UPSTREAM
CIRCULAR INNOVATION
FOR LATIN AMERICA

ProUSAR

cooperación alemana
DEUTSCHE ZUSAMMENARBEIT

Implemented by

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Access the recording of the session here

WCEF
WORLD CIRCULAR ECONOMY FORUM 2025

ACCELERATOR SESSION

1

Tools that Shape the Future

2

Regulatory Changing Moves

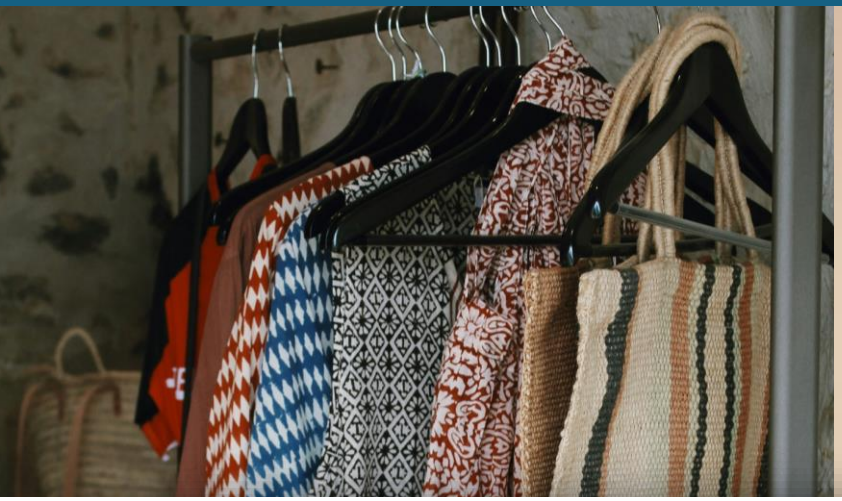
3

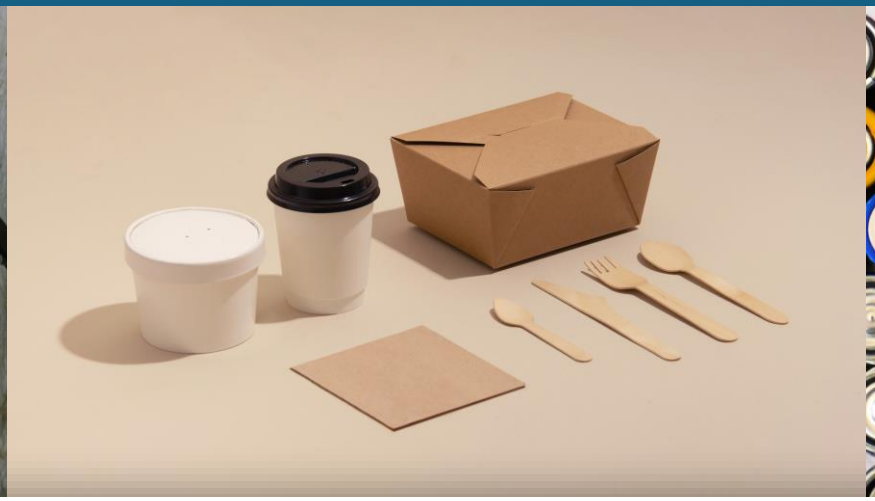
Stories that Inspire

4

Voices that Connect

Circular economy starts not at the bin... but at the blueprint





ProUSAR

cooperación alemana
DEUTSCHE ZUSAMMENARBEIT

Implemented by

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

WORLD CIRCULAR ECONOMY FORUM 2025

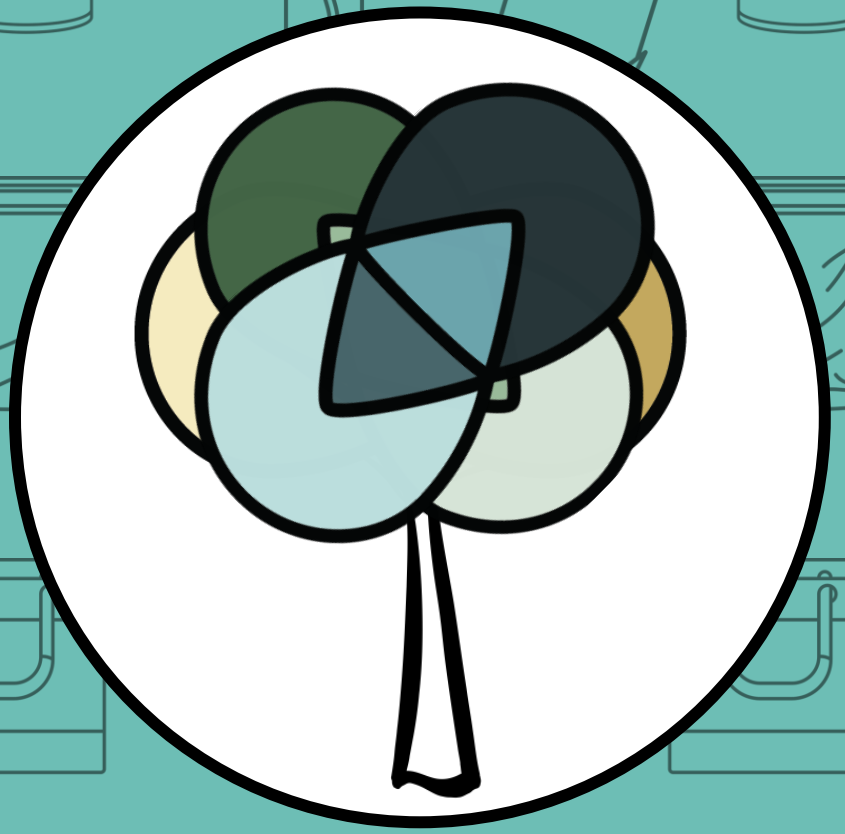
ACCELERATOR SESSION

Tools that Shape the Future

CAJALAB

Colombia's tool for packaging innovation

Jennifer Villalba Technical advisor at GIZ
Leonardo Forero consultant at PMTech



PM Tec Engineering

ProUSAR

cooperación alemana
DEUTSCHE ZUSAMMENARBEIT

Implemented by

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

CAJALAB: Colombia's tool for packaging innovation

CajaLab´s Excel Tool

CajaLab Guide

Why CajaLab?

Eco-designing packaging or choosing circular packaging is not an easy decision

- Ellen MacArthur Foundation
- Sustainability Packaging Coallition
- Cradle to Cradle
- Golden Design Rules
- PREVENT Waste Alliance

Up to 80%

Product´s ENVIROMENTAL impact is

DETERMINATED

By desicions made in the

DESIGN phase

ProUSAR
cooperación alemana DEUTSCHE ZUSAMMENARBEIT
Implemented by giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

74
References consulted

6
Workshops in major cities

+55
Companies, universities and experts

+25
Interviews

Category

Innovation Strategies

ECO-DESIGN FOR REDUCE

- Eliminate materials
- Use of renewable materials
- Use of recycled raw materials
- Process efficiency

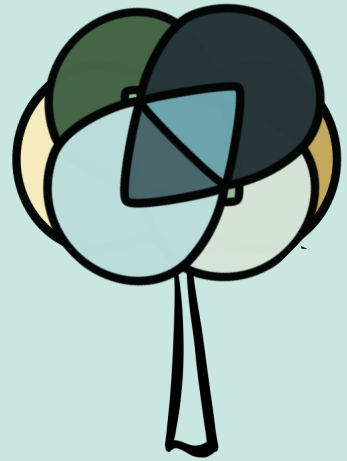
ECO-DESIGN FOR REUSE

- Refill
- Returnability
- B2B Return and reuse

ECO-DESIGN FOR ENABLE RECOVERY

- Design for recyclability
- Design for compostabilty

"A tree: nature's perfect model of circular economy"



Each innovation measure includes:

- ✓ Ease of application
- ✓ Guiding questions
- ✓ Resources required
- ✓ Actors
- ✓ Indicators
- ✓ Communication tips

ProUSAR
cooperación alemana DEUTSCHE ZUSAMMENARBEIT
Implemented by giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

