

UPM Steyrermühl

ENVIRONMENTAL AND SOCIETAL RESPONSIBILITY 2020



UPM Steyrermühl

Founded in 1868, over the decades the site has been a key factor in the industrialisation of Laakirchen. The heart and its founder is the paper mill (UPM-Kymmene Austria GmbH; operator of the pulp mills and paper machine) together with the facilities it operates. It is also owner/co-owner of all the other business units located at the site, all of which strive for sustainability, a regional circular economy and active responsibility alongside innovation, completely in the spirit of the Finnish parent company.

This environmental statement relates exclusively to UPM-Kymmene Austria GmbH and the facilities it operates (Entsorgungs- und Energieverwertungsgesellschaft [EEVG], treatment plant). This report does not affect any of the other business units or associations named below.

The main supplier of wood chips to the paper mill is **Steyrermühl Sägewerks-gesellschaft m.b.H. Nfg KG**, a manufacturer of saw-cut wood and by-products of saw cutting. The sawmill also ensures the supply of wood fuel to the EEVG.

The EEVG – Entsorgungs- und Energieverwertungsgesellschaft m.b.H. provides the required energy in the form of electricity and steam and, in a fluidised bed boiler, uses not only various waste materials, but also the wood fibres that are rejected during fibre and paper production. In addition to fresh wood, recovered paper is also used as a raw material at the site.

The UPM Steyrermühl site is therefore characterised by a largely closed product cycle and high efficiency along the value chain. Even residual materials are employed in a sustainable, environmentally sound manner and processed, for instance, into quality-assured by-product Cinerit, which is used as a stabilising agent in road construction or flood protection (www.cinerit.at).

SLR Steyrermühl Logistik & Recycling GmbH is responsible for supplying the paper mill with recovered paper and is also a key partner when it comes to ensuring that all logistical processes at the site function as efficiently as possible.

Last but not least: in the treatment plant at the site, operational and municipal wastewater is treated before being discharged into the Traun. The operator is UPM; the owner the **Reinhaltungsverband Großraum Laakirchen**, which consists of the municipality of Laakirchen and the two local paper mills, UPM-Kymmene Austria GmbH and Heinzel Papier – Laakirchen Papier AG.

Production capacity	295,000 tonnes per year		
Employees	approx. 210 including apprentices		
Products	Standard and improved newsprint:		
	UPM News		
	UPM EcoBasic		
	UPM Brite		
	UPM Prime		
Certifications	EMAS – EU Eco-Management and Audit Scheme		
	ISO 14001 – Environmental Management System		
	ISO 9001 – Quality Management System		
	ISO 50001 - Energy Management System		
	ISO 45001 – Occupational Health and Safety Management System		
	PEFC™ Chain of Custody – Programme for the Endorsement of		
	Forest Certification		
	FSC® Chain of Custody – Forest Stewardship Council		
	All certificates can be found from UPM's Certificate Finder		
	(available at www.upm.com/responsibility)		
Ecolabels	Austrian ecolabel (UZ 02) for UPM News		
	"Blue Angel" ecolabel (RAL-UZ 72) for UPM News and UPM EcoBasic		
	EU ecolabel for UPM News and UPM EcoBasic		



UPM Stevrermühl Environmental and Societal Responsibility 2020 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 2020. The annually updated mill supplements and the UPM Corporate Environmental and Societal Responsibility Statement together form the joint EMAS Statement of UPM Corporation. The next Updated UPM Corporate Environmental Statement and also this supplement will be published in 2022.

UPM delivers renewable and responsible solutions and innovates for a future beyond fossils across six business areas: UPM Biorefining, UPM Energy, UPM Raflatac, UPM Specialty Papers, **UPM** Communication Papers and UPM Plywood. As the industry leader in responsibility we are committed to the UN Business Ambition for 1.5°C and the science-based targets to mitigate climate change. We employ 18,000 people worldwide and our annual sales are approximately EUR 8.6 billion. Our shares are listed on Nasdaq Helsinki Ltd. UPM Biofore - Beyond fossils. www.upm.com



The mark of responsible forestry

For more information about FSC certification visit fsc.org



For more information about PEFC certification visit pefc.org





www.blauer-engel.de/uz72



Depending on customer requirements, we produce products that meet the criteria of these eco-labels.

