EcoPaperLoop project:
sustainability of the paper value chain
Graziano Elegir, Final conference Ecopaperloop, Kracow 02/12/2014

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
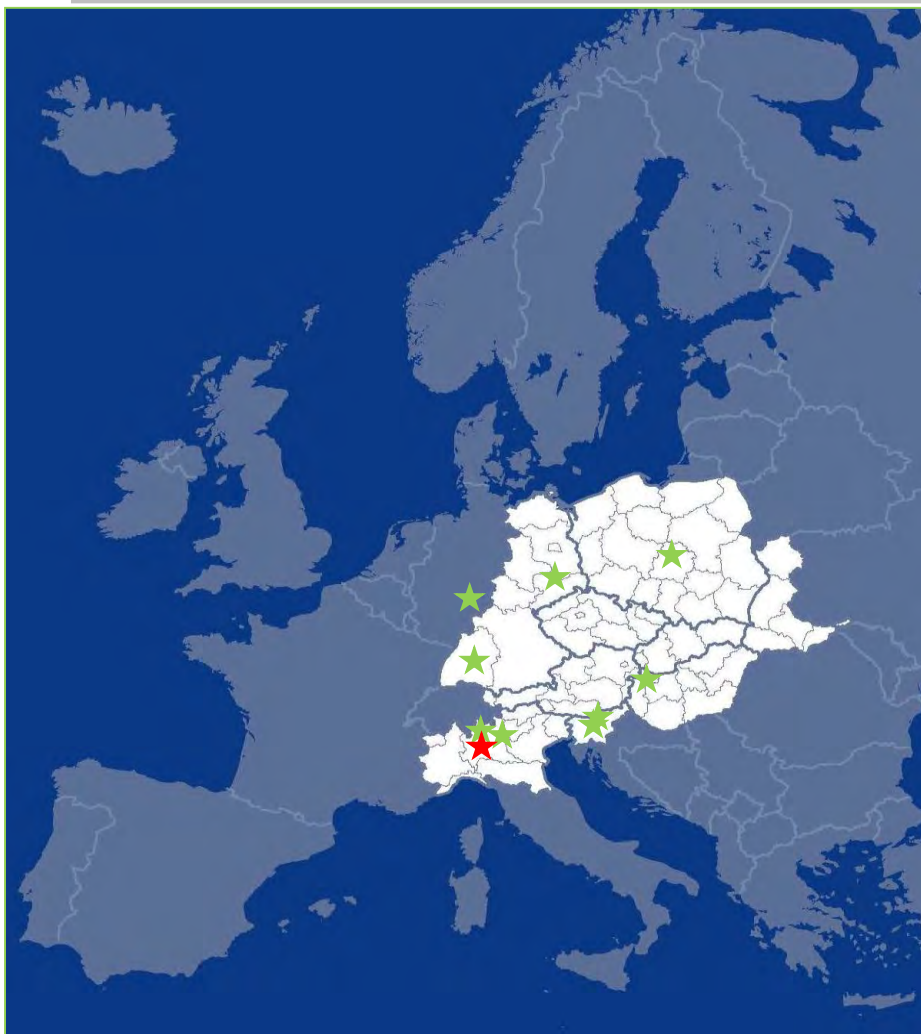
Lead Partner: Innovhub-SSI, Paper Division (Milan, Italy)
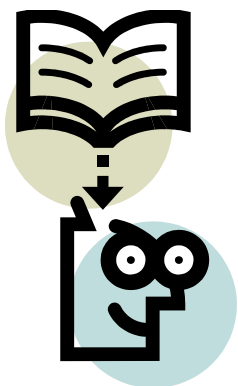**Project time frame**: September 2012 – December 2014

Mission
Improve the quality of paper for recycling

PROJECT PARTNERSHIP

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

Collected paper for Recycling in CE

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
Total	**16.056**

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*

Recycling rate in CE countries

Country	Recycling rate
Austria	70%
Czech Republic	56 %
Germany	76 %
Hungary	47 %
Italy	63%
Poland	39%
Slovenia	64 %
Slovakia	49 %
Average in CEPI countries	71,7 %

- paper recycling rates are still highly inhomogeneous
- paper recycling rates are still quite low in some countries

Recycling rates have constantly increased in the last 20 years *but have recently started to level out.*

The decline in newspapers consumption affects paper recycling rate since they are traditionally one of the best recycled paper products.

The increase of tissue and packaging share does not fully compensate for the decline of graphic paper

Potential for further increase does exist especially in those countries far below the average.

Focus on the Quality of Paper Recycling

- **Improper collection systems** can drastically reduce the amount & the quality of paper being recovered for recycling

  - *Avoid commingled collection with other materials*
  - *Promote the use of EN643 standard*
  - *Promote quality assessment of collected paper for recycling*

- **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.