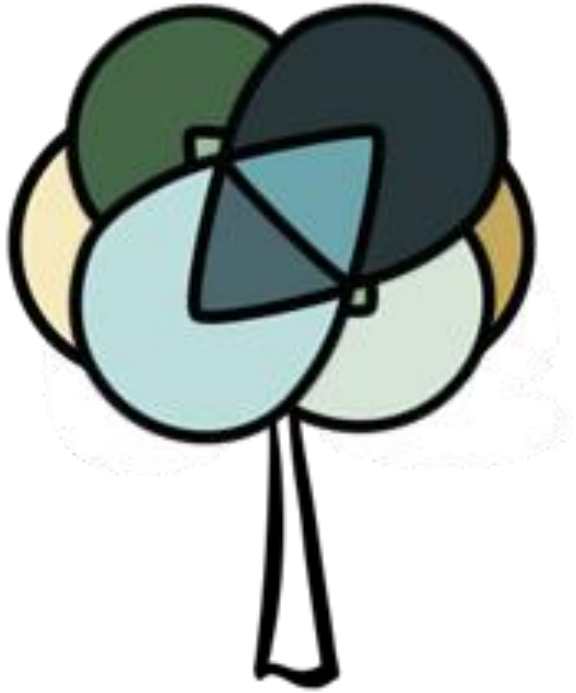
Applying CajaLab with 12 companies

4 different sectors

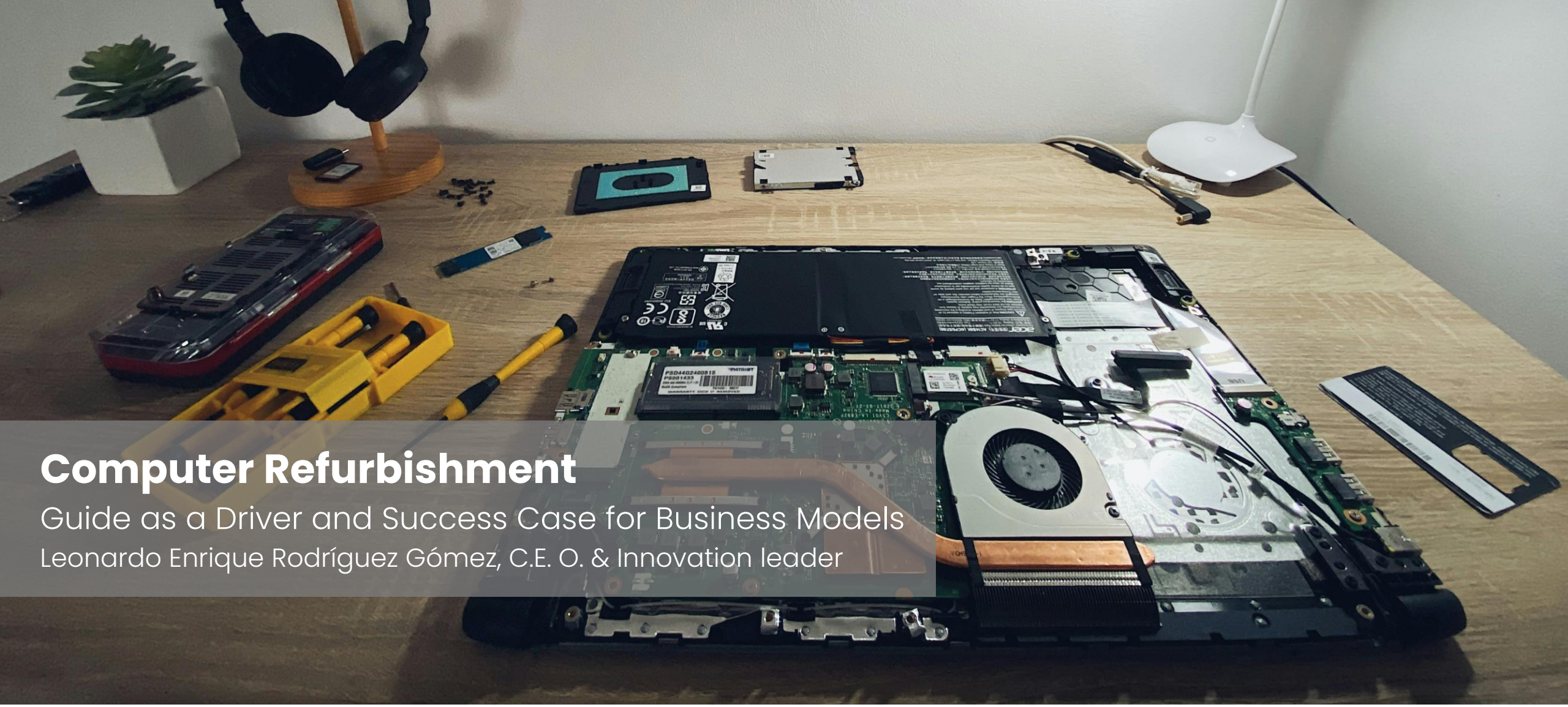
- Identification of the **key product or reference** to intervene
- Evaluation of applicable **circularity strategies**
- Engagement of **internal departments and key stakeholders**

CajaLab as a tool for circular innovation

- Enables **reassessment of existing initiatives** from new angles
- Triggers **strategic questions** around eco-design and systems thinking
- Supports **documentation and traceability** of innovation
- Raises awareness among **non-technical profiles**



CajaLab doesn't just diagnose — it connects, guides, and builds a circular vision.



Computer Refurbishment

Guide as a Driver and Success Case for Business Models

Leonardo Enrique Rodríguez Gómez, C.E. O. & Innovation leader

Reviven
RESIDUOS QUE COBRAN VIDA

ProUSAR

cooperación alemana
DEUTSCHE ZUSAMMENARBEIT

Implemented by
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Why promote innovation in the Circular Economy?

🖥️ **Impact of Computer Refurbishment**

🌱 **Environmental**

Up to 90% less CO_2 vs. manufacturing new equipment

Reduces e-waste by ~92%

💰 **Economic**

30–50% savings compared to new equipment

Global market expanding: $12.6 billion USD by 2032

🤝 **Social**

Improves access to technology in vulnerable areas

Colombia: +2.4 million refurbished devices delivered to public education

✅ **Sources**

Global E-Waste Monitor (2020, 2024)

ADEME (France, 2022)

Fraunhofer Institute (2023)

Refurbed, Cranfield University

Computers for Education Program (Colombia, 2019)

What is the tool?

A practical and technical guide that allows you to:

🔍 Diagnose: Evaluate the functional, aesthetic, and technical condition of used computers.

💾 Securely erase data. Ensure privacy by complying with international standards (NIST 800-88, DoD 52

🔧 Repair and recondition: Standardize cleaning, upgrade, repair, and quality control processes.

📦 Deliver equipment ready for a new life. Define optimal conditions for storage, packaging, and respor

📐 Design reconditioning laboratories. Includes technical criteria, workflows, and operational safety.

🌀 Impact: Turn waste into useful assets, reducing digital divides and supporting circular models.

What did this tool facilitate?

📋 **Process Standardization Defines clear phases:** diagnosis, secure erasure, reconditioning, testing, delivery.

🧪 **Improved reconditioning quality Ensures the functional, aesthetic, and safety conditions of each reconditioned device.**

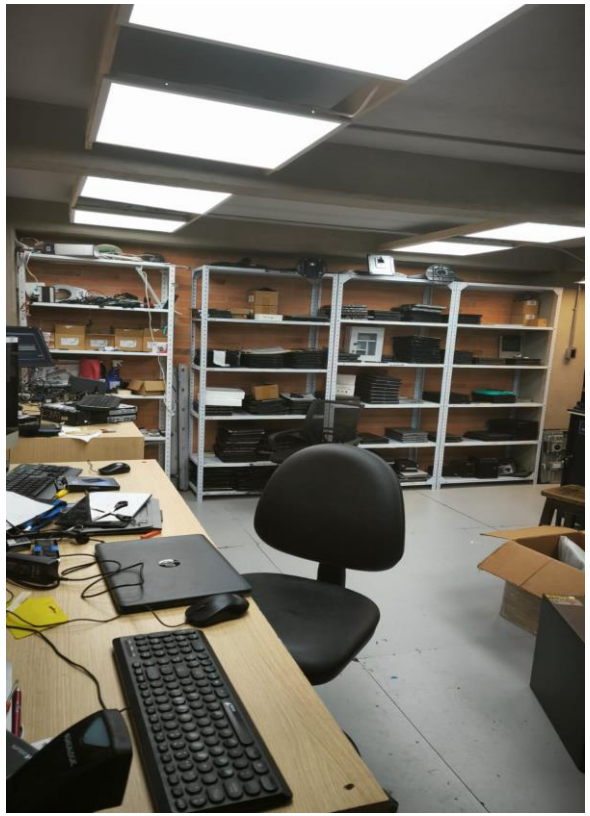
🔐 **Information Security Integrates data erasure protocols backed by international regulations.**

