



**Paper for Recycling:
A Project for Cooperation along its Path to Optimize
and Support the Material Loop
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On behalf of:



Bayerisches Staatsministerium für
Umwelt und Gesundheit



**The Project:
History, Targets and Approach**

A project on five groups of paper products finished in 2010

- Partners: 16 companies, 4 trade associations and the PTS were actively engaged in this bifa project
- Target: find mid- and long-term chances and risks for the eco-efficiency of paper products

In cooperation
with:

BayPapier

www.baypapier.com

VBP

Verband Bayerischer
Papierfabriken e.V.

BayPapier

www.baypapier.com

VBPV

Verband der Bayerischen
Papier-, Papp- und Kunststoff-
verarbeitenden Industrie e.V.

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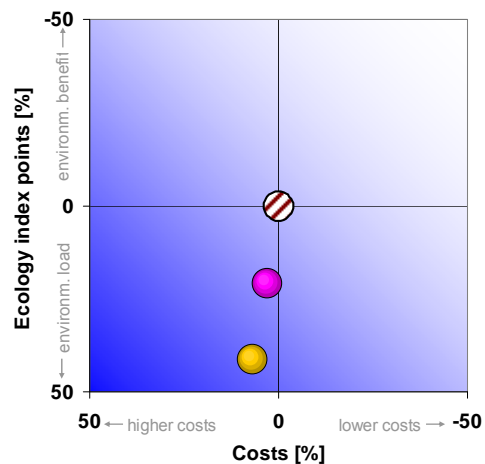
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The example of unprinted corrugated cardboard packaging

- Recovered paper content 80%
- Recovered paper content 60%
- Current Status (recovered paper content 100%)



Foto: UPM



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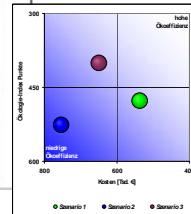
1. The Project – History and Issues



Approaches for
optimizing
waste paper loops

Waste paper
amounts

Waste paper
quality



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1. The Project: Partners

- **bifa environmental institute GmbH (project management)**
- **Association of Bavarian Paper Producers e.V. (VBP)**
- **Association of Bavarian Paper, Cardboard, and Plastics Processing Industry e.V. (VBPV)**
- **Paper technical support: PTS**



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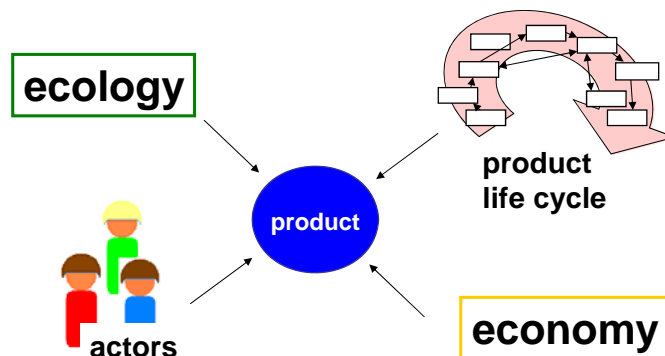
The targets:

- Optimizing and stabilizing waste paper loops (amounts and quality)
- Development of approaches for cooperation and improvement
- Integration of actors along the value creation chain

The method:

- A discursive project: solution identification as interactive process
- Integration of all relevant actors: communication & cooperation
- Socio-scientific methods: tools for supporting creativity, consensus finding, structured analyses, ...

Integrated Product Policy (IPP) means the integration of all aspects with view to environmental effects exceeding the company's boundaries:



Because: Environmental protection works best where reducing negative impacts on the environment corresponds to economic interest.

1. The Project: Participating Enterprises and Associations

- 6 producers of packaging papers
- 9 producers of paper based packaging
- 2 producers of graphic paper
- 4 printing companies
- 2 companies applying paper based packaging
- 1 producer of printing inks
- 1 producer of glues
- 6 companies / municipalities collecting and sorting waste paper
- 6 business associations

Step 1: depth interviews with experts

25 depth interviews with experts

Core questions

- Strengths in collection and utilization of waste paper
- Cooperation of relevant actors
- Threats for availability and quality of waste paper
- Evaluation of threats and analyses of causation
- Options of action for reduction or avoidance of threats



Risiko	Steigender Aschegehalt und sinkende Papierfestigkeit
Vorbereitung	Produktentwicklungen forcieren den Einsatz von anorganischen Pigmenten zur Krümmelmarkierung. Das Altpapier erhält weniger Fasern, das Fasernetz nimmt zu. Die Faser wird in jedem Recyclingzyklus weiter geschädigt.
Stoffliche Partner in der WPK-Papier	Papierhersteller
Wird im Zuge der...	...

