



Enhancing Paper Recycling

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Brussels, 14 November 2012

Eco Design for the Enhancement of Central Europe Paper Based Products Recycling Loop



Programme: Central Europe 2013

Priority 3.4: Using our environmental Responsibility - Supporting environmentally friendly technologies and activities

Project coordinator: Graziano Elegir (Innovhub-SSi)

Budget: € 2,271.176

European Regional Development Fund: € 1,781.258

Project time frame: September 2012 - Dicember 2014

Central Europe program



The peculiarity of this Central Europe program is the strong focus on **communication aspects** and the **involvement of Public Authorities** in the project activities.



- Join R&D activities with Policy developments at regional level
- Promote large communication platform with local stakeholders



Partnership	Country
Innovhub-Stazioni Sperimentali per l'Industria	Italy
Paper Technology Consulting GmbH	Germany
Technical University of Darmstadt	Germany
Technical University of Dresden	Germany
Pulp and Paper Institute Ljubljana	Slovenia
University of Ljubljana	Slovenia
University of West Hungary, Paper Research Institute (UWH)	Hungary
Polish Packaging Research and Development Centre	Poland
COMIECO, National Consortium for the Recovery and Recycling of Cellulose-based Packaging	Italy
Lombardy Region	Italy



EcoPaperLoop- supporters



List of supporting organizations	Associated partner
Ministry of the Environment and Spatial Planning, Slovenia	ICP, Slovenia
Municipality of Dunaújváros, Hungary	UWH, Hungary
Camera di Commercio di Milano	INNOVHUB, Italy
Confederation of European Paper Industry	INNOVHUB-Italy
Assocarta	INNOVHUB-Italy
Intergraf, European Association of the Graphic Industry	INNOVHUB-Italy
Università di Milano Bicocca	INNOVHUB-Italy
VDP, German Paper Association	PTC, Germany
Austria Papier Recycling	PTC, Germany
INGEDE International Association of the Deinking Industry	PTC, Germany

External Advisory Board



Paper for Recycling



Paper is a precious raw material – it shall not be wasted. !

- renewable
- recyclable
- biodegradable

Paper recycling increases the material lifespan and is a **key strategy to reduce less environmentally friendly end-of-life options** such as land-filling of biodegradable material and also incineration in thermo-valorisation plants



Recycling rate and Utilization of Paper for Recycling in Europe



Paper Recycling & Sustainability



Higher quality Paper for Recycling



Better sustainability

- ↓ lower energy consumption
- ↓ lower chemicals consumption
- ↓ lower impact on fresh water

High quality of recycled products requires high quality of collected paper for recycling !



Collection systems & eco-design



Since paper **for recycling** is not only recycled in the country where it is produced, some essential features such as **ecodesign** and **ecocollection** concepts must be developed at transnational level to increase the sustainability of the paper loop.

Improper collection systems can drastically reduce the amount of paper being recovered for recycling; and **improper design of a graphic or packaging product** can make it useless or even harmful for the recycling process.



Major paper collection systems in selected European countries



- **Graphic paper separately, packaging paper & board separately**
 - Finland, Germany, Sweden, Switzerland
- **Paper & board separately**
 - France, Germany, Italy, Spain, United Kingdom
- **Co-mingled, w/o glass**
 - France, United Kingdom
- **Co-mingled, with glass**
 - Ireland, United Kingdom



Collection in Central Europe



Country	Collection 2011 [1000 tonnes]
Austria	1.434
Czech Republic	789
Germany (CE region)*	7.459
Hungary	439
Italy (CE region)*	2.869
Poland	1.844
Slovakia	232
Slovenia	237
Total	15.303

More than ¼ of the paper used by the European Paper Industry

* Estimated figures based on population in the CE region



Paper Recycling in Central Europe



In Central Europe regions paper for recycling is a major resource.

- paper recycling rates are still highly inhomogeneous
- collection systems are different
- Recyclability oriented eco-design of paper products is addressed only in some regions



EcoPaperLoop: strategic focus



MAIN TARGET:

Improve the quality of paper for recycling in Central Europe



Awareness is the key message

awareness **among all members of the paper chain**: Publishers and printers, designers, packaging users and print buyers as well as converters and **local public administrations**.



What do we need in CE?