📊 **Data-driven decision-making Documents the status of equipment and allows for evaluating costs, times, and reconditioning feasibility.**

🏭 **Design of efficient technical spaces Provides guidelines for creating or adapting laboratories with specialized areas and secure workflows.**

🤝 **Replicability and scalability Facilitates the adoption of the model in other organizations, territories, or WEEE value chains.**

🧩 **Result: A practical, adaptable, and technical tool that improves the efficiency and viability of circular models.**



Case Study

- 🛠️ **Standardization of reconditioning processes Allows for the organization and application of uniform technical procedures in all phases of reconditioning.**
- 📑 **Preparation for certification under NTC 6352-2 Aligns practices with the requirements of the Colombian technical standard for reconditioning EEE.**
- 🌿 **Preparation for obtaining the Green Seal Contributes to compliance with environmental criteria to validate sustainable and responsible processes.**
- 🔌 **Expansion to other electrical and electronic devices Provides technical and methodological foundations to replicate the model in other types of WEEE.**
- 📈 **Market analysis in Colombia Provides input to understand trends, potential demand, and distribution channels for reconditioned equipment.**
- 🛒 **Definition of commercial parameters Establishes initial guidelines for sales in physical and virtual stores, under a circular business model.**

ecoindustria®
El corazón del medio ambiente en la industria

Next steps

🛍️ **Successful launch: physical store and virtual site active.** First stage of marketing underway with traceability, a circular seal, and an educational approach.

📚 **Publish the tool as a replicable guide.** Available for adoption by other managers, companies, and governments in Latin America.

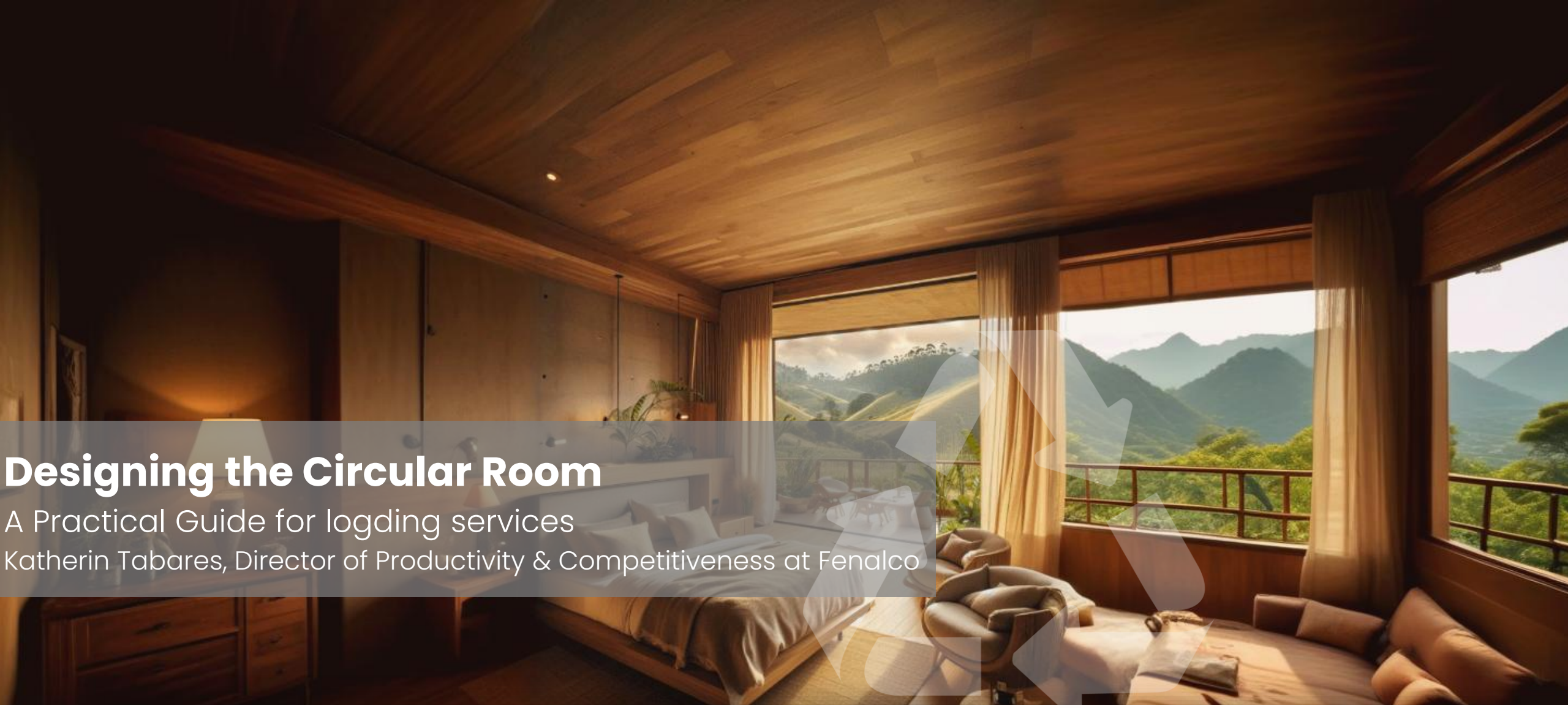
🎓 **Technical training and certification.** Development of training modules on reconditioning, regulations, and green seals.

✅ **Path to NTC 6352-2 certification.** Advance the technical and operational requirements to obtain national certification for reconditioning of EEE.

🔍 **Impact monitoring and continuous improvement.** Measurement of key indicators: quality, recovery, circularity, technological access.

🔌 **Scaling to other EEE.** Adapt the tool to appliances, lighting, or other electronic waste.

🤝 **Strategic partnerships for expansion.** Consolidate public-private cooperation to promote circular economy models in Colombia and the region.



Designing the Circular Room

A Practical Guide for logding services

Katherin Tabares, Director of Productivity & Competitiveness at Fenalco

Fenalco

ProUSAR

cooperación alemana
DEUTSCHE ZUSAMMENARBEIT

Implemented by

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

What is the Circular Economy Room Manual?

Guides hotels in redesigning rooms with circular principles

Structured in 5 phases:

1. Diagnosis
2. Circular design
3. Operational transition
4. Monitoring & KPIs
5. Guest engagement (QR, signage, incentives)

. Adaptable to regional contexts (coast, highlands, urban)

Implementation

FENALCO enables:

1. Replication in retail & services sectors
2. Training in AI + circularity
3. Public-private pilots (ProUSAR Fund)
4. Licensing & monetizing methodologies

Hotels can:

1. Start with one model room
2. Measure environmental & economic impact
3. Lead in sustainable tourism (Zuana & BioHotel cases)

Call to action

Why this matters globally:

- The Circular Room Manual is a **scalable model** for other Global South economies.
- Integrates **AI, circularity, and local adaptation** — ideal for replication in tourism, retail, and real estate sectors.

What we seek:

- Partnerships with universities, cooperants, climate tech startups, and multilateral agencies
- Collaboration to adapt, fund, and expand the model in other territories
- Open innovation ecosystems for sustainable commerce

"A circular room is only possible when the entire value chain is transformed."

