Tchibo

Circular Solutions Pattern Cards

2nd Edition

Designed with AI

Sharing practical insights and real stories from our Circular Economy journey

About the Circular Solutions Pattern Cards

Designed with AI

Tchibo is exploring circular innovations for sustainable impact and economic benefits. Recognizing that implementing the Circular Economy requires fundamental changes to our value creation, we developed the Circular Solutions Pattern Cards: a systematic analysis of Tchibo's circular activities, designed to navigate our transformation.

What can you expect?

The case studies are categorized according to their approach to circularity and their maturity stage. Each one includes an introduction, market insights, and our learnings from evolving work, acknowledging that details may change. We aim to share both our successes and challenges with colleagues and other organisations – not for promotion or green claims purposes, but rather to scale circular solutions and inspire engagement. This is the second edition of Tchibo's Circular Solutions Pattern Cards, updated as of September 2026. For this edition, we have added several new projects – not only from Germany, but also from Austria – reflecting our growing circular journey across markets. Have fun exploring our circular innovations!

Your team from the Tchibo Circular Solutions Lab

Tchibo

Tchibo stands for a unique business model. We operate approx. 900 shops in eight countries, over 24,200 retail outlets and national online shops. Through its multi-channel distribution system, Tchibo offers weekly changing non food ranges in addition to coffee. These weekly collections include products specially produced and curated for Tchibo, focusing on high quality at affordable prices. Founded in Hamburg in 1949, the family-owned company has received several awards for its sustainable business practices.

Our complex business activities in coffee and non food offer fertile ground to explore circular solutions across different product and material cycles and circular services. This is reflected in the various circular approaches initiated within Tchibo.

Circularity Approach: Reuse | Stage: Discontinued | Status: September 2026

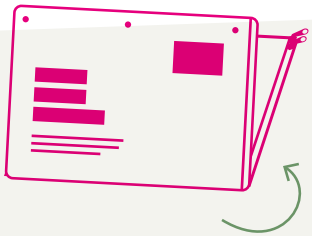
Reusable Shipping Bags

During a 13-month test period between June 2023 and July 2024, 26,000 reusable shipping bags were sent for random online orders within Germany. Customers could return the empty bags via mailboxes or Tchibo shops. The pilot helped test the necessary intralogistics processes. No deposit system or other incentives were used for this test.

Goals: Gain customer feedback, test the durability of the packaging

Tchibo

What if we reuse our shipping packaging instead of throwing it away?



FACTS

- Bags were used 3 times on average
- Response rate of approx. 80 %
- Overall customer satisfaction: good or very good (94 %; n = 3,000)
- CO_2 emission break-even point: 2.5 – 8 cycles (depending on the way of return)
- 1,300 bags damaged

LEARNINGS

Opportunities

- The bag return rate is a key indicator for costs and CO_2 impact
- The bags were generally returned in good condition
- Simple preparation without much effort
- Higher perception as a sustainable brand

Challenges

- The durability of the bag and the closure system can be improved
- High costs for mailbox returns
- Collective returns are necessary to reduce costs
- There is a need for customer education on correct handling (some cut the bag open)
- The lack of strict reusable quotas for the mail-order business

NEXT STEPS

The pilot delivers valuable insights used for the further development of e-commerce packaging, also in light of regulations like the "Packaging and Packaging Waste Directive" (PPWR). Tchibo is committed to bringing together different brands and online retailers in a common industry approach for reusable shipping bags.

Circularity Approach: Recycling | Stage: Scale-up | Status: September 2026

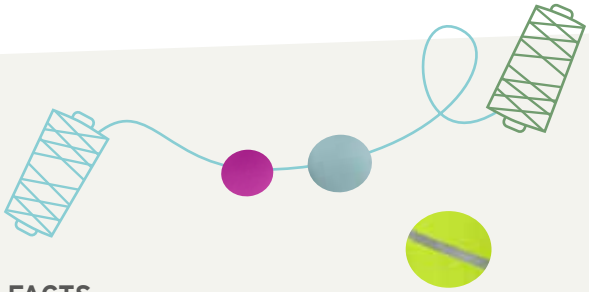
Textile-to-Textile Recycling Scale-Up

As an alternative to conventional or recycled polyester from PET bottles, Tchibo uses recycled polyester from textile waste, also called "textile-to-textile" (T2T), for sportswear products in calendar week 41/2024 and again in 41/2026.
This closed-loop material was produced using an innovative chemical recycling technology. Tchibo has defined clear targets and budgets for scaling the use of T2T polyester.

Goals: Increasing the share of T2T polyester in our apparel products

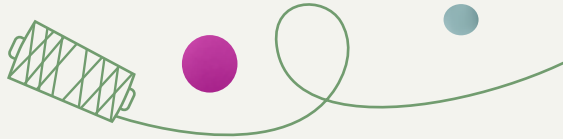
Tchibo

What if we use textile waste to create new clothing?



FACTS

- Input: pre-consumer waste (e.g. waste from textile production) and post-consumer waste (e.g. discarded clothes)
- Price premium: 10–15 % vs. conventional polyester (revised estimate)
- Prices for post-consumer waste materials are generally higher than from pre-consumer waste



LEARNINGS

Opportunities

- Create awareness (internally, customers, and throughout suppliers)
- Market availability of recycled polyester from post-consumer waste is low
- Interim solution: Using pre-consumer waste as input
- Identify innovators within the Tchibo supply chain

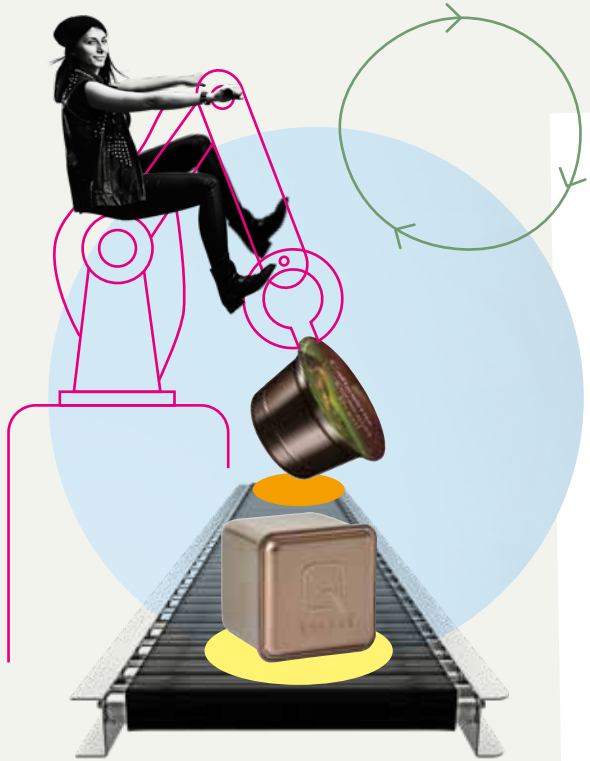
Challenges

- Limited customer communication due to the small number of products in the collection
- Further scaling of the technology and higher market demand are required to reduce the price upcharge

NEXT STEPS

The proportion of textile products made from T2T recycled polyester will be further expanded by 2030 through fixed targets. Tchibo is also committed to support the scaling of these and other T2T recycling technologies.

Circularity Approach: Circular Infrastructure | Stage: Scale-up | Status: September 2026



Coffee Capsule Sorting Technology

For plastic coffee capsules to be recycled, they first need to be separated in the waste stream. Together with Nestlé and JDE, Tchibo is investing in optimizing sorting efficiency and has jointly developed the Best Available Technology (BAT).
It was successfully piloted at the light-weight-packaging (LVP) sorting plant of Veolia in Rostock in 2022/2023.
Since then, five more LVP sorting plants have implemented the BAT, with more in the preparation phase.

