



Univerza v Ljubljani



*Eco-friendly recyclability of paper based product:
Recyclability evaluation and policy guidelines!*

WORLD CAFÉ summary



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The EcoPaperLoop project will run until end of 2014. It is co-funded by the European Union/European Regional Development Fund (ERDF) and the local project partners.

THE WORLD CAFÉ

The World Café was conducted upon the idea of gathering the most ideas as possible from branch experts, public authorities and other participants of »Eco-friendly recyclability of paper based products: Recyclability evaluation and policy guidelines« event. The »brainstorming« was a part of the seminar with the topic »How to improve paper for recycling: present regulations and steps further«. The main idea was to gather as much as possible information and points of view regarding the topic from the different experts or general audience. Overall »The World Café« is a structured conversational process in which four groups of people were discussing a specific topic at separate tables. Graziano Elegir moderated first table and the topic of discussion was Recyclability. The second table with topic Collection strategies was lead by Harald Grossman. The third table was presented by Andreas Faul with topic Public awareness and the fourth i.e. Legislation, was managed by Gorazd Golob. Participants, divided in four groups, switched tables periodically. For the 1st group, at each of the four starting point, 30 minutes were available to discuss the topic. For additional group, i.e. 2nd, 3rd and 4th the time disposable for debate was shortened for 5 minutes. Every time when new group started the session the leaders of the tables gave short introduction to the previous discussion held at specific table and then the audience was asked to write on the piece of paper new ideas or suggestions how to approach in solving the topic from their point of view. At the end of each of the four sessions, stickies were labelled on the sheet of paper so that the next table host's view of what has been already discussed or pointed out.

Detail information on each of the four season tables is given below.



1st RECYCLABILITY

Graziano Elegir and Silva König

Introduction

A general lack of knowledge regarding the most important constraints for the recyclability of paper-based products was highlighted. Lack of information is present along the value chain particularly in the case of converters, retailers and brand owners. In addition to test methods education of all actors in the value chain is a prerequisite to achieve a higher recyclability of the paper-based products. To enhance recyclability the major focus shall be put on producer responsibility.

Contributions from attendees of round table discussion:

OPINIONS & COMMENTS:

- there is a lack of knowledge at Retailer/Packer of Goods;
- everybody who is involved in paper making and use paper has to know about the whole cycle of paper life;
- framework for better trade-offs;
- **environment** (liquid board is still better than 100% plastics – even if liquid board requires dedicated streams);
- **business** (safeguard unique selling prints such as samples in magazines);
- cleaver system to separate advertisements;
- consumers has the power about choosing more recyclable product if it is clear the level of recyclability;
- stickies (PSA) awareness not go to recycle bin;
- is Amazon aware of packaging recycling issues;
- there is not a clear understanding of the difference between recyclability and recycled product (made of recycled fibres);
- technological improvement in the paper industry;
- communication in the paper value chain about recyclability issues;
- to print on the box: It's easy to recycle or it's hard to or a specific logo stating the level of recyclability;
- recyclability shall not raise the price;
- less advertising samples, not matching to paper or including a lot of adhesives;
- information from additives producers to be communicated to packaging producer;
- a better Information system shall be established from upstream (Chemical suppliers) regarding chemical components for recyclable products;
- consumers shall be educated to separate component.

SUGGESTIONS & PROPOSALS:

- focus on → producer responsibility → impact on environmental choice of the consumers;
- modularity of Recyclability Tests;
- umbrella for Methods and links to EN 643, CEN EN 13430 & CR 13695-1 & CR 13695-2 Plus ISO 9001 & 14006;
- guidelines & design rules shall be available for safety of the fibre loop (Not only recyclability but also chemicals that spoil the potential use for food packaging).

Make a data-base (available on net) for fully recyclable additives in pulp and paper industry. Sort of positive list.

2nd COLLECTION STRATEGIES

Harald Grossman and Klemen Možina

Introduction

Short *introduction* and overview on collection strategies in Central Europe Region was presented to the participants with the so far well known ideas of collection strategies. Overall there were 24 participants, out of which 13 of them wrote the propositions and are listed below in section *propositions*. Collection strategies do differ from country to country, they even distinguish one from another in the same country. Unique collection strategy does not and cannot exist, namely due to the diversity of legislation, inhabitants and after all countries diversity, i.e. cities/countryside, etc.

GENERAL

Most appropriate collection strategies are the function of:

- quantity;
- quality;
- infrastructure;
- local paper industry.

Theoretical quantity:

- number of inhabitant/consumers;
- education;
- income;
- age structure;
- awareness (recycling marketing);
- flexibility.

Collection strategies: WHAT?

- commingle;
- single stream;
- source separated (graphical papers, corrugated cardboards, etc.).

Collection strategies: HOW?

- curb side;
- drop off;
- buy-back.