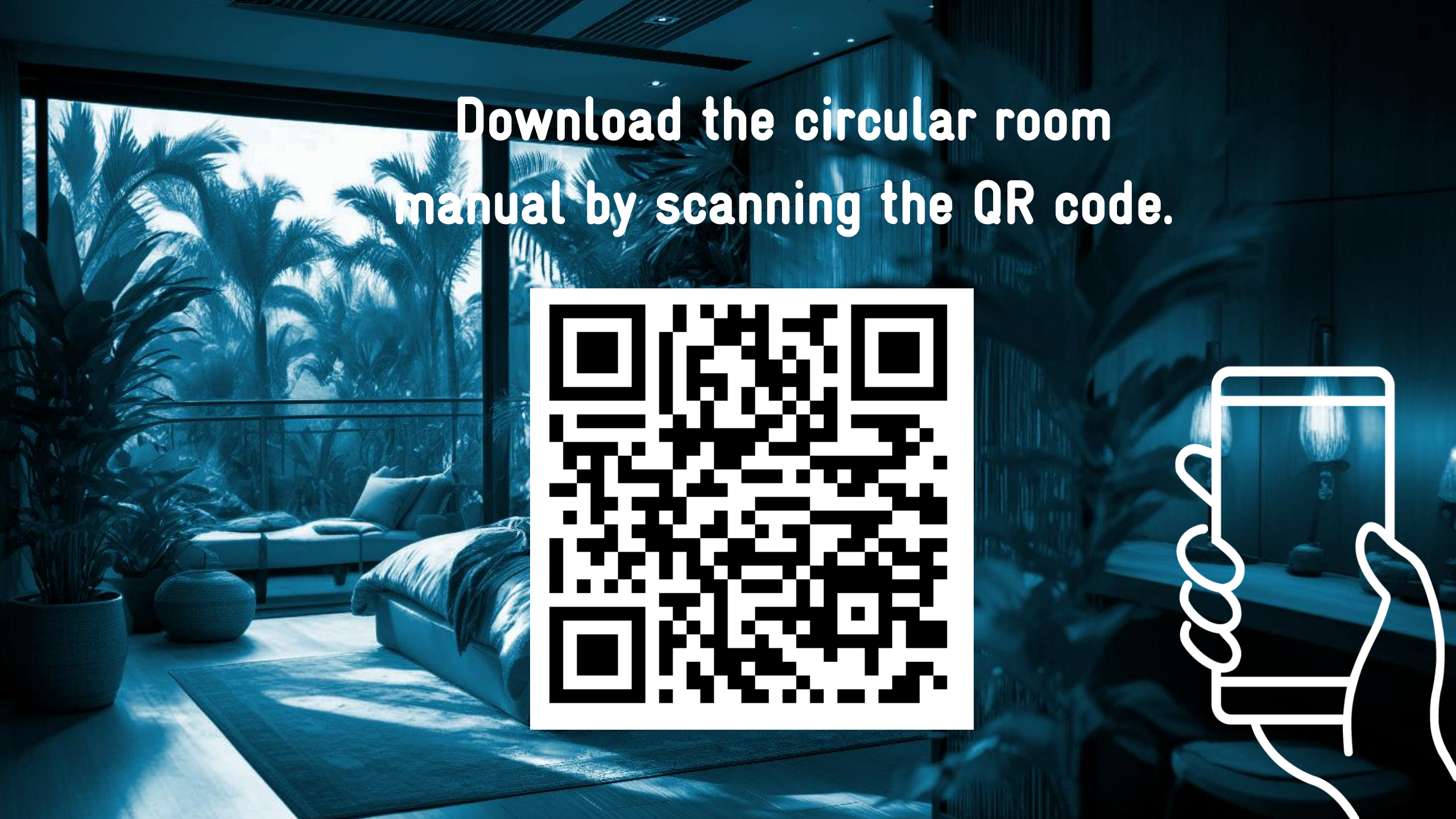
From Hotel as Consumer to Hotel as Circular Ecosystem

Key Productive Linkages:

- Suppliers of circular inputs (textiles, furniture, cleaning products)
- Sustainable designers and architects
- Committed hotel operators
- Waste managers and recyclers
- Local circular economy enterprises

Expected Outcomes:

- Effective waste reduction
- New sustainable business opportunities
- Activation of regenerative local economies


Download the circular room
manual by scanning the QR code.

Regulatory Changing Moves

Voluntary EPR models in the textile sector

Leading to a regulatory approach in Colombia

Ruben Goldsztayn, Director of Sustainable Production and Consumption at the National Business Association of Colombia, ANDI

ANDI | MÁS PAÍS

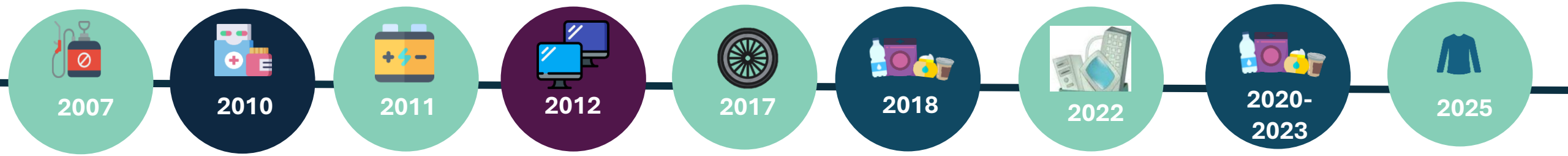
ProUSAR

cooperación alemana DEUTSCHE ZUSAMMENARBEIT

Implemented by

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Driving Circularity in Colombia: The Regulatory Evolution of EPR Schemes



2007	2010	2011	2012	2017	2018	2022	2020-2023	2025
Agricultural pesticide packaging	Used or expired pharmaceuticals	Household Pesticides Lead-acid batteries	Car tires Batteries Lamps Computers and peripherals	Used motorcycle and off-road tires	Household packaging	E-waste	Adjustments to household packaging regulation and inclusion of single-use plastics	Textile Voluntary model

ANDI | MÁS PAÍS

ANDI's Crucial Role in Shaping Colombia's EPR Regulatory Framework

ProUSAR
cooperación alemana DEUTSCHE ZUSAMMENARBEIT
Implemented by giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Colombia's Textile Circularity in Figures

174.411Ton

Textiles put on the market annually

45%

Mainly in Bogotá and Medellín

63%

Fabrics are imported from India and China

97,8%

Textiles to landfills or N/A

2,2%

Post-consumer textiles that are reincorporated into reuse or recycling.

0,03%

Textile-textile recycling

79% Donate unused/unwanted clothes

59% Don't think about caring for the environment when buying clothes

53% Thinks second-hand clothes are dirty

Sources: Textile Sector Baseline. 2024 / Study "The World of Second-Hand Clothing". RADDAR, 2024.

ProUSAR
cooperación alemana DEUTSCHE ZUSAMMENARBEIT
Implemented by giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

RENOVAMODA – Voluntary EPR pilot for textiles

Objective: the first textile post-consumer management program in Colombia under an EPR scheme

SCOPE

- **6** months
- **15** containers
- **Over 10 tons**
  (**98%** reused, recycled, or recovered)
- **2** main cities
- Clothing, household linen and workwear