Goals: Enable large-scale recycling of plastic coffee capsules, prove technology for industry-wide scaling in Germany.

Tchibo

What if we improve the sorting of coffee capsules for recycling?

FACTS

- Sorting rate improved from < 30 % to 90 %
- Main adjustments: software for NIR detection, air nozzle distance and pressure, and conveyor belt surfaces
- Joint investment enables the provision of extensive personnel and financial resources
- Improvement of the total polypropylene stream by 1 %

LEARNINGS

Opportunities

- Cooperation facilitates the pooling of know-how and resources
- Technical and digital innovations in LVP plants offer a central solution approach

Challenges

- Coffee capsules have a very high grammage compared to other similarly sized packaging in the LVP fraction (reason: coffee grounds in the capsule)
- Technology must be adapted to the size, weight, and shape of the capsules
- Sorting concepts at LVP plants vary individually

NEXT STEPS

Project partners are continuing to implement the technology in more LVP sorting plants, aiming to cover 50 – 60 % of German sorting capacity (medium-term goal) and increase it to 90 % by 2030. The BAT is to support the development of sorting and recycling infrastructure in Europe, in line with the PPWR.

Circularity Approach: Share | Stage: Discontinued | Status: September 2026

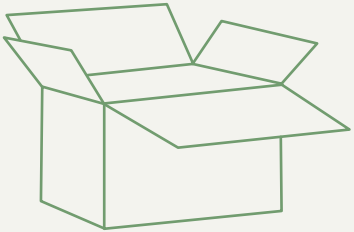
Tchibo Share

In January 2018, Tchibo became the first major retail company to launch a rental model for children's clothing: „Tchibo Share", in cooperation with the start-up Kilenda. Customers could rent products for a self-chosen period of time. Later, the range was expanded to women's clothing, coffee machines, and other categories. In December 2020, Tchibo Share was discontinued for economic reasons.

Goals: Test and scale a circular business model, acquire new customers, retain existing ones

Tchibo

What if customers rent Tchibo products instead of buying them?



FACTS

- Highest demand for kids' and women's clothing; lowest demand: furniture
- Customers cited sustainability as the main reason, and reported high satisfaction with the rental process
- 85 % of textiles are rented multiple times
- Contribution margin from 2nd rental of kids' and higher-priced women's wear, and from 3rd rental of selected items like baby carriers
- High media equivalence value

LEARNINGS

Opportunities

- Successful targeting of young families
- Test lab for new non food assortments
- Brand and employer branding

Challenges

- Critical mass of customers not reached within 2 years; rental models (still) not mainstream
- High costs for reverse logistics and storage
- Suitable for higher-priced products
- Decision to discontinue also caused by uncertainty in the COVID-19 pandemic

NEXT STEPS

Based on the learnings from Tchibo Share, a "Second Hand Restart" was attempted in 2023 with resale platform Sellpy, where customers can buy returns that can no longer be sold regularly, as well as selected used Tchibo textiles.

Circularity Approach: Reduce | Stage: Mainstreamed | Status: September 2026

Renewable Qbo Coffee Capsules

For its Qbo capsule system, Tchibo developed coffee capsules in 2022 using 70 % renewable resources. The material is mainly polypropylene (PP), but instead of using mineral oil as a base, it's made from organic waste, residual oils, and fats. The renewable proportion of the raw material is supplied via a mass balance approach, certified by the International Sustainability & Carbon Certification (ISCC PLUS) system.

Goals: Reduce fossil resource use, provide a sustainable material solution

Tchibo

What if our coffee capsules are made from renewable raw materials?

FACTS

- Bio-based fats processed into PP polymers (same properties as virgin PP)
- So-called "second-generation material" (e.g., tall oils from forestry, waste fats from the food industry)
- ISCC PLUS certification mathematically allocates the bio-based raw materials proportion to the Qbo capsule (mass balance approach)
- Life-Cycle Assessment: 35 % CO_2 emission reduction (results by TU Berlin)
- Development partners: Neste and Berry

LEARNINGS

Opportunities

- Credible customer communication via ISCC PLUS certification
- Promote alternative raw material use
- Recyclable material (like the previous PP capsule)
- Coffee quality: No compromises on quality
- Off-flavours: Successful avoidance of unwanted tastes

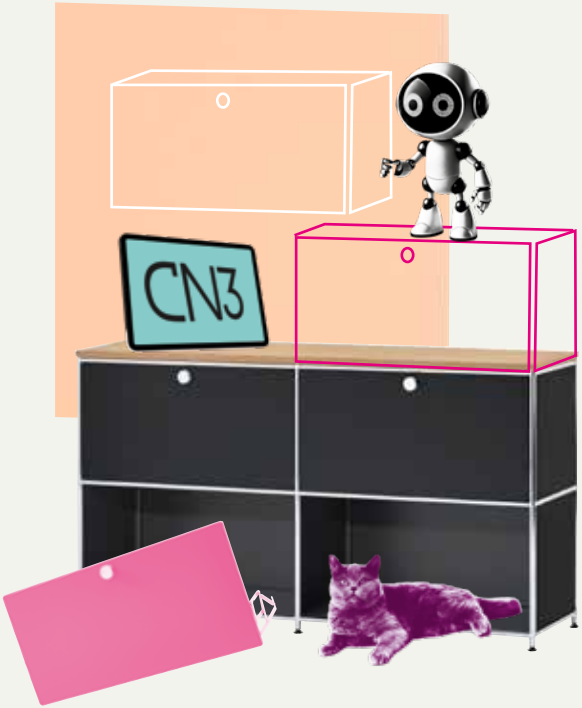
Challenges

- Mass-balance system is difficult to explain to consumers
- ISCC PLUS process and documentation are resource-intensive
- Capsules are heavily criticized, requiring well-tested, verified, and communicated sustainable solutions to avoid greenwashing

NEXT STEPS

Continue developing solutions for more sustainable coffee capsule solutions, e.g., industry investment and initiatives to optimize the practical coffee capsule sorting and recycling.

Circularity Approach: Longevity | Stage: Mainstreamed | Status: September 2026



Longevity in Furniture Design

The "CN3 furniture series" embodies Tchibo's idea of quality and durability. Designed for longevity, it features a timeless design and sturdy construction, complemented by a scratch-resistant surface. Customers have the flexibility to customise their furniture with supplementary modules, such as coloured fronts, wheels or drawers.

Goals: Enhance longevity and empower customers to adapt their furniture to their evolving needs and tastes

Tchibo

What if we design furniture to be timeless and durable?

FACTS

- Stable construction for a long lifespan
- Scratch-resistant surface
- Timeless and long-lasting furniture design
- Spare parts and new accessory sets are continuously launched, so customers can always find new additions

LEARNINGS

Opportunities

- High customer interest in customisable designs: coloured back panels and new add-on sets
- "Design for upgradability" approach: Modifications and replacement of components extend the product's lifespan

Challenges

- Balancing timeless design with evolving consumer trends can be complex
- Staying relevant while maintaining a long-lasting product requires constant market research and innovation

NEXT STEPS

New types of furniture and additional custom colors and new accessory sets will be launched, allowing customers to expand their CN3 furniture and customize it to meet their current preferences and needs.

