

## ENVIRONMENTAL STATEMENT 2024

Hamburger Hungaria Ltd H-2400 Dunaújváros, Papírgyári út 46. Hungary



Name and accreditation number of verifier, and date of verification:

ÉMI-TÜV SÜD Kft. accreditation file number: HU-V-0001 EMAS verifier: Mrs Katalin Moravcsik File Date of verification: 20.03.2025.



### **1. DESCRIPTION OF THE ORGANIZATION 1.1. THE PRINZHORN GROUP**



The name "Hamburger" derives from a family name: the word "Hamburger" and the two bastions in the company's logo commemorate Wilhelm Hamburger, who founded the paper mill in Austria in 1853. By today his descendants have turned the mill into a large international corporation employing 10,000 people in 16 countries under the name Prinzhorn Group. Dunapack Rt. became a member of this company group in the 1990s, separating the packaging and paper manufacturing branches of the business. The former operates under the brand name Dunapack Packaging, and the latter as Hamburger Containerboard.

The company group ranks third among Europe's leading company groups in recycling, paper manufacturing and packaging. Its three subsidiaries in Hungary implement a unique, environment-friendly and energy-efficient industrial and business cycle.



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At the beginning of the fully integrated process, Hamburger Recycling Hungary Kft., representing the Recycling Division of the Prinzhorn Group, collects paper and other waste, which is then recycled in Hamburger Hungária's Dunaújváros plant and turned into containerboard of excellent quality, and then used by Dunapack to make first-class packaging materials. As the three companies' operations are built on one another, a cyclical economic model is created that is sustainable over the long term. This 2024 Environmental Statement of the company only applies to the manufacture of paper and paperboard - as per NACE 17.12.

## PRINZHORN We will. GROUP RECYCLING-Hamburger Recycling We will. MANUFACTURING COLLECTING WASTEPAPER Dunapack Packaging We will. ENVIRONMENTAL CORRUGATED PACKAGING



#### 1.2. HAMBURGER HUNGÁRIA KFT.

Hamburger Hungária Kft.'s plant is located in the south-east of Fejér County, Hungary, in a zone specially designated for the performance of industrial activities.

The company's address changed in 2023 to 2400 Dunaújváros, Papírgyári út 46.; due to the arrangement of house numbers according to the decision of the Mayor of the City of Dunaújváros. The plant was built according to industrial installation

principles considered modern in the 1960s and 1970s. In this way, a cellulose factory was established (where pulp was produced from wood and hay), including three paper machines (for manufacturing writing and printing paper and containerboard from primary pulp and recovered paper), in addition to a plant for making corrugated products (corrugated paper boxes).

When Dunapack was established, the owner purchased the entire range of production; however, later on, during the separation and streamlining of activities, the owner parted with the cellulose factory and two machines producing writing and printing paper. However, arising from the history of the site, the following elements of the infrastructure are shared or constitute a single system:

- electricity input from the national power supply network
- water supply and the water supply network
- drainage and wastewater treatment
- condensate collection
- railway network

Paper machine no. 3 (PM3) was delivered in 1977, and as a result of regular capacity-increasing investments, currently operates with a capacity of 249,000 tonnes per annum. It has undergone continuous technical and technological development to maintain its competitiveness and efficiency.

For Hungarian society, manufacturing technology

based on recovered paper represents an outstandingly environment-friendly alternative, because as much as 95% of the paper waste generated in Hungary is recycled.

Instead of being disposed of in landfill sites or burnt in garbage incineration plants, paper is thus returned to the economic cycle in the form of a product that represents higher added value. As a result, the building of the new paper mill was also the largest environmental protection investment project of the past few years in Hungary.

Paper machine no. 7 (PM7), commissioned in the summer of 2009, has undergone regular improvements and, as a result, currently manufactures an annual 570,000tonnes of corrugated paper made 100% from waste paper. In addition, particular mention must be made of the high standard of technological and technical development. The machine's performance is outstanding in Europe, as confirmed by its unit indicators. Below are the details of the individual indicators, each of which meets and even surpasses BAT requirements.

The industrial railway track leading to the site is suitable for meeting the company's rail transport needs. The overwhelming majority of the electricity and

### 1.3. DESCRIPTION OF THE ENVIRONMENTAL MANAGEMENT SYSTEM

Hamburger Hungaria Kft. endeavours to achieve sensible environment-friendly operation, to certify the existence thereof, and to maintain the environmental impacts and risks of its activities, products and services within a regulated framework, in keeping with its environmental policy and objectives. All this is carried out in parallel with increasingly stringent legal regulations and improvements in economic policy and other environmental protection measures, while identifying the needs and expectations of stakeholders,

I with increasingly stringent legal regulations and improvements in economic policy rection measures, while identifying the needs and expectations of stakeholders, communicating with them, responding to their questions related to the environment, and providing for employee training.

