

ENVIRONMENTAL performance in 2014





Through the renewing of the bio and forest industries, UPM is building a sustainable future across six business areas: UPM Biorefining, UPM Energy, UPM Raflatac, UPM Paper Asia, UPM Paper Europe and North America and UPM Plywood. Our products are made of renewable raw materials and are recyclable. We serve our customers worldwide. The group employs around 20,000 people and its annual sales are approximately EUR 10 billion. UPM shares are listed on NASDAQ OMX Helsinki. UPM – The Biofore Company – www.upm.com

UPM in Hürth

UPM Hürth (Rhein Papier GmbH) is located on the outskirts of Cologne in the Hürth-Knapsack industrial zone. This central position between the Rhine-Main and Rhine-Ruhr conurbations provides short distances for raw material supplies, customer deliveries and waste management.

The mill was founded in 2001, in the immediate vicinity of an existing power plant that supplies power and steam required for papermaking. UPM Hürth's PM 1 paper machine is producing high-quality newsprint and printing paper for advertising supplements since the start-up in 2002. Its raw material is sorted graphic recovered paper, e.g. newspapers, magazines, advertising supplements, catalogues and office paper. The mill's deinking plant can process up to 400,000 tonnes of RCP per year. Process effluents are pre-treated prior to entering the treatment plant in the adjacent chemical industrial park. Most waste is disposed off locally and energetically recovered.

The UPM Hürth mill focusses on a safe working environment, high productivity and innovation for the benefit of its customers.



UPM Hürth Environmental Performance 2014 is a supplement to the Corporate Environmental Statement of UPM's pulp and paper mills (available at www.upm.com) and provides mill-specific environmental performance data and trends for the year 2014. The annually updated mill supplements and the UPM Corporate Environmental Statement together form the joint EMAS Statement of UPM Corporation. The next Corporate Environmental Statement and also this supplement will be published in 2016.



UpCode to the "More with Biofore" video

Production capacity	Up to 330,000 to/a	
Personnel	Ca. 130	
Products	Standard newsprint: UPM News C	Heatset newsprint: UPM EcoBasic H
Certificates	EMAS – EU Eco-Management and Audit Scheme ISO 14001 – Environmental Management System Standard ISO 9001 – Quality Management System Standard ISO 50001 – Energy Management System Standard OHSAS 18001 – Occupational Health and Safety System Standard PEFC™ Chain of Custody – Programme for the Endorsement of Forest Certification FSC® Chain of Custody – Forest Stewardship Council <i>All certificates can be found from UPM's Certificate Finder (available at www.upm.com/responsibility)</i>	
Environmental labels	German Blue Angel for UPM News C and UPM EcoBasic H	



The mark of responsible forestry

For FSC products, visit www.fsc.org



For PEFC products, visit www.pefc.org



Environmental year 2014

Environmental concerns have always been deeply ingrained in our way of thinking. Continuously reducing our energy and water consumption, steadily increasing raw material yield to minimize waste and using sustainable chemical additives for our production processes are the primary focus of continuous improvement. This process has been driven by a management system for environment, quality, energy and occupational health and safety since the mill's certification to international standards.

As a unit of the Finnish UPM Corporation we are committed to conserving the environment and operating our production facilities in such a way as to minimize the impacts on the environment and our employees.

Since steam and electricity are delivered from the adjacent power plant we can influence the corresponding key figures only by increasing energy efficiency. Despite the necessity of frequent shut-downs we could reach the energy target set to the mill. Particularly steam consumption could be decreased notably. This is the result of an optimized operation modus for paper machine and DIP as well as of several energy saving projects. The shutdown of a flotation pump and the decrease of white water temperature may exemplify this. Consumption of water and waste water could be held on last year's excellent level by optimized house-keeping and derived actions.

Environmental Reporting is done in a global data base. Incidents are categorized from 1 (insignificant) to 5 (serious impact on environment). In 2014 there were some small chemical contaminations that could be cleaned immediately and successfully. There was one incident with consequences outside the mill: During repair of TSS control bentonite failed to be added and increased the TSS values in the discharge to the waste water treatment plant. Waste water was separated for some hours. We are very content that we were able to prevent waste water temperature deviations by a different operating modus.

