

# SYSTEMS FOR COLLECTING AND SORTING RECOVERED PAPER IN USE IN ITALY



## THE MAIN ACTORS

CONAI  
COMIECO

PEOPLE: 95%  
MUNICIPALITIES 7.0%

SORTING PLANTS 45%  
PAPER MILLS 68%

# ABOUT CONAI

**CONAI, National Packaging Consortium, private consortium of firms working towards the recovery and recycling of packaging is for consumption on national territory, with aim of meeting statutory targets.**

**CONAI guarantees target achievement at lowest economic cost of all the European consortia, working as a market subsidiary**



# ABOUT COMIECO

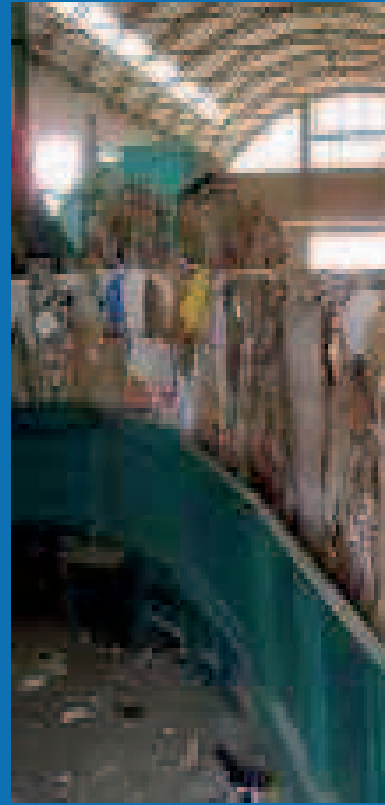
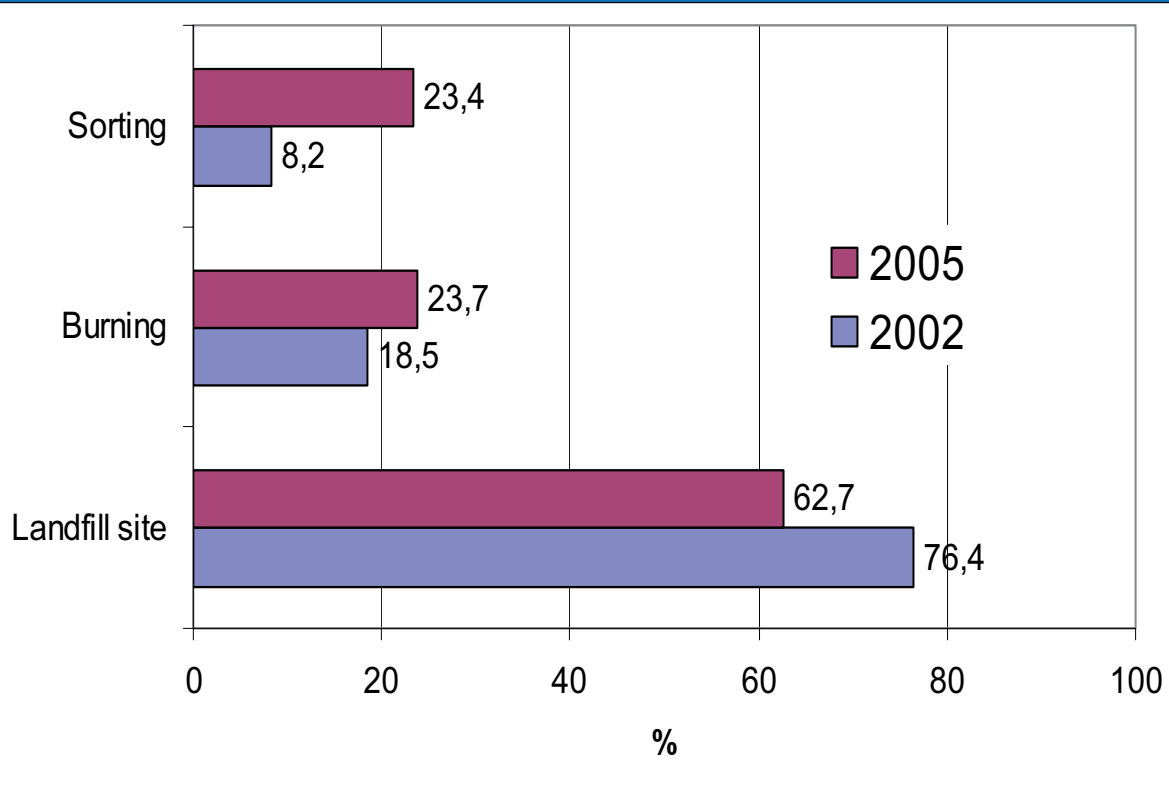
**National Consortium for the Recovery and Recycling of Cellulose-based Packaging. October 24, 1997.**  
Comieco counts, at present, over 3,500 member companies. Its members include: paper manufacturers (paper mills, sorting plants, etc.), importers of paper and boards for packaging, recycling companies.

Comieco, through its paper mills, guarantees the recycling of paper and board collected.

