

STRENGTHENING AMERICA'S RECYCLING SYSTEM: A SUSTAINABLE FOOD POLICY ALLIANCE DIALOGUE ON PRODUCER RESPONSIBILITY



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INTRODUCTION TO EXTENDED PRODUCER RESPONSIBILITY

SUSTAINABLE FOOD POLICY ALLIANCE BRIEFING

May 20, 2021

THE RECYCLING SUPPLY CHAIN

*MRF stands for Material Recovery Facility. It is where the commingled curbside material is sorted and prepped for market





WHAT IS EXTENDED PRODUCER RESPONSIBILITY?

Extended producer responsibility is a practice and a policy approach in which producers take responsibility for management of the products and / or packaging they produce at the end of their useful life. Responsibility may be fiscal, physical, or a combination of the two.

WHO ARE THE PRODUCERS? Brands / Retailers

EPR IS WIDELY APPLIED ACROSS THE US



SPECTRUM OF EPR MANAGEMENT STRUCTURES

The level of financial and operational responsibility varies depending on the structure of the program

PRODUCER OPERATIONAL RESPONSIBILITY



PRODUCER FINANCIAL RESPONSIBILITY

EPR FOR PACKAGING AND PRINTED PAPER



STATES MOST ACTIVELY CONSIDERING EPR FOR PPP





DRIVERS FOR PRINTED PAPER AND PACKAGING (PPP) EPR

- Need for stable funding
- Market challenges
- Focus on circular economy
- Stagnant recycling rates

COMMON FEATURES OF EPR FOR PPP PROGRAMS





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*	-	

Created by legislation establishing rules and targets Managed by one or more Producer Responsibility Organizations (PRO) Guided by a Program Plan



LEGISLATIVE STRUCTURE

- Sets requirements for brand/retailer responsibility for residential recycling programs
- Creates performance standards (e.g., recycling rates, service standards, etc.)
- Establishes oversight



CITEO





Multi-Material Stewardship Manitoba



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WHAT IS A PRO

- Authorized in legislation to represent brands/retailers
- Manages obligations set in legislation
- Develops and implements Program Plan
- Sets and collects fees



WHAT IS A PROGRAM PLAN?

BLUEPRINT FOR MEETING GOALS AND OBLIGATIONS, WHICH COULD INCLUDE

- Proposed list of recyclables
- Collection/processing arrangements
- Education and outreach
- End market development

MUST BE APPROVED BY OVERSIGHT ENTITY (E.G., STATE AGENCY)

PACKAGING INDUSTRY RESPONSIBILITIES



RRS recycle.com

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WHAT IS ECO MODULATION?

Method of differentiating fees paid by brands / retailers

- Incentivize environmental design
- Penalize negative attributes

Added or subtracted from base fee

Based on research or third-party validation

Must be approved by oversight agency

JODIE ROUSSELL

Senior Public Affairs Manager Nestlé SA







Extended Producer Responsibility: An International View

Presentation for the Sustainable Food Policy Alliance Jodie Roussell, Global Public Affairs, Nestlé SA, May 20, 2021

Outline

- Nestlé Packaging Sustainability Initiatives
- Opportunities for Job Creation
- Global EPR Legislation Map
- Best Practices in EPR The Belgian System
- Governance and Scope
- Fee Structure & Eco-Modulation
- Quality of Materials Collected & National Infrastructure
- Data Tracking & Integrity



Nestlé Packaging Sustainability Initiatives

Reduction and elimination



- Fit for Purpose Packaging
- Sourcing new materials, particularly paper
- Sourcing recycled plastics

Reusable / refillable packaging systems



- New business models in bulk, single serving, and refillables
- Requires rethink of supply chains and reverse logistics

Materials innovation for recycling and composting



- Design 4 recycling
- New materials
- New packaging solutions

Recycling and waste management infrastructure



- Plastic neutrality
- Collection, sorting & recycling at scale
- External advocacy to transform the policy landscape

Rethinking behaviors of Nestlé, retail partners and consumers



- Consumer engagement & education
- Retailer sustainability partnerships
- Employee education



Economic Opportunity: Collection, Sorting & Recycling Create New Jobs

A number of jobs studies address to opportunity for local services job creation

GAIA: Zero Waste & Economic Recovery: Job Potential, 2021



Globally 16 countries studied

Landfilling: 2 jobs

Composting: 7 jobs

Mechanized Recycling: 17 jobs

Semi-mechanized Recycling: 321 jobs

Repairing: 404 jobs

(Jobs per 10,000 tons of recovered material per year (TPY)

Source: https://zerowasteworld.org/zerowastejobs/

US EPA: Recycling Economic Information Report, 2020



US Recycling Industry:

- 681,000 jobs
- \$37.8 billion in wages
- \$5.5 billion in tax revenue
- 526 MMT of recycled goods produced