There have been external audits for the renewal of PEFC, FSC & Chain of Custody as well as for the environmental label, "German Blue Angel", which were passed successfully. Due to the new maintenance model the mill had to be certified according to the German Federal Water Act. Responsibilities were trained and the necessary audit was passed. Following new legal demands a management for dangerous goods was established including the proper organisation and training of the staff involved in the related tasks.

As in the past there were no inquiries or complaints from the neighborhood.



Armin Schmidt, General Manager

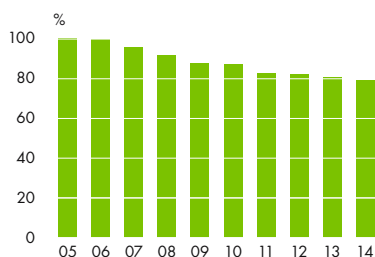
Guido H. Clemens, Manager Technology & Environment

Air

Fossil CO₂ emissions are reported by our energy supplier RWE/Kraftwerk Goldenberg.

UPM Hürth can only indirectly influence these emissions by increasing the energy efficiency of its production facilities. These targets are followed up consistently, the most important tools being optimization of heat recovery and the paper machine's operation mode.

SPEC. ENERGY CONSUMPTION PER TONNE OF PAPER PRODUCED



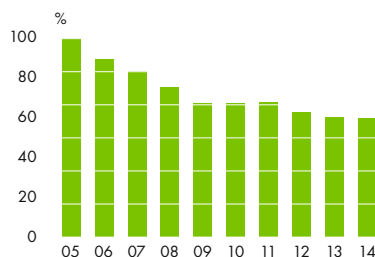
Water

The water for the production process comes from a deep well and is recirculated to reduce consumption. The well water has a low temperature and is first used for cooling, and then for the production process.

Here it runs several cycles of usage in the different water cycles of paper machine and de-inking plant. After pre-treatment in the mill it is directed to the water treatment plant in the adjacent chemical industrial park.

The consistent usage of the water from the PM cycle in the DIP cycles and for dilution of additives has led to a continuous reduction of the fresh water need for the paper production over the years.

SPEC. WASTE WATER CONSUMPTION PER TONNE OF PAPER PRODUCED

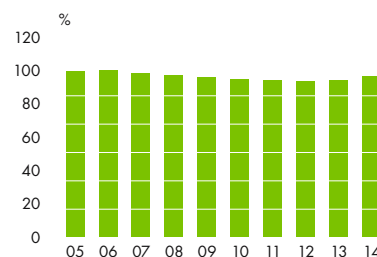


Waste

UPM Hürth uses 100% recovered paper as raw material. So most of the waste generated in the process consists of fibres too short for recycling, together with printing ink and mineral residues. The next important waste type is all the material the recovered paper contains when collected, as plastic foil, staples, inlays and CDs (rejects). These two kinds of waste make almost 99% of the waste generated. Due to a change in RCP composition in comparison to 2012 the waste amount per tonne of paper produced increased slightly.

Since the end of 2012 we have started to recycle sludge not only for heat exploitation in power plants but to give it to a specialized facility that combines thermal

SPEC. RECOVERED PAPER CONSUMPTION PER TONNE OF PAPER PRODUCED



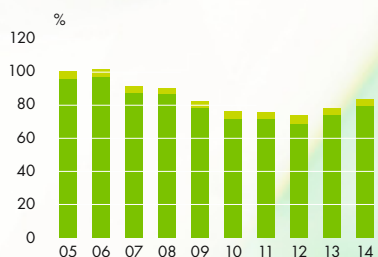
and material recycling producing a substitute for Portland cement. Further possibilities for application of this product are in testing.

10% of the sludge fraction is recycled materially as a porosity additive in brick manufacturing: During stoving of bricks the fibre fraction is burned and leaves small holes in the brick which makes a better isolation of the walls built from it. The ashes remain as high quality filler.

All in all our waste recovery rate is nearly 100%. No waste is brought to a landfill.