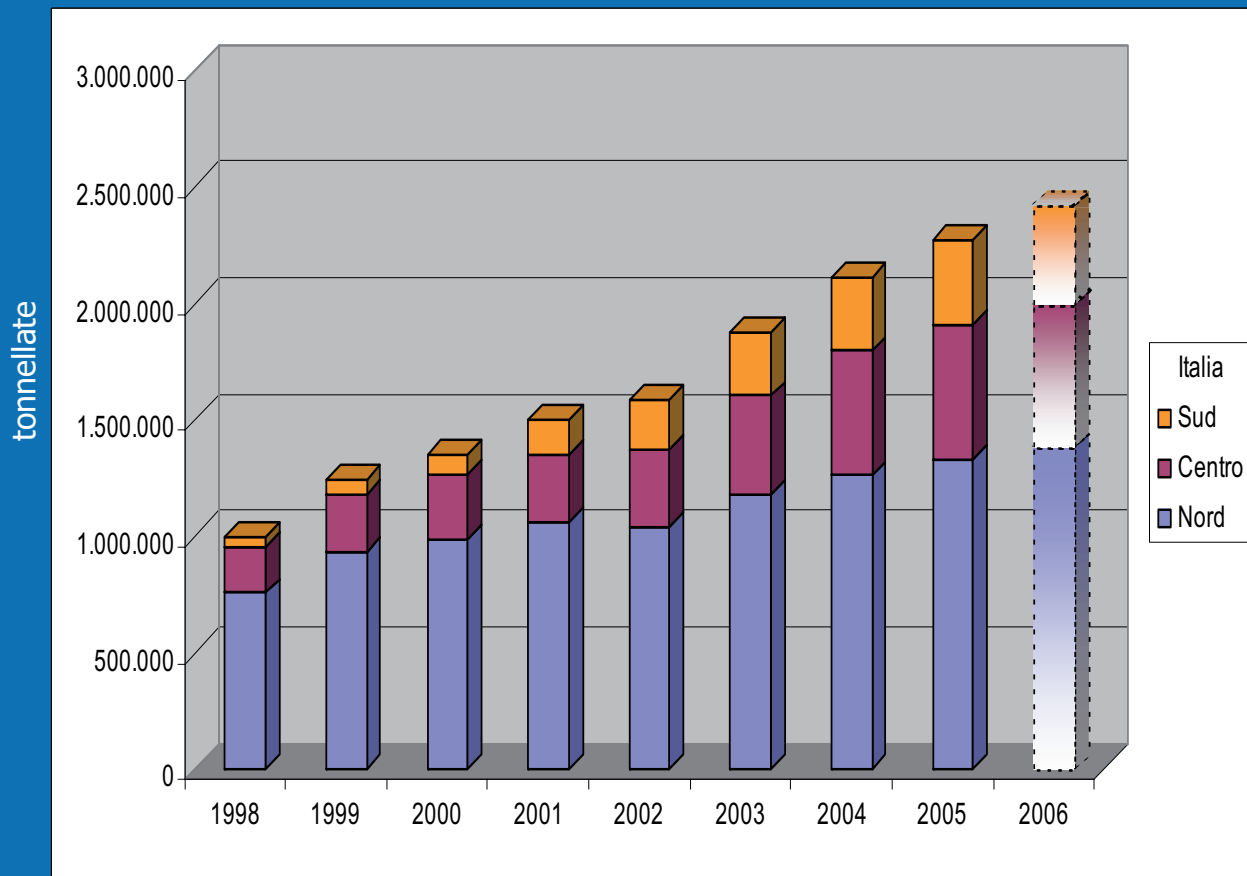


# FINAL DESTINATION OF MUNICIPAL WASTE COLLECTION

23,4% = 8,9 ML inhabitants



# P&B Municipal collection: 2,4 million tons exp



1998

+ 126% incre

12,9 million to

100 landfills a

Average € 100  
total benefit \c

2005

2.265.960 tons

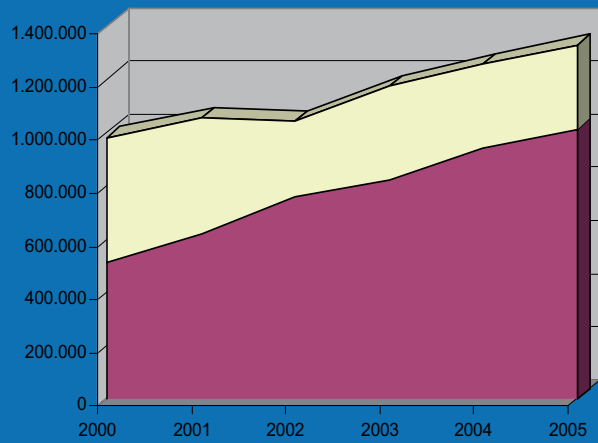
+ 158.000 tons

+ 7,5 % increa

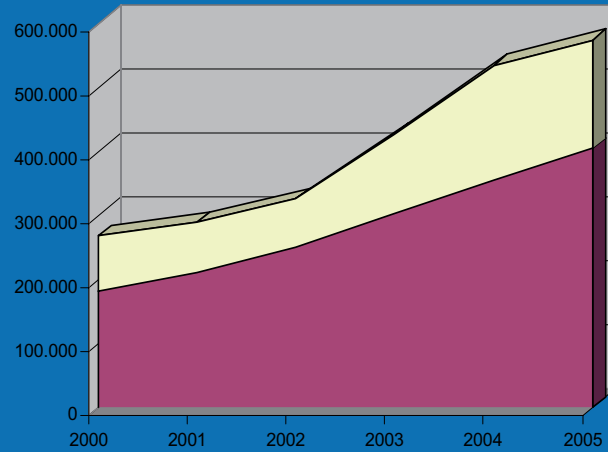
Per capita 39,8

RP net export 3

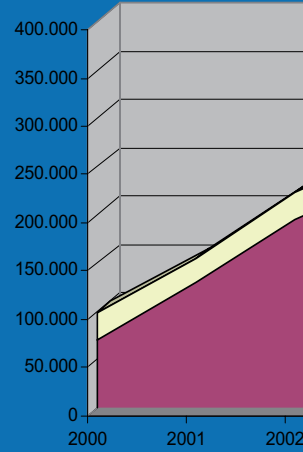
# P&B Municipal collection managed by Com



**North**



**Centre**



**South**

■ Collection not covered by Comieco agreement  
■ Collection upon Comieco agreement

COLLECTION UPON AGREEMENT  2005		(t)
	NORTH	1.013.404,
	CENTRE	404.600,
	SOUTH	329.518,6
ITALY		1.747.523,

# COLLECTING SYSTEMS

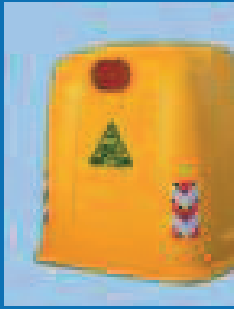
DOOR TO DOOR

BRING SYSTEM

CONTAINER

MRF

COMBINED COLLECTION SYSTEMS