EU: Impacts of Circular Economy Policies on Labor Market, 2018



EU28 Waste & Recycling Sectors

- Baseline of 3.4 million jobs in repair, waste & recycling
- 47,222 Companies

EU: Economic Growth Potential of More Circular Economies, 2015



Scenarios for Circular Economy Job Creation in EU by 2030

- No New Initiatives: +250,000 jobs
- Moderate Circularity Initiatives: +1.4 million jobs
- High Recycling/Reuse: +3 million jobs

obs/ Source:https://www.epa.gov/sites/production/files/2020-11/documents/rei report 508 compliant.pdf

Source:

https://ec.europa.eu/environment/enveco/circular_economy/p df/studies/Annexes.pdf Source: https://www.cleanenergy-project.de/wpcontent/uploads/2015/09/www.wrap.org.uk_sites_files_wrap_Economic %20growth%20potential%20of_more%20circular%20economies.pdf



Global Development of Extended Producer Responsibility Legislation





The Belgian Extended Producer Responsibility System

Governance and Scope

- Fost Plus is Belgium's single, private, non-profit household Producer Responsibility Organization (PRO) established in 1994
- Responsible for selective collection, sorting and preparation for recycling of household waste
- Fost Plus is composed of committees, board members representing the value chain and has 4'730 members
- Household recycling rate in 2020: almost 95%
- Core activities:
- 1. Awareness raising from optimized sorting of waste by citizens to eco-design
- 2. Coordination of value chain participants' activities
- **3. Funding** to contribute to collection, sorting, recycling; generates income from sales

Ease of use



Belgium

- Covers all packaging materials
- Simple "Blue Bag system" introduced in 2019 to collect plastics, metals and drink cartons (PMD) with a color code that is repeated in the public space for collection of packaging waste
- 4.1 Mn Belgians used the Blue Bag by 2020 (all 11.5 Mn Belgians in 2021)
- 95% of packaging is sorted correctly







The Belgian EPR Compliance Fees (2021)

Eco-modulation: Charging fees aligned with the cost of recycling different materials

Green Dot rates 2021

Fee structure

- By material type, including eco-modulation
- Based on weight only
- Updated annually
- 100% funding from Producers & Importers,
- Financing by EPR fees and materials revenues

Eco-Modulation

- Charging fees aligned with the cost of recycling different materials
- Net-cost approach listed in rate table annually
- Examples:
 - Recyclable vs. non-recyclable ("obstructive") flexibles
 - Impact of PET color on fee





Quality of Materials Collected & National Infrastructure

Material Types

4 types of materials collected across the 3 Belgian regions (Brussels, Flanders, Wallonia):

- 1. PMD (Plastics, Metals, Drink cartons)
- 2. Paper
- 3. Glass
- 4. Residual Materials (durable goods, expired products, etc)

Quality of materials depends on the collection system's separation norms. The Belgian system reflects the ideal model.

- Comingled (Single Bin) vs. Separate Collection (Belgium)
- Separate collection of flexibles and paper
- PMD is sorted into specified bails; quality standards agreed with recyclers across Europe

Recycling Sites:

- 80% recycled in Belgium
- 20% exported to neighboring countries (France, Germany, Netherlands) for recycling

