企业ESG如何赋能回收体系

How Corporate ESG Empowers the Collection & Recycling system

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中国再生资源回收利用协会
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当前回收体系的挑战

The challenge of current collection & recycling system

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问题1：经济驱动对低值可回收物无效

Problem 1: Market driven doesn't work on low value recyclables

- 有价值的包装废弃物受到循环回收企业的青睐，如纸箱版、PET瓶、易拉罐等

- Valuable packaging waste is favored by recycling companies, such as cardboard boxes, PET bottles, cans, etc

- 但仍有大量的包装废弃物，虽然是可回收物，但是因为价值太低，最后混在"垃圾"中没有得到回收

- There are many typical low value recyclables, are not sorted into recycling value chain and still be mixed into "Waste"

问题2：数据统计不规范、没有可追溯性

Problem 2: Irregular data statistics and lack of traceability

- 目前绝大部分的包装废弃物仍然以传统的"废品交易"方式进行，而废品回收业者的数据统计缺少检验工具、缺少追溯性、缺少监督机制；
- At present, the vast majority of recyclable materials are still traded through traditional "waste trading" methods, and the data statistics of waste recycling operators lack inspection tools, traceability, and supervision mechanisms;

问题3：用户年轻化，回收的需求也在变化

Problem 3: About comsumers, young generations don't care about income from waste deal, but rather care about the feeling

- 随着生活水平的提高和生活习惯的改变，大部分用户逐渐从"为钱分类"转变到"为环境分类"；

- With the improvement of living standards and changes in lifestyle habits, most users are gradually shifting from "sortinging for money" to "sorting for the environment";

- 越来越多的青年用户，更看重垃圾分类过程的愉悦度和荣誉感，对于可回收物的价值并不放在首位。

- More and more young users value the pleasure and sense of honor in the process of garbage classification, and do not prioritize the value of recyclable materials.

问题4：品牌企业需要更多元化的服务
Challenge 4: Brand owners need more diversified waste management services

- 随着品牌企业在可持续发展方面的持续推进，越来越多的企业有自己的包装废弃物处置目标；
- With the continuous promotion of sustainable development by brand enterprises, more and more companies have their own waste management goals;

- 目前的处置企业仍着眼于再生利用的价值，无法为品牌企业提供多样化的定制服务。
- Currently, collection & recycling companies still focus on the value of recycling and are unable to provide diversified customized services for brand enterprises.