PROPOSITIONS

- look at the best practice in every project partners country;
- many systems have to be used together to get the best results out of it;
- ecological island;
- selling paper directly to the factory;
- tourist/seasonal/university cities;
- separated bins for each waste;
- **collection rate: once a week;**

- **collection volume = theoretical potential × activity;**
- sorting at source;
- volumes of printing papers are increasing due to the advertisement;
- for Poland the curb-side collection is most appropriate;
- if the theoretical model is too complicated, one suggested to get the real data;
- the concept of theoretical quantity should be revised due to the too many parameters;
- in Croatia they still practice the drop-off centres and it works for them because they are usually clean and easy accessible;
- buy-back; money stimulates people and paper gets less contaminated;
- improvement of household collection is needed, because too much material is wasted;
- **everywhere** should the printing paper and packaging material be collected separately;
- **every household should have their own paper bin;**
- **BACK PACKING is the 4th solution** in how to recycle waste packaging materials;
- drop-off and buy-back are the two options that it prefers to happen in the future;
- in Finland the most acceptable strategy is "buy-back" and in correlation to that the municipal organisations have to first educate people, mainly ones aged between 30 and 50, to produce less waste and how to correctly separate them and in the end it does not necessarily just the money they would get in the "buying-back" strategy, but the community would work in some sort of coexistence, where you get coupon or »**local currency**« which you can cash in next time you visit local services, i.e. bakery shop, gym, newspaper kiosk or swimming pool, etc. System of »**local currency**« already works in the UK and some parts of USA;
- unique identity of the paper collection strategies is »**paper is not waste like other waste**« or »**recycling saves jobs**«;
- when considering the collection strategy, it should be noticed in the frame of circular economy and proximity and also taking into account local sustainability;
- quantity depends on the convenience and acceptance, keeping the amount of work from the consumer point of view, to the minimum effort as possible.

3rd PUBLIC AWARENESS

Andreas Faul and Raša Urbas

Introduction

Each group got a brief introduction to the subject. The two main subjects of the EcoPaperLoop project – collection and recyclability – were discussed separately. However, since the subject of this World Café dealt with the consumer, most of the contributions were for collection.

COLLECTION

Rewarding schemes

- How to motivate (to collect):
 - Credits in (recycling) centre;
 - Rewarding (money).
- Rewarding the correct recycling (= proper separate collection)
 - Benefits on the monthly bill

Target groups

- When to motivate
 - Early – kindergarten, primary school
- Raising awareness
 - Especially older population (they tend to act as they are used to: put paper to the garbage)

GENERAL ASPECTS OF INFORMATION AND MOTIVATION

- Motivation of the consumers
- Better Information
 - Internet
 - Stores
 - Producers
 - Using TV, radio and newspaper
- Trustful information (e. g. paper products which are collected separately will be kept separate from other material and will be recycled).
- Improving peoples trust in recyclability procedures, recyclability companies.
- Better explanation of bio-degradable, recycling labels on the products.
- Contaminated material – not raw material! Lack of awareness.
- Nobody cares when packaging becomes waste! Lack of awareness that it might be raw material!
- Positive use of advertising possibilities.
- Advertising of the use of recycled packaging
 - Companies which use those products should point it out

- Give the public the opportunity to see the recycling operations – open door.
- Producers and printers have to do **more** on recyclability
 - Not everything should be on the consumers!
- Positive use of advertising possibilities

THE PAPER INDUSTRY NEEDS FACE-LIFTING!

Specific proposals for information

- Clearer expression on the Product
- »Please recycle this product«
- Information on the product about its »other – second life«
- Use the substrate to submit the message – it does not need expensive TV campaigns
- Do it easy – do not complicate!
- Put me in the blue bin
- Feedback loops
- »I'll be back!« (If this phrase should be used, it is strongly advised to check a possible copyright)
- »I will return as your fresh newspaper in two weeks«
- »I will return as new packaging material within four weeks«
- Make it a story (e. g. a hugging fish – fish prefer paper over plastics because of ocean pollution)
- Recyclable (Recyclable = me / able = you)
- Consumer choice and empowerment
- Urban Forest (Caution! The term »urban forest« is also used by foresters for trees in urban areas)

RECYCLABILITY

- Simple Packaging (keep the number of different materials at the minimum)

4th LEGISLATION

Gorazd Golob and Anja Gross

Introduction

Education, promotion and stimulation on recyclability are much more important and efficient than extended legislation or punishment. There is no need for improved legislation oriented to the end user. Regulation on collecting, sorting and use of paper for recycling should be minimized. We need well defined political goals and policy on EU level.

Recyclability of the final product is more important than content of recycled fibers in paper. Market should regulate the use of recycled paper.

General rules for eco design of printed publications and packaging products in regulation are needed on EU level.

Rules of recyclability should be included in Green Public Procurement regulations.

=> minimum of regulation for GPP;

- take care the influence of new media: how long are printed books still used in school.

Suggestions/needs:

- introduction of legislation for separate collection in offices (incl. and at least for public buildings); problem: very often the user of the premises is not the owner;
- school should be regulated to print on recovered paper;
- guidelines for procurement needed (what type of products should we prefer);
- most important is collection, newsprint is important fibers source;
- regulation is needed on a large scale for recycled paper in public sector.

