GUIDELINE DOCUMENT:

POLICY RECOMMENDATIONS AND GUIDELINES

DECEMBER 2014

Policy Recommendations and Guidelines

Contents

Glossary

Collection	Gathering of paper and paper products from industrial and commercial outlets, from households and offices for recycling. (Collection includes transport to the sorting/processing or recycling plant/paper mill).
Eco-design	Consideration of a product's environmental effects through its whole life cycle with the objective to reduce these effects during product design, development and planning.
End-of-waste	According to Article 6 (1) and (2) of the Waste Framework Directive 2008/98/EC, certain specified waste shall cease to be waste when it has undergone a recovery (including recycling) operation and complies with specific criteria to be developed in line with certain legal conditions.
Extended producer responsibility	Producers/packers/importers placing packaging and/or packaged products on the market are responsible for the appropriate management of the product/packaging, even after it has been discarded by the consumer. This applies to packaging and waste packaging in the EU.
Green Public Procurement	Using purchasing power of Europe's public authorities to choose environmentally friendly goods, services and works, to contribute to sustainable consumption and production.
Life-cycle thinking	Identification of possible improvements to goods and services in the form of lower environmental impacts and reduced use of resources across all life cycle stages to avoid burden shifting; this means minimizing impacts at one stage of the life cycle, or in a geographic region, or in a particular impact category, while helping to avoid increases elsewhere.
Municipal waste	Household waste and waste from retail trade, small businesses, office buildings and institutions (such as schools, hospitals, government buildings), similar in nature and composition to household waste, collected by or on behalf of municipalities.
Paper for recycling	Natural fibre based paper and board suitable for recycling and consisting of - paper and board in any shape - products made predominately from paper and board, which may include other constituents that cannot be removed by dry sorting, such as coatings and laminates, spiral bindings, etc. Remark: Previously known as "recovered paper".
Recycling	Reprocessing of used paper in a production process into new paper and board.

Recyclability	Design, manufacturing and converting of paper-and-board-based products in such a way to enable a high quality recycling of fibres and minerals in a manufacturing process in compliance - where appropriate - with current standards in the Community; as a minimum, recyclability requires that sufficient information is exchanged for appropriate risk management and safe re-use of fibres.
Residual waste	Remaining solid waste after separation of recyclables and hazardous waste collected in households (ideally not including any recyclable fractions/hazardous waste).

1. Introduction

Paper represents one of the best recycled material in Europe and a good example how the circular economy may work promoting proximity recycling thus creating new job opportunities at local level. Currently, the statistics[1] show that at European level 71, 7% of this material goes back into new paper products. Nonetheless, the quality of this material is clearly affected by some present mega trends. The sharp decline of newspapers consumption in most of the European countries is reducing one of the best known recycled paper products meanwhile the concomitant increase in the share of paper based packaging products poses new challenges due to the high diversification of these products. In order to keep the currently high paper recycling rate or even improve it in the future, a clearer definition of recycling oriented eco-design is necessary as well as a further development of the life cycle thinking in the whole paper value chain. The quality of the collected paper for recycling has to be considered as equally important as the amount of collected paper by local decision makers. Besides, the extended producer responsibility for an effective material recycling shall become a key driver in the decision process of environmentally focused companies.

The collected paper for recycling in Central Europe (CE) accounts for approximately 16 million tones, representing about one third of the amount used by the European paper industry. However, the recycling rates are quite different among the CE countries. Some of them are approaching the theoretical limit in collection whereas others still show a significant potential that must be exploited. Lesson learning from best practices is a key point and communication through suitable expert based guidelines is very much relevant to spread correct information thus helping the paper value chain stakeholders to better contribute at the sustainability of the paper recycling loop.

EcoPaperLoop, "Eco design for the Enhancement of the Central Europe Paper Based Product Recycling Loop" project is addressing these challenges. This document is one of the core outputs of the project. Roadmap for the improvement and harmonization of policy rules in the region has been developed as a set of policy recommendations and guidelines targeting European, national, regional and local policy makers designing regulatory environment for waste management and paper recycling in order to support the paper and board mills utilizing paper for recycling as raw material. Recommendations are based on the analyses of the present body of rules on paper for recycling and interviews with different stakeholders from the five project countries, Germany, Hungary, Italy, Poland Slovenia, and additionally from Austria and a number of international and national discussions with different stakeholders groups.