RENOVA MODA

COMPANIES

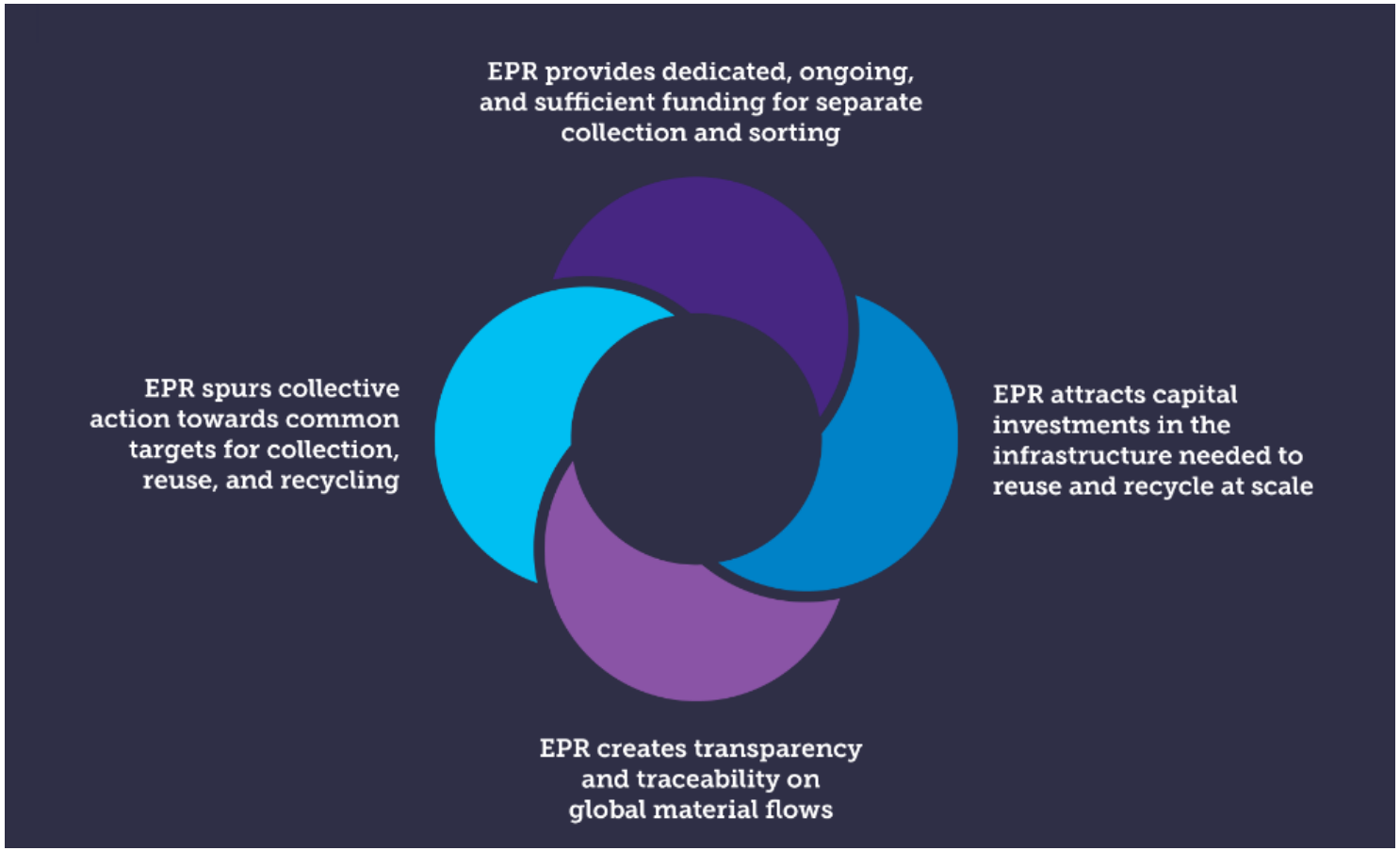
Crystal S.A.S
Comertex
fabricato
distrihogar
CO&TEX
CÍCL-CO®
Viannel
Elegancia, Calidad e Innovación

RENOVAMODA – Next steps

RENOVA MODA

WORKING GROUPS

- Producers and waste residues
- Reverse logistics and traceability
- Close the loop and innovation



Source: https://www.ellenmacarthurfoundation.org/epr-policy-for-textiles

ProUSAR

cooperación alemana DEUTSCHE ZUSAMMENARBEIT

Implemented by giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Textile Circularity Roundtable: The Path Toward EPR

Comprised of

Ministerio de Ambiente y Desarrollo Sostenible
Ministerio de Comercio, Industria y Turismo
ANDI
Fenalco
Colombia Productiva
Secretaria de Ambiente

Priority Topics

- Policies and regulations on circularity
- Circularity best practices
- Responsible consumption habits
- Capacity building

In the process of regulation

Integrated and collaborative work

The importance of connecting public and private sectors

Laura Florez, Director of the Plastic Research Institute in Colombia ICIPC

ICIPC

ProUSAR

cooperación alemana
DEUTSCHE ZUSAMMENARBEIT

Implemented by

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

ICIPC – Plastics Research Institute in Colombia

- 32 Years of Foundation
- Private non-profit initiative
- Support of industry's research needs
- Training
- Laboratory services
- Certification: PCR content and ecodesign
- Focus: Plastics and Rubber

ICIPC

Background

- Legislation in Colombia – Prohibition of Single use plastics
- Alternative substitutes – Biodegradable plastics: “Grey” areas, definition of “degradation under environmental conditions”
- Need to support regulation:
  - Definition of biodegration standards
  - Tests to be conducted in the industry
  - Map “who is who” in the country
  - Experts available

Goal

- To produce an interest group with an academic network
- Consultation experts who have worked both in Colombia and Outside
- Develop unbiased information to support decision making by the environment industry
- Avoid commercial interests
- GIZ: Support in the National Roundtable, logistics and Govern Policies development
- Information custody
- Reliable and neutral partner

Fraunhofer

AIMPLAS

Universidad de los Andes

Universidad del Cauca

ICIPC

UNIVERSIDAD EAFIT

Activities

Knowledge Alliance Colombia and Germany

ProUSAR

cooperación alemana
DEUTSCHE ZUSAMMENARBEIT

Implemented by
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

WORLD CIRCULAR ECONOMY FORUM 2025

ACCELERATOR SESSION

Stories that Inspire

Tronex: Lithium battery remanufacturing

Circular innovation for e-mobility

Federico Vasquez, Director of special projects at Tronex

TRONEX®

ProUSAR

cooperación alemana
DEUTSCHE ZUSAMMENARBEIT

Implemented by

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Recobatt

Segunda Oportunidad para Baterías de Movilidad Eléctrica

IS

R

REFURBISHMENT

WE AIM TO SOLVE FOUR PROBLEMS TO THE WORLD

1. **End-of-Life Battery Management: Unlocking Hidden Value**
   (seeing value where others see waste.)

2. **Cell-Level Diagnostics: Precision Battery Health Assessment**
   (Precision Software and Hardware for Unlocking Battery Cell Insights)

3. **Second-Life Battery Remanufacturing: Engineered for Peak Performance**
   (Designing and Manufacturing Batteries to Exceed Industry Standards)

4. **End-of-Life Cell Valorization: Reclaiming Resources, Closing the Loop** *(Materials not suitable for second-life applications are recovered for raw material utilization)*

- Identification of end-of-life mobility batteries (electric vehicles, scooters, bicycles).
- Logistical coordination with manufacturers, distributors and recyclers, safe logistics and classification by state and origin.
- Prevention of environmental and safety risks in transportation and storing.

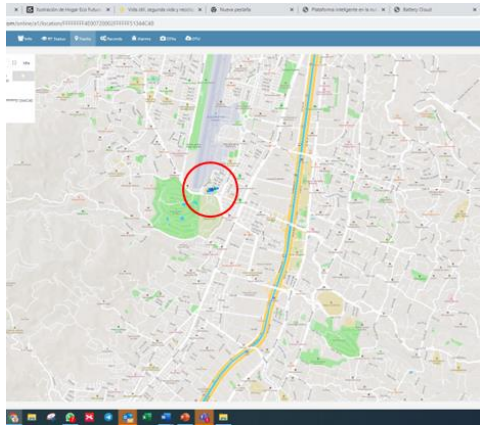
2. Precision Battery Health Assessment

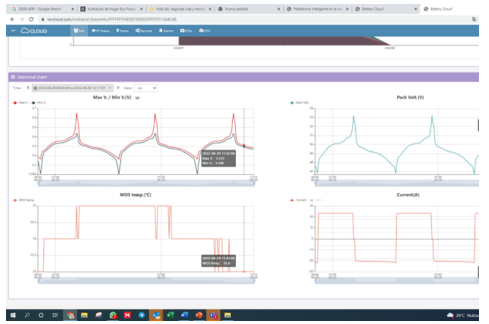
a. Preliminary Diagnosis and Disassembly

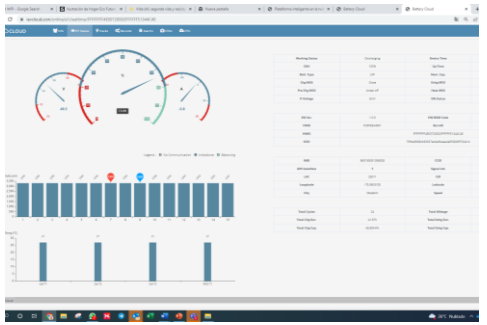
Evaluate functional status and separate reusable parts with technical standards.

- Visual inspection, basic voltage testing, and usage history review.
- Safe separation of modules and cells.
- Minimization of risks and maximization of recovered value.

2. b. Detailed Diagnosis Cell by Cell







- Capacity, internal resistance, and impedance spectroscopy testing.
- Detection of physical, chemical or electrical faults.
- Precise selection of cells suitable for second life.

3. Second-Life Battery Remanufacturing

a. Design of New Second Life Batteries

- Strategic selection of balanced cells.
- Customized configurations according to application (telecommunications, renewable energy).
- BMS system integration for control and safety.