品牌企业回收利用案例

Brand owners' collection & recycling case studies

02

饮料纸基复合包装：利乐
Used beverage carton: Tetra Pak
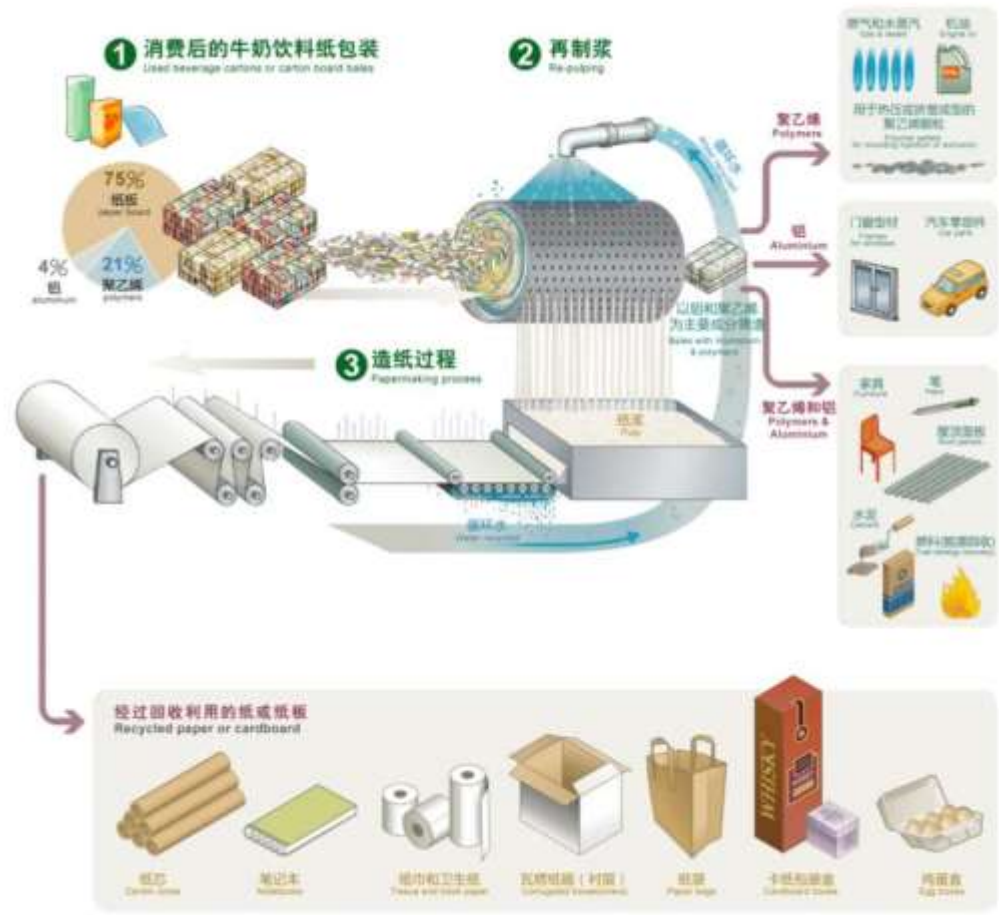
回收目标：40%的回收率（2025年，中国EPR要求）
回收方式：扶持再生厂家和回收商，推动消费后的包装回收
回收挑战：价值较低，回收端仍是瓶颈
推动时限：长期推进，建立可持续产业链

Target: By 2025, achieve 40% recycling rate (China EPR scheme)
Approach: Support collection network building and recycling technology
Challenge: Low Value, collection is the bottleneck
Term: Long term, recycling value chain building

玻璃酒瓶包装：保乐力加
Glass bottle: Pernod Ricard

回收目标：商销渠道90%回收率，避免产品被造假
回收方式：专项回收服务商，附加破碎处置
回收挑战：成本高
推动时限：长期推进（回收方式改变，从瓶子到瓶塞）

Target: 90% recycling rate via commercial sales channels, rrevent packaging materials from being used to counterfeit alcohol
Approach: Specialized collection & recycling service provider with additional crushing disposal
Challenge: Low Value, high cost
Term: Long term (from bottle to cork)

日用品包装：高露洁
Daily necessities packaging: Colgate

回收目标：2025年100%可回收，使用25%PCR，减少1/3原生塑料
回收方式：让参与者寄回口腔护理产品包装，给予积分
回收挑战：依赖于企业活动预算
推动时限：活动性质，按预算推进

Target:　　By 2025, achieve 100% recyclable, 25% PRC in it's packaging, reduce 1/3 new plastic using (base on 2019)
 Approach: Collection events via partner, linked with it's marketing program
Challenge: Low Value, collection cost is high
Term:　　　Long term + Campaign based

高露洁牙膏软管变身的挎包与收纳袋

谁能想到，每天刷完牙后随手扔掉的牙膏包装，可以变成拉链灵活、质地坚韧的环保包袋?

本牙膏管已升级成
可回收环保材料*

高露洁首创可回收牙膏管并无偿分享技术。高露洁呼吁可持续消费，共同守护地球环境。

PURPLE⁺
WHITE
色修美白

TERRACYCLE

保健品包装：三精蓝瓶

Health product packaging: HARBIN PHARM. Group SANJING PHARMACEUTICAL

回收目标：包装回收+环保宣教+促进销量
回收方式：回收三精蓝瓶，最多的十组家庭可获得全家新加坡旅游大奖
回收挑战：成本高、难持续
推动时限：短期活动

Target: Packaging collection + environmental education + sales promotion

Approach: The large-scale event to recycle the Three Essence Blue Bottles, where the top 10 families can win the Family Singapore Travel Award