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[1] CEPI – Confederation of European Paper Industries „Key Statistics European Pulp and Paper Industry 2013"

2.   Policy recommendations and guidelines

The roadmap attempts to set supporting guidelines for the policy on how to further improve common strategy and legislative framework on paper recycling loop to achieve recycling targets and to ensure both availability and good quality of the raw material for the paper industry.

The set of policy recommendations regarding the present body of rules and future targets presented here is developed through the consultation process with a high consensus among the key stakeholders involved.

2.1 Recommendation No 1;

Change of focus of the overall policy regarding paper recycling is needed, prioritizing material recovery and sustainability.

Maintaining and ensuring the quality of paper for recycling should be the main objective. The stakeholders involved in the consultation expressed their strong opinion on the need for well-defined policy goals at EU level, focusing on the sustainability, retrieving fibers as natural resources.

The need for stronger focus is justified in the market trends. The paper recycling rate in Europe has reached 71.7% in 2013. Recycling has increased by 45% since 1998, the base year for the first voluntary commitment set in the European Declaration on Paper Recycling by the European Recovered Paper Council (ERPC). The total amount of paper collected and recycled in the European paper sector remains stable at just over 57 million tons, despite decreasing paper consumption in Europe. Paper fibre is now recycled at an average of 3.5 times in Europe, far exceeding the worldwide average of 2.4 times.
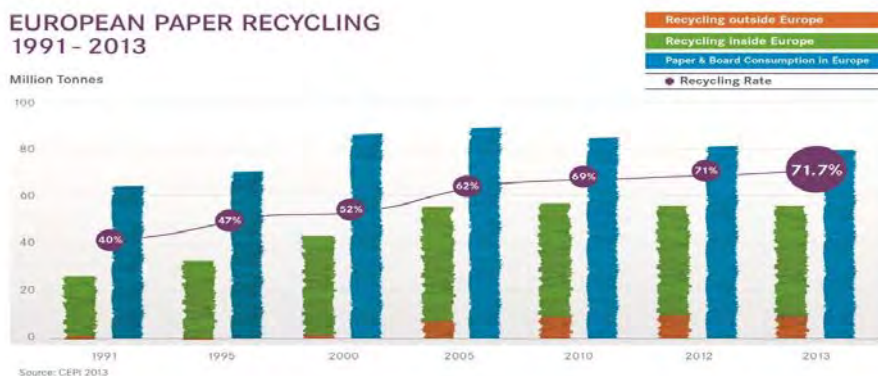
EUROPEAN PAPER RECYCLING
1991 – 2013

Million Tonnes

Figure 1: CEPI, Key Statistics 2013

13 European countries have already exceeded the targeted 70% recycling rate. The countries which did not achieve the target yet (recycling rates below 60%) are also reporting improvements in recent years.

The EU is reaching limits regarding paper recycling rates. It is estimated that overall 22% of the paper consumption are not recyclable or collectable. At the same time, the streams of used paper are changing. Market trends and different consumption patterns are setting new challenges for paper recycling. The decline of the graphic paper markets (esp. newspaper consumption) is causing a decrease of the amounts of best quality paper for recycling while relative share of products more difficult to recycle is growing due to the growing market for paper based multi-functional and multi-material packaging products. The quality of paper for recycling from household waste is lower and presents a constraint to a higher and more efficient recycling.

Taking into account defined targets (increasing quantity of collected paper with growing share coming from households) and market trends (less newsprint, more packaging), maintaining the quality of paper for recycling is becoming more and more challenging.

Policy guidelines:

- A sound implementation of the legislation and supervision of efficiency regarding achievements of the targets at all levels is essential.

- Ambitious targets are achievable only if a comprehensive approach to policy design and implementation is ensured, following the objective to maintain the quality of paper for recycling and thus focusing on the key preconditions, being eco-design, and better collection and sorting.

