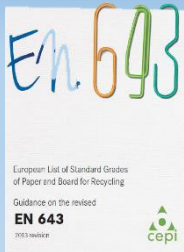


SEPARATE COLLECTION SYSTEM FOR PAPER AND BOARD



Background (REF: 1,2)



Today there are over 60 recognised grades of recovered paper in Europe (EN 643), categorised into five main groups by the Confederation of European Paper Industries (CEPI), and the Bureau of International Recycling (BIR), divided into: Ordinary grades, Medium grades, High grades, Kraft grades and Special grades.

It is important to keep paper and board separated from the rest of municipal waste streams due to several reasons:

- Paper is the one of the biggest fractions (according to volume) in the dry recyclables mix; hence it has a big potential as a resource.
- If quality is good, can be recycled up to 6-7 times (average of 3.5 times) → closing the loop.
- Vulnerable to impurities → should be collected separately from other fractions.
- Separation at the source minimises the need for subsequent sorting operations.

ACTION

Introduce a separate collection system for paper and board to offer citizens the possibility to separate it from their residual waste and other recyclables

Example of best practice implemented

Selective Collection of Paper and Board in Berlin (Germany)

(REF: 4)



Figure 1- Selective collection containers in Berlin

Berlin has almost 100% coverage of separate door-to-door collection for the source separated collection of paper and board, glass and bio-waste.

For the case of Paper and Board, the selective collection system covers the whole city. Materials collected by this system are: newspapers, magazines, catalogues, office paper, packaging paper, cardboard and cards. A door-to-door collection system is used (blue wheelie bins). The service is given by several organizations. Additionally, bring banks are also present throughout the city.

Some indicators about paper and board collection are shown below:

| | |
|-----------------------------|--|
| Collection Coverage | Household nearly 100% and businesses 100% |
| Annual Collected Quantities | 160,574 t: 47.2 kg/cap |
| Source Fundings | BSR (municipal collection service) finances itself from the collection fees and other charges for services but it does not generate profits. Then, cost reductions directly benefit fee-payers |

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Keep in mind that...




- ⚠ Characteristics of a territory and its socio-demographic characteristics define the type of collection scheme.
- ⚠ Regarding the technical issues, it is necessary to develop an accurate system, adapting type and size of collection containers, establishing an adequate frequency for the collection.
- ⚠ The whole process of collection – transport – sorting – recycling should be considered when defining the collection system.

Related BP: "Specific collection system adapted to the real needs"

How to start? (REF: 4)

- Define properly the specific characteristics of the fraction(s) to be collected (graphic paper-cardboard, paper and board, etc.).
- Size the system: make an estimation of the amount of waste and resources (including identification of potential grades) generated.
- Select the adequate and most promising collection system for your territory.
- Conduct an information campaign addressed to citizens, providing them with accurate and easy-to-understand information.
- Monitoring performance of separate collection system.

Potential benefits

| |  |  |  |
|---|---|---|---|
| Increased cost efficiency, getting a higher benefit from PfR, which would balance the investment needed | ● | ● | ● |
| Better quality of collected material, reducing therefore sorting costs | ● | | |
| Paper for Recycling by separate collection motivates citizens and make them aware of their participation in the recycling process | ● | ● | ● |
| Potential use of PfR for "added-value applications" | ● | | ● |



EN 643
EN 840
EN 1501
EN 12574
EN 13071
EN 15132



References:

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2. PAPER.ORG (2013): Recovery and recycling of paper and board (Factsheet)
3. Waste Framework Directive 2008/98/EC
4. KOMMUNAL SERVICE JENA (2014): Separated waste collection system in Jena (Germany)
5. EUROPEAN COMMISSION (2015): Assessment of separate collection schemes in the 28 capitals of the EU