



Central Europe (countries & regions)



The project partners of EcoPaperLoop





WP4-Objective: Improving Paper Collection within CE



An analysis of the p&b collection rates within Europe clearly suggests that there is still a considerable potential of used p&b suitable for recycling which is not being tapped yet.

This conclusion is anything but new. It already gave motivation for a number of studies in the last few years – like COST Action E48 „The Limits of Paper Recycling“.



There is no doubt, that what was (and still is) true for whole Europe is equally true for the Central European regions, which are in the focus of ECOPAPERLOOP.

Quite some of the research tools used and results obtained for the above mentioned studies can be considered instrumental for the objectives of ECOPAPERLOOP's WP4.



WP4-Objective: Improving Paper Collection within CE



The efficiency of a collection system for used products is in general assessed with regard to

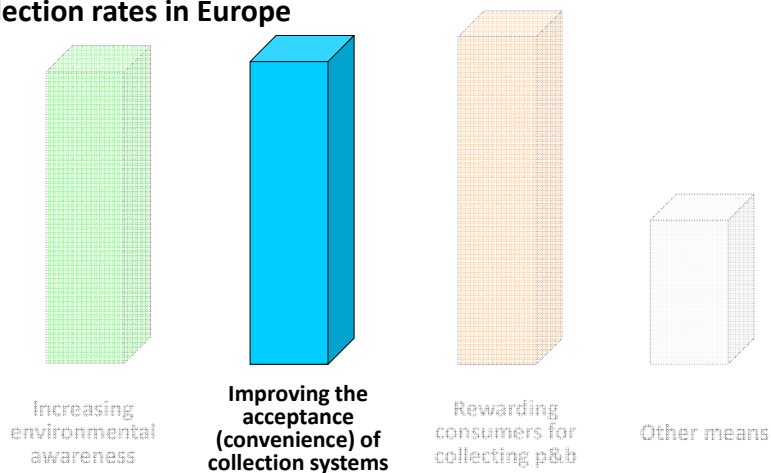
- quantity and
- quality of the collected material and the
- specific collection costs (€/t).

All corresponding studies gave clear evidence that the success of such strategies is moreover a function of





- the local /regional society's environmental awareness,
- the local/regional infrastructure
- the structure of the local/regional recycling industry and
- the way the collection strategy addresses the needs of this local/regional recycling industry

The strategies by which used paper and board products are collected as well as the logistical environment have significant effects on the quality of the secondary materials, the economics and the environmental burdens caused by recycling.

Means to increase p&b collection rates in Europe



The influence of living conditions: Collection quantities and rates in a system for **graphical paper collection** in selected urban structures

	Structure characteristics	Collection quantity [kg/(c-a)]	Recovery rate [%]
	high rise apartment houses	31,36	50,8
	housing blocks	40,49	66,3
	semi-detached building structures	45,68	82,2
	detached single family houses	60,22	93,1

The influence of the collection system:

Paper and board are collected a. o. through household kerbside collections, commercial cardboard collections and a variety of paper/board bring sites.



bring bank



bundle collection
(kerbside collection)



paper bins
(kerbside collection)



bring bank (?)

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While it seems that the collection system has only a minor influence on the amount of p&b collected (provided enough capacity is offered) it obviously has a very pronounced influence on the quality



bundle collection
(kerbside collection)



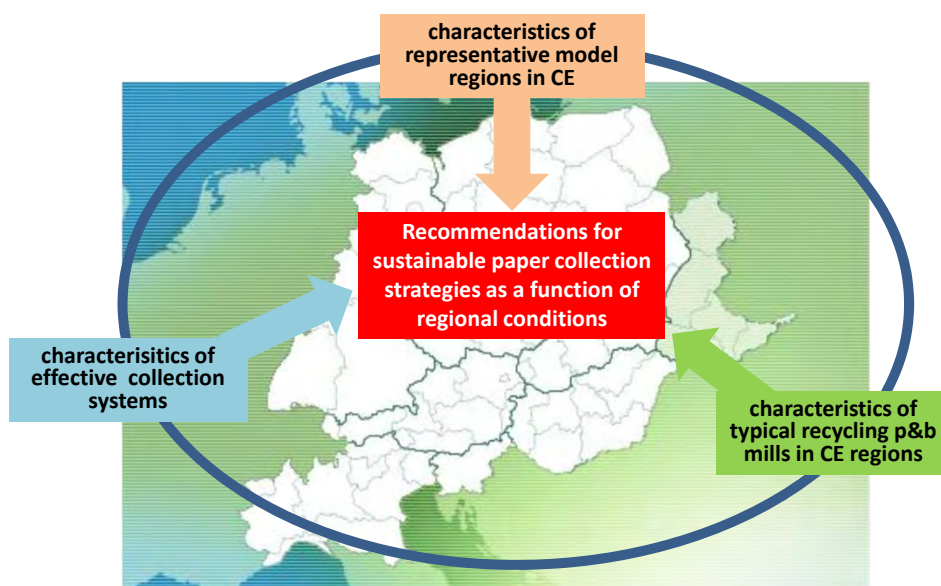
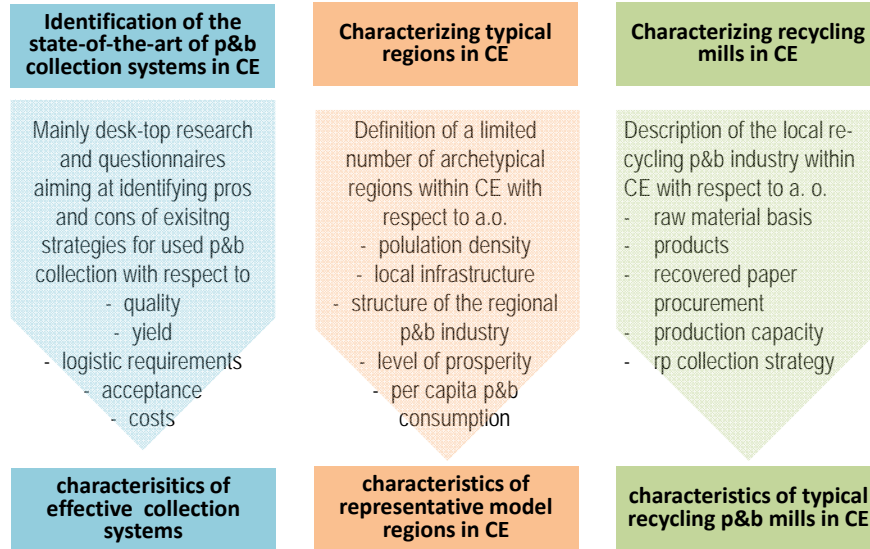
paper bins
(kerbside collection)



