



New Legislation / Poland = Chance to change

Marcin Kwiatkowski

Warszawa, June 24th 2014



Agenda



1. Introduction to Smurfit Kappa
2. The Circular Life of a Cardboard Box
3. Our Experience and Recommendation
4. The Cost of Contamination
5. Time for Change
6. Your Advantage
7. Smurfit Kappa Support

1. Introduction to Smurfit Kappa - Europe



■ Facts 2014:

- present in 32 countries
- over 41,000 employees
- 350 sites
- sales organizations throughout Europe

■ Main Business:

- paper and board recycling
- corrugated board, solid board and cardboard production
- consumer packaging and displays



1. Introduction to Smurfit Kappa - Europe



Smurfit Kappa is the biggest recycler of Recovered Paper in Europe!



Almost 5 million tonnes recycled across 23 sites

(Germany, Benelux, UK, Spain, Italy, Czech Republic, France, Sweden, Austria...)

2. The Circular Life of a Cardboard Box



3. Recovered Paper Quality / EN 643



In recent years many paper mills have changed their production so that they do not need to use wood fiber for the production of new paper and board, they can use recovered paper.

Good collection and sorting systems are critical means of supporting a high level of efficiency within the paper making industry. As a result, good recovered paper qualities need to be established.

We only accept material that meets the requirements of the **European List of Standard Grades of Paper and Board for Recycling – EN643 (2014)**.

EN 643 contains:

- List contains 67 grades of recovered paper
- Specifying composition and quality
- Clear advice to sellers and buyers of recovered paper
- Recently updated with the approval of the European paper, recovered paper and waste management industries.



3.1. Quality / Excerpt of Grades from EN 643



Code	Title	Description	Non-paper components in %	Total unwanted material %
1.02.00	Mixed paper and board	A mixture of various qualities of paper and board, containing a maximum of 40% newspapers and magazines	1.5	2.5
1.03.00	Boxboard cuttings	Printed and unprinted white lined and unlined grey board or mixed board, free from corrugated material	1.0	2.0
1.04.00	Ordinary corrugated paper and board	Used paper and board packaging, containing a minimum of 70% of corrugated board, the rest being other paper and board products	1.5	3.0
1.04.01	Corrugated paper and board	Used paper and board packaging, containing a minimum of 80% of corrugated board, the rest being other paper and board products	1.5	3.0
1.04.02	Corrugated paper and board packaging	Used paper and board packaging, containing a minimum of 70% of corrugated board, the rest being other packaging papers and boards	1.5	3.0
1.05.00	Ordinary corrugated board	Used boxes and sheets of corrugated board of various qualities, may include 10% of other packaging papers and boards	1.5	2.5
1.05.01	Corrugated board	Used boxes and sheets of corrugated board of various qualities, may include 5% of other packaging papers and boards	1.5	2.5

3.2. Quality / Smurfit Kappa Quality Control



The main EN643 grades SK purchases

- OCC (grades: 1.05., 1.04., 4.02., and 4.03.),
- Clippings (grade 4.01.) and Mixed Paper (grades 1.02., 1.03. and 5.02.)

For all European mills:

