

Ecodesign for the Enhancement of Central Europe  
Paper Based Products Recycling Loop

## The Project *EcoPaperLoop*

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Warsaw, 29 October 2013

Ecodesign 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*

**Lead Partner:** Innovhub-SSI (Milano, Italy)

**Project time frame:** September 2012 – December 2014

## Central Europe region (according to ERDF program)



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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	Hungary
Polish Packaging Research and Development Centre	Poland
COMIECO, National Consortium for the Recovery and Recycling of Cellulose-based Packaging	Italy
Lombardy Region	Italy

## External Advisory Board



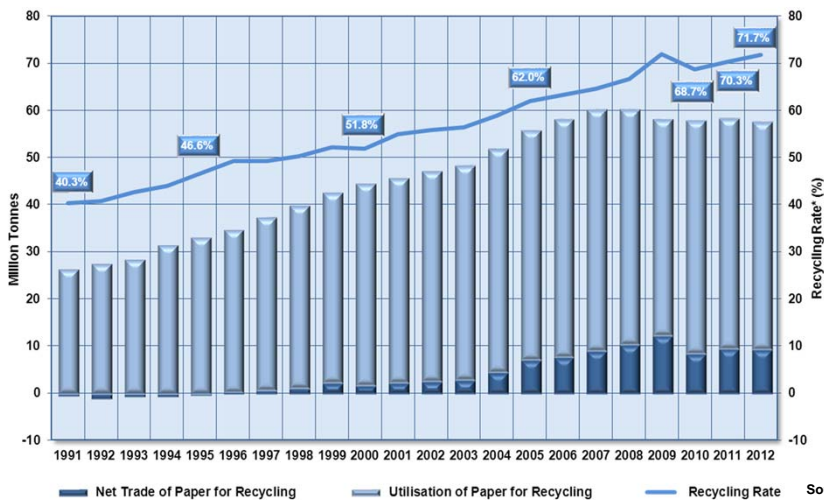
List of supporting organisations	Function
Ministry of the Environment and Spatial Planning, Slovenia	Ad-hoc contact
Municipality of Dunaújváros, Hungary	Ad-hoc contact
Camera di Commercio di Milano	Ad-hoc contact
Confederation of European Paper Industry	Permanent member
Assocarta	Permanent member
Intergraf, European Association of the Graphic Industry	Permanent member
Università di Milano Bicocca	Ad-hoc contact
VDP, German Paper Association	Permanent member
Austria Papier Recycling	Permanent member
INGEDE International Association of the Deinking Industry	Permanent member



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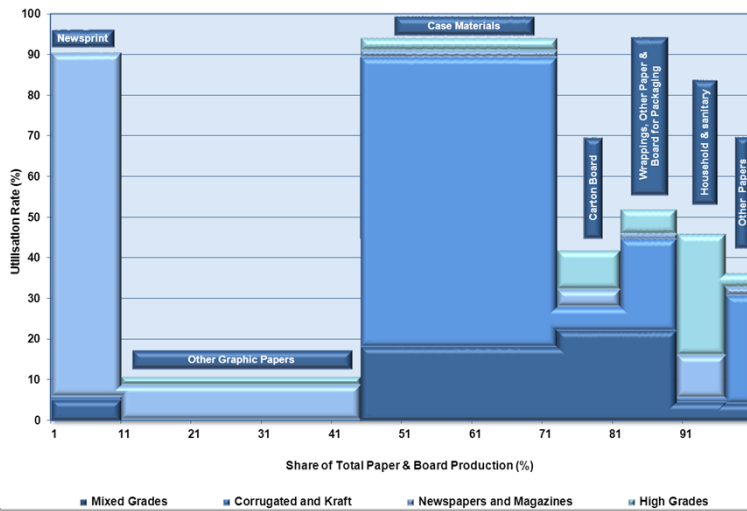
## Recycling Rate and Utilisation of Paper for Recycling in Europe



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## CEPI Utilisation of Paper for Recycling by Sector in 2012



