



Purchase of 100% recycled paper

Environmental protection and energy efficiency fund of the Republic of Croatia

- CO₂ and energy savings through purchase of 100% recycled paper
- Eco-friendly office products demand increased
- Improvement of company's social responsibility profile



Standard product / old tender = benchmark

- Raw materials used in production
- 10.8 t CO₂
- 8.4 toe

GPP 2020 tender

- Recycled pulp used in production
- 8.4 t CO₂
- 3.3 toe

Results

- 2.4 t CO₂ savings
- 5.1 toe energy savings

Contract tendered

- Tender (2 lots) for 3.500 packages of A4 100% recycled paper and 60 packages of A3 100% recycled paper tendered by Environmental and energy efficiency fund in the Republic of Croatia
- 1 year contract
- This tender forms part of the GPP implementation policy of the Environmental protection and energy efficiency fund and contributes directly to the Government's *National Energy Action plan (NEAP)*

Procurement approach

Tendering followed the open procedure, and was divided into two lots:

Lot 1: 3.500 packages of A4 100% recycled paper

<p>Technical specifications</p> <p>Weights 80g/m2</p> <p>ISO 11475 whiteness of 100 min, ISO 2470 Brightness 80 min</p> <p>100% recycled paper (according to the criteria of the Blue Angel RAL-UZ-14 or equivalent)</p> <p>Produced total chlorine-free (TCF)</p> <p>Packaged in a wrapper of 500 pieces</p> <p>For photocopiers, inkjet and laser machines</p> <p>VERIFICATION: Blue Angel (or equivalent) certified paper will serve as means of proof</p>	<p>Award criteria:</p> <p>Lowest price</p> <p>Bidders must prove in their statements which should be delivered with the offer that they fulfill all technical specifications.</p>
--	--

Lot 2: 60 packages of A3 100% recycled paper

<p>Technical specifications</p> <p>Weights 80g/m2</p> <p>ISO 11475 whiteness of 100 min, ISO 2470 Brightness 80 min</p> <p>100% recycled paper (according to the criteria of the Blue Angel RAL-UZ-14 or equivalent)</p> <p>Produced total chlorine-free (TCF)</p> <p>Packaged in a wrapper of 500 pieces</p> <p>For photocopiers, inkjet and laser machines</p> <p>VERIFICATION: Blue Angel (or equivalent) certified paper will serve as means of proof</p>	<p>Award criteria:</p> <p>Lowest price</p> <p>Bidders must prove in their statements which should be delivered with the offer that they fulfill all technical specifications.</p>
--	--



Results

- Less GHG emissions generated
- Less raw materials used
- Less chemicals used
- Less energy used in production

Values for 9,05 t Paper

	Baseline paper		Recycled Paper		Savings		
Total energy demand	8.4	toe	3.3	toe	=	5.1	toe
CO ₂ emissions	10.8	t	8.4	t	=	2.4	t



Criteria development

Criteria for the paper were developed using the knowledge gained at the GPP 2020 train the procurer workshop November 2013 and the European Commission Green Public Procurement training toolkit which included helpful data on recommended criteria for copying and graphic paper, available at:

http://ec.europa.eu/environment/gpp/pdf/toolkit/paper_GPP_background_report.pdf

Calculation basis

Lifecycle Environmental Impact

For the purpose of development of technical specification the following method of calculations was used that was developed by the Institut für Energie- und Umweltforschung Heidelberg GmbH – the "Ecological comparison of office papers in view of the fibrous raw material" methodology.

List of sources used in the "Ecological comparison of office papers in view of the fibrous raw material" methodology:

Bos 1999] **Das Papierbuch**: Handbuch der Papierherstellung. HG: ECA Pulp & Paper b.v., Houten 1999

[BREF Pulp 2001] **Integrated Pollution Prevention and Control (IPCC)**. Reference Document on Best Available Techniques in the Pulp and Paper Industry. European Commission, December 2001. Download: <http://eippcb.jrc.es>

[Ecoinvent 2003] **Life Cycle Inventories of Packagings and Graphical Papers**. Hischer, R: Ecoinvent Report No. 11. Swiss Centre for Life Cycle Inventories. Dübendorf 2005

[Ecoinvent 2005] Swiss Centre for Life Cycle Inventories. **Ecoinvent v.1.2**, Lausanne 2005

[IFEU 1998] **Ökologischer Vergleich graphischer Papiere**. On behalf of the Federal Environmental Agency, Berlin; FKZ 10350120. Drafted by the following project team: The Institute for Energy and Environmental Research Heidelberg (ifeu), Office for Applied Woodland Ecology (BaWÖ) Duvensee, The Hamburg Institute of Environmental Information Studies (IFU), The Institute of Environmental Protection (INFU) of the University of Dortmund and Dr. Rainer Stern from Freiburg, Berlin 1998

[STP 2006] **Personal information from Steinbeis Temming Papier GmbH & Co**. Stadtstraße

2-14, D-25348 Glückstadt. Point of contact: Herr Volker Gehr, 2006

[Trauth 1997] **Umweltbelastungen im Detail**. Tabular list to compare the environmental burdens in the production of primary and secondary fibre papers, by Jupp Trauth, Forum Ökologie & Papier. 1997

[UBA 2000] **Background information paper: Life-cycle Analysis for Graphic Papers**. Berlin, August 2000. Download: www.umweltbundesamt.de

[Umberto 2005]: ifeu – Institute of Environmental Information Studies, Hamburg, ifeu – Institute of Energy and Environmental Research, Heidelberg: **Umberto v.5**. Hamburg/Heidelberg 2005

Environmental declarations by the paper industry

[Lang Papier 2004] Myllykoski Continental, Lang Papier. **Umwelterklärung 2004** (Environmental declaration 2004). Ettringen 2004. <http://www.myllykoski.com>

[LEIPA 2005] Leipa Georg Leinfelder GmbH: **Umweltbericht 2005** (Environmental report 2005), location: Schwedt. <http://www.leipa.de>

[StoraEnso Eilenburg 2004] Stora Enso Sachsen GmbH, Eilenburg. **Vereinfachte Umwelterklärung**

2004 (Simplified environmental declaration 2004). <http://www.storaenso.com>

[STUA Köln 2004] Cologne City Office of the Environment, Department 21 – installation permits:

Rheinpapier, Hürth, Köln April 2004 <http://www.stua-k.nrw.de/abt2/dez21/dez21papierfabrik.htm>

[UPM Augsburg 2005]] UPM-Kymmene Papier GmbH & Co. KG, Augsburg factory.

Umwelterklärung

2005 (Environmental declaration 2005). <http://w3.upm-kymmene.com>

Lessons learned

All bidders were able to confirm or meet the tender requirements. Also, the total number of bids received did not differ to the number received from previous tenders. This shows it is possible to switch to 100% recycled paper as the market can answer the demand of the procurers in Croatia.

Contact

Environmental protection and energy efficiency fund

Ksaver 208, 10 000 Zagreb , Croatia

Telephone: +385 1 5391 800
 Fax: +385 1 5391 810
 E-mail: kontakt@fzoeu.hr