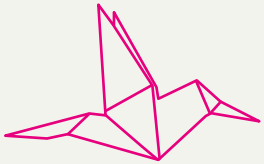
Circularity Approach: Reduce | Stage: Mainstreamed | Status: September 2026

Journey to Plastic-Free Packaging

In April 2020, Tchibo introduced a new packaging concept for (almost) plastic-free packaging of non food articles. Hard goods like kitchen utensils are packed plastic-free. Textiles are stabilized using a bow-shaped back-card insert made of 100 % recycled cardboard. The material thickness has been further reduced to 300 GSM, minimising material use without compromising stability. The designs are unique and patented worldwide. Only the hook and elastic bands used in textile packaging are not yet plastic-free. We are currently working on a solution to address this remaining challenge.

Goals: Eliminate plastic polybags, reduce material use

Tchibo



What if we redesign our packaging to eliminate plastic?

FACTS

- Savings of 30 million plastic covers for products per year
- Savings of 60 million protective bags for transport per year
- > 98 % recyclable packaging
- < 2 % plastic for all non food packaging
- Patent for packaging solution made of paper
- Significant material reduction, e.g., for socks: up to 50 % less cardboard

LEARNINGS

Opportunities

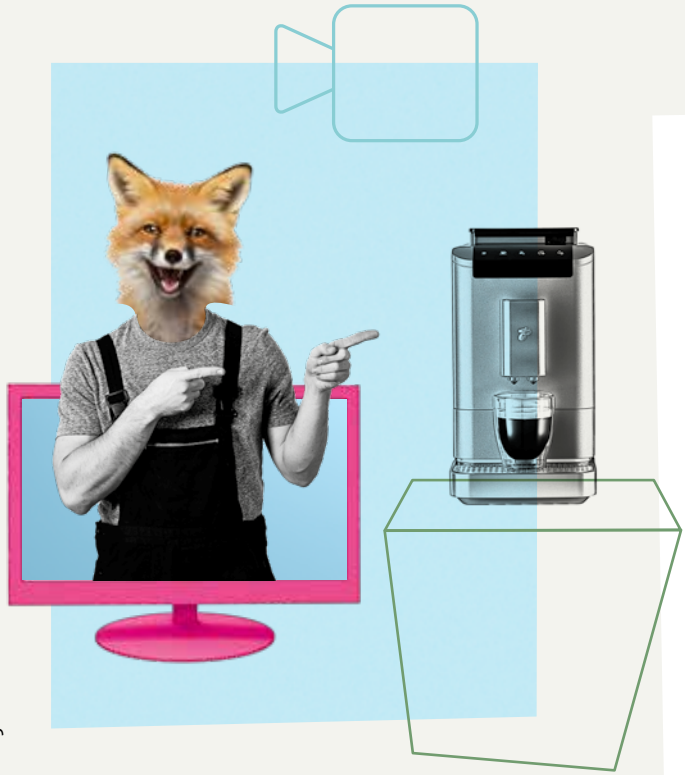
- Good customer feedback, e.g., touch and feel of the clothing fabric
- Baseline for further reduced packaging in 2021, e.g., reducing paper bands and folding boxes

Challenges

- Allow customers to find all important information
- Ensure that products look presentable both in stores and on supermarket shelves
- Ensure enough space to legibly include all legally mandatory information
- Protect the product during transport

NEXT STEPS

We continuously work to reduce material use, ensure recyclability and further develop new approaches. One example is chain-specific online packaging, which requires significantly less material than standard Tchibo packaging.



Video Repair Service

Since 2022, after-sales services for coffee machines include "Remote Fault Inspection", where customers book video inspection appointments with a specially trained Tchibo brand ambassador. The service developed based on the experience that many malfunctions or error patterns can be easily resolved without prior technical knowledge or specific tools. This provides quick help, avoiding the need to send machines to the repair centre.

Goals: Increase customer satisfaction, avoid unnecessary returns

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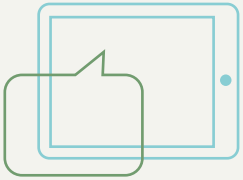
What if we help our customers to repair their coffee machines at home?



FACTS

- Only a fraction of complaints are due to actual technical defects
- Many issues are solved via video calls, instruction videos, or chatbot
- Video call problem-solving rate: 40 %
- Easy to use via various devices
- >4,300 video calls in 2022, >6,000 in 2024 (DACH and Eastern Europe)
- Customer satisfaction: 4.8/5 stars

LEARNINGS

Opportunities

- Increased customer satisfaction and loyalty
- Saves time with immediate, remote solutions
- Reduces shipping and packaging costs
- Promotes a "repair" mindset
- Saves technician resources that are scarce and expensive
- Customers experience minimal downtime with their coffee machines

Challenges

- Customers who bought their machines at one of the external retail partners are often unaware of this service
- Appointment booking can be a hurdle
- Technical issues (login, connection quality) can occur

NEXT STEPS

Continuously expand the machine portfolio to other self-service modules like "first tips and assistance". Also expand the service to cover first-time installation of new coffee machines.

Circularity Approach: Repair | Stage: Mainstreamed | Status: September 2026

Online Shop for Spare Parts

To prolong the lifetime of coffee machines and make repairs more convenient, Tchibo has expanded after-sales services beyond warranty cases by offering a wide range of replacement parts in the Tchibo online shop. This has been launched for all current Esperto models, allowing customers to easily order and replace individual parts, extending the life of their machine.

Goals: Make spare parts accessible in a standard product order process

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Tchibo

What if customers could order spare parts by themselves?

FACTS

- Average sales per month: approx. 1,200 pieces
- Starting with 9 spare parts
- Top seller is the Esperto brewing unit
- Purchases have increased at an annual growth rate of 50 % since the post-launch years
- 60 % of the spare parts have become cheaper by eliminating previous costs for customer service and the repair centre
- International rollout is already at 90 % of Tchibo sales markets

LEARNINGS

Opportunities

- Growth rate shows customer interest in repair
- Improved convenience compared to contacting customer service
- Streamlining of previously inefficient processes in which spare parts were stored and managed by an external partner

Challenges

- Stepwise changeover required to inform customers: web form at the "services & help" section before full integration into the Tchibo online shop
- Identification of business need
- Combine commercial goals of involved departments with circular solutions

NEXT STEPS

The expansion of the range of spare parts for other coffee machines is planned, as well as for other non food products like travel suitcases and furniture. We are even considering "3D printing on demand" in the future.

Circularity Approach: Rethink | Stage: Mainstreamed | Status: September 2026

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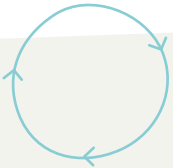
Tchibo Circular Solutions Academy

In September 2022, the Tchibo Circular Solutions Lab launched the "Circular Solutions Academy", a multi-faceted internal training programme to encourage colleagues to "rethink". The programme, which began with quarterly online basic courses, was soon expanded to include advanced workshops for specific product categories and round-table ideation formats.

Goals: Spark interest in the Circular Economy, provide knowledge, and highlight opportunities for Tchibo

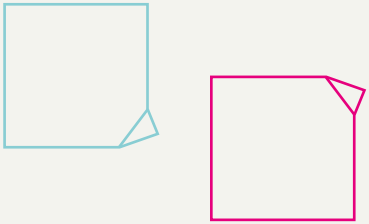
Tchibo

What if we inspire and train colleagues to think more circularly?