# P&B Municipal collection TOP 10 per capita kg/inhab.

> 100.000 inhab. Household paper / Commercial board ratio >

REGION	COLLECTOR	AREA	INHAB.	TONS	PER CAPITA	Paper/board	COLL
centre	Quadrifoglio S.p.A.	Florence Area	469.884	41.610	88,6	3,4	bring system
north	Amsa S.p.A	Milan Area	1.393.384	94.498	67,8	3,6	
north	Società Cremasca S.p.A.	Cremona Area	143.021	9.209	64,4	3,4	bring system
north	CEM Ambiente S.p.A.	Milan Area	383.084	23.556	61,5	3,0	doc
north	Consorzio Brianza Milanese	Monza Area	266.349	15.446	58,0	9,4	bring system
north	Consorzio di Bacino Verona	Verona Area	191.533	11.059	57,7	9,3	bring system
north	Consorzio Basso Novarese	Novara Area	102.538	5.701	55,6	6,7	doc
north	SE.T.A. S.p.A.	Padova Area	247.510	13.680	55,3	3,0	bring system
north	CIDIU S.p.A.	Turin Area	213.536	11.364	53,2	5,4	bring system
south	Amiu Bari	Bari	316.352	16.284	51,5	0,8	bring system+

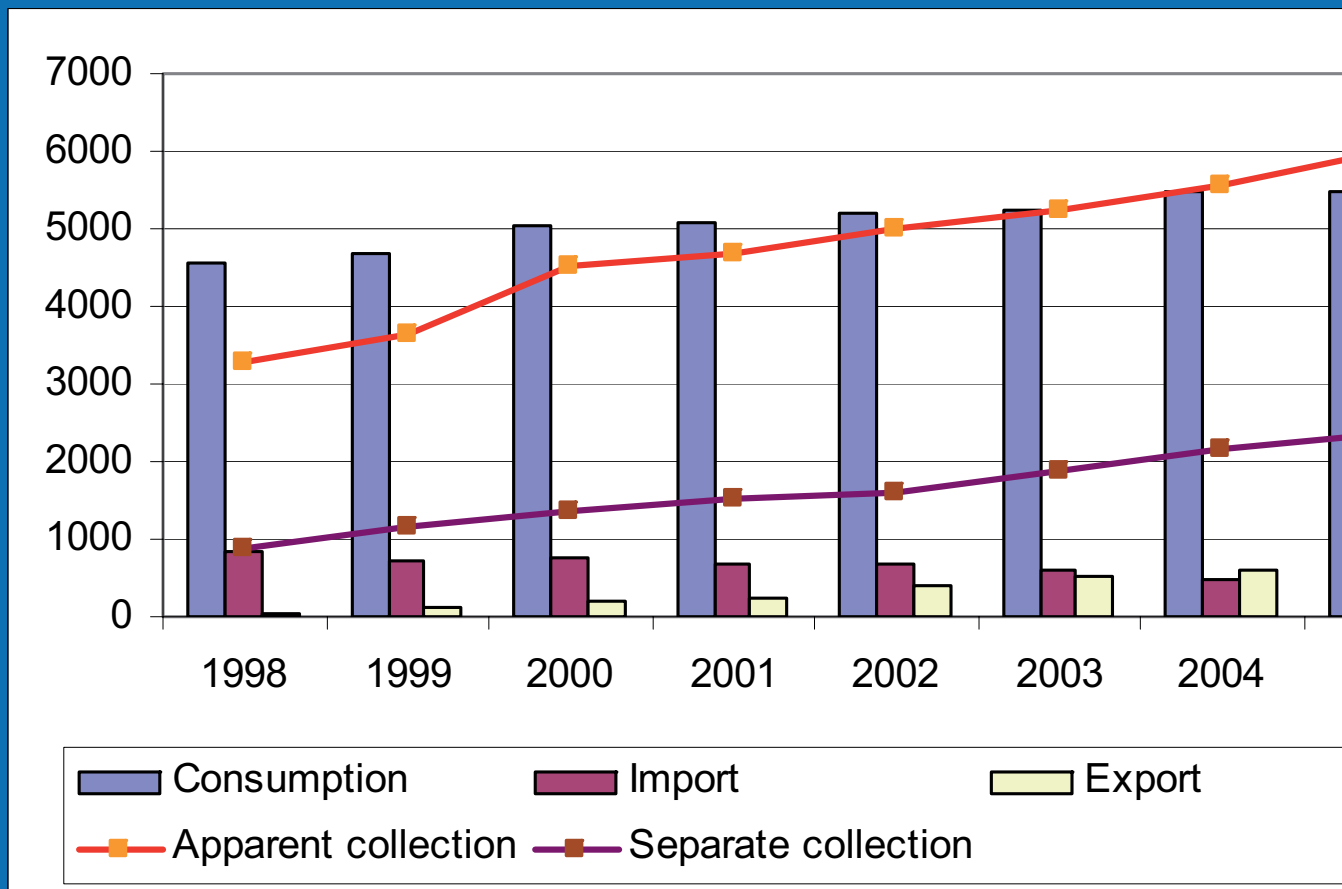
Key learning : “best in class” may use combined collection systems