Challenge: High collection cost, completely dependent on the campaign budget

Term: Campaign based

咖啡胶囊：雀巢
Coffee capsule packaging: Nespresso

回收目标：到2025年实现100%可回收，并没有包装物进入填埋或者环境中的废弃物
回收方式：发放回收袋，用APP进行回收
回收挑战：回收成本和处置成本较高
推动时限：长期

Target: By 2025, achieve 100% recyclabe or reusable,
            No packaging materials have entered the landfill or environmental waste

Approach: Distribute collection bags and use the APP for picking up

Challenge: High collection and recycling cost

Term: Long term

外卖餐盒：美团"青山计划"
Takeout food box: Meituan's "Green Mountain Plan"

回收目标：推动绿色消费、支持可循环利用的绿色包装产品的研发，探索塑料餐盒的规模化回收，并参与行业标准的制定，建立环保包装推荐名录

回收方式：设立"青山公益专项基金"，支持再生厂家和回收产业链建设，推动循环利用包装的研发

回收挑战：体系不成熟，回收难度大

推动时限：长期推进

Target: Promote green consumption, support the R&D of recyclable packaging products, explore the large-scale recycling of plastic lunch boxes, participate in the formulation of industry standards, and establish a recommended list of environmentally friendly packaging

Approach: Establish the "Green Mountain Fund" to support the construction of recycling manufacturers and collection / recycling industry chains, and promote the R&D of recycled packaging

Challenge: High collection cost, diffuct to pick up

Term: Long term

硬质塑料包装：联合利华
Rigid plastic packaging: Unilever

回收目标：2025年使用25%回收料用于包装
　　　　　2025年支持塑料回收量不低于自身塑料使用量
回收方式：扶持再生厂家和回收商，推动消费后的包装回收
回收挑战：NA
推动时限：长期

Target:　By 2025, achieve 25% PRC in it's packaging
　　　　Collect and process more plastic packaging than it sell
Approach: RVM & collection events, linked with it's marketing program
Challenge: Low Value, collection is the bottleneck
Term:　　Long term

软塑复合包装：安姆科
Flexible plastic composite packaging: Amcor

回收目标：到2025年实现100%可回收或可再利用，建立可持续的回收价值链

回收方式：通过高值化再生利用，推动回收产业链发展（化学回收）

回收挑战：价值较低，回收端仍是瓶颈

推动时限：长期

Target:　　By 2025, achieve 100% recyclabe or reusable,

　　　　　　Establish a sustainable recycling value chain

Approach: Develop recycling through high-value recycling technology(Chemical recycling)

Challenge: Low Value, collection is the bottleneck

Term:　　　Long term

咖啡/茶饮门店：星巴克
Coffee/Tea Store: Starbucks

回收目标：2030年降低50%的废弃物填埋（或焚烧）
回收方式：通过回收企业进行专项回收
回收挑战：各地政策和环卫成本不同
推动时限：长期推进，建立可持续产业链

Target: By 2030, reduce 50% waste to landfill or incinerationfrom store

Approach: Customized collection service by partner

Challenge: Policies and sanitation costs vary in different regions

Term: Long term, building up sustainable recycling value chain

"盒瓶回收计划"：欧力

Box and Bottle Recycling Plan: Oatly

回收目标：持续推动"盒瓶计划"，鼓励包装回收
回收方式：线上+线下，专项回收
回收挑战：收运成本高
推动时限：长期

Target: Promoting "Box and Bottle" recycling plan, enhance packaging waste recycling
Approach: Online + Offline, customized collection programs
Challenge: High collection cost
Term: Long term