FACTS

- 200+ participants in basic courses
- 50+ participants in advanced workshops and round-tables
- Participants from 33 departments, including Product Design, Packaging Development, IT-Solutions, Human Resources, and Coffee Buying
- Participant feedback: Knowledge, insights, and inspiration were most valuable



LEARNINGS

Opportunities

- Identify "Circular Economy Ambassadors" within Tchibo
- Provide tools for practical implementation
- Colleague enthusiasm greatly motivates the Circular Solutions Lab team, energising them for the sometimes difficult transformation work

Challenges

- Initial high enrolment in basic courses decreased over time
- The training program must be continuously adapted to the organisation's maturity level (resource-intensive but worthwhile)

NEXT STEPS

Further develop engagement formats to drive organisational transformation toward circularity across different departments.

Circularity Approach: Reuse | Stage: Pilot | Status: September 2026

Tchibo x Sellpy Second-Hand & Resale Pilots

Tchibo conducted two successful pilots with European online resale platform Sellpy. The first pilot started in 2023 and featured second-hand clothing from the Tchibo Share rental model in a branded shop-in-shop format. The second pilot, launched in 2024, expanded the offering to include selected returned clothing, items in good condition that could not be sold through regular sales channels due to minor defects or missing packaging.

Goals: Define a standardised Tchibo resale framework for scaling

Tchibo

What if we offer used and like-new Tchibo clothing on a resale platform?

FACTS

- **Second-Hand Pilot (2023):** Good sales rate with prices at around 50 % of the original retail price; high demand for women's outdoor wear (37 %) and pants (22 %); main selling countries: Germany (46 %) and Sweden (34 %)
- **Resale Pilot (2024):** Most sales in Germany (46 %) and Sweden (36 %); best-selling categories: jeans and pants (21 %), jackets and outerwear (15 %); average selling price: € 10 – € 15 per piece
- Tchibo was the first mainstream brand to open a pop-up shop on Sellpy

LEARNINGS

Opportunities

- Main customers were already Sellpy users: potential to reach new target groups and younger audiences
- Developing customer base in new countries like Sweden
- Resale proves to be a viable new sales channel and revenue stream for selected returns
- Higher visibility of the Tchibo brand on resale platforms

Challenges

- Tchibo is not yet an established brand on Sellpy
- Lower sales volumes and search queries compared to competitor brands
- Internal processes for returns handling need minor adjustments
- Expanding B-Stock marketing in own distribution countries requires alignment with Sellpy

NEXT STEPS

Both pilots were a success, demonstrating a positive business case and a strong partnership.

Circularity Approach: Recycling | Stage: Mainstreamed | Status: September 2026

Recyclable Coffee Packaging

To preserve the quality and aroma of roasted coffee, current coffee packaging consists of a three-layer composite material. For Tchibo's recyclable coffee packaging, the plastic layers have been adjusted with advanced materials so that they are recognised in the sorting process after disposal by the customer via the yellow bin. This way, they can be assigned to the correct recycling stream and remain in the material cycle.

Goals: Improve material reusability, reduce the CO_2 footprint, comply with PPWR, and avoid plastic tax

Tchibo

What if we make our coffee packaging truly recyclable?

FACTS

- Roasted coffee sets above-average quality demands on packaging: protection from light, moisture, and oxygen
- Since 2023, over 20 % of packaging (volume-based) has switched to recyclable foils with good to very good recyclability scores (70 – 90 %)
- Life-Cycle Assessment confirms 35 – 50 % CO_2 emission reductions
- Major improvement through recyclability and advanced materials

LEARNINGS

Opportunities

- The packaging development process also included significant material reductions for some products, partially offsetting the cost increase for new materials
- Packaging labels highlight recyclability, improved CO_2 footprint, and disposal instructions

Challenges

- Transitioning from composites to monomaterials requires adaptation or investments in new packaging machines
- Limited marketing impact: Customers assume coffee packaging is already recyclable

NEXT STEPS

Tchibo aims to be a pioneer for sustainable and economically viable packaging in the European coffee market, switching to optimized recyclable composites in all our sales areas: by 2027 for Tchibo-branded products and by 2030 for all others.

Circularity Approach: Refurbish | Stage: Scale-up | Status: September 2026

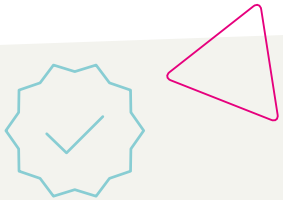
Refurbished Coffee Machines

"Tchibo Refurbished" lets customers trade in used coffee machines for a Tchibo voucher or buy professionally refurbished machines at accessible prices, backed by Tchibo's quality and warranty.
Launched in May 2025, the programme quickly gained positive feedback and expanded its product portfolio. Our partnership with circular solutions start-up koorvi enables the integration of the take-back and recommerce process.

Goals: Extend product lifecycle, reduce electronic waste, and offer affordable quality coffee machines

Tchibo

What if coffee machines got a second life – at a better price?



FACTS

- Customers return their used Tchibo coffee machines to the Tchibo Repair Partner
- Additional machines are sourced internally, e.g., from customer returns
- All machines undergo rigorous testing, repairs, and cleaning to meet Tchibo quality standards
- Refurbished machines are sold at reduced prices with a two-year warranty

LEARNINGS

Opportunities

- Market growth: Reaching price- and sustainability-conscious customers
- Customer lifetime value: Additional touchpoints strengthen long-term relationships
- Resource efficiency: Extended lifecycles reduce waste; return insights inform future development
- Regulatory readiness: Early focus on repairability prepares for upcoming EU requirements

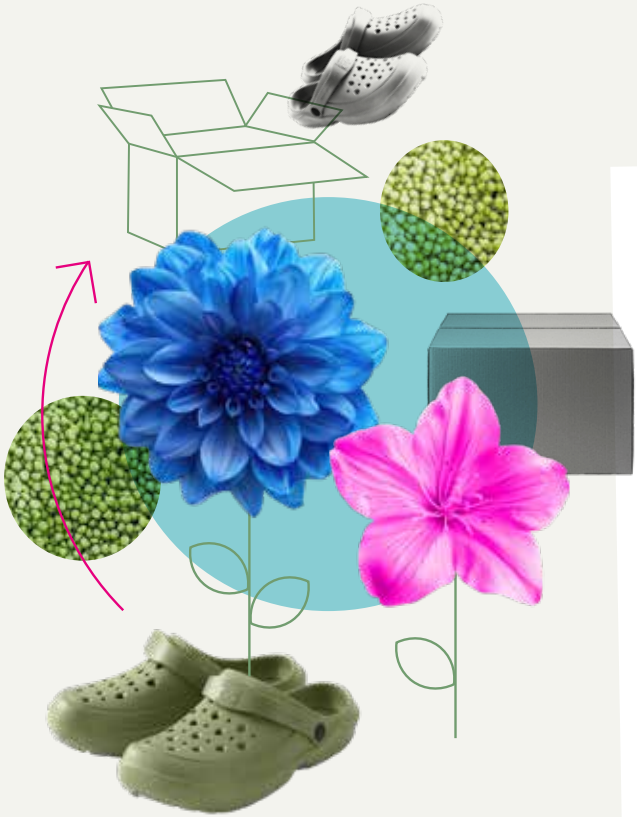
Challenges

- Securing supply: Ensuring a steady inflow of machines suitable for refurbishment
- Rejection rate: Trade-ins are partly declined due to cup counts exceeding the limit
- Customer communication: Clearly explaining technical trade-in criteria before customers initiate a return
- Process refinement: Continuously improving assessment and refurbishment workflows for varying machine conditions

NEXT STEPS

We will refine trade-in criteria and strengthen communication around "Tchibo Refurbished", while exploring assortment/channel expansion and optimizing operational processes.

Circularity Approach: Recycling | Stage: Discontinued | Status: September 2026



Cradle to Cradle Garden Shoe

The olive-green Tchibo garden clogs, sold in 2022, were designed for recycling using a monomaterial construction. The plastic and dyes were tested for material health and recyclability according to Cradle to Cradle Certified® Silver. After use, customers can return them to the manufacturer free of charge within four years of purchase, where they can be continuously recycled into new products without loss of quality.

Goals: Raise awareness and test customer feedback

Tchibo

What if we design a fully recyclable shoe?

FACTS

- Unisex design for adults and children
- The timeless design and robust material ensure they can be worn for a long time
- Cradle to Cradle Certified® ensures safe ingredients and recyclability
- Product development and take-back partner: German ISA-TRAESKO Group

LEARNINGS

Opportunities

- Cradle to Cradle Certified® provides a well-known seal and external validation
- Good feedback on the shoe's quality and longevity
- 74 out of 96 customers gave 4 or more stars
- Start of the journey of circular product design

Challenges

- During the 4-year period, none of the customers made use of the free take-back option to return their product for recycling
- Possible reasons: Products did not reach end-of-life due to high physical durability, or customer communication was not prominent enough

NEXT STEPS

Continue the journey of circular product design, evaluate the use of external certifications like Cradle to Cradle, and improve communication.

Circularity Approach: Share | Stage: Scale-up | Status: September 2026

Tchibo Mietbar

In April 2025, Tchibo established an internal resource sharing platform: the "Tchibo Mietbar". Employees can rent a wide variety of items from colleagues through a community marketplace. The partner is fainin, a start-up from Hamburg providing a sharing-as-a-service solution for organisations. fainin has been successfully validated by over 20,000 verified users across Germany, including university campuses and corporate environments.

Goals: Promote corporate culture, raise awareness of the concept of renting instead of buying

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What if we rent rarely used items instead of buying them?

FACTS

- External platform solution with no process or resource costs for Tchibo
- Rentals are insured for up to € 15,000
- Secure handover location: Office provides a trustworthy space for exchanges
- Over 185 products available directly on the Tchibo Mietbar
- More than 486 active users within Tchibo's headquarters
- Over 70 completed transactions during the pilot phase
- Approx. 300 kg CO_2 saved (ca. 4.2 kg CO_2 per rental transaction)

LEARNINGS

Opportunities

- Community building: Creates cross-departmental colleague connections
- An existing employee community replaces the costly trust-building phase required on open platforms – enabling faster adoption at lower risk

Challenges

- Continuous engagement beyond the initial launch phase requires regular activation impulses
- Scaling the concept to additional Tchibo locations and potentially other corporate partners
- Encouraging product uploads to keep the assortment growing and relevant

NEXT STEPS

Embedding Mietbar into employees' everyday work life, moving from an optional side offering to a natural part of the Tchibo workplace experience.

Circularity Approach: Circular Infrastructure | Stage: Pilot | Status: September 2026

Baby Body with circularity.ID®

In May 2025, Tchibo launched a set of baby bodysuits created according to the circular design criteria by circular.fashion to be durable and recyclable. They feature a digital product passport: the circularity.ID®. Customers can scan the QR code on the care label with their smartphones to find out more about the product lifecycle and the take-back system for a closed-loop solution at the product's end-of-life.

Goals: Test the use of digital product passports and gain customer feedback

Tchibo

What if our products had a digital product passport?

FACTS

- Circularity.ID®: QR code on the care label links to digital product information
- Material: 95 % GOTS organic cotton in conversion, 5 % elastane
- Cross-size design with adjustable buttons
- Part of the collaboration project "Implementing Circularity in the Textile Industry (ICTI)"
- Partnership with "Aktion Hoffnung" for sorting for reuse/recycling

LEARNINGS

Opportunities

- The Digital Product Passport (DPP) enables full product transparency, including information for the customer, sorter and recycler
- Tchibo suppliers in Bangladesh and India received training on circular design and digital product passports

Challenges

- Additional data carriers like RFID were evaluated, but a QR code was the only option feasible within the timeframe
- A QR code is not a scalable option for sorters and recyclers

NEXT STEPS

Building on the learnings from this project, Tchibo is developing an internal guideline for circular design and preparing for the implementation of the DPP.

Circularity Approach: Rethink | Stage: Mainstreamed | Status: September 2026

Designed with AI

Tchibo Circular Solutions Lab

In June 2022, the Tchibo Circular Solutions Lab was founded. It operates as internal spin-off from the environmental team, offering an experimental space for exploring circular ideas and quickly testing them in markets to get real-time feedback. Whether they are material and packaging innovations or circular business models, the team provides its expertise and network in the field of Circular Economy, as well as human and financial resources to support colleagues.

Goals: Identify barriers and economic potential

Tchibo

What if we provide a space for piloting circular ideas?

FACTS

- 20+ pilots realized within the first four years with some already in the scaling phase
- Establishment of an internal training curriculum reaching more than 300 colleagues
- 5 team members with expertise in various fields like textile recycling, business development, or circular design
- Harness the momentum of excitement and interest in Circular Economy

LEARNINGS

Opportunities

- Official mandate to quickly test and potentially scale new concepts and drive circular transformation across the business
- "Lab" approach as a new way of working to accelerate the internal transformation
- Building a network of circular service start-ups and other brands

Challenges

- Integrating circularity into core business processes across departments and standard workflows
- Scaling proven pilots from testing to company-wide rollout
- Building cross-departmental ownership beyond the Lab's direct support

NEXT STEPS

After four years of piloting and learning, the focus shifts to scaling: embedding proven circular solutions into core business processes, broadening internal ownership, expanding collaboration with external partners to accelerate impact, and continuously generating and testing new ideas through pilots to drive the next wave of circular innovation.

Circularity Approach: Reduce | Stage: Mainstreamed | Status: September 2026

Selling Unpackaged Coffee in Shops

In all shops, Tchibo offers its customers the opportunity to buy their coffee without packaging by bringing their own tins or buying tins in the shop. The shop employees then fill the desired amount directly from the chute next to the counter. Customers can choose between 8+ different coffees like Tchibo Privat Kaffee, Blonde Roast, or specialty blends, available as bulk goods, sold as whole beans or with a custom grind – without compromising on quality.

Goals: Raise awareness, reduce packaging waste, and save resources

Tchibo

What if we sell unpackaged coffee to reduce waste?

FACTS

- Available in 800+ shops in 6 countries
- Tchibo is the largest unpackaged coffee house chain worldwide
- TchiboCard customers can also secure an extra 30 loyalty beans, which is equivalent to € 0.30 off the next purchase

LEARNINGS

Opportunities

- Incentives such as the "TreueBohnen" loyalty program help motivate customers
- However, the numbers show potential, so enhanced customer communication is needed

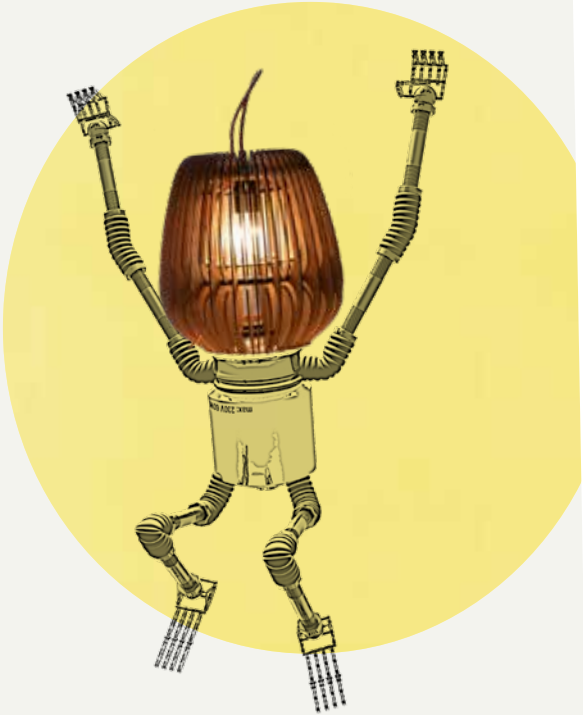
Challenges

- Spontaneous coffee purchases and inconvenience of carrying containers may limit adoption
- Developing a solution for the entire process, including from the roastery to the shops, with reduced packaging

NEXT STEPS

Increase customer awareness and participation through targeted communication and incentives, while leveraging insights from the reusable coffee tin deposit system in Austria to further reduce packaging waste across the coffee journey.

Circularity Approach: Longevity | Stage: Pilot | Status: September 2026



Circular “Fab City Lamp”

Tchibo is part of the project “LOCILAMP – The Fab City Lamp”, which explores how products can be designed and made in a more local, circular and distributed way. The project brings together design, customer feedback, prototyping, sustainability analysis and digital product information. Instead of producing everything centrally, the idea is to share knowledge openly and enable parts of production to happen locally. A key outcome of the project is that the lampshade can be produced by customers themselves in Fab Labs using open files and instructions.

Goals: Develop a circular lamp concept and test how local, open and customer-oriented production can work in practice

Tchibo

What if products were shared globally, but made locally?

FACTS

- Circular, repairable lamp concept developed and tested with project partners
- Customer feedback gathered through a co-creation workshop with the TchiboCard Community in Hamburg
- Lampshade can be locally produced in Fab Labs using open design files
- Lifecycle assessments guided material reduction

LEARNINGS

Opportunities

- Circular design supports repairability, adaptability and more conscious use of materials
- Open-source and local production enable knowledge sharing, community involvement and new opportunities for accessibility and participation
- Digital product information can support transparency along the value chain

Challenges

- Not all parts can currently be sourced or produced locally, especially electrical components
- Open and modifiable product concepts still raise questions around safety, certification and liability
- The Digital Product Passport is still evolving, as key legal and regulatory requirements have not yet been finalized

NEXT STEPS

Raise awareness of the published open instructions to enable Fab Labs to adopt them. Apply project learnings to advance local manufacturing, digital transparency, and customer-centred circular design and scale distributed production in practice.

Circularity Approach: Reuse | Stage: Pilot | Status: September 2026

Reusable Big Bags for Raw Coffee Transport

Currently, the Big Bags that are used to transport raw coffee from Hamburg to our roastery in Poland are single-use: after one journey, they are recycled and disposed of. A reuse pilot is in development to clean and recirculate Big Bags across multiple cycles, cutting packaging waste and bringing reuse logic into the heart of our supply chain.

Goals: Test the operational and economic viability of reusable Big Bags for raw coffee transport, including cleaning standards, logistics, and cycle durability

Tchibo

What if the bags carrying our raw coffee could go around more than once?

FACTS

- Big Bags are used to transport raw coffee from Hamburg to Tchibo's roastery in Poland
- Approx. 800 Big Bags are currently in use per year, all single-use
- Multiple cleaning methods were tested with an external partner to find the right approach
- Successful pre-pilot: a cleaning process meeting Tchibo's quality standards was identified
- A Pilot with a selected number of Big Bags is planned to gather data on cycle durability, logistics, and costs

LEARNINGS

Opportunities

- Direct reduction of packaging waste within Tchibo's own supply chain
- Strengthens Tchibo's reuse competency beyond consumer-facing products, embedding circularity into core operations

Challenges

- The reuse system must be cost-competitive with single-use Big Bags across the full cycle including cleaning, logistics, and write-offs
- Big Bags must be entirely free of coffee residues after cleaning to protect the integrity of every subsequent batch and to assure quality
- An efficient process for returning used Big Bags from Poland to the cleaning partner and back must be established to keep the system running

NEXT STEPS

Building on the successful pre-pilot cleaning tests, the next phase involves running a defined number of Big Bags through multiple real-world transport and cleaning cycles. Based on these results, a decision will be made on whether and how to scale the reuse system, with the ambition to cover all or a significant proportion of the Big Bags used annually.

Circularity Approach: Reuse | Stage: Pilot | Status: September 2026

Tchibo x circolution Reusable Coffee Tins in Austria

A pilot scheme launched on May 26, 2026, in Austria allows customers to purchase coffee in reusable tins for a refundable deposit, redeemable upon returning the tin. The initiative aims to reduce packaging waste by encouraging reuse over single-use packaging.

Goals: Test the viability of a reusable deposit system for coffee packaging and gather customer and operational insights

Designed with AI

Tchibo

What if we offered a reusable alternative to single-use packaging for our coffee?

FACTS

- Project in cooperation with start-up circolution
- Sale of unpackaged coffee in reusable tins
- Available in 33 stores in Vienna and Graz
- Reusable tins with lids in 500 g and 250 g sizes
- Tins are designed for durability to provide a long-lasting alternative to conventional coffee packaging
- Digital tracking provides transparency in the cycle

LEARNINGS

Opportunities

- Pioneer role in mainstream market builds reuse competency and drives reduction of single-use plastic
- Strengthens market position as the leading unpackaged coffee retailer
- The initiative is feasible in the long term in accordance with the PPWR Regulation
- Attract new and younger customers by combining convenience with sustainability
- Boost sales and customer loyalty through additional coffee purchase incentives

Challenges

- Not all tins might be returned by customers, limiting the closed-loop potential of the system
- Shifting customer habits toward reusable systems requires communication effort and consumer education
- Collecting, cleaning and refilling reusable tins requires additional logistics infrastructure and processes

NEXT STEPS

Timeframe: 1 year, until May 2027. Prior to a broader rollout, the practical feasibility (usability), customer acceptance, as well as quality and compliance requirements will be evaluated.

Circularity Approach: Repair | Stage: Pilot | Status: September 2026

REPAIR REBELS x bridge&tunnel

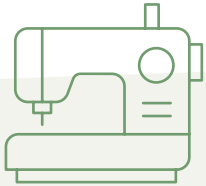
Repair Pilot

In June 2026, Tchibo launched a textile repair pilot in Germany, in cooperation with digital repair platform Repair Rebels and social textile manufacturer Bridge & Tunnel. Customers can select and book professional clothing repairs online, send in their garment via DHL, and receive it back repaired.

Goals: Make textile repair convenient and accessible for mainstream customers, extend product lifespans, combine circular with social impact

Tchibo

What if repairing your clothes was as easy as ordering them?



FACTS

- Fully digital end-to-end process: select, book, pay, ship, track, and receive – all in one place
- Repair categories: pants, jackets, skirts, dresses, backpacks, ski clothing, and kids' clothing
- Platform and logistics by Repair Rebels; all repairs performed by Bridge & Tunnel, a Hamburg-based social manufacturer combining craftsmanship with social impact since 2016
- DHL shipping with tracking in both directions; turnaround time: 7–14 days

LEARNINGS

Opportunities

- Extending product lifespans through repair keeps materials in use longer and reduces textile waste
- A convenience-driven, fully digital process can make repair accessible to mainstream customers who would never visit a tailor
- The social manufacturing component demonstrates that circular and social value creation can reinforce each other

Challenges

- Shipping costs impact the business case, especially for lower-priced repairs
- Repair as a service is still unfamiliar to many mainstream customers and requires education
- Customer expectations around speed and pricing need to be managed: repair is not same-day delivery

NEXT STEPS

Collect data on customer demand, most-booked repair types, satisfaction, and unit economics. Evaluate scaling potential including additional product categories, international markets, and integration with other Tchibo circular services.

