- Training for your suppliers and employees on optimal data collection
- Plausibility check of the data entered in the recycling tool
- Creation of packaging-specific optimization recommendations with regard to recyclability
- Coordination and implementation of empirical tests in real sorting facilities according to current practice
- Commissioning of recognized certifications to confirm recyclability
- Continuous email and telephone support for all project participants

Get a full overview of the recyclability of your packaging inventory. We support you from data collection to optimization.

### Example: Percentage distribution of recyclability of a packaging range based on performance classes.

Performance level      Recyclability/unit,  
by weighting in %

A	≥ 95%
B	≥ 80%
C	≥ 70%
D	< 70%







# Training offers



**For more recycling expertise: To deepen your knowledge about the recyclability of packaging, we offer tailored training for different target groups.**

## **A | Professional workshops on the recyclability of packaging**

The training content is flexible and can be adapted to the requirements of the participants. The target group for the training includes manufacturers, packaging producers, product developers, marketing staff, sustainability officers, and decision makers.

- Basics, methodology, and minimum criteria according to the minimum standard for measuring the recyclability of packaging
- Overview of the state of the art and functioning of sorting and recycling facilities in Germany
- Current legal developments such as the Recycling Fund (§ 21 VerpackG) or the EU Packaging and Packaging Waste Regulation (PPWR)
- Innovative technologies in sorting and recycling, such as image recognition, markings, advanced mechanical recycling technologies, or chemical recycling
- Expert tips for recyclable packaging design
- Customised content on relevant material groups (e.g., plastics, fiber-based packaging and fractions such as HDPE bottles, PET trays, fiber composite packaging)



## B | Exclusive facility tour for practical insights

The on site visit to a sorting or recycling facility for lightweight packaging offers the opportunity to, get a feel for the plant' and better understand the sorting processes as well as the state of the art.

- Guided tour in a sorting facility for lightweight packaging (max. 15 people)
- Insights into input storage, sorting steps, monitoring, and output storage
- Explanation of sorting technologies such as air classifiers, overhead belt magnets, and NIR scanners
- Insight into innovative sorting technologies, such as image recognition
- Subsequent workshop with facility experts, providing deeper insights into the functioning and challenges of recycling processes



## C | Training on BellandVision's recycling tool

Training on BellandVision's recycling tool increases understanding of key terminology and reduces sources of error in packaging assessments:

- Practical introduction to the application of the tool according to the minimum standard for measuring the recyclability of packaging
- Assistance in classifying packaging, material fractions, and recyclable content
- Conducting exemplary assessments using customer specific packaging examples





# Services with CIRCPACK by Veolia



**With the services of our affiliated company Circpack by Veolia, we optimally complement our consulting offer, so that you receive everything from a single source for checking the recyclability of your packaging:**

## **AI Conducting sorting tests**

To verify the recyclability of your packaging according to the minimum standard of the Central Agency Packaging Register (ZSVR), we offer practical sorting tests. Through empirical investigations in real sorting facilities, you gain valuable insights into the identifiability and sortability of your packaging. Our offer includes:

- Empirical testing of the identifiability and sortability of your packaging according to the ZSVR minimum standard - based on practical tests in sorting facilities.
- Conducting operational sorting tests with 125 sample packages or NIR quick tests with 20 sample packages
- Static and dynamic tests for detectability and sorting performance
- Comprehensive final report with results protocol and, for operational tests, a percentage distribution of the result per sorting fraction
- Optional evaluation meeting including consultation on packaging optimizations



## **B I Repulping tests for fiber based packaging**

- Proof of separability according to the methodology of the minimum standard ZSVR
- Required e.g. for plastic coatings using dispersion
- Simulation of the recycling process of a paper mill in the laboratory according to CEPI methodology
- Evaluation of defibering, residual materials, pulp quality and paper production
- Final test protocol with statement on recyclability



## **C I Recyclability certifications**

Assessment of the recyclability of your packaging in accordance with the German minimum standard of the Central Agency Packaging Register (ZSVR) pursuant to Section 21 (3) VerpackG

- Calculation of recyclability for packaging of all material types
- Classification as total or combination packaging
- Review of all criteria relevant to the assessment, including:
  - Availability of suitable sorting and recycling infrastructure
  - Sortability and separability of the packaging
  - Incompatibilities with the recycling process
- Report that comprehensively documents all measurement steps and the derivation of the result
- Issue of a certificate confirming the implementation and results of the measurement
- Determining the proportion of recyclable materials to be used for recyclability





## Types of certification according to RecyClass methodology (for plastic packaging):

### Design for Recycling - EU-wide recyclability assessment

- Testing of equivalent packaging when using the same material and structure. Equivalent packaging may have a different color design, but no different process relevant features.
- Checking the compatibility of your packaging design with the sorting and recycling processes according to the RecyClass protocol
- Evaluation of the quality and substitution potential of the recyclate obtained from your packaging
- Classification of recyclability in classes A to F

This certification provides a well founded assessment of how recyclable your packaging design is for the entire EU market. Identify optimization potential and convince with sustainability benefits.



