



UPM Augsburg

Environmental and societal responsibility 2025



UPM Augsburg

UPM Augsburg is located on the edge of Augsburg city center. Founded in 1849, the site currently employs around 260 employees and produces up to 350,000 metric tons of coated supercalendered printing paper in reels per year. The paper is primarily used for magazines, newspaper inserts, advertising brochures, and sales and mail order catalogues.

In addition to recovered paper and pigments, virgin fibers such as groundwood pulp and chemical pulp from sustainably managed forests are used as raw materials for paper production. The water required for the production process comes from deep wells on the mill site. The wastewater is cleaned in Augsburg's municipal treatment plant. The steam required for the papermaking process is generated in a combined heat and power plant operating on natural gas. The mill's electricity is supplied via the national grid.

The Augsburg site is also home to the head office of UPM Communication Papers and its functions.



UPM Augsburg Environmental and Societal Responsibility 2025 is a supplement to the Corporate Environmental and Societal Responsibility Statement of UPM's pulp and paper mills (available at www.upm.com) and provides mill-specific environmental and societal performance data and trends for the year 2025. The annually mill supplements and the UPM Corporate Environmental and Societal Responsibility Statement together form the joint EMAS Statement of UPM Corporation.

UPM is a material solutions company, renewing products and entire value chains with an extensive portfolio of renewable fibres, advanced materials, decarbonization solutions, and communication papers. Our performance in sustainability has been recognized by third parties, including EcoVadis and the Dow Jones Sustainability Indices. We operate globally and employ approximately 15,100 people worldwide, with annual sales of approximately €9.7 billion. Our shares are listed on Nasdaq Helsinki Ltd.

UPM – we renew the everyday

Production capacity	Up to 350,000 tonnes per annum
Personnel	Augsburg mill 260 / Augsburg office approx. 108 (total number of employees as at December 31, 2025)
Products	Magazine paper (LWC): UPM Ultra UPM Matt UPM Cote UPM Cote Silk
Certifications	Augsburg mill: ISO 14001 – Environmental Management Systems standard ISO 9001 – Quality Management Systems standard ISO 50001 – Energy Management Systems standard ISO 45001 – Occupational Health and Safety standard PEFC Chain of Custody – Programme for the Endorsement of Forest Certification FSC® Chain of Custody – Forest Stewardship Council® Augsburg mill and Augsburg office: EMAS – EU Eco-Management and Audit Scheme All certificates can be found in the UPM Certificate Finder (available at www.upm.com/responsibility)
Environmental labels	EU Ecolabel (EU flower) for copy and graphic paper



For more information about FSC certification visit fsc.org



For more information about PEFC certification visit pefc.org



Review of the year 2025

Environmental protection is an integral part of the papermaking processes at UPM Augsburg. Since 1997, we have been working with an integrated management system that combines quality, energy, environmental and occupational health and safety, and we also participate in the European Eco-Management and Audit Scheme (EMAS). This means we develop our environmental work independently and document our progress in a transparent and comprehensible manner.

UPM's "Clean Run" initiative

UPM is driving further improvements in environmental performance with the "Clean Run" campaign. All UPM mills are audited to assess the quality of their environmental work and determine any necessary action. In addition, all employees are informed about environmental issues relating to their mill.

During the reporting year, the maximum permitted daily load of suspended solids in wastewater was exceeded. The cause of the limit value exceedance was insufficient wastewater treatment performance of the systems prior to the major shutdown. Appropriate corrective measures were implemented.

Environmental audits

During the reporting year, an environmentally relevant external audit was conducted: our Chain-of-Custody process for FSC and PEFC was audited by a certifier. The Augsburg mill was recognized for very good implementation and execution of the process.

Working together to achieve goals

Each year, we set ourselves detailed new targets for quality, energy, environmental protection and occupational health and safety. We actively involve our employees in both the setting of goals and the implementation of targets. We consistently work on improving our environmental performance not just within the company, but also in our collaboration with customers, suppliers, authorities and the general public.

UPM joins "The Climate Pledge"

The aim of this cross-industry network of major companies is to jointly mitigate the climate crisis and to work towards achieving a carbon-neutral global economy. By signing the agreement in 2021, UPM has committed to achieving the objectives of the Paris Climate Agreement ahead of time.

Environmental protection is a priority

As part of the Finnish UPM Group, we attach great importance to environmental protection and continually optimize our paper production process. We keep our environmental impact as low as possible, especially in the immediate vicinity. In 2025, we continued to take regular measurements of airborne emissions. This showed once again that our values not only comply with the permissible limits, but in some cases even fall significantly below them.