Circularity Approach: Refurbish | Stage: Pilot | Status: September 2026

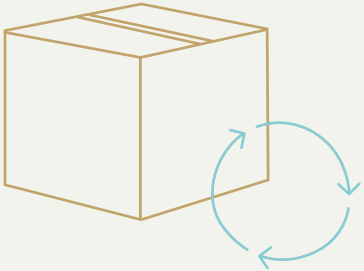
Textile Return Refurbishment

In June 2026, Tchibo explored the recovery potential of apparel products with minor defects through a pilot with &flow by Meyer & Meyer in collaboration with WKS Textilveredlungs-GmbH and M-EASURE. A sample of Tchibo returned clothing from all categories was assessed for typical defects, necessary product refurbishment activities and recommerce potential, creating a data-driven picture of product recovery and resale value at scale.

Goals: Test recommerce potential in connection with previous refurbishment as a viable circular pathway for Tchibo textile returns

Tchibo

What if Tchibo garments with minor defects can be recovered and resold?



FACTS

- 1,400+ Tchibo products were graded
- 70 % of defects are related to staining
- Second-largest refurbishment category: threads (snags and yarn thickening)
- Up to 86 % of returns assessed as suitable for recommerce

LEARNINGS

Opportunities

- Most returned garments are in like-new to good condition with significant hidden value
- Structured grading creates a solid foundation for a future recommerce programme
- Returned garments retain a significant share of their original retail value

Challenges

- Unfiltered sample includes items where refurbishment effort exceeds resale value
- Scaling requires clear pre-sorting criteria and internal process alignment

NEXT STEPS

Building on the pilot findings, Tchibo is evaluating economic and operational viability for external refurbishment and recommerce opportunities to increase the value and circularity of products with defects.

Circularity Approach: Redesign | Stage: Pilot | Status: September 2026

AI Solution – CIRA Circular Design Agent

Tchibo has developed an AI agent for textile products that supports designers, product managers, and product developers in applying circular design principles directly in their daily work. Built on Tchibo's internal Circular Design Guideline for Textiles, the agent gives recommendations on the three core design principles: using circular inputs, designing for product longevity, and designing for recyclability at end of life.

Goals: Inspire colleagues to learn about circular design, make circular design knowledge accessible at the point of decision, prepare for EU regulations (ESPR, EPR)

Designed with AI

Tchibo

What if every product designer had a circular design expert by their side?

FACTS

- Covers role-specific workflows for designers, product managers, and product developers
- Built on a comprehensive internal knowledge base including Tchibo's internal Circular Design Guideline Textiles, material matrices, and durability requirements across product clusters
- Able to generate mood boards and design drawings

LEARNINGS

Opportunities

- By acting as a sparring partner rather than a lengthy compliance document, the assistant lowers the barrier to include circular design principles in daily work
- Product teams gave the feedback that it is easy and fun to work with the assistant
- Modular architecture allows expansion to additional product categories (furniture is next, with further domains planned)

Challenges

- User adoption requires trust: colleagues need to experience the assistant as a helpful thinking partner, not a compliance tool
- Balancing depth of guidance with usability: too much detail overwhelms, too little loses value

NEXT STEPS

Pilot the circular design assistant to validate usability and design impact. Expand the knowledge base to include furniture as the second product category. Use modular architecture to systematically scale circular design expertise across Tchibo's non food product categories.

Circularity Approach: Recycling | Stage: Mainstreamed | Status: September 2026

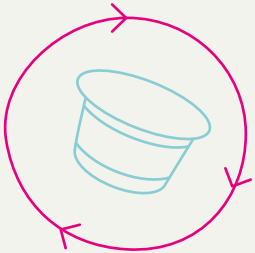
Coffee Capsule Recycling System

Cafissimo and Qbo capsules are made from recyclable plastic and filled with responsibly sourced coffee. Through a bespoke capsule recycling system, they can be fully recycled after use – giving valuable resources a second life. Since 2016, Tchibo has been providing its customers with a practical recycling solution, stepping in where conventional waste management systems fall short.

Goals: Providing consumers with easy access to capsule recycling

Tchibo

What if we offered a recycling system for Tchibo capsules?



FACTS

- More than one third of all Tchibo capsules sold in Austria are currently recycled
- Even after use, a single capsule still contains enough energy to brew a brand-new cup of coffee
- The plastic is turned into new products, while the coffee grounds are converted into biogas
- The recycling system is accessible at approximately 120 Tchibo stores throughout Austria

LEARNINGS

Opportunities

- A low-barrier recycling solution offering Austrian consumers an easy alternative to the standard dual waste system
- In-store communication across Tchibo's branch network creates a direct touchpoint to educate customers on capsule recycling and the value of material recovery

Challenges

- Building a dedicated, Austria-specific collection and recovery system – in partnership with Altstoff Recycling Austria AG (ARA) – that handles both capsule material and coffee grounds, filling the gap left by existing waste infrastructure

NEXT STEPS

Ongoing evaluation of new solutions and products that make the most of the valuable materials still present in used capsules – keeping resources in circulation for as long as possible.

Circularity Approach: Reuse | Stage: Mainstreamed | Status: September 2026

RECUP Reusable Cup Deposit Scheme for Coffee-to-Go

Since 2026, customers at all Austrian Tchibo coffee bars can enjoy their coffee in a reusable RECUP cup with a € 1 deposit. After use, the cups can be returned at any RECUP partner location or at Tchibo directly – making sustainable coffee-to-go straightforward and hassle-free. With this initiative, Tchibo takes another step toward resource-efficient packaging solutions while actively reducing single-use waste.

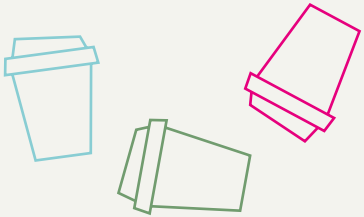
Goals: Raise awareness, reduce packaging waste and conserve resources

Tchibo

What if we joined an established reusable cup deposit scheme?

FACTS

- Available across all Tchibo coffee bars in Austria
- RECUP is already the largest reusable system, with nearly 20,000 participating locations across Germany and Austria
- The partnership further strengthens the cross-border industry, making reusable cups even more convenient for customers



LEARNINGS

Opportunities

- A € 0.2 discount on coffee incentivises customers to choose the reusable option
- As the first coffee chain to offer a cross-industry deposit cup across its Austrian coffee bars, Tchibo sets a meaningful precedent
- Spontaneous coffee purchases become simpler and more sustainable at the same time

Challenges

- Customers are limited to the available cup sizes – no flexibility in sizing
- In the event of loss or damage, customers forfeit their deposit
- Expanding the scheme can only be achieved through an industry-wide increase in return points

NEXT STEPS

Strengthen customer communication to raise awareness and drive uptake of the reusable cup system.

Textile Collection at Tchibo

Since 2023, Tchibo has been giving pre-loved textiles a new lease on life through its "ZWEITES LEBEN" ("Second Life") initiative – together with its customers. Well-kept clothing and household textiles are accepted at 120 Tchibo stores across Austria and kept in circulation in partnership with Re-Use Austria.

Goals: To keep as large a share of used textiles in circulation as possible through a visible and easy donation option – with full transparency and local value creation

Tchibo

What if we offered a textile collection scheme at Tchibo?