- A more market-oriented approach is expected, based on the knowledge of real market issues and cost/benefit analyses.

2.2 Recommendation No 2

**There is room for improvement of the present regulation on paper products but no new bans or expand of legislation are expected.
Education, promotion and stimulation of all actors in the value chain are more important and efficient to reach the targets.**

The present legislation related to paper for recycling defines general requirements. No specific environmental obligations apply for paper products. The packaging waste directive gives reference to the EN packaging standards which provide guidelines on how to implement essential packaging requirements for all. When paper enters the waste stream, the general rules covered in the Waste Framework Directive apply, as for all other materials.

Regulation concerning collection, sorting and use of paper for recycling is generally acceptable. Overregulation that could become a barrier to development should be avoided. Nevertheless, obstacles and weaknesses in the present regulation exist that need to be improved. Separate collection is widely interpreted.

Policy guidelines:

- Legislation is lacking comprehensiveness; therefore more emphasis on the closed loop recycling management is needed with clear responsibilities of all actors involved.

- Recycling is adequately placed in the waste hierarchy of the Waste Framework Directive, but clear definitions and quality standards for determination of recyclability, including certification methods and guidelines, are needed at EU level.

- The priority should be ensuring implementation of existing legislation in all countries and consistency between EU, national/regional regulation. Higher transparency is needed to ease the implementation.

- Greater material flow traceability including economic aspects will give feedback to producers to improve the environmental performance of the products with regard to material recovery and to the policy for further improvements.

- Improvement of the legislation is needed, but higher awareness of the recyclability issues is even more important. More investment in education, awareness raising and promotion of good practice in paper recycling among all actors involved is necessary, including improvement of general knowledge on the whole paper loop, definitions (i.e. the difference between recyclability, recycling, and recycled paper) and the most important preconditions for the quality of the paper for recycling. Support for technological development should also be enforced.

- A more "life-cycle thinking" approach should be applied, promoting sustainability targets among all actors in the chain; eco-design for the paper value chain to improve production towards better recyclable products, and for the waste management to ensure higher collection levels, proper sorting and access to quality paper for recycling.

- Policy measures shall be strengthened to stimulate actors in the paper loop for more efficient recycling, i. e. rewarding tax and fees incentives, stimulating investment in technology development, strengthening market development initiatives (i.e. GPP) and others.

2.3 Recommendation No 3

New consumption patterns and market trends are bringing new challenges for paper recycling.
Improved collection strategies are needed to maintain and ensure the quality of paper for recycling.

Collection strategies differ from country to country, they can even vary from one another within the same country. Uniform collection strategies do not and cannot exist due to different local conditions, landscape and population, settlement and housing structure, legislation and similar. Nevertheless, collection strategies should follow the objectives of clean waste streams, efficient sorting and traceability.

In terms of quality of paper for recycling at the point of collection, the systems can be ranked (from best to worst):
- Collection shops (paper banks) with quality monitoring (and pay-back as incentive)
- Paper bins / containers at households (quality level depending on housing structure) and recycling centers (with presence of monitoring staff)
- Public containers for paper for recycling
- Single stream ("comingled") collection of all recyclables.

The better the quality is at the point of collection, the lower are the costs for post-sorting. Education and motivation of citizens help to further reduce post-treatment costs. Post-sorting isn't necessary at all in case of collection shops.

The key challenge to higher recycling rates and quality of paper for recycling lies in efficient municipal waste collection systems. The qualities of these waste streams are low and in general not well traced and documented. The systems are subject of the regional/local regulation and are also much more dependent on public awareness.

Through years of experience, a general awareness on the importance of recycling for more efficient raw material use by using recycled paper has developed within the population. Much less knowledge exists regarding conditions that determine the quality of paper for recycling.

Policy guidelines:

- Improvements in collection and sorting systems are proposed to be achieved by investing in awareness raising and promotion, development of additional recommendations and guidelines, rather than new bans and extended regulation.