# P&B Municipal collection growth drivers

- ⇒ Municipal separate collection target by law -  
2006 target 35% of MW  
2012 target 65% of MW
- ⇒ Disposal availability and cost – average from € 80 to € 110 to
- ⇒ Comieco National Agreement  
recycling guarantee – payment of collection  
€ 74 million paid to municipalities in 2005
- ⇒ A nation-wide network of sorting plants and paper mills
- ⇒ Increasing paper recovery rate and export
- ⇒ Comieco local campaign targeted to household, and administrations

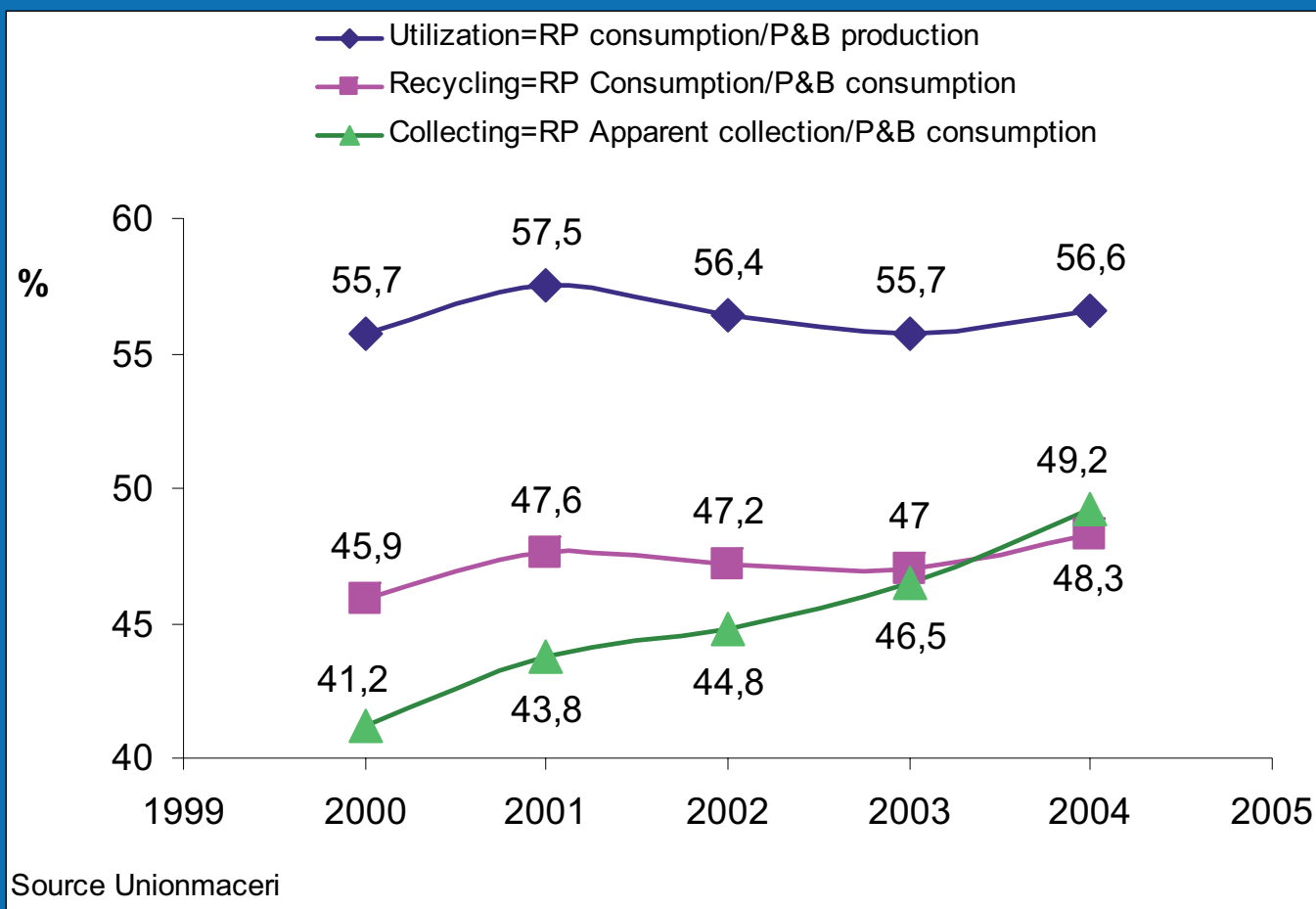