FACTS

- Launched in 2023 with household textiles, the "ZWEITES LEBEN" ("Second Life") initiative was expanded to include casual wear in 2024 and sportswear in 2025
- A total of 28,000 customers have actively contributed to reducing textile waste through their participation

LEARNINGS

Opportunities

- Through targeted collection campaigns and through Re-Use Austria's expertise, the initiative offers a concrete solution to throwaway mentality
- The high quality of Tchibo textiles is a key enabler – good quality is essential for effective and resource-efficient processing
- Annual customer surveys help Tchibo continuously refine the initiative and keep it relevant

Challenges

- Building trust and transparency: customers have general uncertainty about how pre-owned clothing is subsequently used and repurposed
- Increasing awareness and participation: overall visibility of the initiative can be further improved, particularly amongst younger and more digitally oriented customers

NEXT STEPS

The collaboration between Tchibo, Re-Use Austria, and their respective social enterprise partners is set to continue. Four key focus areas are planned for 2026, with implementation guided by customer feedback and preferences.

Circularity Approach: Redesign | Stage: Pilot | Status: September 2026

Designed with AI

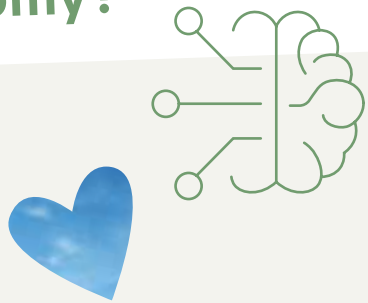
Internal Circular Design Guideline

Circularity starts with design. That is why we at Tchibo developed an internal Circular Design Guideline, defining criteria for circular materials, longevity and recyclability, starting with kids' clothing as the pilot product category. The requirements are tailored to Tchibo's product range. To support the product developers, the guideline is accessible through an AI-based assistant guiding them through the process.

Goals: Prepare for EU regulations (ESPR, EPR) and inspire colleagues to learn about circular design in clothing

Tchibo

What if we made our apparel product fit for the circular economy?



FACTS

- Input: Internal know-how, market research, and existing regulations (e.g., France)
- Principles: The guide includes specific criteria for material selection (e.g., mono-materials), durability (e.g., dimensional stability) and design choices (e.g., clothes that grow with the child)

LEARNINGS

Opportunities

- Creating a unified understanding of circular design across the company
- The AI circular design agent supports a low-barrier and fun introduction to the topic
- Starting with one product category instead of trying to include all products at once reduces complexity and increases applicability

Challenges

- Trade-offs can occur between recyclability and durability
- Expanding to other categories can be challenging (e.g., more complex material blends)
- Implementing circular principles can conflict with existing internal requirements (e.g., cost, aesthetics)

NEXT STEPS

Applying criteria to actual products, further testing of AI circular design agent with product teams, assess impact on product costs and quality testing procedures.

Circularity Approach: Rethink | Stage: Pilot | Status: September 2026

Coffee Grounds from our CoffeeBars Become Coffee Soil

Every year, our Tchibo CoffeeBars generate tonnes of coffee grounds – an often underestimated yet valuable resource. Instead of disposing of them as waste, we have developed a forward-thinking solution in innovative collaboration with our partners Waldaffe & Gusta Garden: the Coffee Soil Pellets. With just a little warm water, these small wonders transform into a nutrient-rich, loose soil – ideal for vegetables, herbs and potted plants. For our customers, this is not only a highly functional, sustainable product, but also a tangible expression of our commitment to the circular economy.

Goals: Make the circular economy tangible, test customer acceptance and avoid waste

Designed with AI

Tchibo

What if we could give the coffee grounds from our CoffeeBars a second, useful life?

FACTS

- Easy to transport and efficient: Just 4.6 kg of pellets produce 20 litres of soil when water is added
- Coffee Soil Pellets combine full-quality potting soil, natural long-term fertiliser from coffee grounds and an integrated water reservoir
- Local value creation: For the first production cycle, 300 kg of coffee grounds were collected from Tchibo stores in Carinthia and processed into high-quality, peat-free garden soil at Waldaffe's nearby production site

LEARNINGS

Opportunities

- By meaningfully repurposing a valuable material, the product can be positioned as a credible example of Recycling and circular economy, strengthening Tchibo's sustainable brand image
- The gardening product is a smart everyday solution for customers
- The partnership with Waldaffe creates the chance to jointly advance innovative solutions, promote local value creation and increase the product's relevance both socially and economically

Challenges

- The novelty of the coffee soil – particularly in pellet form – makes the product difficult to explain at the point of sale
- Communicating the multiple benefits (soil, fertiliser, water reservoir, peat-free) in a concise and understandable way without overwhelming customers
- Ensuring efficient collection and processing of coffee grounds at scale

NEXT STEPS

Comprehensive evaluation, including customer feedback.

Refurbishment at Tchibo's headquarters – Furniture & IT

Tchibo applies circular thinking not only to its product range, but also within its own operations. The internal office management team is reupholstering office chairs using sustainable fabrics rather than procuring new ones. In parallel, Tchibo extends the life of its IT equipment through a long-standing partnership with afb social & green IT, Europe's largest non-profit IT company: decommissioned laptops, smartphones, and tablets are professionally refurbished and returned to the market.

Goals: Extend the lifespan of internal assets, reduce waste, combine circular with social impact

Designed with AI

Tchibo

What if we gave our office furniture and IT equipment a second life instead of replacing them?

FACTS

- Over 500 office chairs reupholstered using sustainable fabrics
- Close to 7,000 IT devices passed on to afb social & green IT since the partnership began almost 10 years ago
- Nearly 90 % of refurbished notebooks remain in active circulation after handover
- afb social & green IT is Europe's largest non-profit IT company, creating jobs for people with disabilities

LEARNINGS

Opportunities

- Circular principles apply equally to internal operations and external products
- Reupholstering saves resources and costs
- afb partnership links environmental responsibility with social impact
- Long-term partnerships prove circular operations can become standard practise

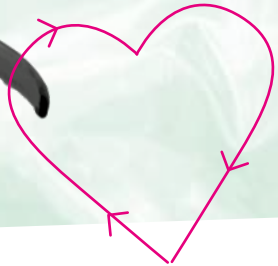
Challenges

- Scaling reupholstering requires a reliable supply of suitable sustainable fabrics and skilled craftsmanship
- Ensuring consistent quality standards for refurbished IT devices across different device generations
- Internal awareness and buy-in needed to prioritize refurbishment over new procurement across departments

NEXT STEPS

Continue and expand the office chair reupholstering initiative beyond the current 500-unit milestone. Evaluate further internal asset categories suitable for refurbishment. Deepen the afb partnership and explore options to broaden the range of refurbished device types.

Tchibo



Curious to see the stages of change?

Designed with AI

PILOT

SCALE-UP

MAINSTREAMED

Coffee Ground Recycling

Circular Design Agent

Baby Body

Textile Return Refurbishment

Reusable Big Bags

Reusable Coffee Tins

Fab City Lamp

Repair Pilot

Tchibo x Sellpy

Circular Design Guideline

T2T Recycling

Tchibo Mietbar

Tchibo Refurbished

Coffee Capsule Sorting Technology

Tchibo x RECUP

Plastic-Free Packaging

Recyclable Coffee Packaging

Tchibo Circular Solutions Lab

Renewable Qbo Coffee Capsules

Video Repair Service

Unpackaged Coffee

Longevity in Furniture Design

Refurbishment at Tchibo

Online Shop for Spare Parts

Textile Collection

Coffee Capsule Recycling System

Tchibo Circular Solutions Academy

DISCONTINUED

Cradle to Cradle Garden Shoe

Tchibo Share

Reusable Shipping Bags

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Stage