Management screenings, as well as internal and external audits, are performed annually to assess the company's environmental performance with a view to the various considerations of sustainable development.

In order to ensure uninterrupted improvement, we set objectives on the basis of our governance policy, the rules applicable to us, risk assessments and our significant environmental impacts. Specific action plans (programmes) are assigned to these, with deadlines, persons in charge, and the necessary tools to map out the path to achieving the objectives. The uninterrupted monitoring of these programmes and the updating of objectives is supervised by the executive body of the management eventee.





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thermal energy required for running the production equipment is generated by a power plant operating on site, and only a minor part is procured from external companies, i.e. from ISD Power Ltd. and E.ON, both operating in the same industrial zone.

The company obtains the industrial water required for its technology from ISD Power Ltd., and purifies it in an industrial water treatment plant to make it suitable for the manufacture of paper.

On the site of the paper mill, there is a sewer network with three functions, for the separate collection of industrial wastewater, communal wastewater and rainwater. Rainwater bypasses the wastewater treatment plant, while industrial and communal wastewater undergoes mechanical and then biological treatment. Since February 2018, the company has only been treating the industrial wastewater generated in its own plant, and not wastewater from neighbouring companies.





The purpose of operating and constantly improving the integrated management system is to meet a complex set of objectives:

- to meet our customers' needs and expectations to the highest possible standard and ensure their satisfaction with our products and services;
- to live in harmony with the environment and society, and to manage our business in a sustainable manner;
- to ensure appropriate, safe and healthy working conditions for our staff;
- to pay particular attention to energy efficiency during work;
- to keep the company's business interests in mind.

This set of objectives and the fundamental principles required for achieving them are formulated in our management policy, one of the pillars of the management system and our daily activities.





Hamburger Hungaria Kft. considers as its fundamental objectives:

- fulfilment of customer requirements to a high standard;
- responsibility for the health and safety of employees, and consistent commitment to social responsibility, the environment and energy efficiency;
- serving the interests of the owner and employees.

#### In order to achieve our objectives:

- We operate an integrated management system in compliance with the requirements set out in the international standards ISO 9001, ISO 14001, ISO 45001, ISO 50001, ISO/IEC 27001 as well as the Regulation 1221/2009/EC (EMAS);
- Our management system, activities, products and services are continuously monitored and improved; In order to achieve goals and targets, we guarantee the necessary information and resources, aiming to performance;
- We produce our products by 100% recycling of recovered paper, endeavouring to fully satisfy customers' quality requirements;
- We maintain constant and proactive communication with our customers in order to identify their needs service, logistics and customs administration activities;
- We apply strict requirements to our suppliers and sub-contractors, and constantly monitor and evaluate their performance; we make efforts to purchase energy-efficient products and services;
- In the course of planning our activities and performing our daily work through the alignment of our financial and taking into account climate change aspects as well;
- In order to ensure the assertion of customers' interests, environmental protection, energy efficiency, and the health and safety of our employees, partners and visitors, we regularly assess the risks and hazards of our activities and make efforts at continuously reducing these risks via scheduled measures;
- We consider it our fundamental obligation to achieve a high standard of environmental protection and more have put in place and are continuously improving the necessary monitoring mechanisms in order to enhance the management of emergencies endangering our staff and the environment;
- Our employees are regularly informed of the company's objectives and results, and undergo regular training to improve their expertise, knowledge, commitment and awareness;
- We follow an honest and open information policy towards the population living in the surroundings of the paper mill, the general public, the authorities and various offices in order to establish mutual trust;.
- operation and evaluation of management processes.

We are convinced that the consistent application of these fundamental principles is of key significance in efficient business management, the maintenance and strengthening of our market position, and the development of our company.

Dunaújváros, 15 January 2025

**ENVIRONMENTAL STATEMENT 2024** 

apply the best technologies available to us, and to achieve the continuous development achievable via their application, extending to economies of scale, safety, quality, energy efficiency and environmental

as precisely as possible and to provide them with up-to-date and accurate information on the quality and ecological benefits of our products; the services provided to our customers also include technical customer

interests with the requirements of environmental protection - we endeavour to conserve natural resources. and follow the principles of energy efficiency and sustainable development, applying a life cycle approach

energy-efficient operation by simultaneously complying with laws and official regulations, and to create, maintain and continuously improve healthy and safe working conditions for our employees and partners. We

• We consult with employees and their representatives, ensuring their involvement in the development,

Attila Bencs Managing Director



### 2. DESCRIPTION OF MANUFACTURING

The paper manufacturing activity performed at Hamburger Hungária Kft's site is 100% recovered paper-based. In order to facilitate a better understanding of the environmental impacts of production activity, the papermaking process is briefly described below.

#### 2.1. MANUFACTURE OF PAPER AND PAPERBOARD

The papermaking process entails three main technological phases.

#### Stock preparation

The preparation of stock (raw material) includes the processes of preparing the fibrous materials to be fed into the paper machine, and in this phase waste paper is pulped using water. The resulting material is cleaned, sorted in several steps, and formed by mechanical methods, before the pulp suitable for papermaking is fed into the paper machine.

#### Forming

Forming of sheets is carried out on the paper machine by dewatering the fluid fibre suspension while it flows, by pressing and drying the wet pulp web. The main components of the paper machine are the headbox, wire section (wet end), press section and dryer section

The headbox spreads the liquid (0.5-1%) fibrous suspension evenly along the entire width of the paper machine onto a continuously moving wire mesh. A significant dewatering of the stock takes place on the endless wire mesh, during which the sheet structure is formed.

When the paper web leaves the wire, it still contains 80% water. Further dewatering takes place in the press section, where the water removed by the press rolls is carried off by felts. The water content of the web exiting the press section is 45-50%. In the dryer section, the rest of the water evaporates from the web as it passes through steam-heated dryer rolls, until eventually the water content of the web drops to 6-8%. Every paper mill endeavours to make this loop as closed as possible so that the minimal amount of fresh water is consumed, resulting in less wastewater and fibrous material as by-products of the manufacturing process.

#### Primary packaging

At the end of the paper machine, the finished paper is wound onto a reel or tambour, producing a master roll which is cut up into smaller rolls and labelled according to the customers' requirements. Finished rolls are carried into the automated storage facility via conveyor belts, where they are sorted according to paper grade and customer, and stored until delivery.







### 2.2. PRODUCTION

At the site of Hamburger Hungária Kft., PM3 operates with a capacity of 249,000 tonnes per annum and PM7 with a capacity of 570,000 tonnes per annum. The paper machines produce primarily containerboard, including linerboard and corrugating medium (or fluting) with a surface weight of 70-175 g/m2, exclusively from recovered paper. The base papers produced by the company are used to make corrugated products (cardboard, boxes, paper rolls) for nearly all branches of industry. In recent years, on-site production has evolved as follows:



In 2024, the two paper machines manufactured various kinds of paper used as raw material for corrugated boxes in a product assortment similar to previous years. Exclusively (100%) recovered paper was used as the raw material for production, and 86% of the manufactured goods were sold on export markets.

The volume of manufactured products amounted to 684.947 tonnes, and their distribution by paper grade is shown in the following chart.



## **3. ENVIRONMENTAL IMPACT ANALYSIS**

Within the framework of preparations for the annual management screening, the evaluation of environmental impacts is reviewed and updated as follows. The environmental aspects of individual activities, products and services, together with the resulting environmental impacts (regular, non-regular, and during operation under emergency conditions), are identified with the help of a document entitled "Matrix of Environmental Factors and Impacts." Individual impacts are rated by scoring on the basis of previously specified criteria.



The significant environmental impacts at our company include, but are not limited to, the following: use of recovered paper (as a favourable impact), consumption of electricity, thermal energy and fresh water, wastewater discharge, water pollution and waste generation.

We are equipped to manage extraordinary situations that generate potential environmental impacts, and have an Operational Damage Control Plan approved by the competent environmental authority. This document specifies the actions to be taken and the contact details of persons and organizations (environmental and water management authorities) to be notified in the incidence of damage. There was no incident or emergency in the paper factory that entailed a danger of damage to the environment in 2024.

In the course of operating and improving our technology, we take into account the conclusions on the best available techniques (BAT) made under Directive 2014/687/EU governing the manufacture of paper for recycling purposes, and develop our technological and technical requirements accordingly.





### 3.1. RECOVERED PAPER USE

The main raw materials used in papermaking include pulps from trees and other plants (primary pulps) as well as recovered paper (secondary pulps). The raw material for products manufactured by Hamburger Hungária Kft. is exclusively recovered paper, as no primary pulp is added to the waste paper during the manufacturing process. For this reason, the availability of a sufficient amount and appropriate quality of recovered paper is of vital significance for the company.

Up until recycling, the paper of appropriate quality received for recycling at the site is stored on a 100% paved surface, protected by a high fence against dispersion, in accordance with the expectations of BAT. Thanks to its production accomplished in the year reviewed, Hamburger Hungária Kft. recycled 312.233 tonnes of recovered paper generated in Hungary.

The ratio of recovered paper collected in Hungary and used in pulp consumption deteriorated compared to the previous year, to 41.3 %. Hamburger Hungária Kft. is compelled to import waste paper as the domestic supply fails to cover the amount required for production. We had a MOHU contract until June 30, 2024, and until then the waste had been delivered through MOHU, but after that we had to build a new supplier network, which took time and is responsible for the decrease in the share of domestic waste.

The waste paper and refuse generated in the course of papermaking is returned to the pulper, and thus remains in the internal cycle of papermaking. This amount was 6.215 tonnes in 2024, representing 0.9% of the net amount of the paper manufactured.

The following diagram shows waste paper consumption data.



Ratio of domestic waste in pulp consumption





### 3.2. ENERGY MANAGEMENT

Worldwide, the paper industry is classified among traditionally highly energy-intensive sectors. This applies to both thermal energy and electricity consumption. Thermal energy consumption is high because a great amount of heat is needed in the paper machine for drying paper - in other words, for evaporating its water content - while the use of electricity is high because paper machines operated by electricity are required for moving or forming water, paper pulp and paper sheets. We continuously adopt measures to improve energy efficiency for two reasons: to improve economies of scale through the use of modern solutions and to reduce the environmental load caused by papermaking.

Compression in the press section of the paper machine has been optimized accordingly. With the help of numerous heat exchangers, heat is regained before steam condensate is emitted into the air. These solutions are in keeping with BAT53 recommendations.

Since 2016, our company has been attested according to the ISO 50001standard.

The total unit consumption of electricity for paper manufacturing shows a minimal increase of 0.3% compared to the previous year.

Total amount of electricity used to manufacture paper and paperboard







The following diagram shows data for total thermal energy consumption in papermaking. Our unit thermal energy consumption was up on the previous year.

The use of thermal energy shows a minimal decrease of 7.76 % compared to recent years.



Total amount of thermal energy used to manufacture paper and paperboard

#### The biogas generated during anaerobic purification at the wastewater treatment plant is collected and transferred to our own power plant and used in an auxiliary boiler compartment, in a CFB boiler or in biogas engines operating since May 2017.

The key parameters related to biogas are as follows:

- + Total amount of generated biogas: 9,148,447 m<sup>3</sup>
- + amount used: 9,142,127 m<sup>3</sup>
- + Volume of flared gas: 6,320 m<sup>3</sup>

The amount of biogas produced showed a slight decrease compared to the previous year. According to the test record made on 11.11.2024, the composition of purified biogas was typically the following: 67.9% methane, 30.9% carbon dioxide and 0.48% other gases.

### 3.3. WATER MANAGEMENT

Water use is the other area where the presented technology requires papermaking to most utilise the environment. This entails partly the use of a large amount of water and partly the emission of resulting wastewater. In order to reduce this to the minimum, we continuously strive to make our water system as closed a loop as possible, while also controlling our use of chemicals. Consequently, the pulp-rich water generated during papermaking is recirculated on multiple occasions. This simultaneously provides an opportunity for reducing fresh water input and for increasing pulp recovery. With this technological solution, we also comply with the best available technique of fresh water consumption.

The specific water consumption of paper production has increased slightly compared to previous years, but we continue to maintain the target value (7m<sup>3</sup>). If we use less water, chemical consumption will increase. The optimal value is 7m<sup>3</sup>, and water consumption is further influenced by the number and duration of shutdowns.



Wastewater is treated in the modern, two-phase biological wastewater treatment plant operated by Hamburger Hungária Kft.

The amount of wastewater from paper production, similar to the amount of fresh water used, increased slightly due to increased production. Its unit value was 6.42 m<sup>3</sup> per tonne, considerably below the value recommended under the best available technology (10 m<sup>3</sup>/t).







Wastewater quality is tested on the basis of a self-monitoring schedule approved by the competent authorities, with the help of spot samples taken on a monthly basis. The following table contains the averages of these measurements.

#### WASTEWATER DISCHARGE Findings of the self-monitoring

	Limit since 14/03/2018	2021	2022	2023	2024
		m	ng/l		
Volume of used dichromate oxygen (COD <sub>k</sub> )	685	99,16	82,5	78,33	133,8
Five-day biochemical oxygen demand (BOD <sub>5</sub> )	50	25,33	30	25,33	24,16
Total suspended solids	200	46,41	20	34,25	31,16
Adsorbable organic halides	1,643	0,093	0,062	0,114	0,157
Total amount of inorganic nitrogen	10	2,0	4,991	4,25	3,00
Total amount of phosphorus	2	0,49	0,818	0,62	0,76
Toxicity	-	-	-	-	-

We submitted our self-monitoring plan for 2021-2025 on 30.04. 2021.

The results of monthly self-monitoring measurements performed last year conformed to the specified threshold limits, and the authority did not identify any contaminant emission exceeding the specification.

In order to obtain a more complete picture of the operation of the wastewater treatment plant and to be able to perform a more efficient performance evaluation, since 2018 the results of water quality tests regularly performed during the operation of the wastewater treatment plant are taken into account, instead of the abovereferenced spot samples. As these tests are carried out considerably more frequently (daily or weekly), the results obtained better represent the operation of the technology and any related short-term changes taking place. (See at point 7 Environmental protection in figures.)

#### 3.4. AIR PROTECTION

In the case of the various additives used in paper manufacturing, special care is taken to specify their solvent and VOC (volatile organic compound) content, and formulas imparting colour are used accordingly. In this we fulfil the BAT51 recommendation.

Regarding the air conditioning equipment on site, we meet our obligation to register in the HLH (refrigeration, air conditioning and heat pumps) monitoring system. The site has a single point source, belonging to an emergency diesel pump found in the industrial waterworks. A specified emission limit does not apply to this equipment, and no other measuring obligation is required.

#### 3.5. SOIL PROTECTION

In order to prevent all kinds of soil contamination, the methods of storing, moving and using hazardous substances used in the course of production are tightly regulated, and potentially contaminant containers are appropriately protected and equipped with emergency basins. A basic FAVI report regarding hazardous waste containers located on the site was performed.

#### 3.6. WASTE MANAGEMENT









Distribution of the delivered reject according to the method of utilization

Due to the sludge centrifuge implemented in 2021, the 77% of the sludge generated in the wastewater treatment plant (after dewatering) is used for energy recovery in our own power plant. 23% of the amount produced is converted into a qualified compost product using the technology used by the neighbouring waste management company.





The majority of our hazardous waste comprises liquid oily waste generated during maintenance, used lubricants, greases, absorbents, chemicals and the packaging waste of indirect materials contaminated by hazardous substances. Their volumes fluctuate year by year, depending on the maintenance of the various equipment.

Delivered waste is transferred to a licensed waste manager, primarily for additional utilization or for disposal. In 2023, the non-hazardous and hazardous production waste included in the table in Section 6 was generated at the site in the amounts specified in the table. A larger change in hazardous waste can be attributed to the disposal of laboratory chemicals (e.g.: 4 larger shipments in January Sludge from oil-water separators HAK130502).

#### 3.7. NOISE LOAD

The paper mill is located on an area designated for industrial activity. On 7 Dec 2023, the Fejér County Government Office issued a unified environmental permit under registration number FE/KTF/12400- 7/2023, which approved our noise abatement action plan based on the expert opinion, which we plan to implement up to Phases I-IV. The expected completion date is 31 December 2028.

Stage II specified in the permit:

Measures to be taken in 2024.

• Noise reduction of the outside unit of the steam receiver with a noise protection wall and casing. The amount of noise reduction required is  $\Delta LZ = 17$  dB(A). We carried out the required noise reduction measures, but instead of soundproofing the steam receiver, we relocated the unit to the building. Thus, it is no longer a source of noise.

#### 3.8. FUEL USE

For the purposes of in-house movement of materials, forklift trucks fuelled by PB gas are used and we have our own filling station in relation to this. 160,973 liter of gaseous fuel was consumed in 2024. Our own fuel oil filling station was commissioned on the territory of the paper mill in 2016, and ihe recorded consumption of fuel oil was 384,865 liter in 2024. Diesel consumption shows a significant decrease of 76,276 liters compared to the previous year. No environmental damage occurred at the filling stations.







### 3.9. OTHER ENVIRONMENTAL IMPACTS

In addition to striving to reduce the environmental impacts of our own activities, we also make efforts, as far as it is within our power to do so, to favourably influence the impacts caused by our subcontractors and suppliers.

We make regular efforts to maintain, and, as far as possible, increase the ratio of transport by rail and river. Logistical, environmental and financial considerations alike suggest that water and rail transport would provide a reasonable solution in the case of raw materials and rolled paper products. However, the number of customers and suppliers capable of receiving delivery by rail or water is on the continuous decline.

In addition to monitoring the environmental performance of our own activity, for several years we have also been evaluating the environmental impacts caused by our subcontractors and suppliers.

When selecting partners, we prefer enterprises with an environmentally conscious, responsible attitude towards the environment. We have set contractual and other requirements vis-à-vis third-party corporations performing activities on our site, in order to ensure that they, too, contribute to reducing the environmental load of the sites.

Such requirements include, for example:

- the existence of a management system with a focus on the environment, or efforts at building such a system;
- the avoidance of use of toxic substances that damage the environment;
- packaging that ensures safe and environment-friendly transportation and
- transport vehicles that are only allowed to enter the site in an impeccable technical condition;
- when indirect materials are transported, the safety data sheet of the material to be attached in every case.



### 4. COMPLIANCE WITH THE LAW AND STAKEHOLDER EXPECTATIONS

We continuously monitor the legal requirements in force in relation to the environment. We maintain records of the statutory regulations related to our activity in a regulated manner, in the procedural rules entitled "Management of External Documents," included in our integrated management system. We have continuously been performing and reviewing the assessment of compliance based on our uniform environmental licenses. We are also continuously carrying out preparatory work, like impact assessments and pre-permit work for our planned investments. In the course of its operation, our company comes into contact with or is exposed to the impact of numerous companies, private persons, employees and inhabitants living in the neighbourhood, officers of the central and local governments and other business partners. The above-referenced stakeholder groups have been taken into account and their needs and expectations of us comprehensively evaluated in accordance with the provisions of the relevant procedural rules. Communication with stakeholders on environmental matters is performed in accordance with the procedure V-K-E-02.

The environmentally key stakeholders who have high expectations of us and fundamentally determine our operations are listed below.

## 

#### Community, civil and non-governmental organizations No comments were made on the site by any community, civil or other non-governmental

organization.



Local government, authorities and ministries We have consulted local governments and competent authorities about matters related to environmental authorization for projects on the site.

#### **Professional organizations**

We participate in the work of numerous Hungarian and international professional organizations. Occasionally we deliver lectures and on other occasions we are listeners. With the help of professional organizations or as the government's strategic partner, in 2024 we had the opportunity to participate in giving opinions on numerous statutes and strategies regarding environmental protection. Through our active contribution and the sharing of our professional experiences in the industry, we have assisted the work of decision-makers and legislators.

We join in the activities of the following organizations:

- + KSZGYSZ (Association of Environmental Service Providers and Manufacturers)
- CSAOSZ (National Association of Packaging and Materials Handling) +
- +MHT (Hungarian Hydrological Society)
- + MGYOSZ (Confederation of Hungarian Employers and Industrialists)
- +CEPI (Confederation of European Paper Industries)

+HOSZ (Hungarian Waste Management Federation)

- During regulatory inspections it was established that we perform our activity in accordance
- with the provisions of our authorizations and of the statutes.



The most significant directives of the European Union and Hungarian statutes related to our activity include the following:

- § Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (Text with EEA relevance) §. Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control)
- S Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000, establishing a framework for Community action in the field of water policy
- § 2014/687/EU: Commission Implementing Decision of 26 September 2014 establishing the best available techniques (BAT) conclusions [...] for the production of pulp, paper and board
- δ Regulation 1221/2009/EC (EMAS) amended by Regulation 2017/1505/EU and by Regulation 2018/2026/EU
  - Act LIII of 1995 on the general rules of environmental protection
  - Act CLXXXV of 2012 on waste

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- Act LXXXV of 2011 on the Environmental Product Fee
- Government Decree 220/2004. (VII. 21.) on the rules for protecting the quality of surface waters
- Ş KvVM (Ministry of Environmental Protection and Water Management) Decree 28/2004. (XII. 25.) on the emission limits of water contaminants and the special rules governing their application
- δ KvVM (Ministry of Environmental Protection and Water Management) Decree 27/2005. (XII. 6.) on the detailed rules for verifying the discharge of used and wastewater
- Ş Government Decree 309/2014 309/2014. (XII. 11.) on registration and data provision obligations related to waste

EU commission's executive order 2023/2122 (October 12, 2023) updating executive

- EU order 2018/2066 regarding the monitoring and reporting of greenhouse gas emissions under Directive 2003/87/EC of the European Parliament and of the Council about its amendment
- § EU commission's implementing decision 2024/564 on solid fuel boilers and packages consisting of solid fuel boilers, auxiliary heaters, temperature controllers and solar devices Delegated Regulation (EU) 2015/1187 and (EU) on harmonized standards developed to support Regulation 2015/1189
- § Regulation 12/2024 (VIII. 15.) SZTFH on the registration of ESG reports, ESG rating agencies, and ESG software.
- δ Regulation 13/2024 (VIII. 15.) SZTFH on the detailed rules for the fulfillment of sustainability due diligence obligations by businesses Act LXXXVII of 2024 on greenhouse gases.
- Directive (EU) 2024/2881 of the European Parliament and Of The Council on δ ambient air quality and the Clean Air for Europe program - though this may not be directly related.

### 5. IMPLEMENTATION OF THE 2024 ENVIRONMENTAL PROGRAMME

Objective	Action	Deadline	Evaluation		
Reducing air pollution emissions by using the on-site Dunapack building	Increasing the on-site storage capacity, which reduces transport- related pollution emissions.	31.08.2024.	We were also able to replace storage costs, and in terms of material handling, the emission of pollutants decreased, as there is no need to transport the product to an external warehouse		
PM3 Noise reduction project continued	Based on the noise protection expert opinion of the Hamburger Hungária Kft. site prepared in 2020, the reduction of the dominant noise sources in 4 stages until 2021-2028. In 2023.	30.09.2024.	A task assigned for 2024 was the noise reduction of the steam receiver outdoor unit, which we achieved by modifying the technology (relocating the pressure-reducing unit to a closed heat center room).		

until 2021-2028. In 2023, the noise reduction of the Dunapack boiler chimney with an absorbent channel silencer. The amount of noise reduction required is  $\Delta LZ$  $= 15 \, dB(A)$ 





## 6. ENVIRONMENTAL OBJECTIVES FOR 2025

Objective to achieve	Required action	Deadline
Implementation of iChemistry software	Improvement of the availability of safety data sheets through the use of the iChemistry application. Safety data sheets related to hazardous materials on site will be accessible via QR codes. The system's automatic expiration tracking further strengthens regulatory compliance and occupational safety control.	31.05.2025
Replacement of two gas- powered forklifts with electric ones.	Reduction of CO2 emissions by replacing two gas- powered forklifts with electric ones, and decreasing the specific energy consumption for material handling. Expected annual savings: 165,823 kWh.	31.08.2025
Construction of a dedicated chemical dosing storage and system for PM3 (PAM + Bentonite) and PM7 (PAM).	Enhancing supply security, increasing the safety of chemical dosing and storage, and preventing environmental pollution through the construction of a dosing and storage system.	30.09.2026
Modernization of the starch cooking technology for PM3 + PM7.	By producing more uniform and higher quality starch, reducing starch consumption. Expected reduction: 5%.	30.09.2026

	Objectives carried o
Development of an automatic chlorine dosing system in the waterworks	Development of an auto in the waterworks and re handling of hazardous s Minimization of industrial optimization of industrial ROI: chlorine savings, re soft water production
Planning and licensing of an independent water extraction work	Increasing the security of First step: planning for p
Continuation of PM3 noise reduction project	Based on the noise prote Hamburger Hungária Lto reduction of the main no four phases between 20 The multi-phase program noise reduction measure installation of silencers a Planned works for 2025: - The internal surfaces o fitted with sound-absorb - The pipe fittings will be - The pipes running in th to the pressure-reducing protective cladding.
Increasing the efficiency of PM7 adhesive filtration.	Improvement in adhesive and consequently, an ex lifespan of the cylinder c

		25
ainerboard We will.	1	
l over from 2024		
utomatic chlorine dosing system d reduction of risks related to the s substances trial water network corrosion, rial water chlorine content. , reduction of chemical dosage for	31.12.2025.	
y of industrial water supply. r permission, authorisation	31.12.2025.	
rotection expert opinion for the Ltd. site, prepared in 2020, the noise sources will be carried out in 2021 and 2028. ram is still in progress, within which ures are being implemented (e.g., s and noise protection walls). 25: s of the heat center room will be orbing panels. be acoustically insulated. the external open space, related ing unit, will be covered with noise	31.12.2025.	
sive quality, reduction in its usage, expected improvement in the r coatings.	31.05.2025.	



### 7. ENVIRONMENTAL PROTECTION IN FIGURES

The following are the basic indicators and relevant sector-specific environmental performance indicators based on Regulation 1221/2009/EC of the European Parliament and of the Council:

			2022				2023				2024		
		A	В	R		A	В	R		A	В	R	
	Headcount		348				356				335		
_	Raw materials (t)	727 895	662 407	1,099	t/t	724 273	650 234	1,114	t/t	755 646	684 947	1,103	t/t
PM3 + PM7 total	- of this: secondary (t)	727 895	662 407	1,099	t/t	724 273	650 234	1,114	t/t	7550646	684 947	1,103	t/t
PM7	Additives (t)	43 106	662 407	0,065	t/t	40 122	650 234	0,062	t/t	45 167	684 947	0,066	t/t
13 +	Water consumption (m <sup>3</sup> )	4 784 138	662 407	7,222	m³/t	4 545 912	650 234	6,991	m³/t	4 941 721	684 947	7,215	m³/t
M	Heat energy (GJ)	2 690 035	662 407	4,061	GJ/t	2 679 545	650 234	4,121	GJ/t	2 602 151	684 947	3,799	GJ/t
	Electricity (MWh)	250 389	662 407	0,378	MWh/t	239 945	650 234	0,369	MWh/t	253 582	684 947	0,370	MWh/t
	<b>Biological diversity</b>	515 604	1 004 713 <sup>3</sup>	0,513	m²/m²	640 106	1 143 668 <sup>3</sup>	0,560	m²/m²	652 979	1 072 632 <sup>3</sup>	0,609	m²/m²
	Wastewater (m <sup>3</sup> )	4 763 709	662 407	7,192	m³/t	4 177 854	650 234	6,425	m³/t	4 398 458	684 947	6,422	m³/t
	- COD (t) 4	861,2	662 407	1,3	kg/t	975,351	650 234	1,5	kg/t	890,431	684 947	1,3	kg/t
	- Suspended solids (t) <sup>4</sup>	357,69	662 407	0,54	kg/t	318,614	650 234	0,49	kg/t	335,624	684 947	0,49	kg/t
	Biogas generation (m <sup>3</sup> )	9 873 214	662 407	14,905	m³/t	9 148 447	650 234	14,069	m³/t	8 938 270	684 947	13,050	m³/t
Non-	hazardous waste - reject (bonedry t)	62 139	662 407	94	kg/t	42 328	650 234	65	kg/t	48 009	684 947	70	kg/t
	Hazardous (kg)	24 452	662 407	0,037	kg/t	73 840	650 234	0,114	kg/t	124 028	684 947	0,181	kg/t
	Environmental fines (HUF)		0				0				0		

"A" indicates the total annual use/impact of the given area; "B" indicates the total annual output of the organization;

"R" indicates the ratio of A to B

Hamburger Hungária Kft.'s key environmental performance indicators satisfy Directive 2010/75/EU on industrial emissions, as well as the BAT conclusions concerning the use of paper for recycling in the reference document no. 2014/687/EU on the manufacture of paper.

## 8. STATEMENT BY THE VERIFIER

Statement by the STATEMENT BY THE ENVIRONMENTAL VERIFIER A ENFORCEMENT MAS environmental verifier registration number: HU-V verification in the following area: C17 Manufacture of pa declares to have verified whether the organization of statement / updated environmental statement Manburger Hung H2400 Dunaújváros, P registration number: HU-OUODE management and audit scheme (EMAS), Regulation of and of the Council of 25 November 2009 on the voluntar eco-management and audit scheme (EMAS), Regulation of the European Parliament and of the Council.	
STATEMENT BY THE ENVIRONMENTAL VERIFIER A ENFORCEMENT Katalin Moravcsik File of ÉMI-TÜV SÜD Kft. EMAS environmental verifier registration number: HU-V verification in the following area: C17 Manufacture of pa declares to have verified whether the organization s statement / updated environmental statement Hamburger Hung H-2400 Dunaújváros, Pa registration number: HU-000002 has fulfilled all the requirements set down in Regulation ( and of the Council of 25 November 2009 on the voluntar eco-management and audit scheme (EMAS), Regulation of the European Parliament and of the Council. By signing this statement, I confirm that – The implementation of the verification–and of the A	
<ul> <li>ENFORCEMENT</li> <li>Katalin Moravcsik File of ÉMI-TÜV SÜD Kft.</li> <li>EMAS environmental verifier registration number: HU-V verification in the following area: C17 Manufacture of padeclares to have verified whether the organization statement / updated environmental statement</li> <li>Hamburger Hung H-2400 Dunaújváros, Paregistration number: HU-000002</li> <li>has fulfilled all the requirements set down in Regulation (and of the Council of 25 November 2009 on the voluntar eco-management and audit scheme (EMAS), Regulation of the European Parliament and of the Council.</li> <li>By signing this statement, I confirm that</li> <li>The implementation of the verification-and of the American Statement (and of the Council of 25 November 2009)</li> </ul>	Statement by th
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<ul> <li>has fulfilled all the requirements set down in Regulation ( and of the Council of 25 November 2009 on the voluntar eco-management and audit scheme (EMAS), Regulation of the European Parliament and of the Council.</li> <li>By signing this statement, I confirm that</li> <li>The implementation of the verification-and of the V</li> </ul>	
<ul> <li>and of the Council of 25 November 2009 on the voluntaries</li> <li>eco-management and audit scheme (EMAS), Regulation of the European Parliament and of the Council.</li> <li>By signing this statement, I confirm that</li> <li>The implementation of the verification-and of the Voluntaries</li> </ul>	registration number: HU-000002
<ul> <li>The implementation of the verification and of the verification.</li> </ul>	and of the Council of 25 November 2009 on the voluntar eco-management and audit scheme (EMAS), Regulation
	By signing this statement, I confirm that

- The findings of the verification and of the validation confirm that nothing suggests that the organization does not fulfil the statutory legal regulations in force with respect to the environment,

- the data and information provided in the environmental statement/updated environmental statement(\*) made by the organization/site(\*) give a reliable, true and accurate view of all the activities of the organization/site(\*) within the scope of application defined in the environmental statement.

This document is not equivalent to registration under the EMAS. Registration under the EMAS may only be performed by bodies competent under Regulation 1221/2009/EC. This document may not be used as a separate public statement.

Dated: 20/03/2025

Signature



(\*) Strike through as appropriate.

#### ne Verifier

ABOUT VERIFICATION AND

/-0001/2017 accredited to perform audits and aper and paper products (NACE) specified in the organization's environmental

#### gária Kft. Papírgyári út 46.

(EC) No. 1221/2009 of the European Parliament ry participation by organisations in a Community on 2017/1505/EU and Regulation 2018/2026/ EU

validation fully complies with the provisions of nd Regulation 2018/2026/EU,



# 9. ADDITIONAL INFORMATION AND CONTACTS

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