Review of the year 2020

Environmental protection has long been a feature of the Steyrermühl ethos and the topic is the subject of great focus. In many areas, the last year has been overshadowed by the COVID-19 pandemic. Despite more complicated conditions in everyday working life, over the past year many activities were once again undertaken to safeguard and improve the environmental standards achieved in a sustainable manner. The existing environmental management system in accordance with ISO 14001 guarantees that all applicable environmental regulations have been complied with for another year. Accordingly, there were no environmental offences or events that would be classified as a Clean Run 3-5 incident according to UPM specifications.

Last year's focus was on the fight against occasional odour emissions, which are considered bothersome by the neighbourhood to the east of the site. Further improvements have been achieved through ventilation measures at selected locations, improvement of process chemical conditions, reduction of dwell times for water circuits and defined cleaning measures: these will be continuously optimised in the coming year.

Generation change

After almost 45 years of service, long-standing Steyrermühl Environmental Officer Christian Polzinger is entering the passive phase of his semi-retirement. The ongoing development and improvement of the environmental standard at the site was strongly influenced by his engagement.

Christian Polzinger was significantly involved in the set-up and development of the treatment plant, which was and still is an essential component in minimising the environmental impact of wastewater discharged into the Traun, and which he headed for almost 20 years. Even today, it is technically state of the art. He also served as Environmental Officer from 1996. During this time, he was instrumental in the implementation of the environmental management system that is still in operation at the site. In addition to his duties as a board member of

Reinhalteverband Großraum Laakirchen and fire safety officer/commander of the Steyrermühl works fire brigade, Christian Polzinger also contributed to significant progress in the recovery of ash generated from fluidised bed boiler combustion at the EEVG: in the spirit of a functioning circular economy, this ash is experiencing growing demand under the brand name Cinerit®, used, for instance, as a stabilising agent in earth works (www.cinerit.at).

Managing Director Ernst Spitzbart would like to thank Christian Polzinger for his long-term commitment and his achievements, and wishes him nothing but the best and good health for the future!

As his successor, Thomas Detzlhofer will adopt the position of Environmental Officer. These last two and a half years, he has had the opportunity to gradually take over the environmental agenda at the side of Christian Polzinger. We wish him every success in his future activities!



Thomas Detzlhofer **Environmental Officer**

Dollaf Th.

Christian Polzinger **Environmental Officer**

Ernst Spitzbart Managing Director

Responsibility figures 2020

Non-recyclable



Waste in 2020:

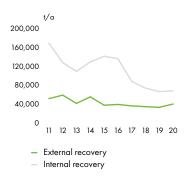
0%

76%

of 2020's fly ash recycled as Cinerit®.

The use of our fluidised bed boiler fly ash as a stabilising agent was higher than in the previous year: The recovery rate of ash, including material temporarily deposited in landfill, was 91%.

Volume of recovered residual materials in 2020 (UKA and EEVG)



Air



Specific fossil carbon dioxide emissions from power plants in the period 2011 to 2020:

69%

reduction.

Specific nitrogen oxide emissions from power plants reduced by

54%

from 2011 to 2020.

Taxes



Overall, we paid

EUR 14 million

in income tax, employer contributions, national insurance, municipal tax and real estate tax.

Safety



The number of accidents with lost time could be reduced by

93%

(2011: 26, 2020: 2)



Certified fibre

2020:

93%



Energy

Specific energy use (kWh per tonne of paper) of biogenic fuels has increased by

114%

between 2010 and 2020.

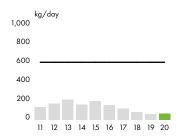
Electricity purchases from hydropower in 2020:

100%

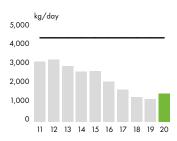


In 2020, we were again able to comply with all the prescribed limits for discharged wastewater. It remains our express goal to sustainably reduce the specific amount of water.

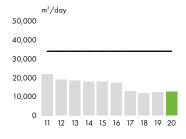
Biological oxygen demand, BOD_s



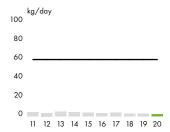
Chemical oxygen demand, COD



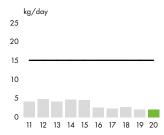
Wastewater volume



Nitrogen (inorganic), N

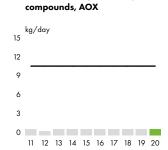


Phosphorus, P



Limit value

Adsorbable organic halogen



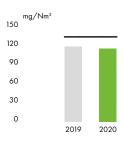
Air



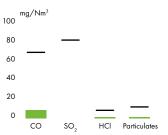
The energy generation facilities at the site are state of the art. Due to the successful installation and commissioning of a selective non-catalytic reduction (SNCR) system, NO_{χ} emissions were also kept below the required thresholds last year.

The fossil CO₂ volume was kept at almost the same level as in the previous year.

NO_x emissions FBB



Air emissions FBB



FBB = fluidised bed boiler

Limit value

Production and raw materials

During the past year we were able to continue optimising synergies with the sawmill operated at the site. The wood chips that are a by-product of wood cutting are used as a raw material for fibre production. This cascades the use of wood, a valuable raw material, with material use upstream of thermal use.

Crisis team

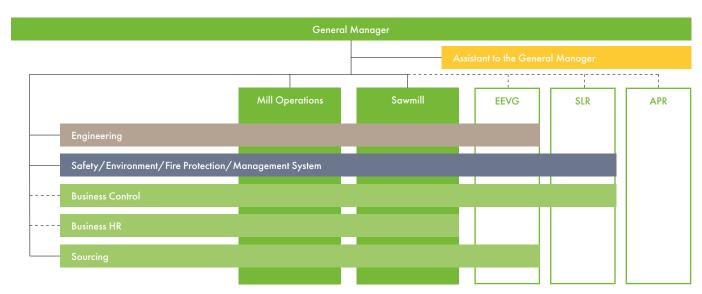
There is a crisis team in place at Steyrermühl to ensure that the site is able to respond effectively in times of crisis. The team is made up of representatives from all areas and across the entire business structure. This ensures that the company is still in a position to make decisions even in exceptional circumstances.



Main organigram

The organigram below shows the current business structure of the entire Steyrermühl site. Various functions and departments have a cross-company

hierarchy that supersedes the parallel unit hierarchy at the site (paper mill, sawmill, EEVG and SLR).



Societal responsibility

Work safety

The chief principle at UPM is occupational health and safety. In the time of COVID-19, we are the leader in internal tests for employees and our visitors – both regionally and across the group. A crisis team has been meeting at least twice a week since March 2020 to keep up-to-date with relevant legal provisions, recognise regional developments and opportunities, and to prevent positive cases at the site. Outlook: vaccinations on site are our next goal.*

As far as the classic topic of occupational safety in the sense of avoiding injuries is concerned, on top of the general obligation to wear goggles outside the offices in 2019, the general obligation to wear helmets for all trips by bicycle on the premises, whether indoors or outdoors, was introduced in 2020. Employees have been/will be equipped with the appropriate personal protective equipment. Following a cutting injury due, on the one hand, to improper use, and, on the other hand, because they in any case pose a real risk, Stanley knives were banned from the company as far as possible in 2020. However, the main topic of the past year was "LoTo: Lock out – tag out", as accident prevention is still a focus and means energy release, the continuation of area evaluations and the subject of safety for contractors, digitalisation of instructions as well as health and hygiene.

We again achieved our ultimate goal, which was not to have any serious or fatal accidents. Despite all the measures and efforts, Steyrermühl was not completely spared from accidents: there were four near-misses with a high risk potential, but without any downtimes for the employees involved. These were mainly caused by negligence. Lesson learned: it is essential to keep repeating safety rules; only then will they remain in the memory and be implemented in practice when things need to be carried out or resolved quickly.

Benefits for employees

Accident prevention and coronavirus aside, we care deeply about the health of our employees – both physically and mentally. We conduct vaccinations that vary throughout the year, such as those against flu or TBE, and in consultation with management/if tasks permit, we offer individual home office provisions if required so as to counteract the psychological strain of additional burdens on our employees where possible.

Engaging with communities

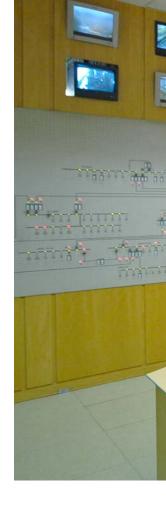
Papiermachermuseum: for several decades, UPM Steyrermühl has provided the association with exhibition space for a symbolic value and therefore makes a continuous contribution. Connected to it: the Alfa cultural and events centre. Pre-coronavirus, this was one of the most frequented events centres in the region with well over 100 events per year – and it strives to return to this.

European Capital of Culture Salz-kammergut 2024: a cultural initiative carried out preliminary work at the Laakirchen site in 2020. UPM is providing the association with premises.

The site is also home to an art school, where people with disabilities can take part in interactive and creative educational activities.

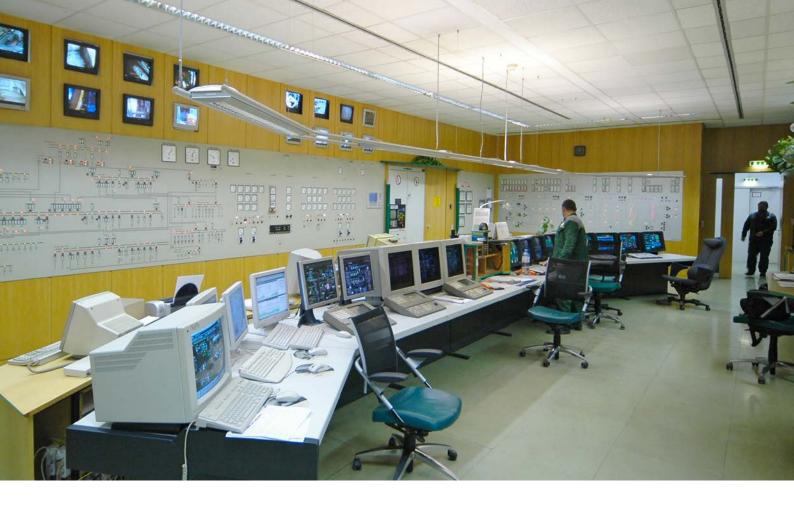
The Environmental Advisory Council of the municipality of Laakirchen is made up in equal measure of representatives from the political parties of the municipal council and of the Laakirchen LUI environmental initiative. Established in the early 1990s as part of the approval process for the fluidised bed boiler, it has since met regularly to discuss current environmental issues, primarily concerning the fluidised bed boiler.

For the UPM site in Steyrermühl, local community engagement has played an essential role almost since the beginning, and not only in relation to health matters: after no skilled labour could be found in the rural surroundings,





^{*}Status: April 2021



highly specialised workers were initially brought into the country from Bohemia. They wanted to be retained. The factory management therefore invested amply in social housing. There were workers' flats, a spa facility, a company kindergarten and a hospital.

For some time now, only very few active employees have lived in the buildings around the factory. Education, however, is still a major priority: the Papiermacherschule, the training centre for the Austrian paper industry, offers education and further training to become a foreman/industrial foreman in paper technology.

"Die Steyrermühl", as the site is known colloquially, of course also invests in young talent from within its own ranks. As such, apprenticeships as a paper technician, metal technician (main module mechanical engineering), electrical technician (main module automation and process control technology, plant and operating technology) as well as laboratory technician (main module chemistry) can be taken.



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.

		2018	2019	2020
Production capacity (UKA)	Paper	Up to 295,000 t	Up to 295,000 t	Up to 295,000
Raw materials and additives	Recovered paper Process chemicals Consumables	See UPM Corporate Environmental and Societal Responsibility Statement for more information		
Energy (EEVG)	Renewable fuels	76%	79%	78%
	Fossil fuels External power supply	See UPM Corporate Environmental and Societal Responsibility Statement for more information		
Emissions to air (UKA and EEVG)	Carbon dioxide, CO ₂ (fossil) Nitrogen oxide, NO _x Sulphur dioxide, SO ₂ Particulates Carbon monoxide, CO	35,161 † 135.8 † 0.161 † 1.5 † 8.1 †	36,125 t 123.9 t 0.0 t 1.1 t 10.0 t	44,714 † ³⁾ 134.0 † 0.0 † 1.5 † 12.1 †
Water intake (UKA and EEVG)	Process water and cooling water	5,033,759 m³	5,386,667 m³	5,440,402 m ³
Discharges to water (Site total) ¹⁾	Wastewater volume COD BOD ₅ Phosphorus Nitrogen (inorganic) AOX	4,293,359 m³ 473 t 29.3 t 0.98 t 1.04 t 0.4 t	4,492,620 m ³ 436 t 21.4 t 0.75 t 1.07 t 0.4 t	4,574,760 m ³ 543 t 23.5 t 0.72 t 0.95 t 0.4 t
Waste (UKA and EEVG) ²⁾	Non-hazardous waste and by-products - Ash (Cinerit) - Ash (fly ash and bottom ash) - Others - Intermediate storage - Ash (fly ash and bottom ash)	10,531 t 25,391 t 566 t 8,737 t	14,740 t 22,186 t 426 t 6,462 t	30,536 t 11,439 t 355 t 3,890 t
	Hazardous waste	59 t	49.4 t	49.8 t
Land use (UKA)	Total use of land Total sealed area Total nature-oriented area on site Total nature-oriented area off site	101,5 ha 41,2 ha 0 ha 60,3 ha	101,5 ha 41,2 ha 0 ha 60,3 ha	101,5 ha 41,2 ha 0 ha 60,3 ha

¹¹ The additional wastewater volume of the sawmill and SLR is not recorded separately because it only amounts to smaller quantities of domestic wastewater.

COD: chemical oxygen demand BOD₅: biological oxygen demand AOX: adsorbable organic halogens



 $^{^{2)}}$ Weight when dry

³⁾ Congestion management in August 2020

Performance against targets in 2020

TARGET	MEASURES IN 2020	STATUS
Health and safety Reduction of accidents at work: TRIF of 6	Consistent implementation of measures resulting from audits,	TRIF target not achieved
(accidents per one million working hours)*	internal standards and group guidelines	-
 Proactive reporting: at least two documented safety observations per employee 	 Consistent improvement of the safety culture at the site 	Target achieved
2 Waste		
Safeguarding of the ash recovery rate; expansion of the Cinerit market	Maintaining the use of ash as a stabilising agent in earth works, (dam building, road bases), cooperation with potential partners or participation in standards committees	Target achieved – update in 2021
3 Water		
Reduction of fresh water consumption in production to < 14 m³/t	Use of working groups to determine potential for improvement	18 m³/t Update in 2021
4 Water/air emissions		
Prevent Clean Run deviations in category 3–5**	Further optimise startup and shutdown plans for downtimes. No serious fires, increased use of the One Safety tool	0 (Target achieved)

^{*} TRIF = total recordable injury frequency (total number of all recorded accidents without need for first aid)

Targets for 2021

TARGET	MEASURES FOR 2021	RESPONSIBLE
1 Health and safety		
 Reduction in accidents at work: TRIF 6 (accidents per one million working hours) 	 Consistent implementation of measures resulting from audits, internal standards and group guidelines Consistent improvement of the safety culture at the site 	All
 Proactive reporting: 3 documented safety 	Improvement of the LoTo standard	All
observations per employee	Improvement of order and cleanliness at the facility	
2 Waste		
Safeguard ash recovery rate, expand Cinerit market	Maintaining the use of ash as a stabilising agent in earth works, (dam building, road bases), cooperation with potential partners or participation in standards committees	Energy/environment
3 Water		
Reduction of fresh water consumption in production by $\leq 2 \text{ m}^3/\text{t}$	Use of working groups to determine potential for improvement	Production/technology
4 Water/air emissions		
Prevent Clean Run category 3–5 deviations	Further optimise startup and shutdown plans for downtimes. No serious fires, increased use of the One Safety tool.	Production/environment/ fire protection





Validation statement

This supplementary report for the calendar year 2020 for UPM-Kymmene $\,$ Austria GmbH, Fabriksplatz 1, 4662 Steyrermühl, Austria, has been verified within the scope of the EMAS Regulation by

Quality Austria Trainings-, Zertifizierungs- und Begutachtungs GmbH Zelinkagasse 10/3, 1010 Vienna, Austria AT-V-0004

The Managing Environmental Verifiers at Quality Austria Trainings-, Zertifizierungs- und Begutachtungs GmbH hereby declare that the environmental policy, environmental program, environmental management system, environmental audit and environmental audit procedures of the organisation comply with Regulation (EC) No. 1221/2009 of the European Parliament and of the Council on 25 November 2009 (EMAS Regulation), as amended by Commission Regulation (EU) 2017/1505, and the relevant contents of the supplementary report are valid in accordance with Annex IV, section B, letters a–h within the scope of the group registration with Reg. No. FI-000058.

The next complete environmental statement will be published in the second quarter of 2022 (with data until the end of 2021).

Updates are supplied annually as supplementary sheets.

Dipl.-Ing. Markus HADERER

Dr. Georg BUCHTELA Managing Environmental Verifier

^{**} Clean Run deviation: event with harmful effects on the environment

We reduce the world's reliance on fossil-based materials by developing renewable and responsible products and solutions in all our businesses. **UPM Biofore – Beyond fossils.**



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