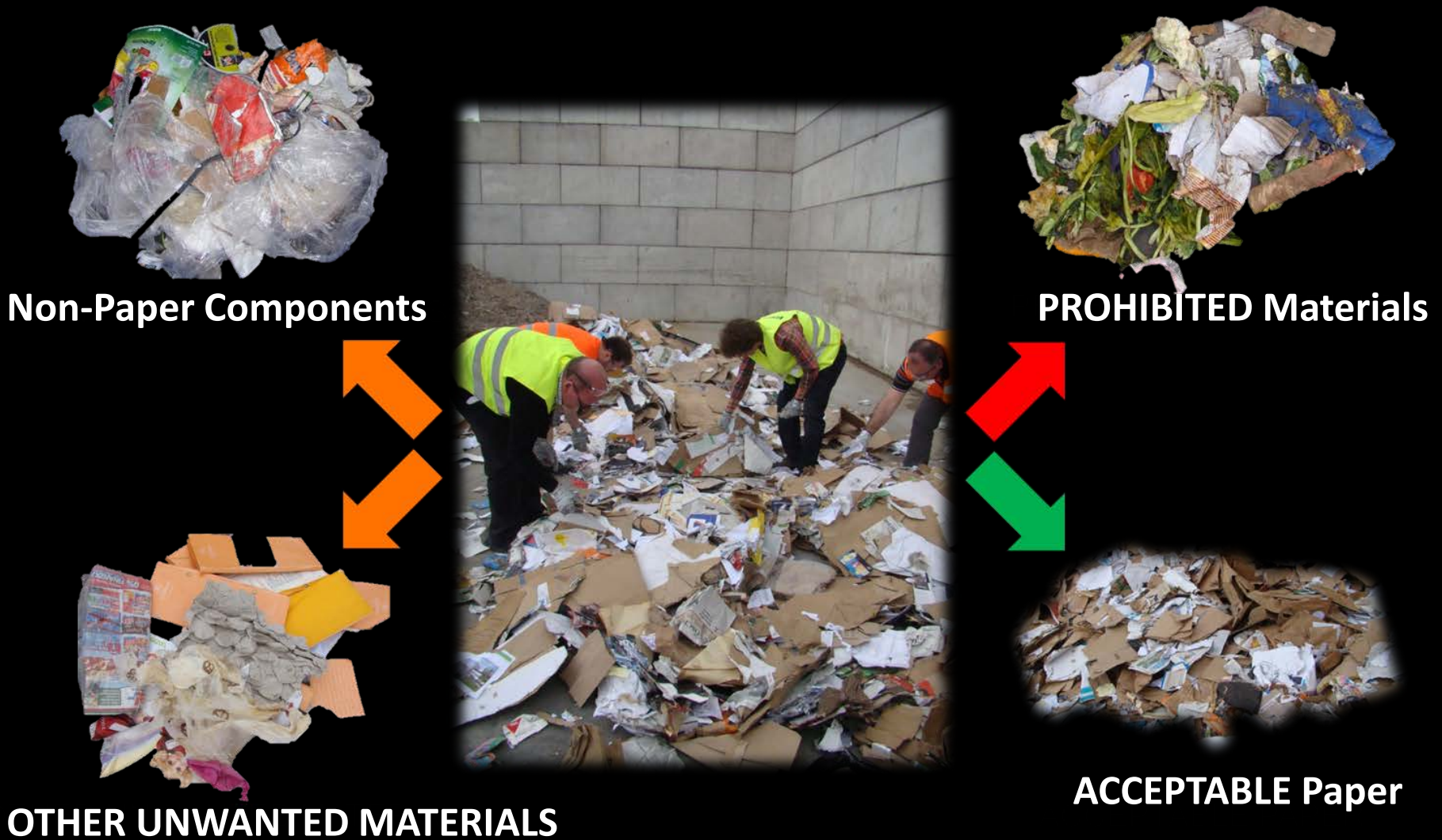
- Delivery standards (health & safety / documentation)
- Quality standards (EN643, bale identification, etc.)
- Control systems (visual entry inspection, moisture analyses)

For selected mills:

- Compositional quality control

Inclusion of prohibited materials (as listed in EN643) may lead to an immediate rejection by the paper mill.

3.2. Quality / Compositional analysis



4. Our Experience and Recommendation



- Paper and board sorted from general waste collections is not suitable for recycling.
- Paper and board sorted from collections which mix different materials (co-mingled) carries a high risk of failure to meet the EN643 standard.
- Until recently low quality material has had a market in the Far East. However, China has reacted by implementing “green fence policy” (stop the import of low quality)
- There is a very high risk that low quality material (not meeting EN 643 standards) will not find a home in future and if it does the value will be far below that of good quality material.



What Smurfit Kappa recommend:

Waste paper and board collected separately from other materials (either as mixed paper and board or as individual paper and board streams) will more readily meet the EN643 standard.

5. The Cost of Contamination



- An excess of 1% moisture in recovered paper adds around 1.2% raw material cost to a paper mill once the external and internal transport of the material is taken into consideration.
- An excess of 1% contamination in recovered paper adds over 2.5% raw material cost to a paper mill once the external and internal transport of the material is taken into consideration **and the cost of disposing of the unwanted material.**
- **These costs will be reflected in the prices paid for material!**

6. Time for Change



New legislation = Your TIME FOR CHANGE!

A big chance for your city!

Use the change in the law to secure your future!



7. Your Advantage – Implementing Separate Collection



- Better quality = cost saving = best price
- With a good concept, system costs can be recovered in a shorter time
- A big opportunity to implement collection systems that ensure the greatest potential markets for your materials (domestic and export) and the highest value returns.
- Will ensure Poland meets the requirements of the European Waste Framework Directive.
- Contributes to Poland meeting its EU recycling targets.
- You contribute to a better environment; saving resources.



8. Smurfit Kappa Support



- ✓ Smurfit Kappa is close to Polish environmental legislation.
- ✓ We know the current situation (collection and separation of waste) in households and we have a direct link to other European collection systems.
- ✓ We are able to give advice based on a detailed knowledge of the European waste management industry.
- ✓ We can offer close cooperation to responsible persons of the city.
- ✓ Current market conditions and price trends are our daily business.
- ✓ We can work closely with third parties for a good implementation process.
- ✓ **We open up opportunities with forward-thinking partners by relentlessly applying our experience, expertise & ingenuity!**

 Smurfit Kappa

NO PAPER – NO BOX!



 Smurfit Kappa

Open the future



Thank your for your attention