Source: CEPI



## Volumes collected in the Central Europe region



Country	Collection 2012 [1000 tonnes]
Austria	1.451
Czech Republic	807
Germany (CE region)*	7.416
Hungary	436
Italy (CE region)**	3.618
Poland	1.842
Slovakia	250
Slovenia	237
<b>Total</b>	<b>16.056</b>

Approximately 1/3 of the paper used by the European Paper Industry

\* DE: Estimated figures based on population in the CE region

\*\* IT: Estimated figures based on Comieco's collection in the CE region



## Paper Recycling in Central Europe



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

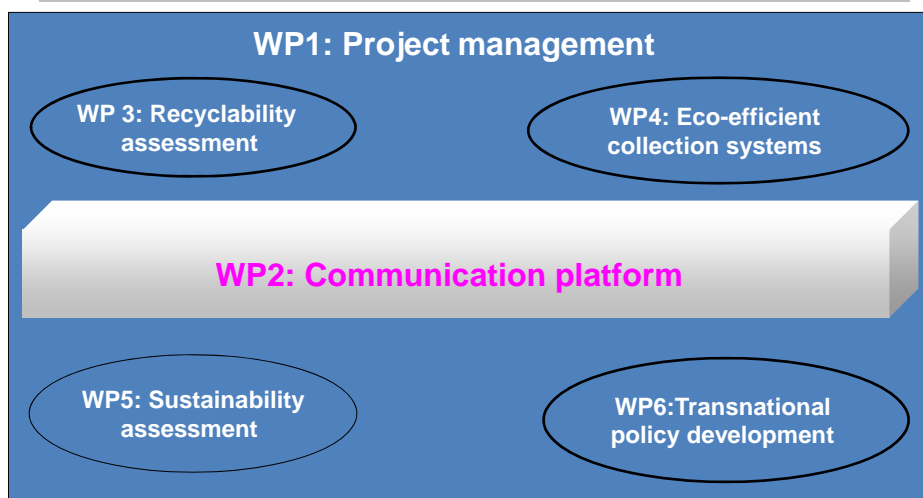
**Improper collection systems** can drastically reduce the amount of paper being recovered for recycling; and **improper design of a graphic or packaging product** can create problems in the recycling process, lower the recycled paper quality and worsen the environmental impact.

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

- paper recycling rates are still highly inhomogeneous
- collection systems are different
- Recyclability oriented ecodesign of paper products is not always addressed.



## EcoPaperLoop – project structure



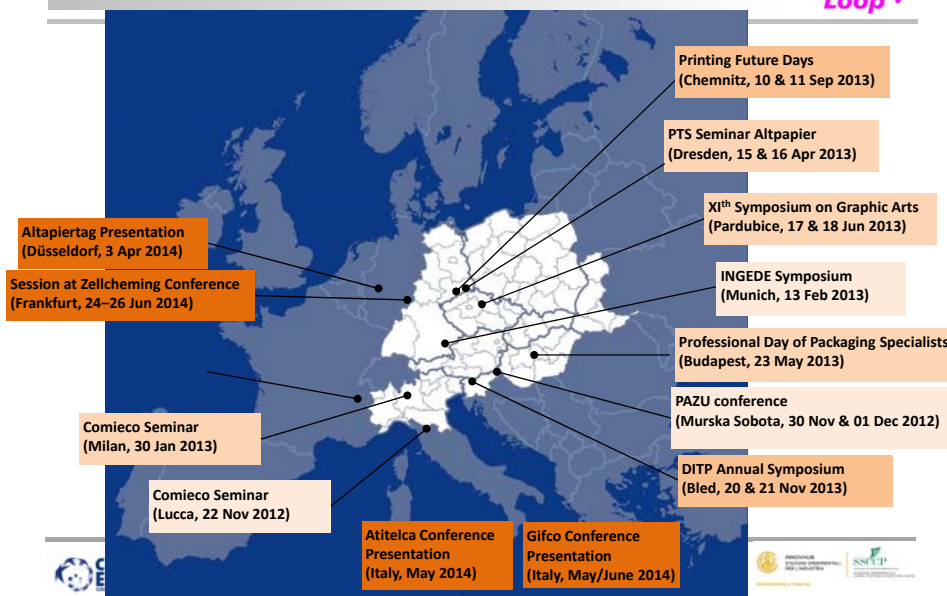
## Main project targets



- ❑ New standard method to assess packaging paper products recyclability.
- ❑ Regional database on printed and packaging products recyclability.
- ❑ Recommendation guidelines for reliable best practises on recovered paper collection.
- ❑ LCA case studies on the impact of recycling oriented ecodesign of paper products.
- ❑ Roadmap for new transnational policy strategies in the paper for recycling field.