各类包装回收分析

Matrix Assessment

Package Type	Case Studies	Legislation	Sustainability Strategy	Value chain building	Recycling Rate Goal	Anti-Fake	Sales promotion	Env. Education	Branding & PR
Beverage carton	Tetra Pak	√	√	√	√			√	√
Glass bottle	Pernod Ricard		√?		√	√			√
Oral care products packaging	Colgate		√				√	√	√
Health care bottles	Sanjing						√	√	√
K-cup	Nestle NESPRESSO		√				√?	√	√
Takeout food box	Meituan	√	√	√				√	√
Rigid plastic bottle	Unilever		√		√		√	√	√
Flexible plastic package	Amcor		√	√?				√	√
Coffee/Tea Store	Starbucks		√	√?	√				√
Beverage carton	Oatly		√	√?			√	√	√

各类回收模式对比

Comparison table of different collection modes

03

传统模式 – 废品交易

Traditional Model - Waste Trading

现状 Status:

➢ 回收网络依然存在
➢ 仍然具有大量的交易频次
➢ 商业模式受到更大的制约和规范化要求
➢ Still exists, high frequency of transactions, constraints and standardization requirements

挑战 Challenges:

➢ 只关注"高价值"废品
➢ 对低值废弃物的回收几乎没有帮助
➢ 没有可追溯的记录和数据
➢ 目前财务可持续，但是财务制度不规范
➢ Only focus on 'high-value' & 'sellable' waste, no traceable records and data, financial sustainable, but the financial system is not standardized

发展中的模式 – 智能回收箱

Developing model – returing vending machine

现状 Status：

➢ 高速发展
➢ 各种不同类型的企业投身其中
➢ 取代了部分的传统回收渠道
➢ Developing, Various types of enterprises are involved in it, Replaced some traditional recycling channels

挑战 Challenges：

➢ 投资成本高,收运及后勤成本高
➢ 对低值可回收物帮助有限
➢ 有记录和数据,财政可持续性有待考证
➢ High investment cost and logistics costs, Limited assistance for low value recyclables, Fiscal sustainability needs to be verified

小黄狗

章鱼回收

爱回收

猫先生

搭把手

发展中的模式– O2O方式（线上到线下）

Developing model – Online to offline (APP)

拾尚回收	白鲸鱼	飞蚂蚁	易袋扔	有闲有品	书袋熊

可回收物全品类
All recyclables

旧衣物
Waste textiles

旧衣物、图书
Waste textiles
Books

全品类
All recyclables

旧家电
Waste appliances

旧图书
Books

现状 Status：

➢ 高速发展
➢ 各类企业和投资机构加入其中
➢ 取代了部分传统回收模式
➢ Developing, Various enterprises and investment institutions join in, Replaced some traditional recycling models

挑战 Challenges：

➢ 收运及后勤成本高，部分APP对低值废弃物回收有益
➢ 数据可追溯
➢ 财务持续性有待考证
➢ High shipping and logistics costs, Some APPs are beneficial for the recycling of low value waste, Data traceability, Financial sustainability needs to be verified

专项回收的模式

Cusotmized collection

托底模式 – 垃圾分类

Household waste sorting program

上海市生活垃圾分类标识

| 有害垃圾 HAZARDOUS WASTE | 可回收物 RECYCLABLE WASTE | 湿垃圾 HOUSEHOLD FOOD WASTE | 干垃圾 RESIDUAL WASTE |
| 红色 PANTONG RED C | 蓝色 PANTONG 514 C | 棕色 PANTONG 4715 C | 黑色 PANTONG BLACK C |

现状 Status：

➢ 政府主导的垃圾分类促进回收已经在46个城市强制实施，并计划在2025年底在所有地级以上城市实施（297个）

➢ Gov. owned collection program has been mandatory in 46 cities and is planned to be implemented in all prefecture level and above cities by the end of 2025 (297 cities)

挑战 Challenges：

➢ 回收方式难以"客制化"，很难与营销活动和市场活动结合

➢ 数据和追溯性难以保证（如针对某一品牌）

➢ 目前财务可持续，依靠政府财政

➢ Hard to customized or link to marketing program, hard to track the data for one brand, base on Gov. financial support