Globaler Rohstoffhandel

Characterization of chances and risks (PTS)

Risiko	Minerale in AP-basierten Verpackungen migriert in Lebensmittel
Ursachen	Es werden immer mehr sehr leuchtende pigmentierte Altpapierverpackungen hergestellt, die hauptsächlich aus Blei (Schwarzblei) und chemischen Mineralen (gelbe- und violettepigmentierte) in der AP-Faser enthalten sind. Der Eintrag durch Altpapier aus dem Kreislauf (z.B. durch Zerkleinerung, ggf. eine unvollständige Trennung) über die Carbonen werden die Probleme (C14/C24) auf Lebensmittel (Brotkrumen, PE-Behälter und PE-Verpackungen) übertragen können.
Einflussfaktoren	Altpapier, Tonkollagen, Gerüststoffe
Einflussfaktoren	Minerale als Additiv für Druckfarben und Mineralien

Quelle: PTS III

Step 2: fixing of positions (kick-off workshop)

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Step 2: Fixing of Positions



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E.g. instruction for an individual working step

Your job for the next 20 minutes: Please collect as much ideas as possible. Please think about:

▪ **Fixing of position:**

Where do you see real strengths, e.g. regarding collection, utilization, or ingredients of waste paper? Where is good cooperation between actors? Please note your ideas on green cards.

▪ **Critical view on present and future situation:**

What's bad with cooperation? What has negative effects on availability or quality of waste paper? Are there developments you are concerned about? Please note your ideas on red cards.

▪ **Options for action – support the positive, counteract the risks:**

What could be done different, additionally, or new? Which precondition would be necessary for that? Who should be integrated in this project? Please note your ideas on blue cards.

World Café – the Method

- **Collection of knowledge, perspectives, and ideas of all participants**
- **Several discussions about defined issues or questions in a relaxed atmosphere (like a coffeehouse)**

Step 2: Fixing of Positions

World Café – the realization:

- **Five coffeehouses, each discussing two threads with 4-5 participants – one host for each group**
- **Mixed groups in each coffeehouse**
- **Questions on each threat:**
 1. Mark all actors affected by, and all actors causing a threat.
 2. Discuss the threats and develop a und about the question:

*„What happens if the threat grows?
– What would be the changes?“*

-

Step 3: Options for action in the value creation chain

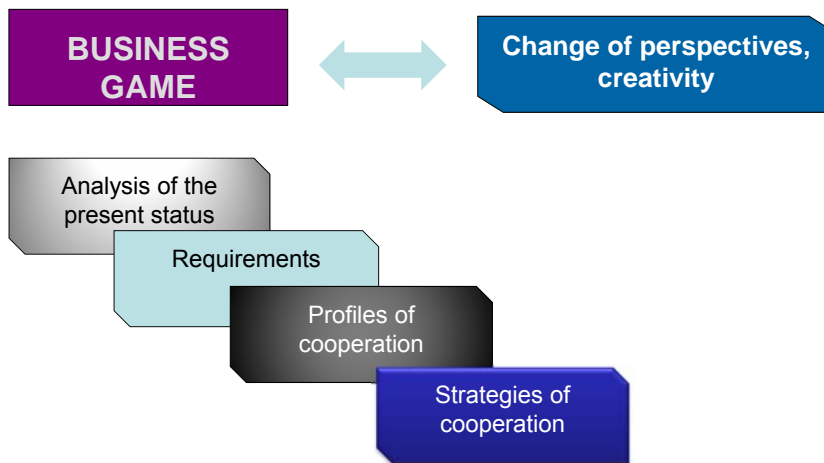
Step 3: Options for action in the value creation chain

The workshop



Step 4: Options for cooperation in the value creation chain

Step 4: Options for cooperation in the value creation chain



Step 4: Options for cooperation in the value creation chain

- 1. Review of situation: Which expectations regarding the problem solving do the other actors have on us? – Which expectations do we have on others?**
- 2. Information demand: Which information do we need from other actors to solve the problem? – Which information do the others need from us?**
- 3. Actual praxis: How do we deal with the issue up to now? Which shortcomings do we see on our side, which in others?**
- 4. (New) cooperation: How could the problem be solved by cooperation?**

You represent the following group:

- Politics**
- Publishers & users of graphical papers**
- Producers of packaging papers**
- ...**

Next steps

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1. The Project: the Steps

1. Analyses of actor's perspectives along the value creation chain (25 depth interviews with experts)

2. Workshop: Chances and risks in the value creation chain

3. Workshop: Options for action in the value creation chain

4. Workshop: Options for cooperation in the value creation chain

Additional workshops in special groups

Three additional focus workshops as process jokers

5. Workshop: Implications and recommendations

6. Final report, publications, presentations, closing event

Next steps

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CLOSING EVENT:

- **Date:** June 20th 2012
- **Place:** Hamburger Rieger GmbH & Co. KG,
Trostberg

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