### Letter of Compatibility - Early Recycling Assessment (for plastic packaging)

- Recycling compatibility testing as early at an early point of the development phase plastic packaging
- Ideal if the packaging manufacturer has no influence on subsequent processing steps
- Evaluation of the individual packaging components before completion
- Analysis of theoretical\* sorting and recycling feasibility at EU level
- Checking compatibility with sorting and recycling processes in accordance with the RecyClass protocol
- Assessment of recyclate quality and substitution potential for virgin material
- Classification of recyclability in classes A-F

Optimize the recyclability of your packaging at an early stage with this forward-looking certification. Avoid later adaptation costs and impress with sustainable design right from the start.

\*We then recommend a final assessment of recyclability only for finished packaging including all components.





## Certify methodology for paper, glass, metals

With the Certify methodology, we certify the recyclability of your packaging made of:

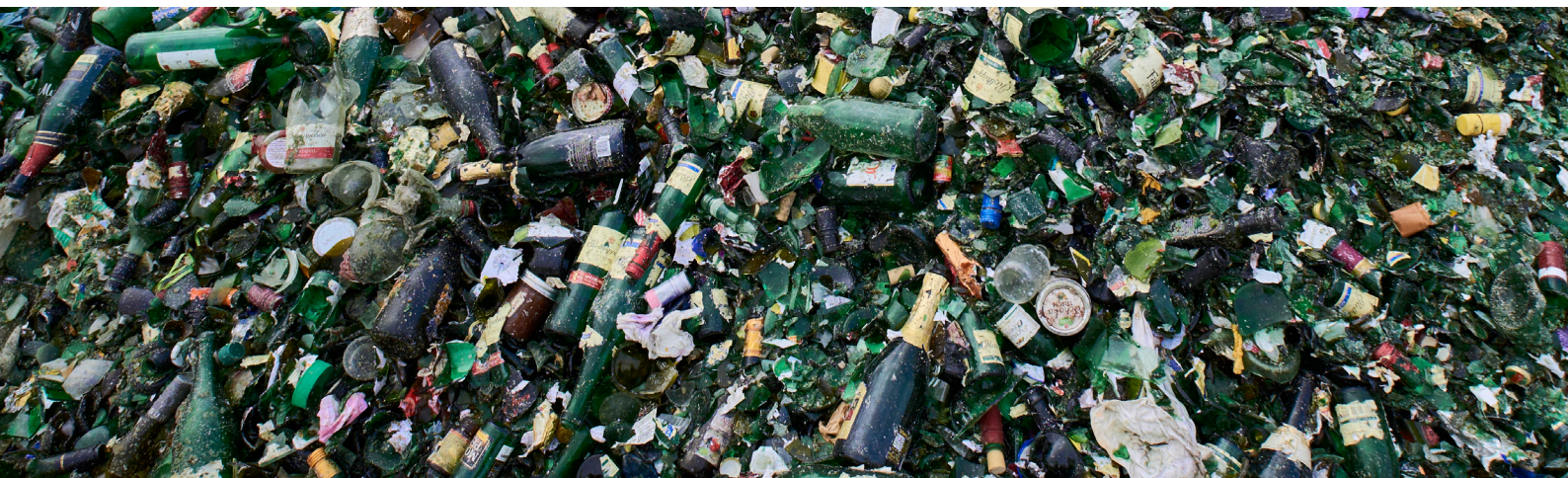
- Paper, cardboard, and paperboard
- Glass
- Ferrous metals
- Aluminium

### Our scope of testing:

- Examination of the existing sorting and recycling infrastructure
- Analysis of the sorting and separability of your packaging
- Assessment of recyclability in the recycling process

Based on recognized standards and through the involvement of industry experts, you receive a well founded and meaningful certification.

Benefit from our expertise across the entire value chain of these materials. We bring your packaging up to the latest recycling standards!







# With us, you rely on ...



- ... extensive experience in testing packaging for recyclability,
- ... a thought leader in the field of „Design for Recycling“,
- ... a highly motivated team of packaging engineers,
- ... the largest recycling capacities for plastic packaging in Europe,
- ... international expertise in the field of packaging recycling,
- ... the largest dual system in Germany.

Benefit from our holistic service for the system participation of packaging - from packaging optimization to sorting and recycling tests.



## BellandVision GmbH



Bahnhofstraße 9  
D-91257 Pegnitz



[www.bellandvision.de](http://www.bellandvision.de)



[circularconsulting@bellandvision.de](mailto:circularconsulting@bellandvision.de)



+49 (0) 9241-4832-600



@BellandVision