- Requirements in relation to recyclability in eco-design and producer responsibility to inform and guide consumers for proper collection should be strengthened. Producer needs to communicate to the consumers and end-users information on the recyclability of the product in a simple and understandable manner so that they are informed enough to make the appropriate choice at discarding. Guidelines for proper collection and sorting at the consumer level are needed to maintain pure paper streams. Instructions must be available according to the local sorting systems and recycling technologies in use.

- "Smart« regulation is needed, combining regulatory and policy incentives to stimulate collection and recycling. Regulation should be designed based on the knowledge of the real market issues and stimulated through prices, paper stream should be market oriented.

2.4 Recommendation No 4

Promote eco-design and recyclability.

"Use product design to educate on the environment".

Policies are more focused on the waste stage of the paper life cycle; eco-design is not promoted and encouraged sufficiently. Schemes in support of extended producers' responsibility are missing both in relation to material and financial flows.

Eco-design is supported and encouraged by the new Waste Framework and Packaging and Packaging Waste Directives. The Eco-design Directive (2009/125/EC) does not address paper products and they are not included in the plan of products for which minimum criteria will be produced in the near future. The Eco-design Directive determines minimum environmental requirements while eco-label caters to the top 5% of products concerning environmental performance on the market. The Packaging and Packaging Waste Directive refers to EN standard 13430 which determines general requirements for packaging recoverable by material recycling, applicable to all recyclable packaging materials.

Eco-design of packaging is a trade-off with regard to many product requirements relevant to the packaged product. In view of this the final choice of packaging parameters is left to the packer. Extended producer responsibility and essential requirements defined in the packaging standards can improve packaging recyclability.

Various practices for extended producer responsibility exist in Europe, with different grades of producer responsibility limited to responsibility for final waste management or enhanced to include all stages of waste management with collection and sorting.

Policy guidelines:

- All stakeholders in the paper and waste paper value chain have the power to improve the quality of recycled paper. It is therefore appropriate that responsibilities of each stakeholder are clear and proportional to their range of influence to the quality of paper for recycling.

- General rules for eco-design in regulation on EU level are needed. Eco-design should be stimulated through waste and cost traceability of post-consumer waste management. Recommendations for product designers and producers should be available.

- Determination of recyclability, including evaluation methods and criteria for certification is of high importance. Recyclability tests should represent an umbrella and link to the existing standards and certifications.

- It is expected that a common approach to the operation of producer responsibility will be implemented. This should entail complete coverage of waste product management costs. For that, greater transparency of material flows and economic aspects within the producer responsibility need to be ensured.

- Encouragement of the use of ecolabels and purchase of products with eco certification that include recyclability criteria is important.

2.5 Recommendation No 5

Enforce use of recyclability criteria in green public procurement. "Recyclability of the product is more important than content of recycled fibres in paper products".

Common criteria for green public procurement in EU are defined, linked to eco-label recommenddations. Though the product eco-label is proof of compliance with environmental criteria, it must not be requested per se from the supplier in the tender procedure.

Environmental criteria in public procurement procedures are more or less a legislative requirement in all countries; with some countries prescribing exact environmental criteria and others relying more on the dissemination of good practice, contract templates and other softer tools.

On paper products the content of recycled fibres in the product has a high level of awareness. This aspect prevails too much, as the closed paper loop will only be established and maintained if adequate attention is also given to the recyclability of the product.

Policy guidelines:
- GPP should focus on sustainability. A shift needs to be made from the attention given in GPP to the share of recycled fibres contained in the product to the recyclability of the product.

- GPP is important tool to stimulate recycling, it represents one of few demand side measures and should therefore be imposed stronger. Common rules defined at the EU level need to be clearly defined.

- Implementation is critical, therefore it should be strongly supported by the guidelines, exchange of good practices and education of the users. Efforts are needed to increase the competence of civil servants performing GPP.

- GPP should be an obligation for public authorities and at the same time part of the general policy promoting eco-design and recycling. Measures are needed to stimulate private sector to use the same principles and criteria in the procurement.

2.6 Recommendation No 6

Ensure access to quality paper for recycling in Europe.