# Recovered Paper consumption, apparent collection, import, and export (000/ton)

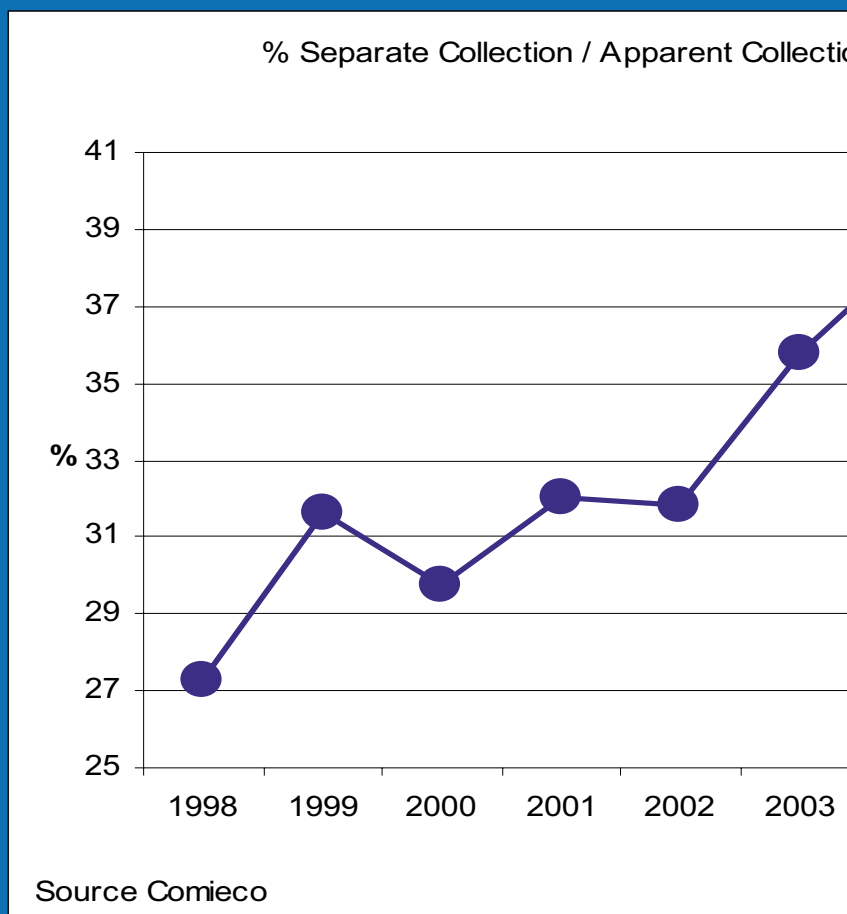


Source Comieco

# Utilization, Recovery and Collecting rates



# RATIO BETWEEN SEPARATE COLLECTION / APPARENT COLLECTION

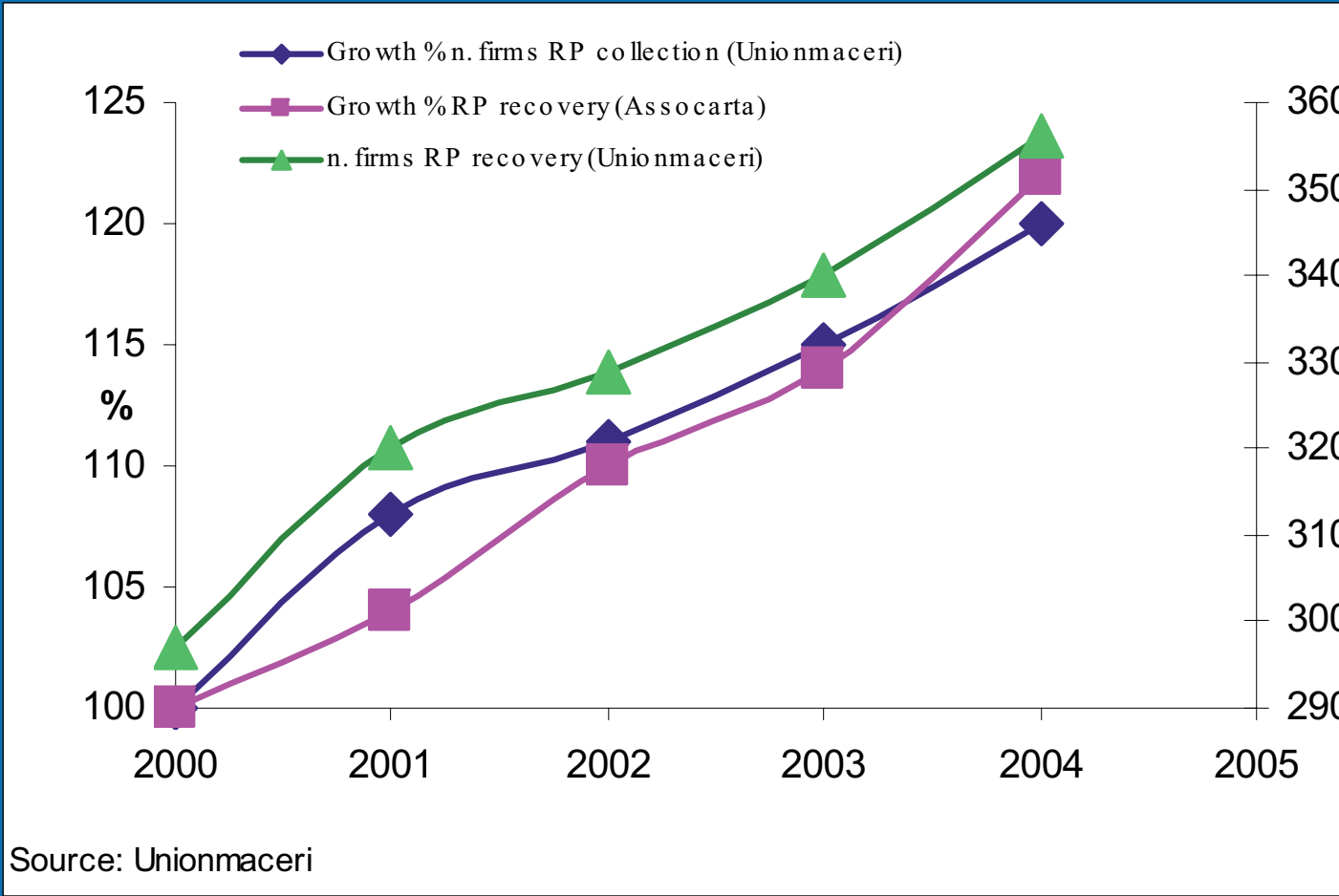


# THE RECYCLING NETWORK 2005

	Sorting plants under agreements	Paper mills under agreements	Sorting plants for secondary and tertiary packaging waste collection
NORTH	<b>151</b>	<b>38</b>	<b>81</b>
CENTRE	<b>57</b>	<b>22</b>	<b>19</b>
SOUTH	<b>97</b>	<b>8</b>	<b>53</b>
<b>ITALY</b>	<b>305</b>	<b>68</b>	<b>153</b>



