estoniancell
AS ESTONIAN CELL

ENVIRONMENTAL AND SUSTAINABILITY REPORT

2024

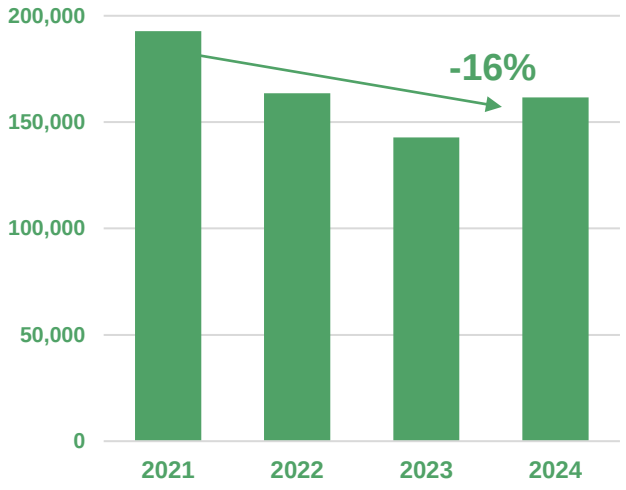
HEINZEL GROUP

estoniancell

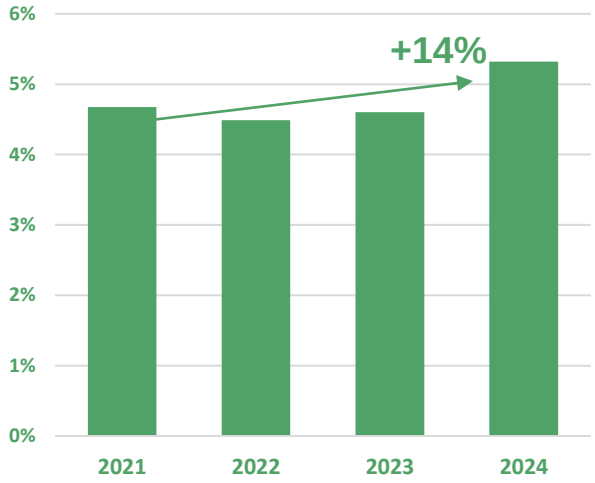
INDEX

Sustainability Metrics Overview 2024

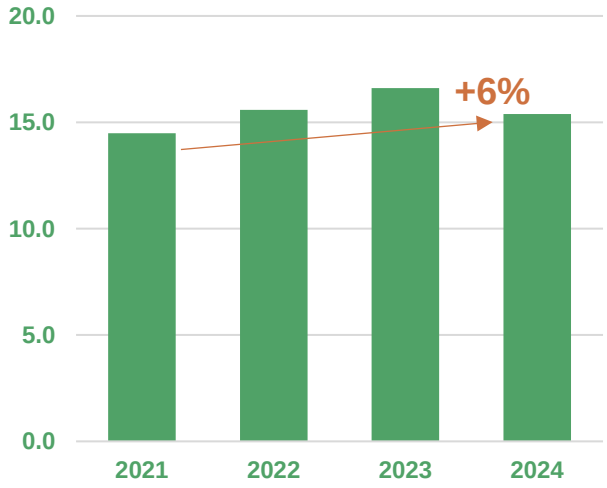
ESRS E1-6: Scope 1 + 2 emissions [t CO2e]



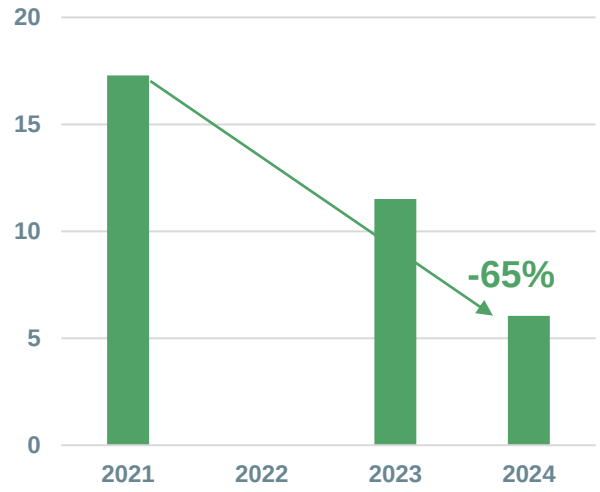
ESRS E1-5: Share of energy from renewable sources [%]



ESRS E3-4: Freshwater withdrawal per produced ton [m³/t]



ESRS S1-14: Lost time injury frequency rate (LTIFR)



Sustainable Practices

- Lower carbon footprint
- Increased share of renewable energy
- Higher water withdrawal compared to base year
- reduced frequency of injuries