矩阵分析 Assessment for waste collection

Collection models	Advantages	Challenges
Waste trading	➢ No extra cost ➢ Collection volume is **huge**, especially for the **valuable packaging waste**. i.e. paper board box, PET bottle, Al can, etc	➢ Mostly informal, no record, no tracking ➢ Social and safety risks ➢ It **doesn't work**, for those brand owners
Return value machines (RVM)	➢ Visitable ➢ **A part of valuable packaging waste** can be recycled via RVM	➢ Asset-heavy model ➢ Site based ➢ **Very few affect** for waste collection in stores
O2O collection APP	➢ Flexible operation and easy to customize ➢ Traceable with all record ➢ Big covering scope ➢ **Workable for most of wastes**	➢ **High transportation cost** ➢ **Medium collection volume**
Household waste sorting program	➢ Official channels with policy support ➢ Public system, no extra cost ➢ **Accesses (recyclable, other, harmful) for all packaging waste**	➢ Customized requirements are impossible ➢ Standards are different between each city ➢ Many packaging waste are **defined as "other waste" sent to incineration**
Customized collection	➢ Fully customized processes and rules ➢ Traceable with all record ➢ **Workable for all kinds of package waste**	➢ **Very costly** (design, transportation, labor, etc) ➢ **Low collection volume** ➢ **Limited influence**

中国再生资源回收利用协会企业环境责任专业委员会

Corporate Environmental Responsibility Committee(CERC)
of China Resource & Recycling Association

助推企业履责
Support enterprises in fulfilling their Env. responsibilities

搭建多方合作平台
Building a multi-party cooperation platform

提升回收企业能力
Enhance the capability of collection & recycling partners

构建废弃物闭环回收利用产业链
Building a closed-loop recycling value chain

工作目标
Objectives

为数据溯源和认证提供支撑
Provide support for data traceability and certification

回收行业驱动引擎

Driving engine of collection & recycling industry

中国再生资源回收利用协会
china resource recycling association

市场驱动：可回收物如同一个"商品"，从收集、分类、运输、再生等，每一个环节都有自己的盈利性，市场自行驱动。典型案例：纸箱版、PET瓶、易拉罐等

Market driven: Recyclable materials are like a "goods", with their own profitability at every stage of collection, classification, transportation, and recycling, driven by the market itself. Typical cases: cardboard boxes, PET bottles, AL cans, etc

政策驱动：因为价值原因，无法进行市场驱动，但又因为其重要性需要被强制回收，从政府出台相关的法规、标准、政策来驱动其回收。典型案例：外卖餐盒、饮料纸基复合包装等

Policy driven: Due to value, market driven doesn't work. The government offices release relevant regulations, standards, and policies to push its recycling. Typical case: takeaway food boxes, beverage paper-based composite packaging， etc

ESG驱动：既没有办法市场驱动，也没有受到政策监管的部分。但是，品牌企业（尤其是头部企业）出于自身社会责任和ESG要求推动的回收。典型案例：软塑包装、玻璃瓶等

ESG driven： It is neither market driven nor subject of policy regulation. However, brand owners (especially leading companies) promote recycling due to their own social responsibility and ESG requirements. Typical cases: Flexible plastic packaging, glass bottles, etc

行业引擎

Industry engine

回收行业驱动引擎

## Driving engine of collection & recycling industry

回收行业驱动类型 Collection & recycling industry	企业环境责任专委会职责 CERC's Responsibilities
市场驱动 Market Driven	制定行业标准帮助其规范化、提高行业从业公司和从业人员的能力和水平 Develop relevant standards to standardize the industry and improve the capabilities of collection and recycling companies and employees
政策驱动 Poilicy Driven	协助政府部门达成回收目标，组织行业资源对接和建言献策 Support government departments in achieving recycling targets, organize industry resource to understand the policy, and provide suggestions and solutions
ESG驱动 ESG Driven	做好平台服务，对接履责企业和回收企业，达成品牌企业目标的同时，也帮助回收行业赋能，促成废弃物减量 Provide platform services, connect with brand owners and collection / recycling enterprises, achieve brand enterprises' goals while also empowering the recycling industry and promoting waste reduction

Collection system need to be further developed!