We always follow up any complaints immediately. In 2025, there were no complaints about tangible environmental impact.



Dr. Eva Kriegbaum
General Manager



Eva Männer,
Manager OHSEM

UPM Augsburg

Contribution to UN Sustainable Development Goals in 2024

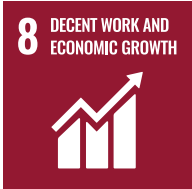


Energy

Improvement in specific gas consumption for coating drying and calender heating by

-6%

compared to the mean value for 2024



Healthcare

83

Employees at the mill participated in the health initiative offered as part of prevention, the 'Cardioscan' vitality check.



Certified fiber

Forest certification schemes like FSC® and PEFC guarantee that wood, our most important resource, comes from sustainable sources. UPM's target is to use only certified fiber for papermaking by 2030.

90%

certified fiber used for papermaking.



Water

Reduction of normalized specific wastewater generation since 2017

-22%

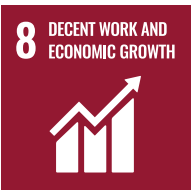


Emissions

Avoidance of

5,560 t

of CO₂ scope 1 emissions at the site in 2025



Safety

Our clear goal at UPM is: **Zero fatal and serious accidents.** We were able to meet this target in 2024. Occupational health and safety is an integral part of our daily activities. We are also working to reduce or completely prevent all incidents within our sphere of influence by means of continuous improvement and effective risk management.

The TRIF* including external companies in 2025 amounted to

4.4

TRIF*: total recordable injury frequency (%)



Waste

0 kg/t Paper

process waste to landfill.



Air



Energy generation is the main source of air emissions from paper mills. Emissions can be reduced through the appropriate choice of fuels and combustion technology, and through flue gas purification. UPM Augsburg has set itself the target of further reducing CO₂ emissions through efficient energy use, as per the strategy set out in the UPM mills' Corporate Environmental and Societal Responsibility Statement.

Waste

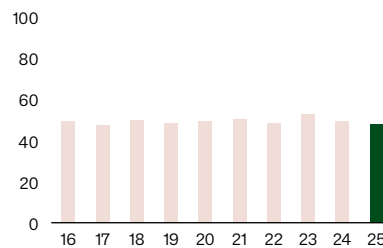


In line with the circular economy principle, the majority of production waste is recycled. All waste is forwarded to waste management facilities and disposed of in compliance with the relevant statutory requirements. UPM Augsburg aims to maintain the waste recovery rate at its current level of 99.9%.

CHP emissions in 2025		
	Limit value (mg/Nm ³)	Mean value of measurements (mg/Nm ³)
CO	50	0.8
NO _x	100	69

Carbon dioxide (fossil), CO₂, Scope 1

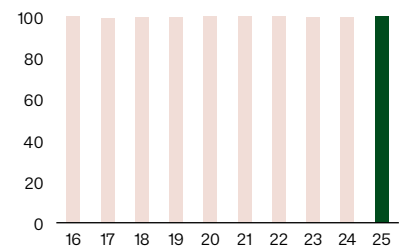
kg/t paper, development as %



Reference year: 2000

Recovery rate

%



Water



The water for the production process is drawn from deep wells on the mill premises. Virtually continuous water recycling within our systems reduces water use.

Part of the process water evaporates as the paper web dries. The thermal energy contained in the exhaust air is recovered and reused as much as possible. The remainder is discharged into the ambient air as water vapor. Cooling water is taken from the Proviantbach, Schäfflerbach and Stadtbach canals.

The process water is recycled several

times before it is discharged as effluent to the Augsburg municipal treatment plant for purification.

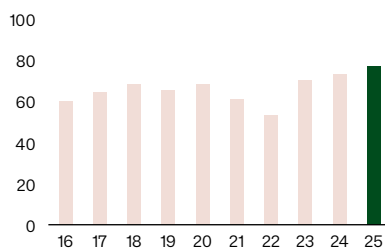
The “Water emissions” emission values on page 10 are the intake values for the Augsburg municipal treatment plant.

During the reporting year, the maximum allowable daily solids load in the wastewater was exceeded. The cause of the limit exceedance was insufficient wastewater treatment by the plant prior to the major shutdown. Appropriate corrective measures were implemented.



Wastewater volume
(not normalized)

m³/t paper, development as %

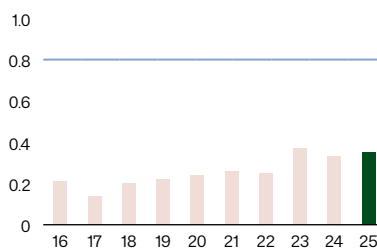


Reference year: 2000

Increase in specific wastewater volume due to lower utilization of production capacity in 2023 and 2024

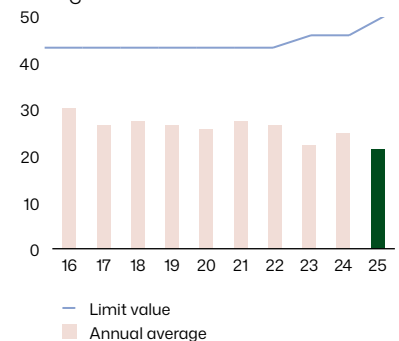
Adsorbable organic halogen compounds, AOX

mg/l



Temperature

°C



— Limit value

■ Annual average

Organizational structure and emergency organization

Operators in charge are appointed for environmentally relevant production plants and ancillary facilities.

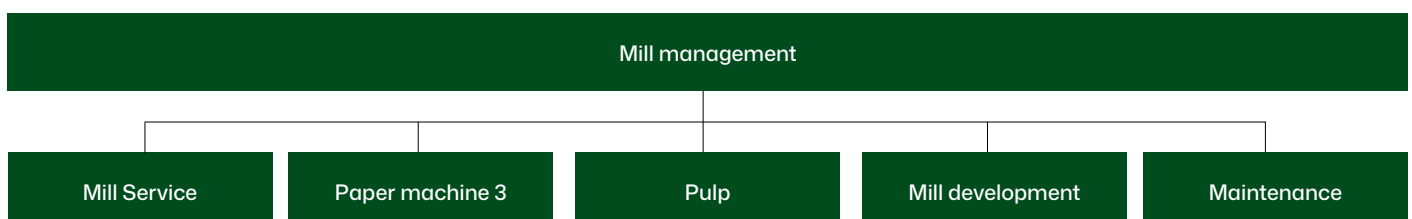
Statutory representatives advise the mill management and the specialist departments in the following areas: immission control, water protection, waste, hazardous goods, radiation protection, and internal rail operations.

There are also designated representatives

responsible for the integrated management system (quality, environment, energy) and for occupational health and safety, fire protection and data protection.

Comprehensive emergency plans have been defined for emergencies of all kinds, such as fire, industrial accidents and environmental incidents. From alerting to immediate action and follow-up, there are guidelines to minimize

the effects of an emergency to the greatest extent possible. Detailed flow charts are available for different types of emergencies. A crisis team has been appointed to decide on the action to be taken in the event of a large-scale emergency.



Social responsibility

Improving our environmental performance

We take responsibility for the environment and are committed to minimizing the impact of our production operations on our employees and the environment. For example, a solution was found within the UPM Group to use the ash from our fiber residue as a soil stabilizer and as an additive for construction materials. Additionally, UPM sets itself environmental goals that are in line with the Agenda 2030 sustainability targets.

Significant environmental aspects:

The environmental aspects identified as significant are taken into account by appointing officers and implementing an appropriate operational structure, and by considering these aspects in the mill's targets.

Chemicals

Hydrogen peroxide reduction

The objective was to avoid overdosing hydrogen peroxide in the bleaching process, as overdosing results in only a marginal gain in brightness.

By reducing the upper control limits of the bleaching regulators in recovered paper bleaching from 4.0% to 3.5% and in ground-wood bleaching from 7.0% to 6.0%, the use of bleaching chemicals in recovered paper processing was reduced by a total of 14.5% in 2025 and by 8.3% in groundwood production.

Fatty acid

Previously, fatty acid was added at three dosing points in the deinking process via the APC control system (pulper drum, flotation 1 and flotation 2). The dosing point at the pulper drum was decommissioned without any loss of quality.

As a result, in 2025 not only were 236 tonnes of fatty acid saved, but also 105 tonnes of caustic soda, 36.95 MWh of electricity for pumps and agitators, as well as steam for temperature control.

Water

The absolute specific wastewater volume increased further in 2025 from 8.5 m³/t (2024) to 9.1 m³/t due to the low operating rate and the resulting weekday stop-and-go operation (atypical grid utilisation in January/February and September to December 2025).

The normalised assessment of the specific wastewater value shows an improvement from 5.9 m³/t (2024) to 5.6 m³/t (2025).

This reduction was achieved by increasing the volume of treated process water used as a substitute for warm water, made possible by the AZUD filter newly installed in 2024.

Energy

Waste heat potential PM3:

"Heat pump" project

Following intensive preparation, the investment in the flagship project "Heat Pump PM3" was approved.

The continuous supply of process heat in the form of steam is essential for operating our paper machine. Currently, this steam is produced using gas-fired large water boilers and an electrode boiler.

By integrating a high-temperature heat pump that generates steam from previously unused waste heat from the paper machine in combination with electrical energy, 15 to 20% of our heat demand will in future be supplied significantly more efficiently and with lower CO₂ emissions.

The generated thermal energy will be fed directly into the main steam header of PM3, thereby reducing the demand for fossil-based steam generation. The heat pump uses the natural refrigerants ammonia and water, both with a global warming potential of zero.

It is planned to procure the electricity required for the system via a green Power Purchase Agreement (PPA), consistently continuing the chosen path of decarbonisation.

This project is truly unique – a comparable system does not yet exist within UPM or at any other industrial site. It is a lighthouse and pilot project offering numerous opportunities and supporting our strategic objectives in every respect:

1. Showcase measure for energy efficiency improvement and sustainability
 - a. Savings of 15,000 to 20,000 MWh of primary energy per year (depending on utilisation)
 - b. Reduction of 5,000 to 8,000 tonnes of CO₂ emissions at the site (depending on utilisation)
2. Significant and measurable ecological benefit
3. High flexibility in steam generation
4. Important step towards the production of CO₂-free paper
5. Cost savings in steam generation

Overall, a major and strategically important investment for our mill.

To realise the project, various infrastructure measures are required, particularly the construction of a new building including connection to PM3 via a cable and pipeline bridge. The feedwater tank with supply pump will be installed in the PM3 building. Final handover and commissioning of the system is planned for spring 2027.

LED lighting – logistics dispatch hall

In the logistics dispatch area, conventional lighting was replaced with LED technology. This results in electricity savings of 157 MWh per year.

Operation of the electrode boiler (Power-to-Heat)

In 2025, the electrode boiler installed in 2024 was operated for the full year. As a result, approximately 30,700 MWh of natural gas (Ho) and 5,560 tonnes of CO₂ were saved.

Reduction in gas usage at PM 3

The specific gas consumption at PM3 (Pow-erdry, Turndry, thermal oil) improved again in

2025 by 6% to 165 kWh/t. Compared to the baseline year 2003, this represents an overall improvement of 27%. The main reason for the significantly improved energy efficiency in coating drying is the successful implementation of measures from the action plan. In 2025, the operating mode of both units was optimised. Experience from the sister mill in Dörpen was successfully applied, allowing more heat to be retained within the overall system by reducing exhaust air flows. This resulted in energy savings of approximately 1,990 MWh and 400 tonnes of CO₂ in 2025.

Optimizing the use of electricity in ground-wood pulp production

In groundwood production, the normalised electricity consumption per tonne of ground-wood developed at a similar level to 2024. Compared to the original energy baseline, a reduction of 7% can be reported.

A decisive factor in this development was the consistent avoidance of part-load operation. During production periods, the plant was generally operated with five grinders, and operation with only three or four grinders was further successfully minimised.

Improvement of the CO₂ footprint – UPM Augsburg

In 2025, the electricity supplier for the first time issued a load-profile-weighted CO₂ emission factor. As a result, the specific Scope 2 CO₂ footprint of our paper decreased significantly by more than 20% to 487 kg/t (2024: 660 kg/t).

Optimisation of heating energy

In July 2025, the hall heating system in the crumb stock building was renewed. The more efficient heating system enables savings of 420 MWh of thermal energy (steam) per year.





Waste

Waste separation – cooperation for recycling of forming fabrics and press felts

Approximately 7,000 tonnes of machine clothing are consumed annually on paper machines in Europe. A large proportion has traditionally been thermally recovered rather than reintroduced into the production cycle as a raw material – this was also previously the case at UPM Augsburg.

Together with waste management partners, UPM has now developed and fully implemented in 2025 a circular material loop for forming fabrics and press felts made of polyamide (PA) and polyethylene terephthalate (PET), in accordance with the cradle-to-cradle principle.

From the return transport of used machine clothing from paper mills, through cleaning and separation of the different plastic components (PA and PET), to the reprocessing of the recycled material into new monofilaments and the production of new machine clothing, a resource- and energy-efficient closed loop has been established. This significantly reduces the previously applied thermal disposal of this waste stream.

The recycle from the machine clothing is currently used to manufacture injection-moulded parts for the automotive and furniture industries, replacing virgin plastics. Demand for the material is high, and the recycling process is already fully scalable.

In addition to replacing primary polymers, every tonne recycled avoids approximately three tonnes of CO₂ emissions that would otherwise result from incineration. In the long term, this leads to near-zero CO₂ emissions and energy consumption for this material stream.

Waste separation – further measures

In 2025, 218 IBCs were sent for environmentally sound reconditioning. Compared to the production of new IBCs, this saved 8.4 tonnes of steel and 3.3 tonnes of plastic.

According to data from the German Environment Agency, this corresponds to an equivalent of 23.3 tonnes of CO₂ emissions.

In addition, a take-back system was organised for emptied oil and grease drums, which are also reconditioned.

Legal compliance

The applicable environmental regulations are adhered to and the existing environmental management system is proactive in responding to changes.

Promoting young talent at UPM Augsburg

As a member of the Bavarian/Swabian branch of the “Talent for the Region” (Talente für die Region) business networking company, the Augsburg mill is actively involved in making students and young academics from the area aware of professional opportunities and offering a platform for an exchange of experiences. In collaboration with the association DIE PAPIERINDUSTRIE e.V., school and university students are given insight into the paper industry, including its sphere of activities, career development opportunities, and the training involved in becoming a paper technologist or paper engineer.

UPM employees get involved

The Augsburg mill can look back on a long tradition of support for children in need. Last year, the Cent Parade was used to make donations to the “Bunter Kreis” charity and

the St. Nikolaus children's hospice. Both organizations provide support for seriously ill children and their families, and help them with the challenges of daily life. In the Cent Parade, UPM employees donate the cent amounts from their monthly wage statements to charity.

Corporate sports association

For many years, the mill has also supported the work of the UPM-Kymmene Augsburg e.V. corporate sports association.

Corporate health management

Health is a valuable asset. UPM Augsburg is working intensively to protect and promote the health of its employees, as a healthy, efficient and motivated workforce is a prerequisite for the Augsburg mill's success and competitive edge. We aim to create a healthy environment for our employees, increase their awareness of health and occupational safety, and thus lay the foundation for job satisfaction and motivation. In recent years, we have been continuing to work on improvements in the field of health and safety. Since the implementation of a corporate health management system, occupational health and safety, health support and occupational integration management have become intertwined. The promotion of health and preventive healthcare have become increasingly important. For example, the mill's employees have been provided with free mineral water since September 2017.

Environmental parameters

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 and Societal Responsibility Statement.

		2023	2024	2025
Production capacity	Paper	Up to 350,000 t	Up to 350,000 t	Up to 350,000 t
Raw materials	Recovered paper Round wood Chemical pulp Pigments Process chemicals Operating supplies	See UPM Corporate Environmental and Societal Responsibility Statement for more information		
Energy	Fossil fuels Purchased power	See UPM Corporate Environmental and Societal Responsibility Statement for more information		
Emissions to air	Carbon dioxide, CO ₂ (on-site fossil emissions, scope 1) Carbon dioxide, CO ₂ (fossil emissions from purchased energy, scope 2) Nitrogen oxide, NO _x Carbon monoxide, CO Sulphur dioxide, SO ₂	46,905 t 146,260 t 16.3 t 3.5 t 0.3 t	48,043 t 154,471 t 16.8 t 4.1 t 0.4 t	39,595 t 96,920 t 13.2 t 5.7 t 0.3 t
Water intake	Process water Cooling water	1,804,241 m ³ 7,554,681 m ³	2,046,966 m ³ 8,532,903 m ³	1,902,740 m ³ 7,319,140 m ³
Discharges to water	Effluent volume Chemical oxygen demand, COD Biological oxygen demand, BOD ₅ Phosphorus, P Nitrogen (inorganic), N Adsorbable organic halogen compounds, AOX	1,760,537 m ³ 4,248 t 2,196 t 3.6 t 21.1 t 0.6 t	1,992,685 m ³ 4,073 t 1,934 t 3.8 t 21.6 t 0.6 t	1,799,079 m ³ 3,837 t 1,835 t 3.2 t 18.0 t 0.6 t
By-products and waste¹⁾	By-products in accordance with §4 German waste management act (KrWG): Wood residue Waste for recovery: - Fiber residues - Deinking residue - Waste wood - Metal - Construction waste - Other ²⁾ Waste for disposal: - Construction waste - General waste, e.g. - Other Recovery rate	7,496 t 50,145 t 1,948 t 44 t 471 t ³⁾ 98 t ³⁾ 464 t 62 t 18 t 91 t ⁴⁾ 99.8 %	10,767 t 50,056 t 1,574 t 42 t 182 t 20 t 448 t 0 t 18 t 65 t 99.8 %	9,226 t 47,455 t 1,304 t 22 t 130 t 12 t 385 t 0 t 18 t 39 t 99.8 %
Hazardous waste		59 t	70 t	52 t
Land use	Total sealed area (incl. externally operated hydropower plants) Total nature-oriented area on site Total nature-oriented area off-site Total use of land	23.7 ha 3.6 ha 0 ha 27.3 ha	23.7 ha 3.6 ha 0 ha 27.3 ha	23.7 ha 3.6 ha 0 ha 27.3 ha