Recovered Material Quality Specifications

Product Specification 05/2018 Fraction-No. 420		💓 DerGrünePunkt					
Specification/Description Used, residue-drained, system-compatible items made of aluminium or containing alumin foll, such as trays, wrapping fold, incl. secondary components such as lids, labels, etc. The supplement just of this specification		Product Specification 03/2018 Fraction-No. 310-1 Sorting fraction: PLASTIC FILMS			🖉 DerGrünePunl		
B Purity At least 65 % by mare relaction boundary), deducted standard out	ality 90% by many	A Specification/Description			Product Specification 05/2012 Fraction-No. 324		
At least 90 % by mass (rejection boundary), deduced standard qua At least 90 % by mass according to specification/description	A4, e.g. bags, carrier bags and shrink-wrapping film, incl. secondary components such a labels etc.			Sorting fraction:	POLYPROPYLE	NE	
C Impurities Maximum total content of impurities Solid impurities with a unit weight of > 100 g and c (e.g. free-schiquehes) and explosives are not permitted Items made of paper, board, cardboard and of plastic that do not o	The supplement is part of this specification! 8 Purity A least 62 % colourless, transported films > DIN A 3			A Specification/Description Under residue-dande, rijd, system-compatible items made of polypropylene, volume 5 6 lines, e.g. bottles, bottles, cups and trays, incl. secondary components such as lids, labels etc. The supplement is part of this specification!			
Liquid packaging boards	< 2 % by mass	C Impurities			B Purity		5 m
Magnetic iron-metal items	< 3 % by mass	Max total amount of impurit	44	8 % hu mase	At least \$4 % by mass ac	cording to specification/descrip	eon.
Other residues	< 5 % by mass	Metallic or mineral importing	with a unit weight of > 100 g are g	of permitted	C Impurities		
Examples of impurities:		Other metal items	and a data design of a roo g are i	< 0.5 % bu mann	Max total amount of impr	rities	6 % by mass
Glass Cartons for liquids		Other plastic items		< 4 % by mass	Metallic and mineral impu not permitted!	rities with a unit weight of > 10	0 g and cartridges for sealants are
Tinplate cans		Paper, cardboard, carton		< 1 % by mass	Other metal items		< 0.5 % by mass
 Light fitting components (e.g. light bulbs, flu 	iorescent tubes)	Other residues		< 4 % by mass	Rigid PE items		< 1 % by mass
- Plastics	d toother annulas)	Examples of impurities:			Expanded plastics incl. E	PS items	< 0.5 % by mass
 Poreign materiais (e.g. rubber, stones, woo Compostable waste (e.g. food, garden wast 	d, texmes, risppers) (e)	- Grass - Composit	te paper/cardboard materials (e.g.)	jouid packaging boards)	Plastic films		< 2 % by mass
D Form of delivery	Aluminised plastics Other materials (e.g. rubber, stones, wood, textiles, nappies) Compostable waste (e.g. food, garden waste)			Other residues Examples of impurities:		< 3 % by mass	
Transportable bales Dimension and density of the bales must be chosen to a to remure that a largouin took doading area 12,00 m x 2.40 m, tatimal loading height mix. 2.60 m) can be bodied with a minimum bading of 221 No statuth mappings Phoduction V as usuatmany bale press Leabeling via bentified with DSD bale bade stating the sorting plant nofraction no. production via data		Form of Delivery Transportable balas Dimension and delays Dimension and delays Dimension and delays Dimension and set 200 mm 2 40 mm balance based on benchmin 200 mm can be mick Based on area 1200 mm 2 40 mm balance based on benchmin 200 mm can be			Glass Papero Ster type:reliableDevelopmentals (e.g. Tiquid packaging boards) Papero Ster type:reliableDevelopmentals (e.g. Tiquid packaging boards) Auminised plastics Other materials (e.g. nbber, stones, wood, textilies, nappies) Compositable waste (e.g. food, garden waste)		
		loaded with a minimum loading of 23 t Dry-tool Produced with customary bale presses Identified with DSD bale label stating the sorting plant no., fraction no, and production date		D Farm of Delivery - Transportation basis: - Transportation basis: - Transportation prior to 240 m r.2.40 m; tateral loading height min. 2.60 m) can be loaded with a mimmum loading of 171 - Directore			
					 Produced with cust Identified with DSD date 	omary bale presses bale label stating the sorting p	lant no., fraction no. and production

Specifications for sorted packaging feed that into recycling plants is harmonized across Europe



Belgian Extended Producer Responsibility System





Data Tracking & Integrity



Data tracking key for:

- Determining the system costs
- Quantities managed
- Identifying free riders and orphan (unlabeled) products
- External and internal reporting
- Law enforcement

Need to respect data privacy:

- Relatively simple in a monopoly environment
- Requires specific body in a competitive environment (i.e. the Central Body in Germany) to deal with information provided by competing entities
- Definition of common rules for data collection

Verification:

Auditing of data quality through external expert companies

Competition:

Best practice: 1 PRO

Competition ideal on contracts for collection, sorting, recycling of materials





4. System Overview: Belgian Extended Producer Responsibility System



Belgium



Abbreviations: FP=Fost Plus, HH=household; IC=Intermunicipal Companies, MSW=Municipal Solid Waste, PAYT=pay-as-you-throw, yr = year, EFW=Energy from Waste 1 - Other wastes included construction waste (20%), green waste (20%), green waste, etc. 30 Source: Team analysis; Vito; Nestle Belgiux; Eurostat, FostPlus; IRPC; DG Environment

DYLAN DE THOMAS

Vice President of External Affairs The Recycling Partnership



RECYCLINGPARTNERSHIP.ORG



Accelerating Recycling:

Policy to Unlock Supply for the Circular Economy







The Recycling Partnership Driving System Change Coast-to-Coast



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Circular Economy Accelerator Purpose

Together, we will drive change by building consensus and advocating for attainable policy and legislative solutions that rapidly advance the circular economy. Our work will seek to:



Incentivize recycling over disposal.



Secure sustainable funding for recycling infrastructure and education.



Expedite innovative public-private solutions.





Circular Economy Accelerator Partners







1 Recycling = jobs.

2 Recycling provides critical feedstock to the U.S. supply chain.



Recycling protects the planet and its people.





Public-private partnership policy solutions

















LOCAL GOVERNMENT



How It Works: Current System

Local governments bear all burden of funding residential recycling, and it's not enough to sustain or improve the system.







How It Works: Proposed System

Funding is injected from privatesector packaging and printed paper fees and public-sector disposal surcharges to sustain and improve the system.





Endorsers











QUESTIONS?