EXECUTIVE FOREWORD

Overview of production activities

In 2024, there was a significant reduction in the average production cost compared to the previous year. Additionally, the first half of the year had a significantly lower cost base than the second half. At the same time, the average sales price, which had been rising month by month in the first half of the year, turned downward in the second half. Due to the combination of these described production costs and sales price developments, the company was unable to sell its potential output in the third and fourth quarters of the year. Additionally, deliveries to Asian customers were hindered throughout the year due to the arrangement where container ships were rerouted around Africa on the Europe-Asia routes, as the direct route through the Red Sea was unsafe due to armed attacks occurring there. In 2024, the mill's production capacity was utilized at approximately 90%, and the company produced 166,995 tonnes of aspen BCTMP (2023: 136,296 tonnes). During the reporting year, 155,444 tonnes of pulp were marketed (2023: 147,145 tons). Due to the difference in the amount of pulp produced and sold, pulp inventories increased by 11,551 tonnes in 2024.

- **Environment, corporate social responsibility**

Year after year, the company's environmental footprint has consistently decreased due to large-scale resource-saving and environmental investments made in previous years, and the implementation of innovative biogas production technology in anaerobic wastewater treatment since 2013.

In previous years, we had achieved significant energy savings by investing in resource-saving and optimizing work processes. The mill used 199 GWh of electricity during the year (2023: 172 GWh) and 11.7 million cubic meters of natural gas (2023: 9.9 million cubic meters). Energy consumption increased compared to the previous year due to the increase in the absolute volume of pulp produced. The average electricity and natural gas specific consumption in 2024 was record low.

In 2024, a thorough repair of the biogas reactor was carried out, eliminating mechanical problems that hindered gas production. The reactor plays an important role both as part of the water treatment process and in biogas production. In previous years, the production of biogas with a methane content of 75% reached over 7 million cubic meters annually with an energy value of 50 GWh. However, in 2024, biogas production was affected by the limited energy input into the reactor due to reduced pulp production volumes and the suspension of biogas production during the reactor repair. The company produced 4.2 million cubic meters of biogas in 2024 (2023: 4.0 million cubic meters). The company sells the produced biogas to a partner who purifies it to a level comparable to natural gas and supplies it as biomethane to the public gas network. In conclusion, we can confirm that the company continued to meet the highest environmental protection standards in 2024. The best available technology (BAT) used in the mill ensures higher efficiency than industry standards in wood, energy, and water consumption. Additionally, the sulfur- and chlorine-free technology is environmentally friendly. In addition to the economic benefits, the previously described biogas plant has a remarkable positive environmental impact, further reducing the mill's ecological footprint. The company's environmental goal is to continuously improve the production process in accordance with the principles of sustainable development.

Over the years, the company has consistently worked on safety, employee satisfaction, environmental protection, and community involvement and informing about the company's activities.

At the end of the reporting year, the company employed 85 full-time employees (2023: 86 employees). Throughout the value chain, from forest harvesting to delivering goods to customers, more than 500 people are employed.

Our goal is for every employee to leave work at the end of the day as healthy as they were when they arrived. In 2024, there was 1 work accident with lost workdays in the company, and additional measures were implemented to prevent such incidents in the future (2023: 2 work accidents). We also aim to increase employee motivation by developing employees and considering their feedback to the company. The company conducts annual development interviews with all employees and employee satisfaction surveys to consider employee feedback in ensuring a motivating and safe working environment.

Similar to previous years, Estonian Cell continued to distribute compost to farmers for free. Estonian Cell produces compost from the biomass generated by the water treatment processes, which is mixed with aspen bark. The resulting high-quality and organic compost is ready for use in agriculture to improve soil fertility. This has been confirmed by various compost-related studies conducted in collaboration with scientists from the Estonian University of Life Sciences, based on the results of which the company's compost stabilization requirements were also eased.

Estonian Cell values the life of the community in Kunda town, Viru-Nigula municipality, and Lääne-Viru County, being a supporter of local education, cultural, and sports projects. Over

the years, Estonian Cell has supported various running events, the creation of health trails, youth training opportunities, technical education in the robotics club at Kunda Joint Gymnasium, and piano studies at Kunda Music School. In 2024, in the difficult economic situation, the company supported only a few smaller projects.

The company continues to support the active participation of various levels of managers and top specialists in various educational projects, including giving lectures on entrepreneurship or specific fields and inviting schoolchildren to job shadowing days at the mill. The company also considers it important to promote modern and environmentally friendly industry, which is why regular tours introducing the mill and the production process are organized for interested parties. In 2024, a number of events and excursions introducing the company's activities took place, including 'Bring Your Child to Work Day' and 'Forest People's Day'.