¹⁾ All figures including moisture

²⁾ Other recyclable waste and general waste for recovery

³⁾ Decommissioned paper machine incl. ancillary facilities at the mill being dismantled as of 2020

⁴⁾ Replacement of track ballast in 2023

Performance against targets in 2025

Targets	Achievement
1 Energy use Reduce energy use for HS; target <2,400 kWh/t (normalized) (continue to consistently operate 5 grinders, better visualization through new DCS, improve wood quality)	Target not fully achieved, actual 2025: 2,434 kWh/t Due to gravure production requirements, the grinding department had to apply higher specific refining energy. (Reduction compared to actual 2024: 2,579 kWh/t was achieved.)
2 Emissions Reduce gas consumption by -25,000 MWh Ho and reduce CO ₂ by -4,500 t (P2H boiler operation for a full year, improved flexibility marketing)	Target achieved, actual 2025: Gas consumption: -30,700 MWh Ho CO ₂ : -5,560 t
3 Water Reduce normalized specific wastewater production by -0.3 m³/t by 2024 (optimization and stable operation with atypical grid usage of the AZUD filter, wastewater recovery PM3)	Target achieved, actual 2025: 5.6 m³/t
4 Use of chemicals Reduction in the use of bleaching chemicals compared to 2024 by -5% relative	Target achieved, actual 2025: DIP 2024: 3.37% - 2025: 2.88% (14.5% relative reduction) HS 2024: 6.49% - 2025: 5.95% (8.3% relative reduction)
6 Waste Reduction of residual waste by -5% by 2024 (Measures: Recycling of coverings project / Employee training)	Target achieved (actual value 2025: 55 t / 2024: 99 t)

Targets for 2026

Targets and measures	Deadline	Department responsible
1 Energy use Reduce specific electricity consumption in DIP by 18 kWh/t	12/2026	Production
2 Emissions Reduce gas consumption at PM3 by 5 kWh/t	12/2026	Production
3 Emissions Reduce CO ₂ emissions (Scope 1+2) by 68 kg/t	12/2026	Production
4 Water Reduce normalised specific wastewater volume by -0.2 m³/t compared to 2025 (optimisation and stable operation during atypical grid utilisation of the AZUD filter)	12/2026	Production
5 Use of chemicals Reduce hydrosulfite consumption in DIP by 80%	12/2026	Production
6 Waste Reduce losses in DIP by 0.8% (Project Flotation 2)	12/2026	Production
7 Use of chemicals No deviations in categories 3-5	12/2026	Production



Environmental verifier's declaration on verification and revalidation 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 GmbH, Augsburg mill in 86153 Augsburg, Georg-Haindl-Str. 4+5, Germany as indicated in the UPM Corporate Environmental and Societal Responsibility Statement 2024 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 as amended by Regulation (EU) 2017/1505 and Regulation (EU) 2018/2026 of the commission 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 2025 of UPM GmbH, Augsburg mill, reflect a reliable, credible and correct image of all the activities of UPM GmbH, Augsburg mill, within the scope mentioned in the Environmental Statement 2025.

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.

Augsburg, 10.08.2026


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

UPM GmbH

Georg-Haindl-Strasse 4
86153 Augsburg
Germany
Tel. +49 (0)821 3109-0
Fax: +49 (0)821 3109-156

If you require more information,
please do not hesitate to contact us:
Dr. Eva Kriegbaum
General Manager
Tel. +49 (0)821 3109-0

Eva Männer
Manager OHSEM
Tel. +49 (0)821 3109-249

E-mail: info.augsburg@upm.com