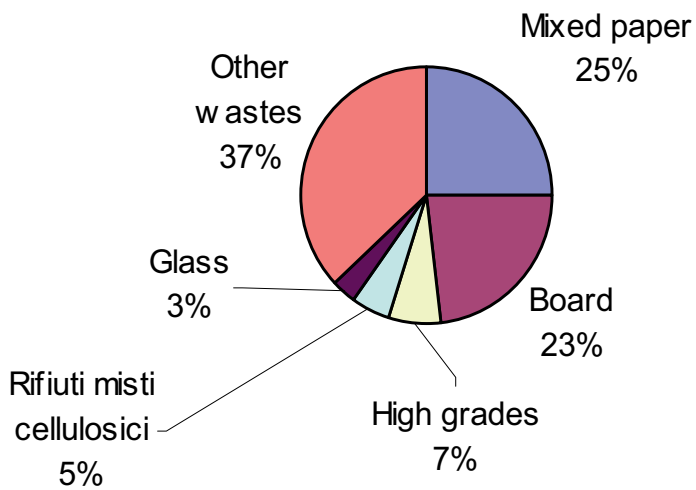
# RECOVERING PLANTS



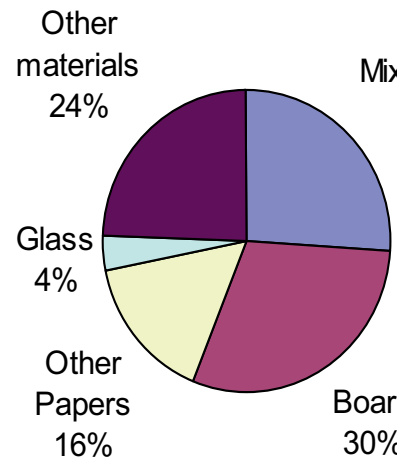
# MANUAL AND AUTOMATIC SORTING



# COMPOSITION OF MUNICIPAL WASTE