Especially, for those "Low value recyclables".
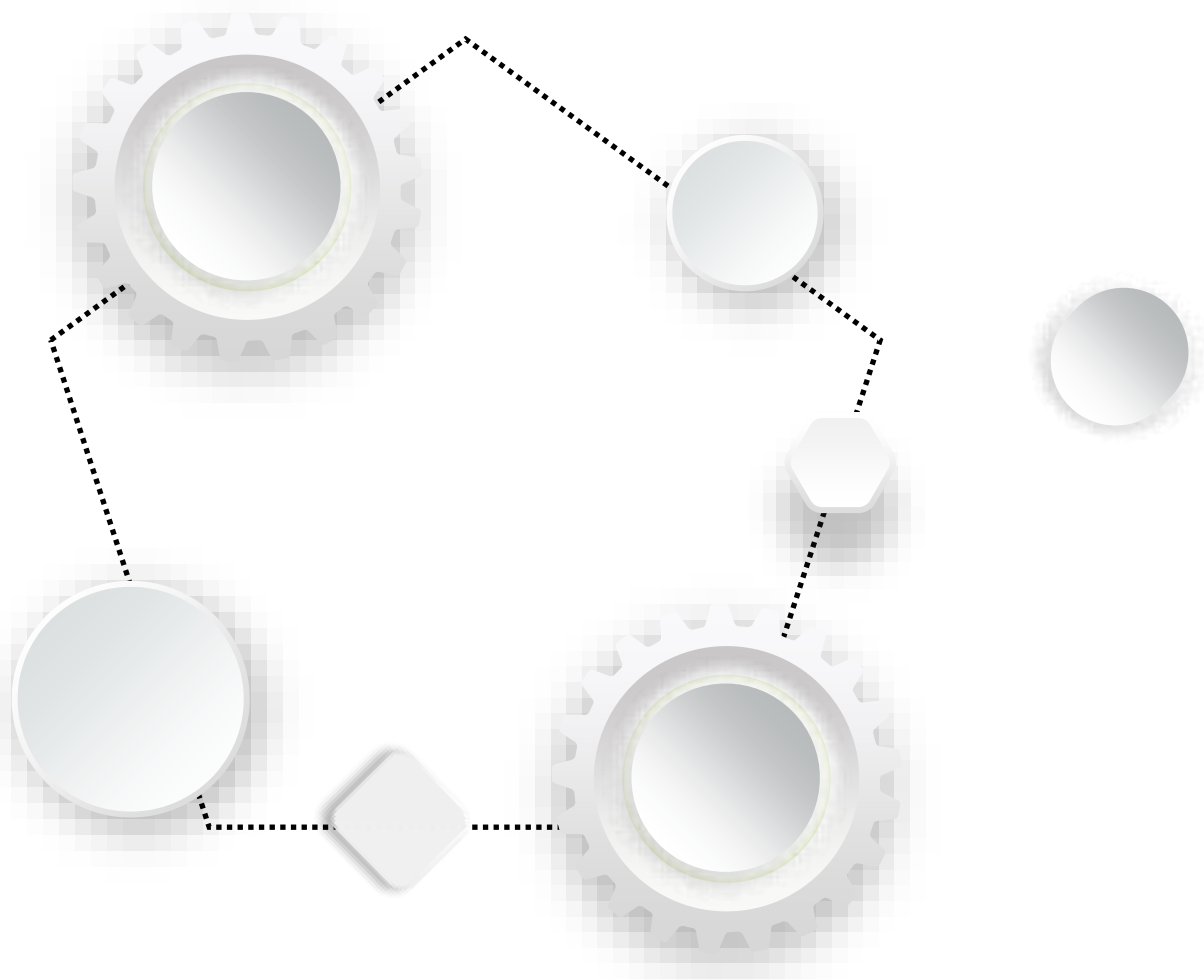
感谢！
Thanks!

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