3. b. Final Assembly and Validation

Technical execution that closes the loop and ensures operational functionality.

- Cell, BMS, and enclosure integration.
- Performance, safety, and durability testing.
- Preparation for its second life in new applications.
- Use of the brand RECOBATT

4. VALORIZATION, RECYCLING AND CIRCULAR ECONOMY OF BATTERIES

REPROCESSING AND MATERIAL RECOVERY OF LITHIUM, COBALT, AND NICKEL (THROUGH A STRATEGIC PARTNER)

REDUCTION OF HAZARDOUS WASTE AND CARBON FOOTPRINT .

ACTIVE CONTRIBUTION TO THE CIRCULAR ECONOMY AND SUPPORTING ENERGY TRANSITION

A Secure and Environmentally Responsible Path to Battery Second Life

TRONEX

Integra en sus procesos los Objetivos de Desarrollo Sostenible, impactando positivamente en la sociedad, que van desde la fabricación de pilas, su distribución, hasta el cierre de ciclo de vida de los productos, mediante programas posconsumo, pasando también por el diseño de proyectos de energía y soluciones para la industria que aporten a la economía y al desarrollo del país.

Xiclo: Reusable system for packaging

Circular innovation for delivery

Ana Maria Villegas, CEO and Co-Founder at Xiclo

xiclo

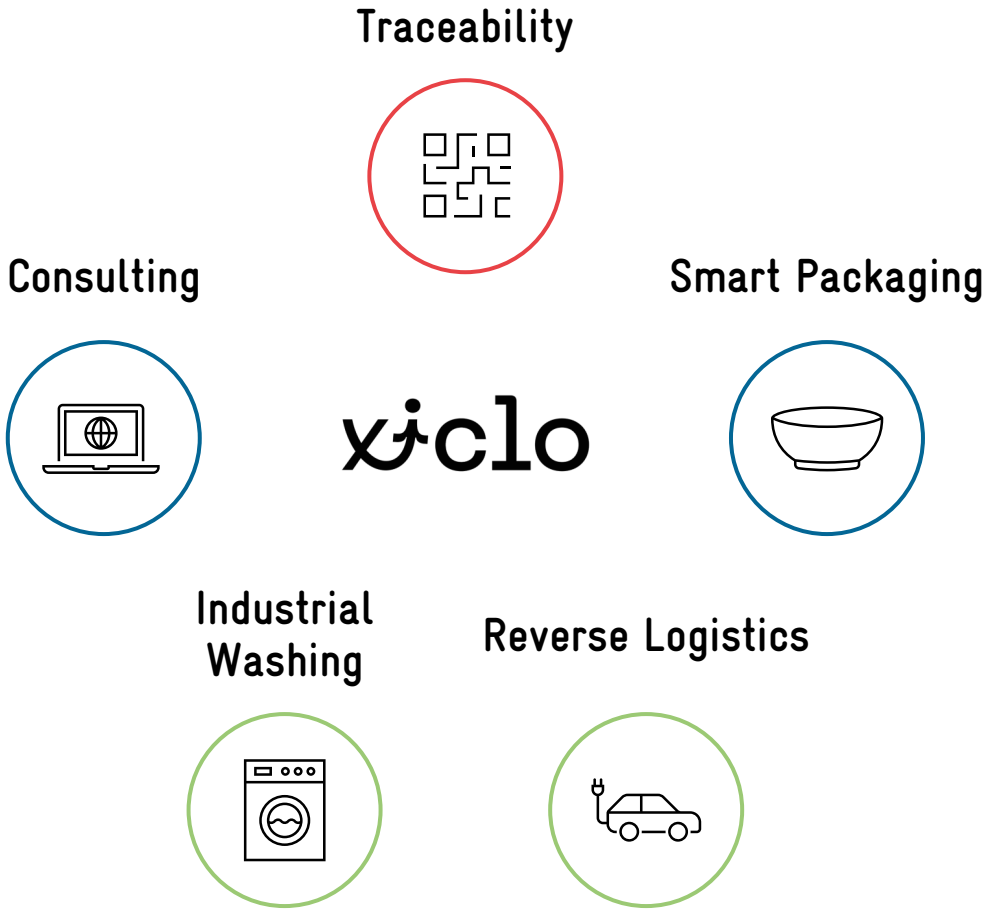
ProUSAR

cooperación alemana
DEUTSCHE ZUSAMMENARBEIT

Implemented by

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Xiclo develops technology to make reuse scalable



Xiclo has managed to maintain, on average, a rate of return of

98%

Demonstrating the effectiveness of the system

ProUSAR
cooperación alemana
DEUTSCHE ZUSAMMENARBEIT
Implemented by
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

TAKAMI – Scaled and Organic Adoption

The partnership with Takami began in 2024 with a pilot in its brand Osaki. Although access required the Xiclo App, user receptiveness was high. Interestingly, expansion was not driven by the company, but by users themselves, who requested the system in other brands. This demand led Takami to scale up the system strategically, integrating it into its delivery channel, removing tech barriers and enhancing the user experience.

411 kg Waste avoided

1.540 L Water saved

Reuse scalability is not just about technology but about listening to users and adapting to real operations.

EL CORRAL – On-site Consumption Pilot

The Xiclo pilot at El Corral tested the system in a high-traffic, fast-paced setting for 6 months. Although it was implemented in a single location and only for milkshakes, the pilot achieved 340 uses, showing strong scalability potential. The main barriers were the app download requirement and lack of staff incentives. These insights led to the development of the Tap&Reuse model, which removes tech friction and improves the user experience in quick-service environments.

6,8 kg Waste avoided

6 kg CO_2 emissions avoided

In high-turnover settings, adoption relies on frictionless user experience, clear staff incentives, and seamless integration into daily operations.

JUAN VALDEZ – First Closed Ecosystem

In partnership with ANDI, Juan Valdez launched the first closed-loop pilot for reusable cups: a coffee bar operating 100% with returnable cups. Designed for a controlled setting with recurring users, the pilot recorded over 8,200 uses in 8 weeks, with strong staff engagement. Each cup averaged 12.44 uses, proving operational and environmental efficiency without digital traceability. High user satisfaction (NPS >9) and perceived environmental value led the brand consider to expand the model to other institutional bars.

53,6 kg Waste avoided

12,44 Uses per cup

Institutional settings with recurring habits are ideal for reuse. The pilot highlighted the need to communicate hygiene standards, enhance cup design, and plan traceability for future scaling.

D´CASA – Reuse Model in Meal Plans

The pilot with DCASA validated Xiclo’s effectiveness in collective dining contexts with high usage frequency. Without the need to download apps or register, the system integrated seamlessly into the daily meal plan operation. In just a few weeks, over 7,000 uses were recorded, proving that recurrence and operational simplicity are key to success in these environments.

141,9 kg Waste avoided

126 kg CO_2 emissions avoided

In meal plans, recurrence is key to ensuring the operational and financial sustainability of reuse systems.

ProUSAR
cooperación alemana
DEUTSCHE ZUSAMMENARBEIT
Implemented by
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

CORONA SUNSET –
Reusable Cups in Large-Scale Events

The Corona Sunset Festival in 2023 was the first massive event in Colombia to implement reusable cups not intended as souvenirs. With 6,000 attendees, a return scheme based on user trust was piloted, with 5,400 cups in rotation and an on-site return logistics system managed by Xiclo. The operation included collection bins, mobile return points, and a temporary washing station installed at the venue. The experience was supported by educational actions, social media campaigns, and staff training.

65 kg Waste avoided

405 kg Reusable packaging kept in circulation

Large-scale events are viable settings for reuse when combined with on-site logistics, cleaning infrastructure, and effective communication before, during, and after the event.