IN OUT OF THE SORTING SYSTEM

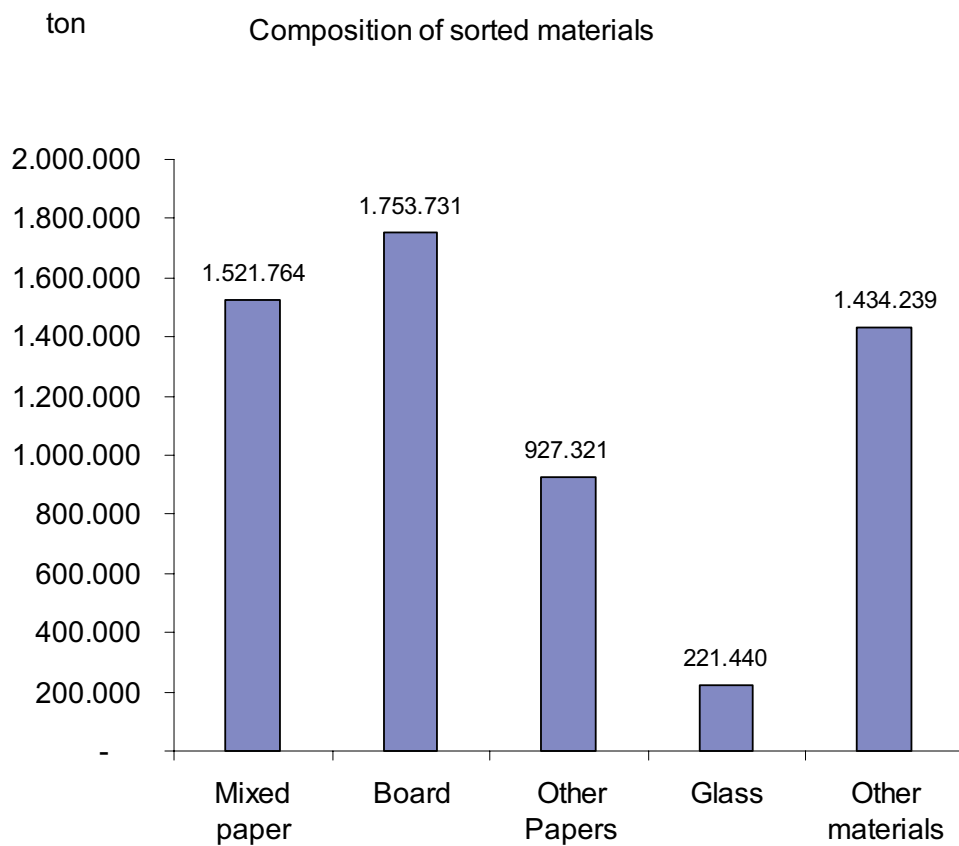


IN



OUT

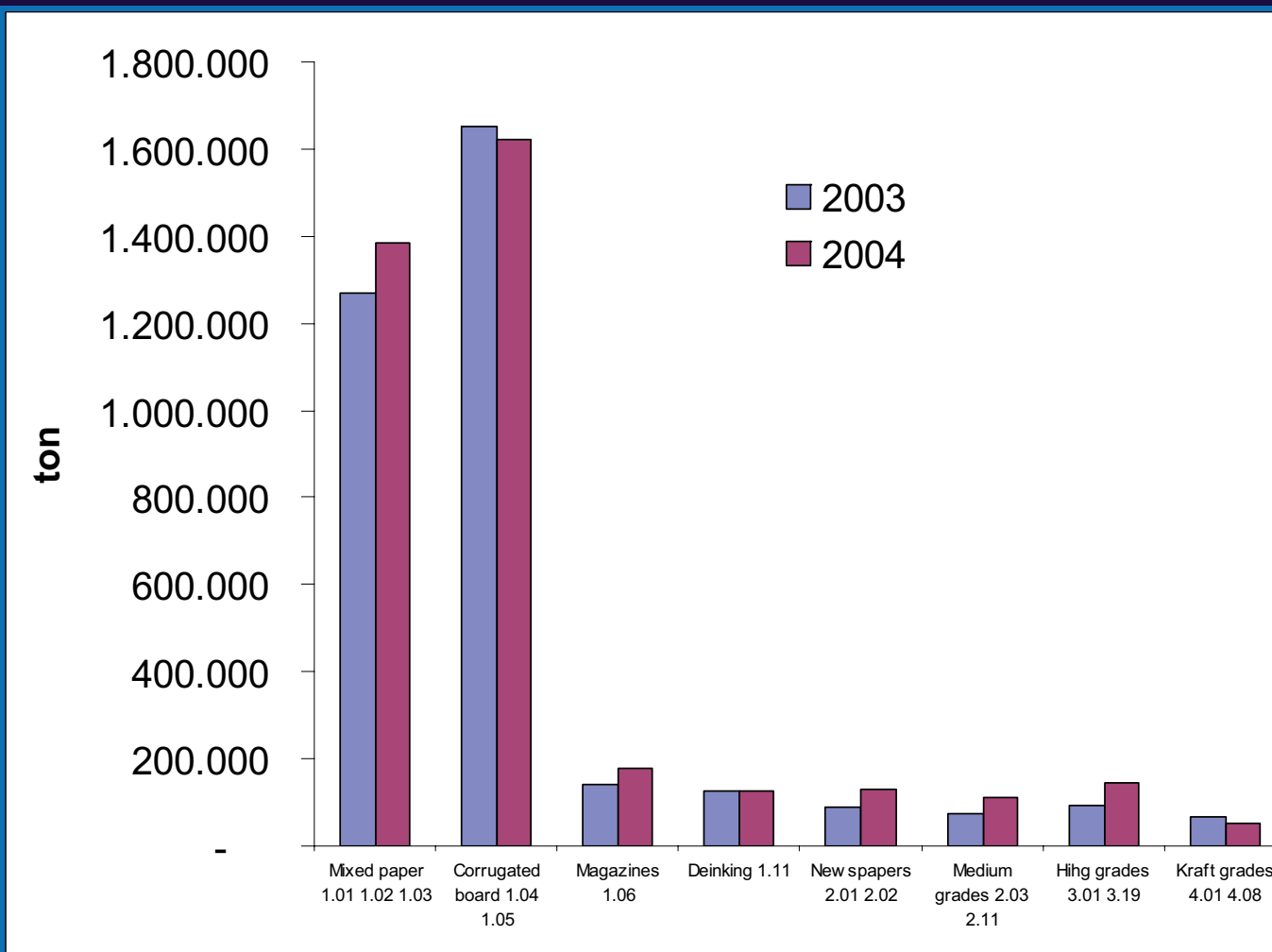
# COMPOSITION OF SEPARATED MUNICIPAL WASTE