CONTRIBUTIONS FROM ATTENDEES OF ROUND TABLE DISCUSSION

Legislation in GPP (Green Public Procurement)

Requirements:

- keep the laws simple;
- common rules for definition for GPP;
- comparability of products.

Opinions:

- the system, not the regulation, should support recycling products;
- guidelines on GPP on EU level are existing;
- promotion of recyclability only possible to certain point because we need virgin fibers;
- more important is eco labeling, GPP should focus on sustainability;
- not the source of a product (is it a recycling product or a product from virgin fibers) should be important, but the recyclability of a product should be important;
- legislation supports unhealthy development (eg. virgin fibers in Northern EU countries, eg. disadvantage for Sweden);
- market should regulate the use of recycling products (more participants had have this opinion);
- regulation needed for the procurement of recycling;
- no laws for GPP, because that would increase corruption, instead make sure that recycling products are cheaper;
- GPP forest (FSC?) certification is more important than the certification of recycled paper;
- there are already existing regulations on safety issues

Legislation on sorting

Opinions:

- educating people is better than regulation;
- different systems for collection;
- increase in sorting at point of collection (households) will increase costs;
- compensation for consumers who separate at point of collection (eg money at recycling yard);
- make it easier for consumers to collect;
- no legislation on sorting needed (market should regulate);
- regulation over prices (stimulation instead of punishment for consumers);
- sorting paper for recycling (p4r) must be collected separately on an European level.

Legislation on education

Opinions:

- should be organized at municipal level;
- supporting of public education on early stage (eg. school);
- regulation or guidelines on education in schools;
- we are the good ones.

General:

- general rules for eco-design in regulation needed on EC level;
- make paper collection as easy as possible for customers;
- material from school (paper collected in school eg. newsprints) has better quality;

- regulation on who is allowed to collect paper from households;
- use public awareness to create political needs for better legislation (politicians react to voters not to industry);
- smart regulation: not demand-side tools (recycled content) where shortage of supply => recyclability is more important;
- less regulation – if we want to have more paper recycling lets make it a better and cheaper option by using economic forces instead of legislation.

CONCLUSIONS AND SUMMARY

Recyclability

The **topic** is frequently **confused** with the amount of definitions regarding recycling. The term **recyclability refers to the quantity of product that can be derived from the material during recycling** and feasibility of using them once again in the production of a new product. The **amount of information** printed on the packaging should be **limited**. Recyclability is the major issue of today's product; therefore every products composition should be designed as a function of decomposition, i.e. green design. More focus is suggested to be on the **producer responsibility**, while the consumers will with their choice of selecting specific packaging influence on the **environmental impact**. It is a social aspect and it is well defined and recognized by the media, which are in case of paper-based product often incorrectly presented, i.e. not using paper saves trees, etc. Publicly available database on the Internet might be helpful to increase awareness about the »real green« and »not so green« paper base product.

Collection strategies

Introduction in to the subject needed to be presented in detail for better understanding of the topic, therefore with each additional group; the lack of time became an issue. Overall, well-known and applied collection strategies in different countries (SLO, DE, IT, PO, HU, FI, CRO) are accepted. Participants pointed out some general suggestions need for the uniform collection strategy, but taking into account the fluctuation of the residence in i.e. touristic or University cities. More realistic data should be considered when studying different approaches of collection and not just the theoretical ones. Highlighted were **collection frequencies**, which to the participant observation should be **once a week, separately collection of graphic materials and cardboard, number of bins** should be **increased**, especially to segregate paper from other wastes, due to the brittleness of the paper, possibility of »**back-packing**« into the »used« paper packaging with the same content, introducing the »**local currency**« from which all the involved in the chain have in some way profit and on paper/packaging should be written, i.e. »**recycling saves jobs**«. All the proposals should help to stimulate the municipal to think about how to establish the uniform collection strategies in correlation to the county or even to the entire region of Central Europe, so that, when one goes outside of its domicile, it will recognise the recy-

cling bins, because they are the same as they are in its surrounding, i.e. red is for paper, yellow for packaging (plastic, aluminium, etc.).

Public awareness

The subject was suitable for this type of brainstorming exercise; the time was sufficient for the groups.

Most of the specific proposals were of a kind which can be submitted on the substrate. However, the challenge is to carry the message in a few words or in one picture and at the same time make clear that it refers to the packaging and not to the product for which the packaging is used. This latter aspect is not an issue in the graphic sector, where the paper is the product itself.

Legislation

The topic in general is well established in everyday life, but most of the participants were not aware of the specific provisions that are the part of the EU standards and directives. GPP is one of the topics discussed in detail with the participants of the World Café. Recycling should be supported by the system itself and not by the strict regulation/legislation. GPP is primarily focused on the sustainability and it should be promoted not just through public but also through entrepreneurship procurement. Need for secondary fibers should not be dictated exclusively throughout the legislation, it should be regulated also in correlation with the market demand. Therefore, **education is better than regulation** and **regulation above price**, i.e. stimulating consumers has higher effect than punishments.