PÁRAMO LAB · ABInBev · Corona

ProUSAR · cooperación alemana DEUTSCHE ZUSAMMENARBEIT · Implemented by giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

The support of the ProUSAR

The ProUSAR project has been a key ally in consolidating the Xiclo system. Its support enabled us to:

1. Connect with strategic partners

2. Fund pilot projects that helped us understand the market

3. Strengthen our technology through specialized technical assistance

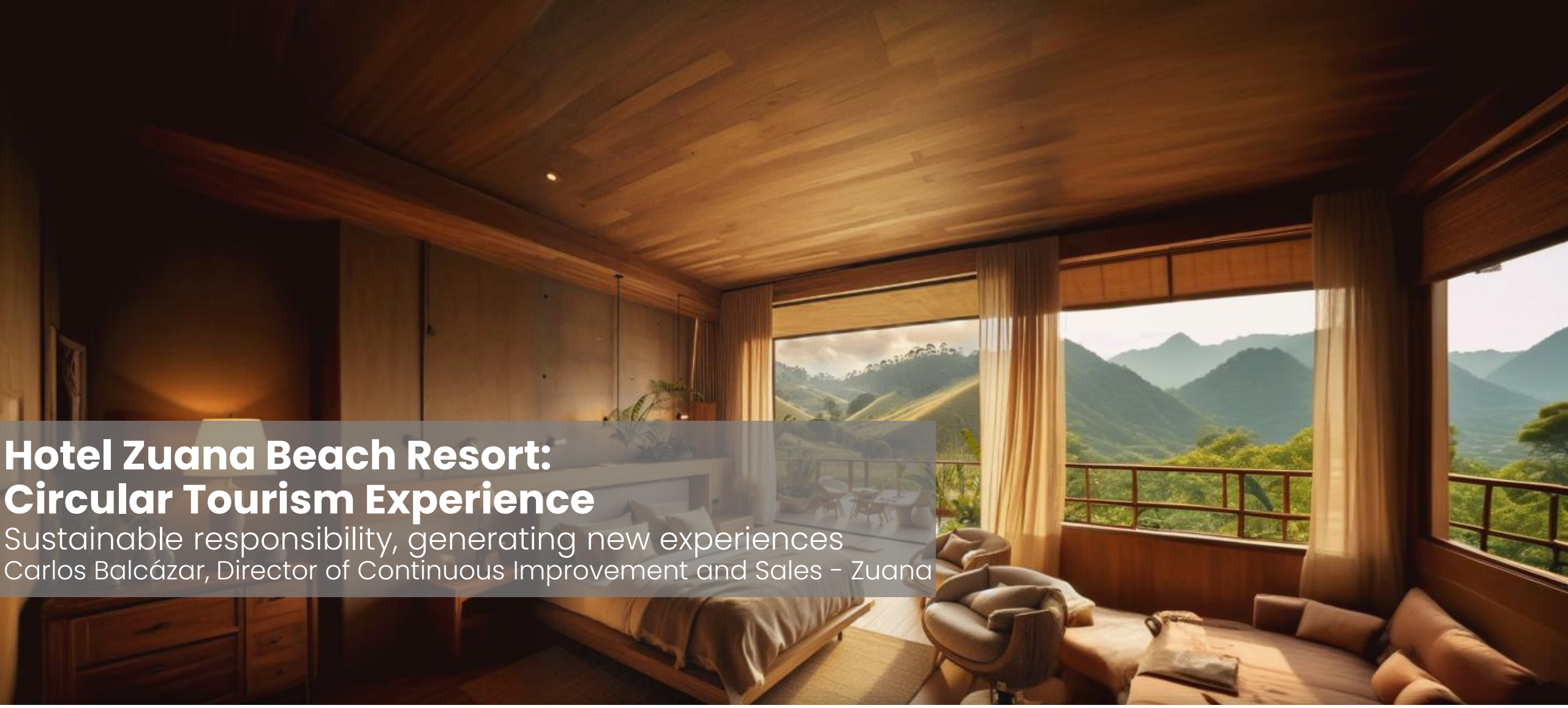
4. Expand our packaging inventory to scale operations

5. Increase the visibility of our solution as a national sustainability provider

6. Access results-based payment schemes thanks to the achievements obtained

ProUSAR

Unlike other general financing mechanisms, ProUSAR deeply understands the challenges of traceability, reusability, and circularity in packaging. This understanding has been decisive in supporting technical solutions from early stages, upstream in the value chain.



Hotel Zuana Beach Resort: Circular Tourism Experience

Sustainable responsibility, generating new experiences

Carlos Balcázar, Director of Continuous Improvement and Sales - Zuana

ZUANA BEACH RESORT
RNT: 1138

ProUSAR

cooperación alemana
DEUTSCHE ZUSAMMENARBEIT

Implemented by

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Hotel Zuana Beach Resort: A Circular Tourism Experience

The goal: Build a **More Sustainable Hospitality Model** at Zuana Beach Resort

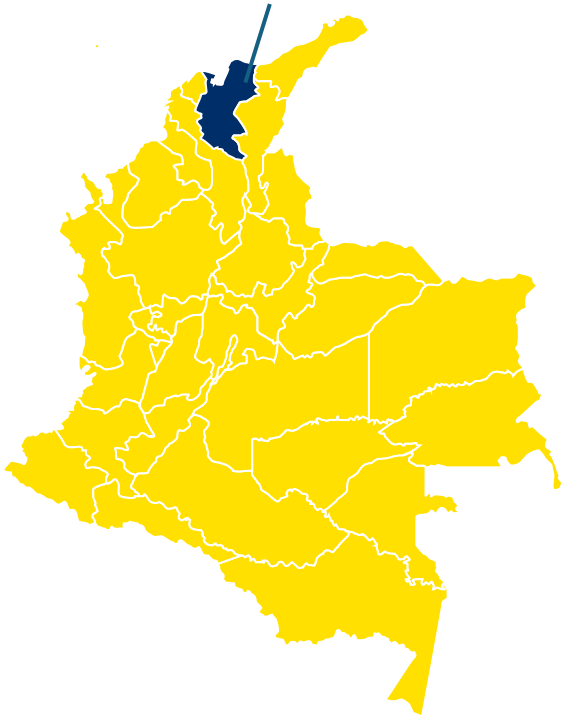
ZUANA
BEACH RESORT
RNT: 1138

Exclusive 5-star family resort that participated in ProUSAR's

"Circular Hotel Room Pilot Project"

From Sep '24 – Feb '25

Santa Marta, Colombia



ProUSAR | cooperación alemana DEUTSCHE ZUSAMMENARBEIT | Implemented by giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Hotel Zuana Beach Resort: A Circular Tourism Experience

How did we do it?

1. Mapped material flows
2. Identified opportunities for waste reduction
3. Selected locally sourced circular products & services
4. Guaranteed alignment with hotel visions, target group & budget
5. Implemented circular alternatives

ProUSAR | cooperación alemana DEUTSCHE ZUSAMMENARBEIT | Implemented by giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

From Waste to Value

How we started…

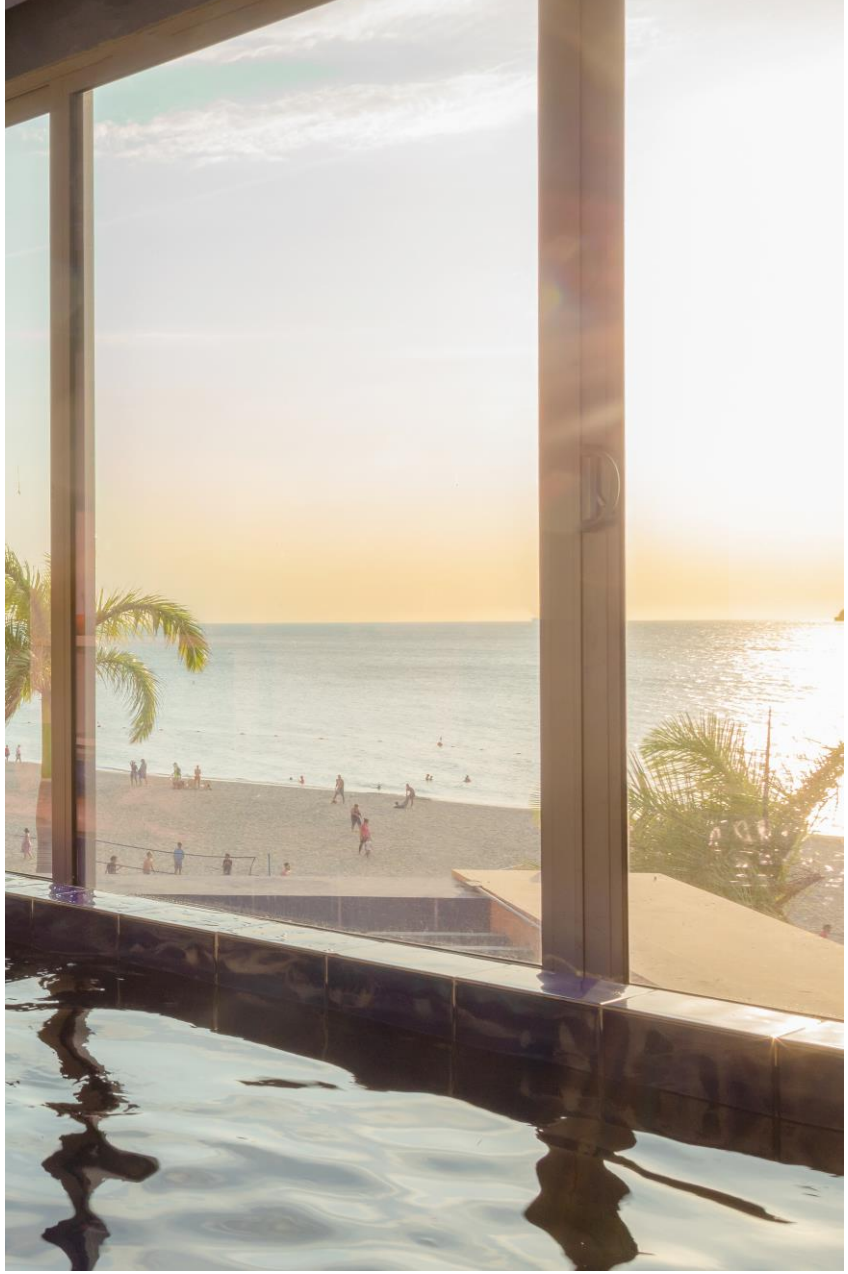
We understood that most waste in the hotel sector is generated due to **mismanagement, lack of knowledge about alternatives & general culture.**