Hazardous waste is handled by a licensed contractor for disposal and is disposed off according to governmental regulations.

TOTAL AMOUNT OF WASTE PER TONNE OF PAPER PRODUCED, DIVIDED INTO SLUDGE AND REJECTS



■ Rejects
■ De-inking sludge

Environmental parameters 2014

The figures related to production as well as raw material and energy consumption are published as aggregated figures on group level in the UPM Corporate Environmental Statement.

Production capacity	Paper	Up to 330,000 t
Raw materials and additives	Recovered paper Additives	See UPM Corporate Environmental Statement for more information
Energy	Fossil fuels Purchased power	See UPM Corporate Environmental Statement for more information
Emissions to air*	Carbon dioxide, CO ₂ (fossil) Nitrogen oxide, NO _x Sulphur dioxide, SO ₂ Particulate Carbon monoxide, CO	453,982 t 293 t 160 t 8.4 t 24.3 t
Water intake	Process water	2,022,407 m ³
Discharges to water	Effluent volume COD Phosphorus AOX	1,595,424 m ³ 1,496,58 t 1.338 t 0.370 t
Waste**	Total volume (without hazardous waste) of which: – de-inking sludge – screening rejects – others Recovery rate Hazardous Waste	89,713 t 84,970 t 4,222 t 521 t 99.6% 32.3 t
Size of mill area		12.75 ha

* preliminary values

** including moisture

COD: chemical oxygen demand

AOX: adsorbable organic halogen compounds



Performance against targets in 2014

TARGETS	TARGET ACHIEVED?
Power consumption ≤ 0.84 MWh/to	yes
Steam consumption ≤ 0.95 MWh/to	yes
Process water ≤ 7.5 m ³ /to	yes
Waste water ≤ 6.2 m ³ /to	yes
RCP loss $\leq 16,65\%$	no, resulting from frequent shutdowns and different RCP quality
Environmental responsibility on all organisational levels in order to prevent events regarding environment and to enhance environmental performance.	yes

Current targets 2015

TARGETS AND MEASURES	DEADLINE	DEPARTMENT
Power consumption ≤ 0.83 MWh/to	2015-12-31	Manager Energy
Steam consumption ≤ 0.94 MWh/to	2015-12-31	Manager Energy
Yield: RCP loss $\leq 16,65\%$	2015-12-31	Manager Operations
Clean Run Cat. $\geq 3 = 0$	2015-12-31	Manager Technology & Environment
Implement a responsible person for environmental issues on department level	2015-12-31	Manager Technology & Environment



Environmental verifier's declaration on verification and validation activities

Environmental verifier, Astrid Günther (DE-V-0357), acting for TÜV NORD CERT Umweltgutachter GmbH, licensed for the scope NACE Code 17.12 (papermaking), declares to have verified whether the site UPM Hürth/Rhein Papier GmbH, Bertramsjagdweg 12, 50354 Hürth, Germany, as indicated in the Environmental Statement 2014 of the mentioned site (registration no FI-000058), meets all requirements of Regulation (EC) No 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organisations in a Community Eco-Management and Audit Scheme (EMAS).

By signing this declaration, I declare that:

- the verification and validation has been carried out in full compliance with the requirements of Regulation (EC) No 1221/2009,
- the outcome of the verification and validation confirms that there is no evidence of non-compliance with applicable legal requirements relating to the environment,
- the data and information of the Environmental Statement 2014 of UPM Hürth/Rhein Papier GmbH reflect a reliable, credible and

correct image of all the activities of UPM Hürth/Rhein Papier GmbH, within the scope mentioned in the Environmental Statement 2014.

This document is not equivalent to EMAS registration. EMAS registration can only be granted by a Competent Body under Regulation (EC) No 1221/2009. This document shall not be used as a stand-alone piece of public communication.

Essen, April 27, 2015

Astrid Günther
Environmental verifier
DE-V-0357
TÜV NORD CERT Umweltgutachter GmbH

MORE WITH BIOFORE



UPM leads the integration of bio and forest industries into a sustainable future characterised by innovation, responsibility and resource efficiency. www.upm.com



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