

# Refillable bottles for waste prevention: Initiative to introduce refillable systems in Spain

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**Fundació per a la Prevenció dels Residus i el Consum responsable**

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# Foundation for Waste Prevention

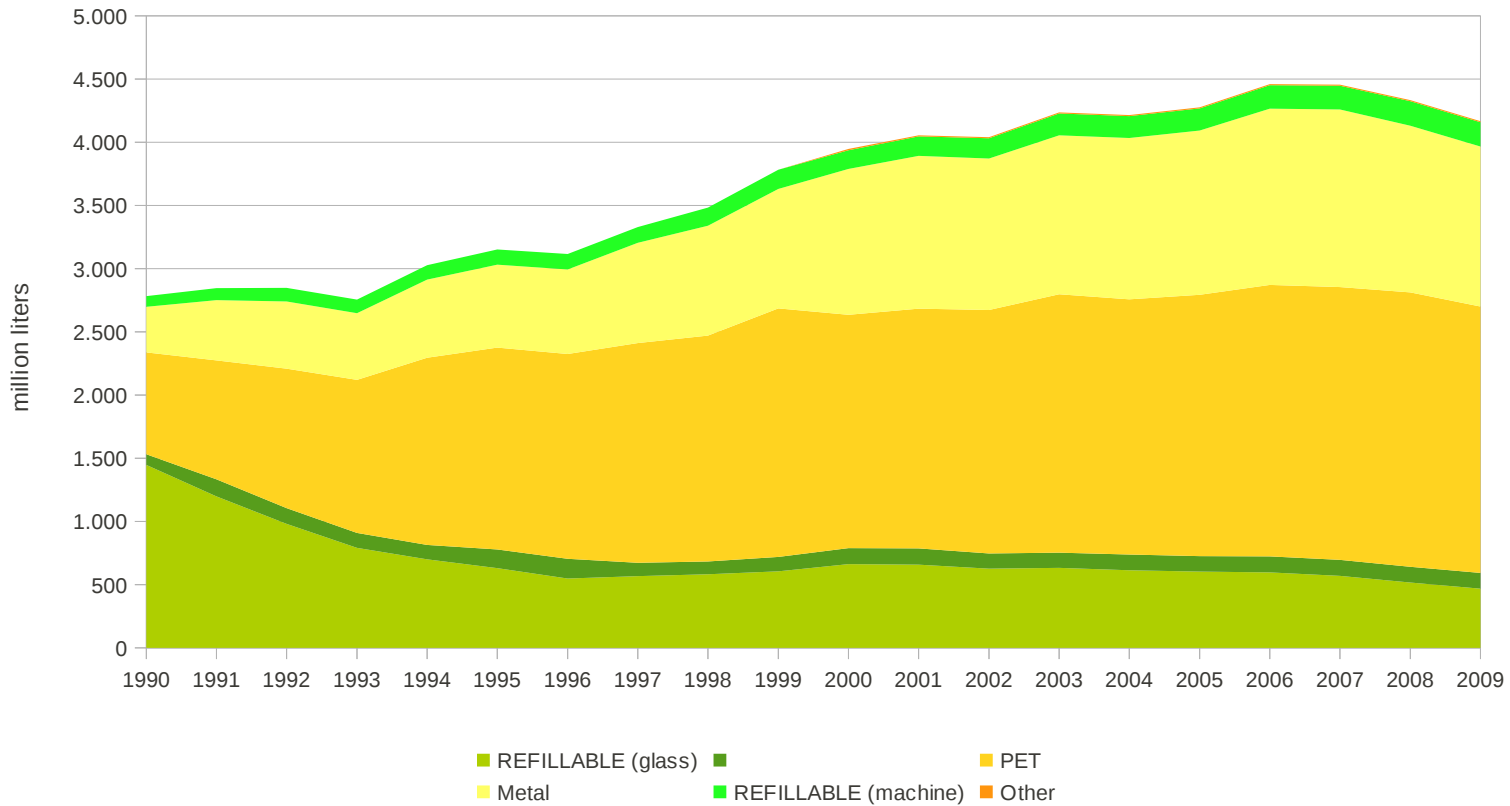
- NGO
- Waste prevention and responsible consumption
- Founded in 2005
- 8 full-time employees
- Areas of work:
  - Environmental education
  - Studies
  - Campaigns
    - Tax on one-way bags
    - Deposit system
    - Waste prevention law

# Overview

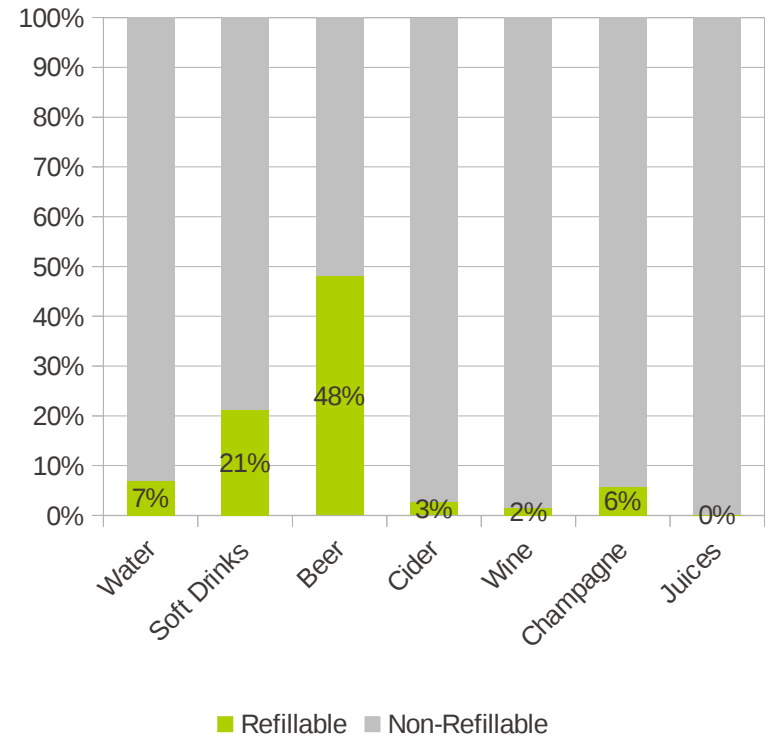
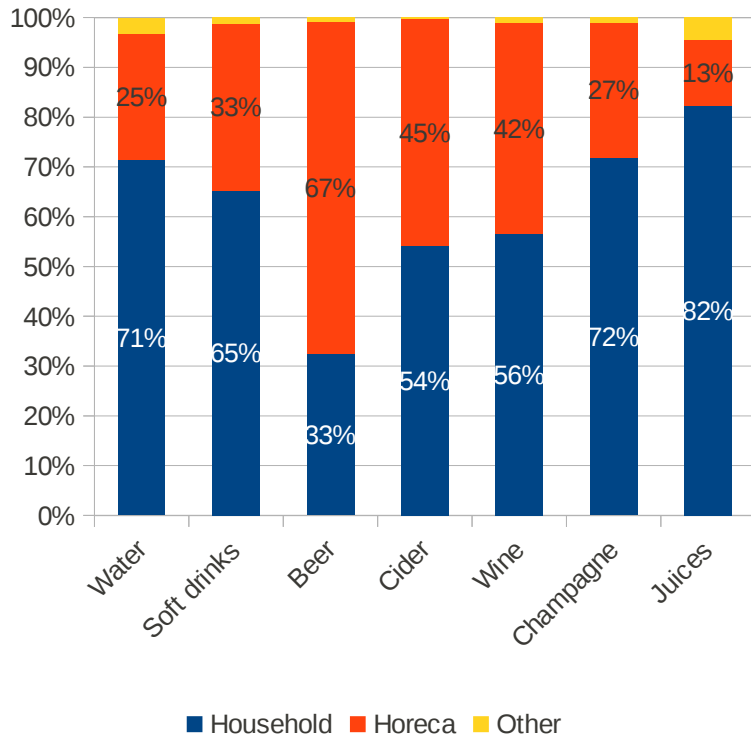
- What is the Foundation for Waste Prevention
- Refillable bottles for waste prevention

# The decline of refillables in Spain

Soft drinks as an example



# The decline of refillables in Spain



## Reuse targets in Spain (PNIR 2006)

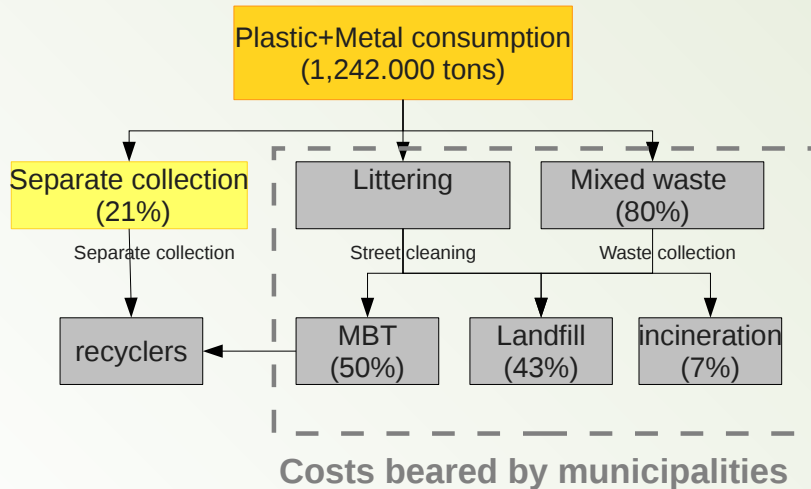
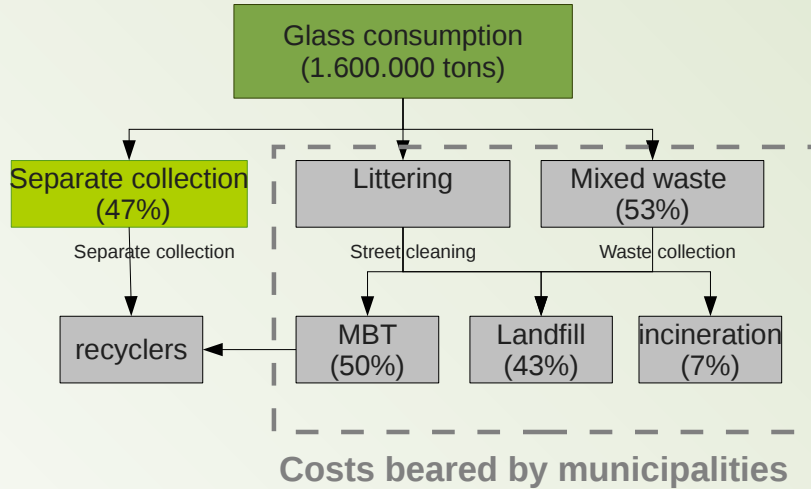
Product	Horeca	Other	Overall target (2010)	Share (2010)
Water	60%	15%	26%	7%
Beer	80%		45%	48%
Soft drinks	80%		30%	21%
Wine	50%		34%	2%

- Increasing the reuse of glass containers for food certain liquids, especially in the foodservice, and industrial and commercial packaging.
- Nevertheless:
  - No defined instruments
  - No sanction mechanisms
  - No control mechanisms

# Strategy to reintroduce refillables

1. Create level playground:
  1. Enhance producer responsibility
  2. Guarantee right to choose for consumers
2. Raise awareness among fillers

# Weak producer responsibility



- 2/3 of beverage packaging are not managed through EPR
- Some costs are not met by PRS:
  - Littering (beaches!)
  - Disposal
  - 20-40% of real costs!
- Separate collection is a failure
  - Glass below EPD
  - Lightweight packaging on the verge
- Green dot fee:
  - 0,67 cents/container put into market
  - 1,91 cents/container collected separately.



# Retorna initiative

- Coalition of NGOs and companies
- Target:
  - Advance towards Zero Waste
- First campaign:
  - Deposit on one-way packaging
  - Packaging law recast



# Retorna proposal

- Deposit on:
  - Main beverages: **water, soft drinks, beer and juices**
  - Main packaging materials: **glass, plastic, cans and cartons**
- Amount: **20 cents**
- Return in **supermarkets** and **small retailers** (with handling fee)
- **18.000 million** containers **every year** - **51 million** containers every day!!!
  - 32% of yellow container + 47% of green container = **40% of main beverage packaging**
  - 4,5% of total municipal waste

# Deposit schemes are environmentally sound

- LCA conducted by Inèdit
- The deposit system is the system with the **least environmental impact** for the collection and treatment of beverage containers
- **320 kg of CO<sub>2</sub>-eq per tonne** can be avoided (47% reduction in the contribution to climate change)
  - **On site compaction** of containers due to automatic collection is key to reducing this impact.
- Deposit schemes (using reverse logistics) can **reduce air pollutants and urban transport**. All analyzed pollutants (including NOx and particles) have between 18% and 90% less emissions.

Source: *Análisis de Ciclo de Vida de la gestión de residuos de envases de PET, latas y bricks mediante SIG y SDDR en España*. Inèdit, 2011.  
[http://retorna.org/mm/file/Documentacion/febrero2011\\_estudiocompletoACV.pdf](http://retorna.org/mm/file/Documentacion/febrero2011_estudiocompletoACV.pdf)