  - *Need of a scientific approach to assess recyclability of paper based products*

Paper for Recycling in Central Europe

- **Paper for recycling** *is not recycled only in the country where it is produced.*

  - Recycling focused product design
  - Efficent paper collection systems (quality oriented)

  must be developed at a transnational level to increase the sustainability of the paper loop.

Stakeholders interaction in the paper for recycling value chain
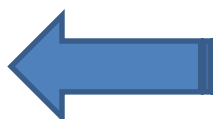
Municipalities: quantity

Citizens:
waste management costs

Waste management : profitability

Converters: quality of the product

Paper mills: quality of paper for recycling

EcoPaperLoop – project structure

WP1: Project management

WP 3: Recyclability assessment

WP4: Eco-efficient collection systems

WP2: Communication platform

WP5: Sustainability assessment

WP6:Transnational policy development

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.

❑ Pilot LCA case studies on the impact of recycling oriented eco-design of paper products.

❑ Roadmap for transnational policy strategy in the paper for recycling field.

EcoPaperLoop_ Recyclability tools developed

➢ **New Laboratory assessment method for paper based packaging products**

➢ **Created a large database on paper based product recyclabiliy**

➢ **Score card proposal for paper based packaging products**

EcoPaperLoop_ Sustainability tools developed

➢ **Pilot LCA case studies: environmental impact of different product design**

➢ **Web-based sustainability recycling calculator**

EcoPaperLoop_ collection systems

➤ **Deep analysis of the current situation in the Central Europe countries**

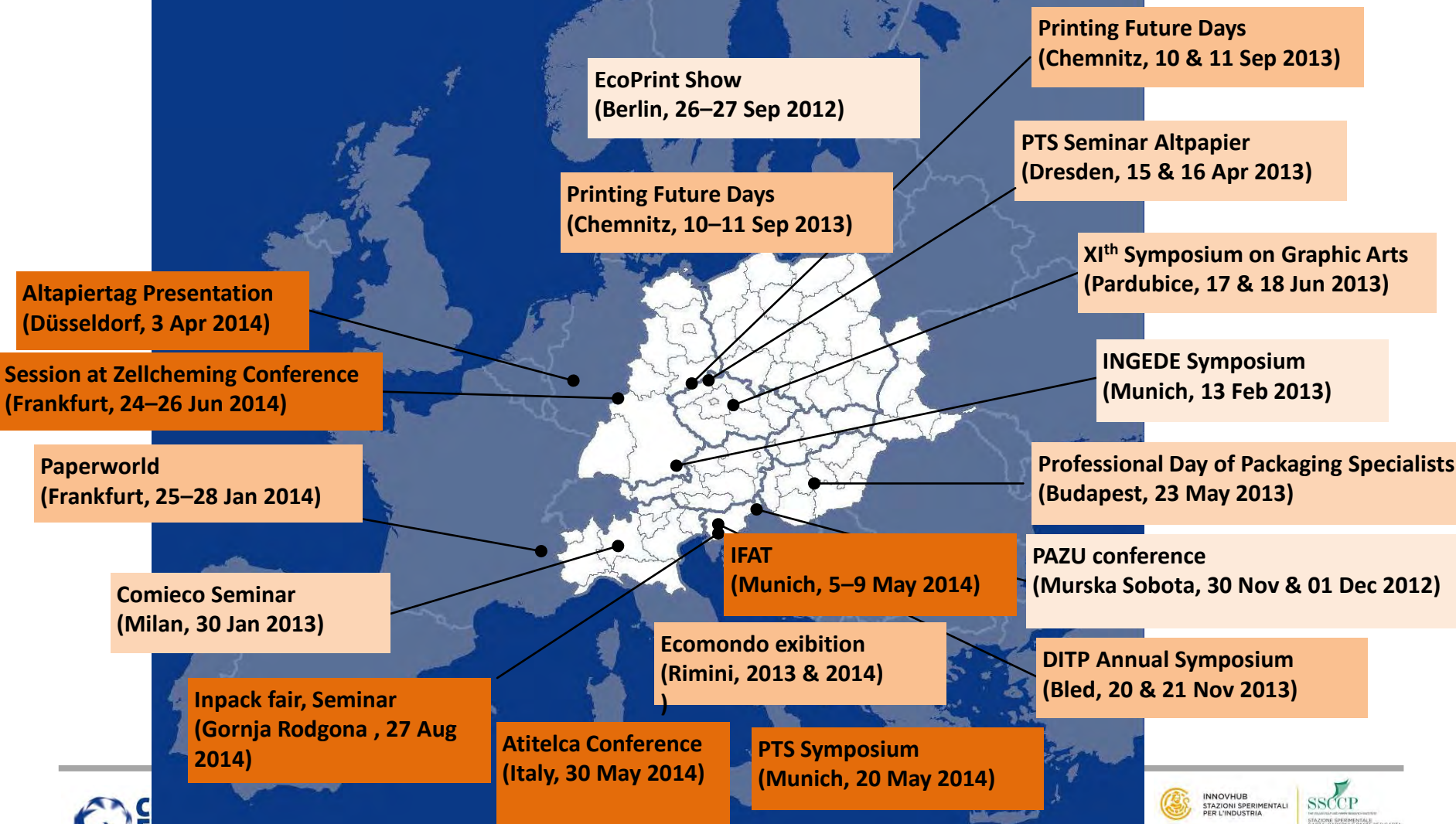➤ **Recommendation guidelines and decision tree for paper collection systems**