It is estimated that a high quantity of reusable and recyclable paper for recycling is lost with export outside the EU borders. EUROSTAT reports the trade volume of paper for recycling in EU-27 according to trade flows. The EU-27 imports are small, but the exports exhibit strong growth till 2009, now remaining stable at nearly 15% of the amount of paper collected separately in the EU.

A recent proposal for changing the legal definition of end-of-waste for paper, aimed to allowing collected paper to cease being considered as waste earlier in the recycling process, has been rejected due to the fear of a potential negative effect on paper recycling in Europe. That could compromise the health and environmental standards contained in the Waste Directive and could reflect in even increased export of paper for recycling thus strongly effecting the European paper recycling sector (European Parliament, December 2013).

The waste shipment regulation provides a safeguard to prevent loss of resources. Amended regulation lays down requirements for shipments of waste within the EU and between the EU and third countries, containing stricter requirements for the member states to establish shipment inspection plans, based on risk assessment.

Policy guidelines:

- End-of-waste regulation and criteria already announced in a new directive should be discussed with the focus on sustainability and resource efficiency. Market and cost/benefit analyses should prevail.

- Strict implementation of the waste shipment regulation needs to be ensured, with more practical supervision of actual shipments of paper for recycling from EU.

- Paper and packaging waste traceability all along until recycling has to be enhanced.

3. Project partners' contribution and strategy

The overall results from our project clearly show that there is room to enhance the quality of paper for recycling implementing the already existing legislation as well as through strong voluntary commitments in the paper value chain.

It is clear that paper mills using paper for recycling as a major raw material are only partially satisfied by its quality. So far, the target of increasing the collection rate in all CE countries is prevailed versus the concept that quality of the secondary raw material is at least as important as the overall collection rate.

The project partners worked together for more than two years promoting the relevance of the quality of paper for recycling. During the project some relevant tools have been developed, and some of them already implemented. Nevertheless, in order to be more effective they will need to be adopted in the whole paper value chain in the near future.

Assessment of paper based packaging recyclability; the method has been developed, and presently four laboratories in CE region possess the right equipment and expertise to carry out the recyclability test thus assisting packaging designers in the development of new recycling oriented products.

Scorecard of paper based packaging products; a Scorecard proposal has been developed during the project time frame and preliminary discussed in a web based public consultation. Nonetheless, this instrument will require a deep discussion in the European Recovered Paper Council before being adopted. The project partners involved in this development will ensure their availability even after the end of the project to ensure a smooth adoption. Due to the complexity of paper recycling process and the huge variety of products present in the market, most likely, additional adjustments and methodological refining will be necessary to ensure the sustainability of the tool in the next future.

Ecolabels and green public procurement; recently, the recyclability criteria have been included into the ecolabel of printed and converted products. Similar criteria are present in the Blue Angel and Nordic Swan as well. In several CE countries the public administration is further developing the national plans for green purchasing. In this context, a clear message from the EcoPaperLoop project concerns the introduction of recyclability criteria for the products to complement the already existing criteria of a minimum amount of recycled products purchased by public authorities. In order to develop minimum environmental criteria, the project partners in their own countries commit themselves to support public authorities and local environmental agencies with the technical expertise gained in the project.

Sustainability tool for end-of-life performance; a sustainability tool has been developed during the project. Currently, this tool allow to translate the recyclability performance of graphic products tested according to ERPC score card into (i) energy consumption increase/decrease versus an average category product, (ii) chemicals consumption increase/decrease versus an average category product, (iii) CO_2 consumption/savings versus average category product. In the case of packaging products categories the tool has been set up, however, it will properly function once the data base will be fully completed. Project partners working on recyclability of packaging products in their own countries agreed to share future results. The lead partner will maintain and update this tool for at least five years after the end of the project.

Decision tree of paper for recycling collection systems; based on the analysis of CE situation, a decision tree has been developed to support local authorities in charge of waste management and collection. The decision tree allow decision makers to clarify what is the best strategy to follow in order to improve paper for recycling collection and quality compared to previous.