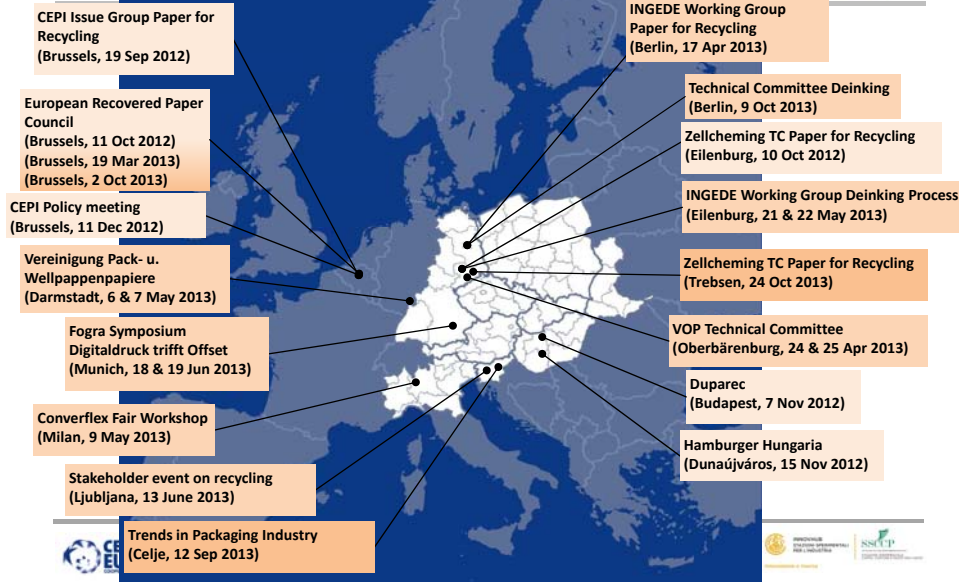


## Communication in conferences

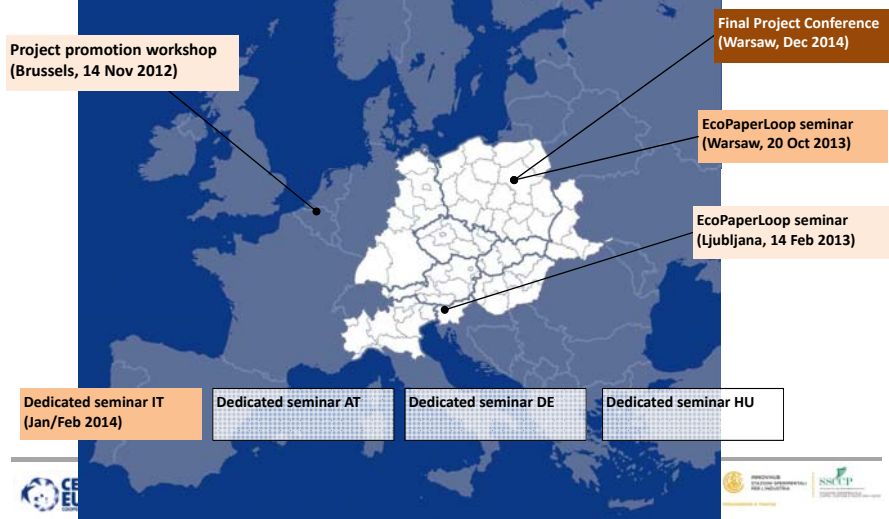




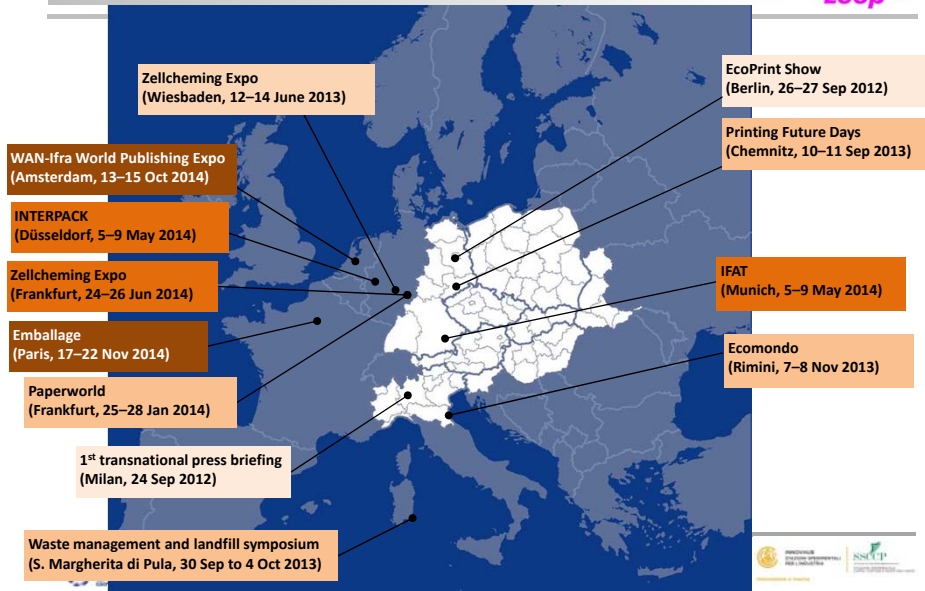
## Face-to-face stakeholder dialogues



## Project promotion workshop & Promotion seminars in local language – Work items 2.2.2 & 2.3.1



## Transnational press briefings & Trade shows and exhibitions



## Activity on paper based products Recyclability assessment



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

- New shared method for testing packaging products recyclability was developed
- Round Robin Test performed in four laboratories
  - PMV (DE), Innovhub (IT), UWH (HU), ICP (SI)
- Laboratory assessment campaign just launched
  - 160 packaging samples to be assessed
  - 60 graphic products to be assessed by INGEDE Methods / ERPC Scorecard
  - Initial focus on Polish packaging products



## Activity on paper collection strategies



Strategic focus:

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

- Portrait of current management scenario of paper for recycling in CE based on in-depth analysis of local and regional characteristics

Identification of the state-of-the-art of p&b collection systems in CE

Characterising typical regions in CE

Characterising recycling mills in CE



## Ecodesign for recycling: Criteria for sustainability evaluation



Goal:

**Enhancing life cycle thinking in paper based products ecodesign, for the improvement of recycling behaviour and sustainability**

- Sustainability assessment of recycling oriented ecodesign of paper products (case studies):
  - *LCA on graphic products*
  - *LCA on packaging products*



## Approach for EcoPaperLoop LCA



- **Determination of environmental impacts for products and comparison**
- **Packaging**
  - **Recyclable**
  - **Non-recyclable**
- **Graphic**
  - **Recyclable on similar quality level**
  - **Recyclable on lower quality level**
  - **Recyclable only for packaging**



## Translation of research into new policy guidelines, Leader ICP (SI)



Strategic focus:

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

- Analysis of the current adopted body of rules on paper based products.
- 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*



## Thanks to supporters



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



REPUBLIC OF SLOVENIA  
MINISTRY OF THE ENVIRONMENT  
AND SPATIAL PLANNING



Austria Papier Recycling



CAMERA DI  
COMMERCIO  
MILANO



Dunaújváros Megyei Jogú Város  
Polgármestere



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## Thank you for your attention!



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

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Regione Lombardia



University of Ljubljana



Ecopaperloop partnership

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