EcoPaperLoop_ regulatory framework

➢ **Deep analysis of the current situation in five Central Europe countries**

➢ **Roadmap document: project position paper for a transnational strategy in CE**

Communication in conferences and exibitions

EcoPrint Show
(Berlin, 26–27 Sep 2012)

Printing Future Days
(Chemnitz, 10 & 11 Sep 2013)

PTS Seminar Altpapier
(Dresden, 15 & 16 Apr 2013)

Printing Future Days
(Chemnitz, 10–11 Sep 2013)

XIth Symposium on Graphic Arts
(Pardubice, 17 & 18 Jun 2013)

Altapiertag Presentation
(Düsseldorf, 3 Apr 2014)

INGEDE Symposium
(Munich, 13 Feb 2013)

Session at Zellcheming Conference
(Frankfurt, 24–26 Jun 2014)

Paperworld
(Frankfurt, 25–28 Jan 2014)

Professional Day of Packaging Specialists
(Budapest, 23 May 2013)

Comieco Seminar
(Milan, 30 Jan 2013)

IFAT
(Munich, 5–9 May 2014)

PAZU conference
(Murska Sobota, 30 Nov & 01 Dec 2012)

Inpack fair, Seminar
(Gornja Rodgona , 27 Aug 2014)

Ecomondo exibition
(Rimini, 2013 & 2014)
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DITP Annual Symposium
(Bled, 20 & 21 Nov 2013)

Atitelca Conference
(Italy, 30 May 2014)

PTS Symposium
(Munich, 20 May 2014)

Face-to-face stakeholder dialogues

CEPI Issue Group Paper for
Recycling
(Brussels, 19 Sep 2012)

European Recovered Paper Council
(Brussels, 11 Oct 2012)
(Brussels, 19 Mar 2013)
(Brussels, 2 Oct 2013)
Brussels, 2 Oct 2014

CEPI Policy meeting
(Brussels, 11 Dec 2012)

Vereinigung Pack- u.
Wellpappenpapiere
(Darmstadt, 6 & 7 May 2013)

Fogra Symposium
Digitaldruck trifft Offset
(Munich, 18 & 19 Jun 2013)

Converflex Fair Workshop
(Milan, 9 May 2013)

Stakeholder event on recycling
(Ljubljana, 13 June 2013)

Trends in Packaging Industry
(Celje, 12 Sep 2013)

INGEDE Working Group
Paper for Recycling
(Berlin, 17 Apr 2013)

Technical Committee Deinking
(Berlin, 9 Oct 2013)

Zellcheming TC Paper for Recycling
(Eilenburg, 10 Oct 2012)

INGEDE Working Group Deinking Process
(Eilenburg, 21 & 22 May 2013)

Zellcheming TC Paper for Recycling
(Trebsen, 24 Oct 2013)

VOP Technical Committee
(Oberbärenburg, 24 & 25 Apr 2013)

Duparec
(Budapest, 7 Nov 2012)

Hamburger Hungaria
(Dunaújváros, 15 Nov 2012)

Project promotion workshop & Promotion seminars in local language

EcoPaperLoop seminar (Warsaw, 20 Oct 2013)

Final Project Conference (Kracow, 2 Dec 2014)

Project promotion workshop (Brussels, 14 Nov 2012)

EcoPaperLoop Seminar (Munich, 9 Oct 2014)

EcoPaperLoop seminar (Sopron, 9 July 2014

EcoPaperLoop Seminar (Milano, 7 Oct 2014)

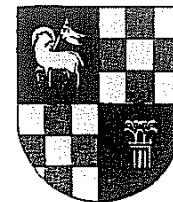EcoPaperLoop seminar (Ljubljana, 14 Feb 2013)

Thanks to supporters

Thank you for your attention!

www.ecopaperloop.eu

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Ecopaperloop partnership