At Zuana, we were initially sceptical about the circular hotel room due to **expected high costs of implementation** (f. ex. for initial investments, such as recycling facilities or recollection mechanisms).

Limited understanding of circular economy principles beyond recycling of plastic, metal or carton.

We slowly expanded our concept of **sustainability**: sustainability is not only environmental, it also means **social and economic development.**

Shifted mindset: used items are no longer only waste, but **waste can be a social & economic resource and a motor for development**



ProUSAR | cooperación alemana DEUTSCHE ZUSAMMENARBEIT | Implemented by giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

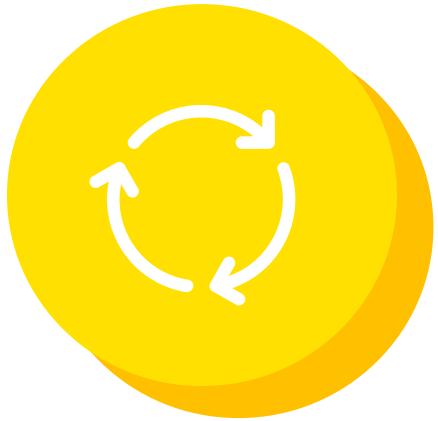
From Waste to Value

The 3 Rs of a Circular Economy

Reduce

- Eliminate
- Rethink
- Reduce

Reuse



- Reuse
- Repair
- Recondition
- Remanufacture
- Reconvert

Recycle

- Recycle
- Recover

From Waste to Value: Our Circular Room

Textiles

- Selection of a provider for the adequate handling of **textile waste**
- Procurement of **mattresses** with a **modular design**
- Optimizing products' life cycle through **addequate cleaning, reparation, and storage**
- **Up- and downcycling** of used textiles.
- **Sales and donation** of used textiles

Packaging

- Installation of a **refill station for drinking water**
- Purchase of **reusable and returnable packing** (shampoo dsipensers)
- Purchase of packaging made from **renewable, recycled or recyclable** material
- Adequate handling of **single-use plastic products**
- Promotion of a **culture of separation** at the source

Electronics

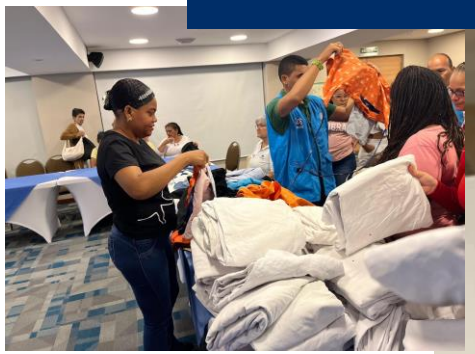
- Shared use of **irons by guests**
- Implementation of an **automization system** for A/C
- Purchase of **energy-efficient** electronics
- Preventive maintenance
- Purchase of electronic equipment with recycled material

ProUSAR
cooperación alemana DEUTSCHE ZUSAMMENARBEIT
Implemented by giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Our Circular Initiatives

Installation of water refill stations & refillable amenities

Used textiles transformed into…



Decorative baskets

Cleaning cloths

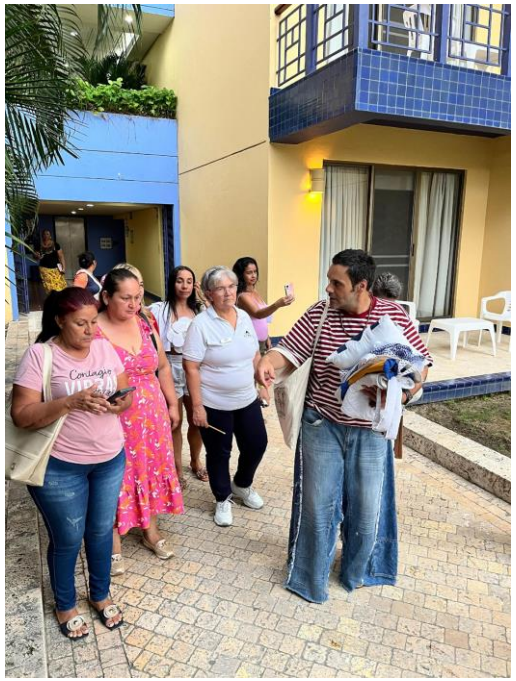
Bags for waitress trolleys & broom and mop protectors

Communication material

Challenges

- Limited availability of **local sustainable suppliers.**
- **Insufficient data** on material flows.
- Need for **better internal tracking systems.**
- Key learning: **Sustainability and circularity as a holistic strategy.**

Fundación Urumo upcycling used textiles



Building Community Partnerships

Our local allies

SUCOF FC

AGRO IK ORGANIC PRODUCTS

BIORGANICOS NUTRILOM PL

BASURA CERO SANTA MARTA E.S.P.

Fundación Puntos Verdes

Our impacts

- Built **alliances** with local textile, packaging & e-waste recyclers.
- **34 tons of waste reintegrated** into the productive cycle (27% increase)
- **Extended product life** through reuse and remanufacturing
- **Substituted single-use items** with refill systems and reusable packages
- **Improved energy efficiency** with smart systems
- **6 tons of food waste** transformed into fertilizer
- Promoted **socioeconomic inclusion** with Fundación Urumo

WORLD CIRCULAR ECONOMY FORUM 2025

ACCELERATOR SESSION

Contact GIZ Colombia

Peter Foerster
ProUSAR Project director
peter.foerster@giz.de

Daniela Nossa Diaz
Circular Economy Technical Advisor
daniela.nossadiaz@giz.de

Our speakers contact

Jennifer Villalba
Circular Economy Technical Advisor
jennifer.villalbapoveda@giz.de

Leonardo Forero
Circular Economy consultant at PMTech
lforero@pm-tec.co

Leonardo Enrique Rodríguez
C.E. O. & Innovation leader Reviven
Leonardo.rodriguez@ecoindustria.com

Katherin Tabares
Director of Productivity and Competitiveness at Fenalco
katherinetabares@fenalco.com.co

Ruben Goldsztayn
Director of Sustainable Production and Consumption at ANDI
rgoldsztayn@andi.com.co

Laura Florez
Director of ICIPC in Colombia
lflorez@icipc.org

Carlos Federico Vasquez Jiménez
Director of Special Projects at Tronex
Federicovadquez@tronex.com

Ana María Villegas
CEO and Co-Founder at Xiclo
daniela.nossadiaz@giz.de

Carlos Balcázar
Director of Continuous Improvement and Sales at Hotel Zuana Beach Resort
daniela.nossadiaz@giz.de

cooperación alemana
DEUTSCHE ZUSAMMENARBEIT

Implemented by
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH