

Policies to promote innovation for sustainable production. The case of Italian waste packaging and WEEE systems



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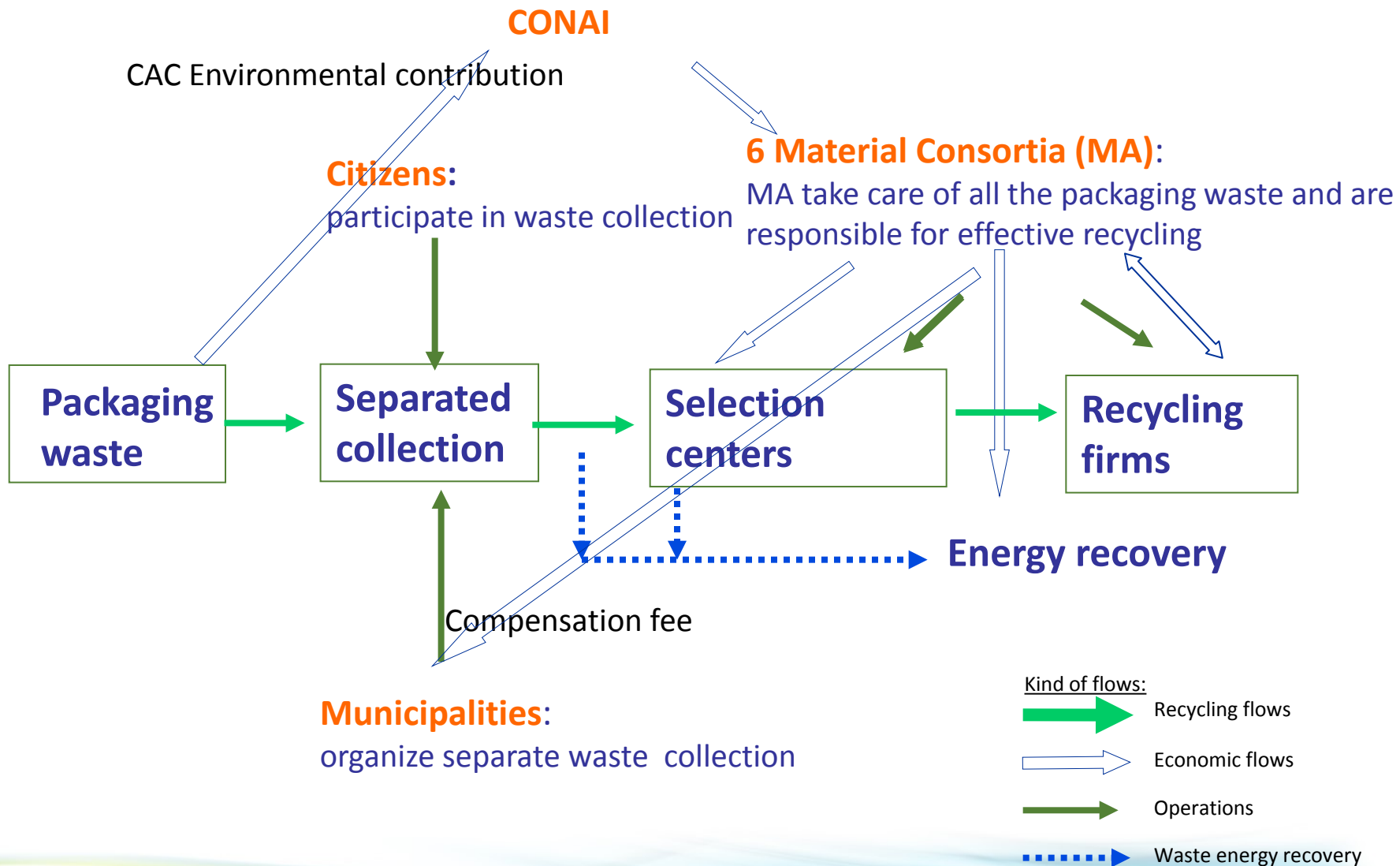
European waste legal framework

EU waste management policy aims to reduce the **environmental and health impacts** of waste and improve Europe's **resource efficiency**. The long-term goal is to turn Europe into a "**recycling society**", avoiding waste and using unavoidable waste as a resource wherever possible. Strategies intend to achieve much higher levels of recycling and to minimize the extraction of additional natural resources. Proper waste management is a key element in ensuring resource efficiency and the sustainable growth of European economies.

The **European Waste Framework Directive** (Directive 2008/98/EC) sets the basic concepts and definitions related to waste management in Europe. In particular it establishes **3 key principles** of European waste management system:

- **Waste management hierarchy**
- **Polluter pays principle**
- **Extended producer responsibility**

Conai functioning scheme

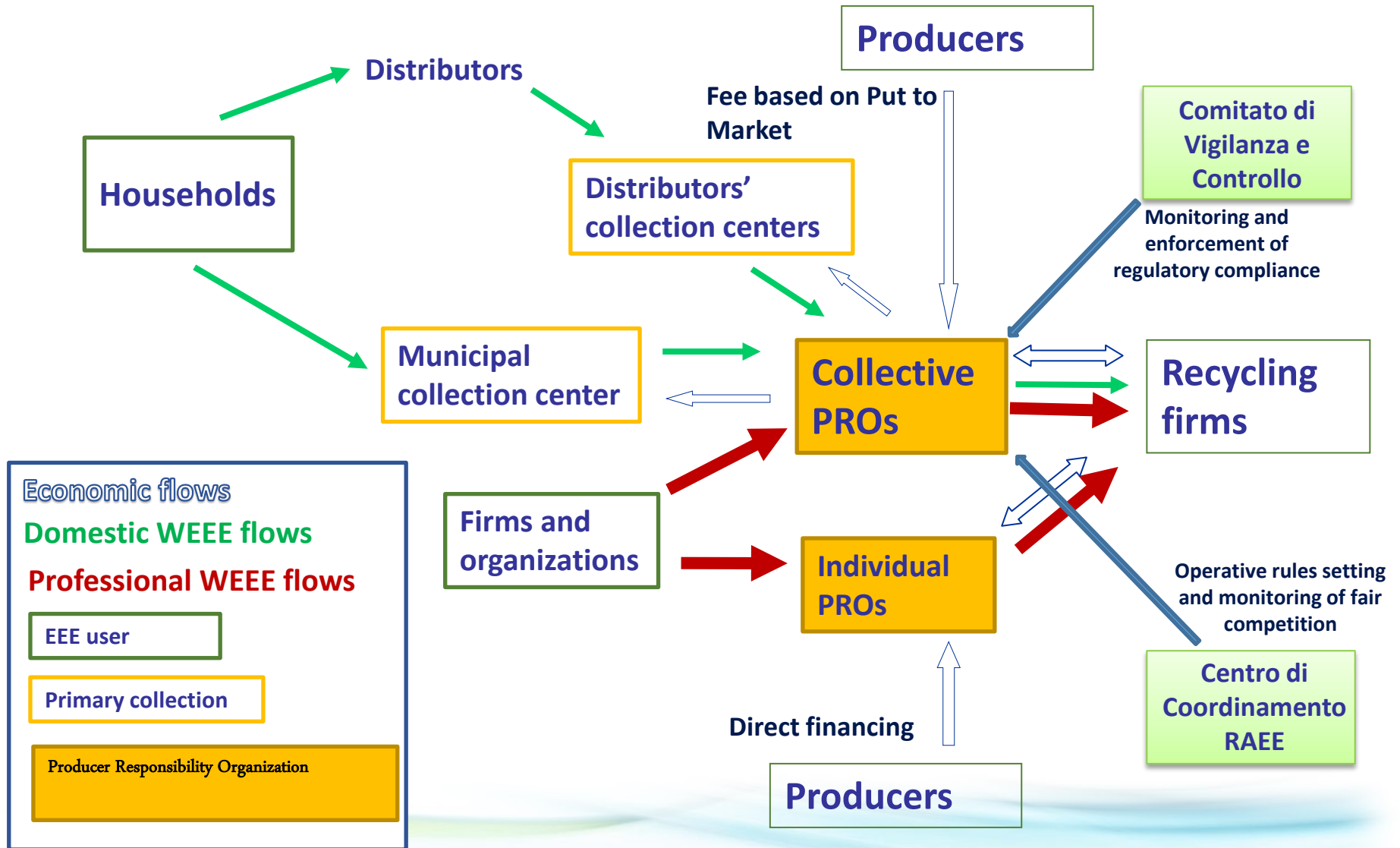


Packaging waste marketed, recycled and recovered in 2015

In 2015, Conai managed **3,8 millions tons of packaging waste** in the framework of ANCI-Conai agreement.

MATERIALS	Packaging marketed	Recovered		Recycled		Recycling objectives Directive 2004/12 CE
	kton	kton	% on marketed packaging	kton	% on marketed packaging	
Steel	474	348	73,4%	348	73,4%	50%
Aluminium	67	50	75,5%	47	69,9%	50%
Paper	4.585	4.067	88,7%	3.653	79,7%	60%
Wood	2.672	1.715	64,2%	1.633	61,1%	15%
Plastic	2.128	1.796	84,4%	867	40,7%	22,5%
Glass	2.343	1.661	70,9%	1.661	70,9%	60%
TOTAL	12.268	9.637	78,6%	8.208	66,9%	55%

WEEE system functioning scheme



WEEE collected and recycled in 2016

WEEE Group	Domestic EEE marketed (average 2013-2015)*	Domestic WEEE collected in 2016		Total WEEE collected including professional WEEE (% on marketed)		Collection Target for 2016-2018 period
	kton	kton	% on marketed	kton	% on marketed	
R1	146	77	52%	358	40%	45%
R2	286	86	30%			
R3	31	66	200%**			
R4	249	49	19%			
R5	10	3	31%			
TOTAL	753	281	39%			
*Marketed EEE as declared to the National Registry, due to 'free riding' the total EEE marketed could be around 50% more than declared.						
** the result is due to differences in weight of EEE sold and WEEE produced (CRT TV and LCD TV)						

In addition to the collection target, the legislation envisages **minimum recovery and recycling targets** calculated on the total of WEEE collected (depending on the WEEE category, recovery targets range from 70% to 85%, recycling targets from 50 % to 80%).

In 2014-2016, the minimum recovery and recycling targets were reached in nine WEEE categories out of ten (the recovery rate is below the target for only the 'Electrical and Electronic Instruments' category).

The economic and environmental impacts of waste management in Italy

Packaging waste:

- Recovery of materials has saved the purchase of 7,8 million tonnes of raw materials in 2016, for a value of around 1,5 billion euros (IEFE, 2017)
- Emissions of GHG avoided by the proper management of packaging waste exceeded 19 million tonnes of CO2 equivalent in 2015, for an economic value of 590 mln euro (IEFE, 2017).

WEEE:

- Recovery of materials has saved the purchase of around 200.000 tonnes of raw materials, for a value of between 110 and 120 million euros in 2015 (IEFE, 2017).
- Emissions of GHG avoided by the proper management of WEEE exceeded 1.1 million tonnes of CO2 equivalent in 2015, for an economic value of 30-40 mln euro (IEFE, 2017).

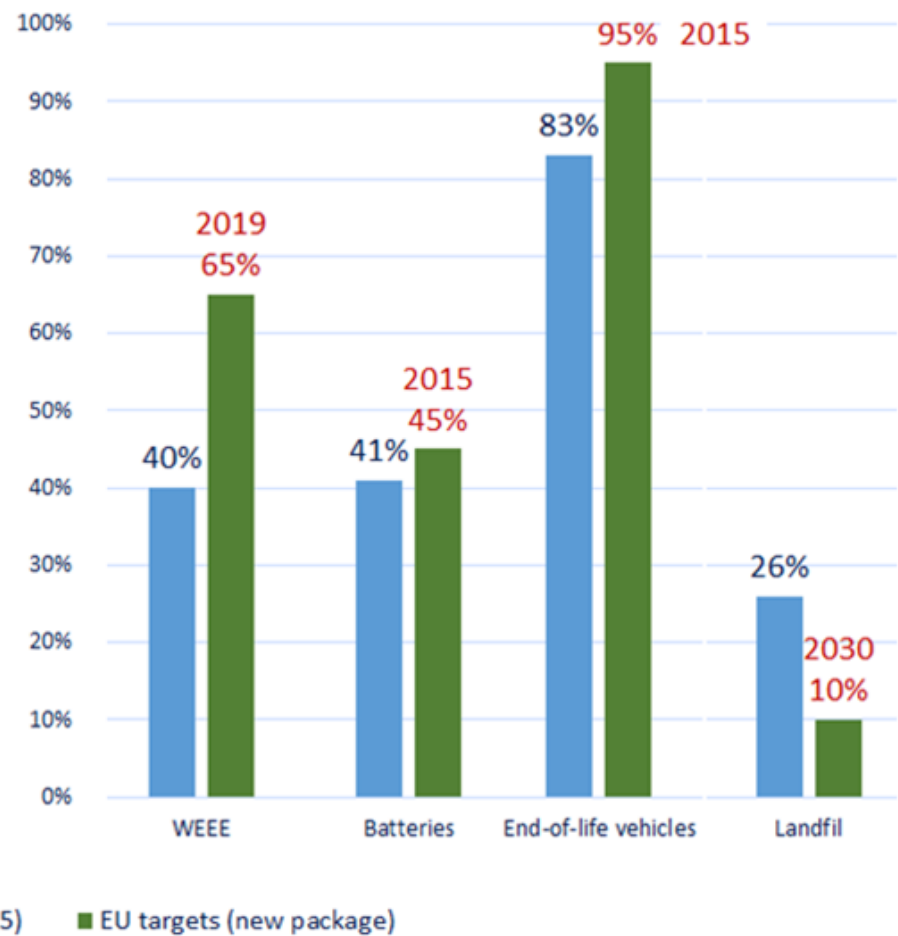
The Circular Economy Package in Italy



Recycling targets of the Circular Economy Package



Collection targets of the Circular Economy Package



Source: IEFE (2017)



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