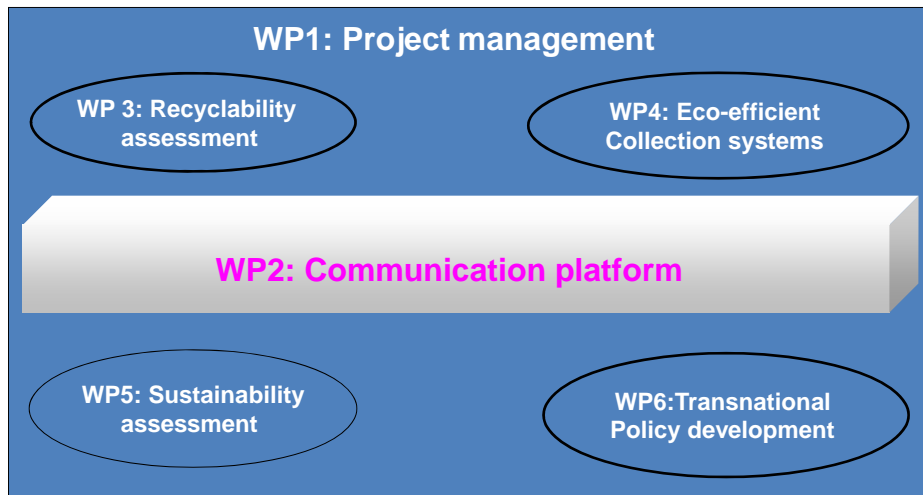


- Develop a clear picture of each region's status
- Develop common methodologies and practices
- Develop Communication platform to enhance awareness of recycling oriented eco-design and eco-collections

- Develop a sustainable transnational strategy for Central Europe management of paper for recycling



EcoPaperLoop- project structure



WP1: Project management Leader- Innovhub-SSI (IT)



- Fulfillment of start up requirements
- **Day to day project management, coordination and internal communication**
- **Steering and monitoring project implementation**
- All reports finalization and submission
- Financial management



WP2: Communication & Dissemination Leader – PTC (DE)



Strategic focus: **promotion of project outputs among stakeholders**

Website www.ecopaperloop.eu and **twitter** account @EcoPaperLoop

Two transnational **press briefings** (1st on 24 Sep 2012)

Newsletters, articles in public press, trade magazines, press releases in all partner languages

Video clips, at least one TV/radio broadcasting in each partner country

Regional transnational workshops in Slovenia and Hungary (incl. training schools),

Seminars in local language (in each partner country),

Final conference in Poland

Face-to-face stakeholder dialogues

Guideline documents in all partner languages



WP3: Paper Based Product Recyclability Leader-PMV (DE)



Strategic focus: **Create a large database on the recyclability of paper based products in Central Europe**

- Enlarge the current Ingede database on recyclability of printed product.
- Develop a common method on packaging recyclability
- Develop a CE packaging recyclability database
- Develop a packaging recyclability score card proposal



WP4: Improve collection strategies Leader-TUD (DE)



Strategic focus:

Compare quality of paper for recycling versus different collection systems in the CE region.

- Portray of current management scenario of paper for recycling in CE based on in-depth analysis of local and regional characteristics
- Deliver recommendation guidelines on sustainable paper collection strategies in the region.



WP5: Ecodesign for recycling: criteria for sustainability evaluation, Leader- Cobro (PL)



Strategic focus:

Enhancing life cycle thinking in paper based products eco-design, for the improvement of recycling behaviour and sustainability

Sustainability assessment of recycling oriented eco-design of paper products (case studies):

- *LCA on graphic products*
- *LCA on packaging products*
- *Development of a software based tool calculator to support recycling oriented eco-design.*



WP6: Traslation of research into new policy guidelines, Leader ICP (SI)



Strategic focus:

Stimulating new policies to enhance quality of paper for recycling in the CE region

- Analysis of the current situation regarding the implementation of EU regulation (e.g. WFD, GPP)
- Roadmap for the implementation of project results in the present body of rules.
Stakeholder on-line consultation
Organization of brainstorm sections during Regional Transnational workshops



EcoPaperLoop – Main outputs



- Reliable standard methods to assess paper products recyclability.
- Regional database on paper products recyclability
- Recommendation guidelines for reliable best practises on recovered paper collection.
- LCA studies on the impact of recycling oriented eco-design of paper products.
- Sustainability software based tool based on project results.
- Roadmap for new transnational policy strategies



Thanks to supportes



International confederation for printing and allied industries s.l.s.b.l.



Austria Papier Recycling



Dunaújváros Megyei Jogú Város
Polgármestere



Thank you for your attention!



This project is implemented through the **CENTRAL EUROPE Programme**
co-financed by the **ERDF (European Regional Development Fund)**



Ecopaperloop Kick-off meeting in Milano



University of Applied Sciences



www.ecopaperloop.eu