# Deposit systems create jobs

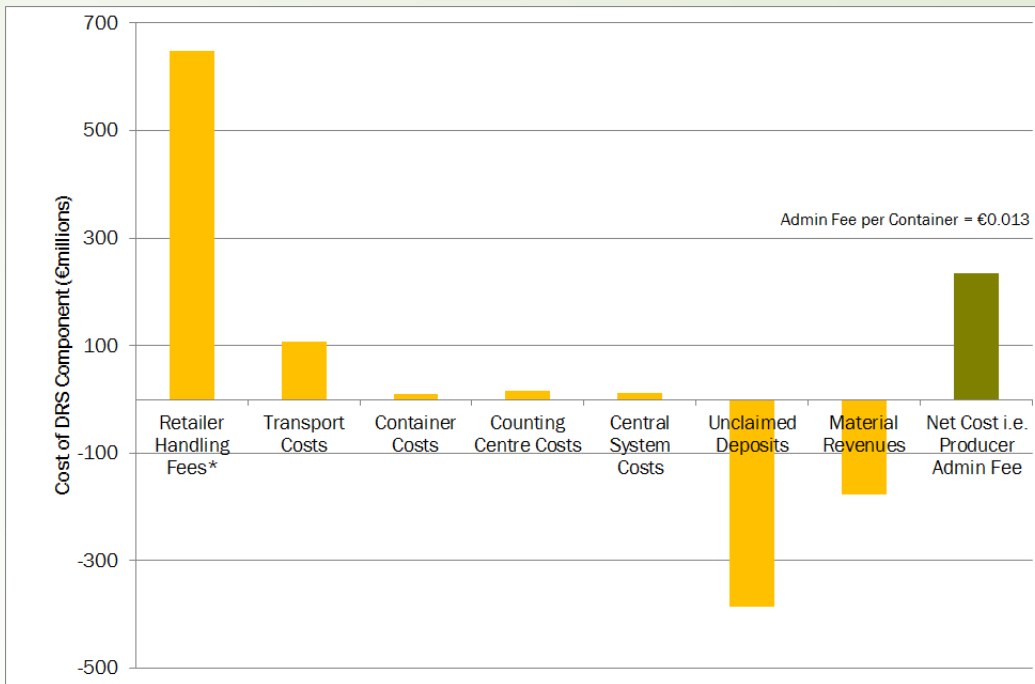
sector	product/service	implementation		operation	
		min	max	min	max
collection	RVM			362	<b>8.892</b>
	manual return			0	<b>2.059</b>
transportation	to counting centers			332	332
	to recycling plants			277	277
treatment	in counting centers			360	360
	in recyclers			500	1.250
administration	administration	30	100	30	100
	formation	144	144		
fabrication	RVM	<b>379</b>	379		
	transportation vehicles	226	226		
maintenance	RVM			240	328
	transportation vehicles			3	3
construction	plants	232	232		
	retailers	116	116		
<b>TOTAL</b>		<b>1.127</b>	<b>1.197</b>	<b>2.104</b>	<b>13.601</b>

Source: *Estimación del empleo potencial en la implantación y desarrollo de la primera fase del SDDR en España*. Istas, 2011.

[http://retorna.org/mm/file/Primera\\_fase\\_SDDR\\_.pdf](http://retorna.org/mm/file/Primera_fase_SDDR_.pdf)

# Deposit schemes are economically viable

- Study made by Eunomia
- Cost of selective collection:
  - Green dot: 1,91 cents (0,67 green dot fee)
  - Deposit system: 1,45 cents (1,3 deposit fee)



# Deposit schemes. Redistribution of costs

- **Fillers' fee:** from 0,67 to 1,3 cents/container (internalization)
  - 111 million
- **Retailers:** 4 cents per collected container
  - 648 million
- **Local government (citizens):** savings
  - 57-93 million
  - 1,4 a 1,97 euros/person
- **Consumer:** (if fillers do not internalize) from 2,6 to 4,9 euros/year
  - From 35% to 89% of selective collection

Source: *Examining the Cost of Introducing a Deposit Refund System in Spain*. Eonomia, 2011.  
<http://retorna.org/mm/file/Implementing%20a%20Deposit%20Refund%20System%20in%20Spain.pdf>

## Recast of legal framework

- Packaging law. PRS should:
  - manage separation collection and sorting of packaging
- Pay proportional cost of:
  - Mixed waste collection and treatment
  - Street cleaning costs
  - Possible pay fee for public space use
  - Taxing according to packaging LCA
- National waste plan:
  - Include sanctions for not achieving agreed targets
  - Guarantee right to choose refillables/non refillables

# Raising awareness among fillers

- On grounds of
  - Carbon labelling: 40-80% of footprint is manufacturing of bottles.
  - Economic savings: *cava* bottles 30% cheaper if they are reused.
  - Zero waste commitment



## Raising awareness among fillers

- **Wine:** opposed to mandatory targets
- **Cava** (champagne): 5,7% reuse (of 245 million bottles/year)
  - 150 million exported
- **Water:** Highly concentrated sector
- **Soft drinks:** barrier to parallel imports of cans. Economic savings (<200 km).
- **Beer:** cans
- **Milk:** vending machines

# Thank you for your attention!



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