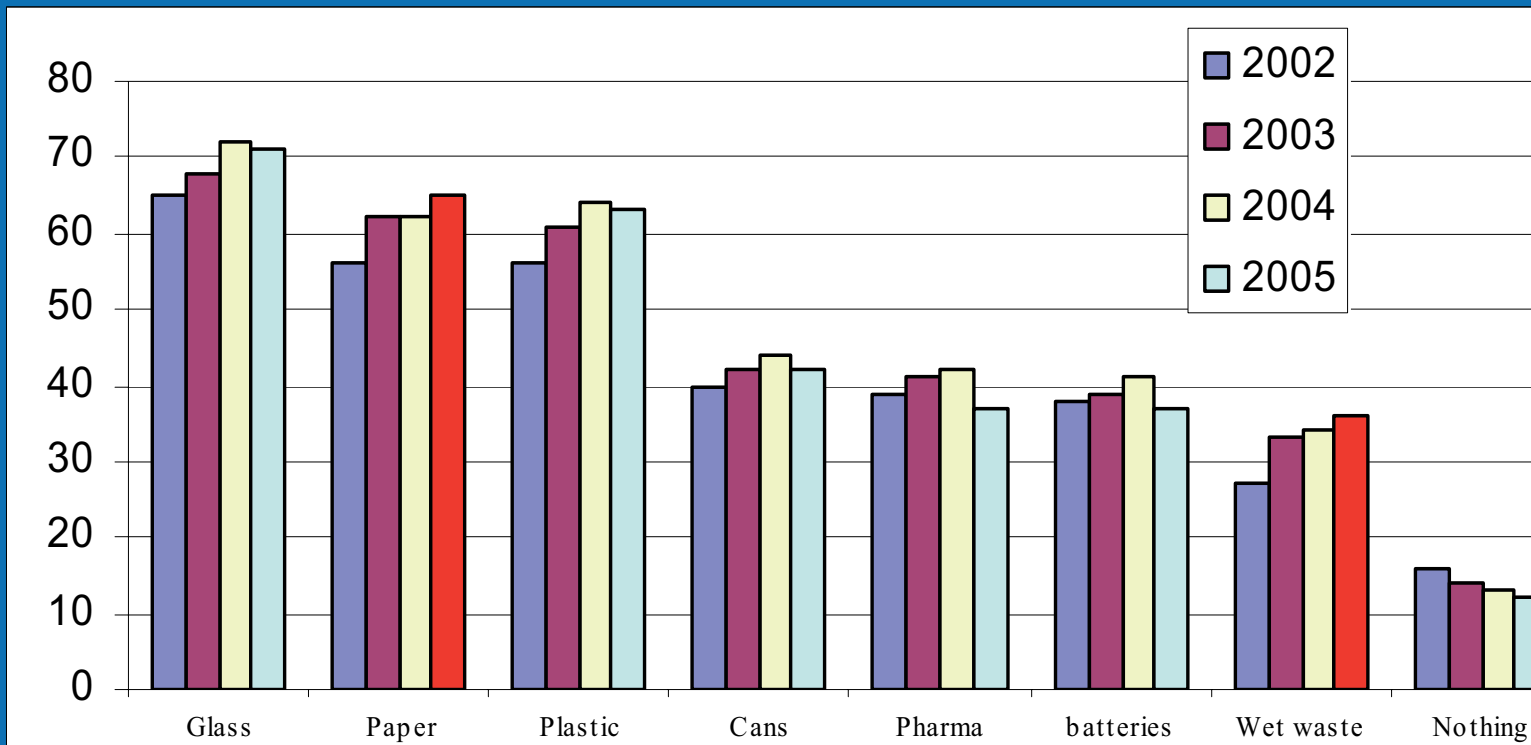
Source Unionmaceri



# COMPOSITION OF SORTED PAPER AND B



# Separate Waste Collection as Civicness I



Source: Comieco



Many thanks for your atte