bring bank (?)

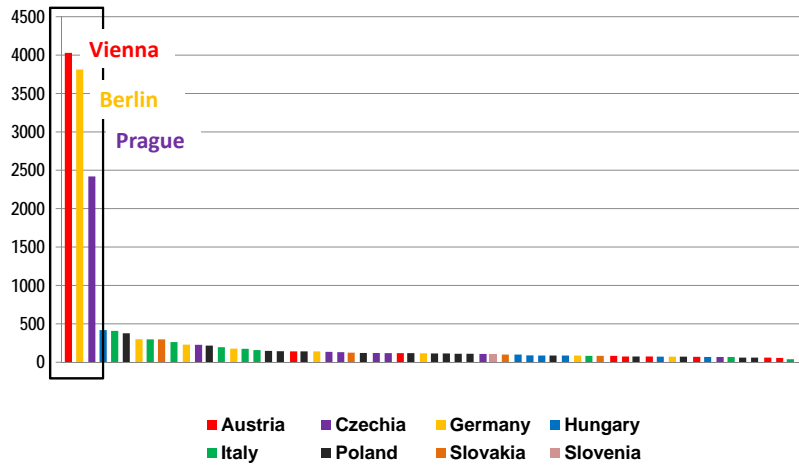
The influence of the collection system on recovered p&b quality:

Recycling station:	99.5 % graphic 0.5 % undesired (of which 0.1% non-paper materials)
Bundle collection:	97.5 % graphic 2.5 % undesired (of which 0.6% non-paper materials)
Bring bank:	96.6 % graphic 3.4 % undesired (of which 0.4% non-paper materials)
Paper bin pick-up:	82.3 % graphic 17.7 % undesired (of which 1.9% non-paper materials)

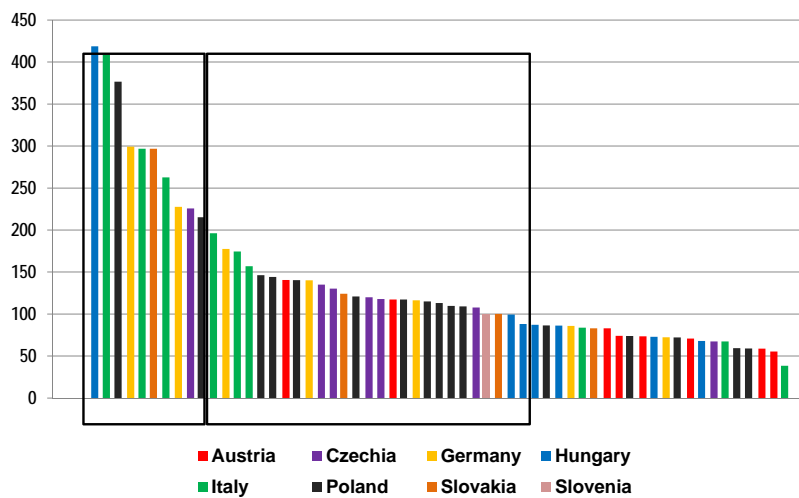


The population density (inhabitants/km²)

the big cities



The population density (inhabitants/km²)





The activities and objectives of WP4



- 1. Establishing contacts with mills, recovered paper platforms and local authorities (TUD, UWH, ICP/UL, Cobro)**
- 2. Collecting data in GIPSH* countries (SSCCP, PMV, UWH, ICP/UL) on societal, industrial and infrastructural conditions**
- 3. In-depth analysis of the present situation in GIPSH* countries. Recovered paper quality vs. collection strategy**
- 4. Establishing a database for the GIPSH* countries**
- 5. Recommendations on sustainable paper collection strategies (TUD, COBRO) as a function of regional conditions**

*GIPSH = Germany Italy Poland Slovenia Hungary