To ensure transparency, the company voluntarily publishes its annual environmental and responsibility report on its website www.estoniancell.ee. Additionally, the company is included in the Heinzel Group's responsibility report, and the company's indicators are considered and published in the annual responsibility report on the group's website https://www.heinzel.com/en/downloads/.

- **Investments and development trends for the next financial year**

If in the market situation prior to the energy crisis, our goal was to maximize the production volume that limited the sales volume, then in the situation of extraordinarily high electricity prices from time to time, we have adjusted our strategy and have been able to be flexible in giving up the production and sale of certain volumes, in the event that due to extremely high energy costs, the own price should become unreasonably high. Assuming, among other things, the effect of process optimization, we aim for a new production record of 189,000 tons per year in 2024, and we will continue to work to increase the production volume to at least 200,000 tons in the coming years, eliminating bottlenecks, assuming costs stabilizing.
The company continues to work with green energy production solutions and to reduce the CO2 footprint in order to achieve a carbon emission reduction of at least 70% (scope 1 + 2) by 2030 compared to 2021, in line with the goals of the parent company Heinzel Group. The planned on-site energy production project also allows to reduce the risks related to the availability and pricing of energy from fossil sources and reduces the mill's direct carbon emissions in the scope 1 level by as much as 80%. Considering the complexity of the solution, we are planning to prepare the project for the decision making in 2024, but large-scale investments will take at least 2 years after the approval of the project.

- **Recognition for conducting responsible business operations**

The stabilization of sales and input prices that occurred in 2024 and the projected developments for 2025 will allow the company's economic performance to gradually improve. An important part of this is also the fixed electricity and natural gas purchase contracts, which are at a significantly better price level in 2025 compared to the previous year. However, as an exporter, the company is heavily dependent in the short term on the functioning of logistics chains and global economic development, as well as the competitiveness of the cost price of pulp produced in Estonia, especially in the European and Asian markets.

According to future predictions by independent analysts in our market sector, the demand for pulp produced from high-yield deciduous paperwood is expected to grow by an average of as much as 4% per year until 2030. This is primarily influenced by the rapidly growing demand for lightweight packaging in the e-commerce sector, as well as the continuing trend to replace single-use plastic packaging with more environmentally sustainable materials. Additionally, the declining availability of recycled paper due to the decreasing volume of printed paper production is increasing the demand for pulp, i.e., fresh wood fiber.

In 2025, the focus remains on improving internal processes, including complex production processes as well as the management and communication of people at an even higher level than before, in order to increase the production volume of the mill, which operates at maximum capacity 24/7, and to make resource usage even more efficient, thereby contributing to environmental protection. In addition to optimizing the quality of pulp according to customers' needs and taking into account the parameters of the final product, the focus is on optimizing the operation of the mill to minimize the impact of the highest electricity hourly prices while avoiding a complete shutdown of production during those periods.

Due to the nature of the production process, the pulp industry is energy-intensive in any country in the world, even when using the best available technology, as Estonian Cell does. Therefore, the price impact of energy and energy-dependent inputs on production cost competitiveness is critically important for all pulp producers. Traditionally, pulp industries are established in forest-rich areas. In addition to the market price of energy, energy fees and taxes have a significant impact on the competitiveness of the company domestically. For example, Estonia has so far decided to impose a significantly more burdensome renewable energy fee on energy-intensive industries compared to other countries, thereby disregarding the recommendations reaffirmed in the European Union's Green Transition Package to keep industries with a significant risk of relocation within Europe. Therefore, the company continues its domestic advocacy work on industrial competitiveness, both in limiting state-regulated fees and in supporting large-scale and measurably impactful industrial investments, similar to other European countries, on the path towards carbon neutrality.

We thank our employees for their dedication and our customers and partners for their good cooperation, which has allowed us to come through a very challenging year intact, enabling us to continue on the path to improvement in 2025, with the aim of ensuring the good health of both employees and the mill, as well as achieving good economic and environmental results!

Siiri Lahe
Member of Management Board

Rain Pärn
Member of Management Board

1 Scope and Content of the Report

Company: AS Estonian Cell

Address: Jaama 21 Kunda, Viru-Nigula, Lääne-Virumaa

Scope of management system:

- Pleegitatud keemilis-termo-mehaanilise haavapuitmassi tootmine.
- Production of bleached chemi-thermo-mechanical pulp.

Assessment of life cycle: The assessment of the life cycle starts with the arrival of roundwood to the territory of Estonian Cell and ends with the departure of the finished goods from the company's territory.

NACE code: 17.11 Preparation and spinning of cotton-type fibres

Content: The environmental report has been prepared in accordance with the requirements of the Eco-Management and Audit Scheme (EMAS) regulation, according to which the main topics of inspection are:

- the legal requirements applicable to the organisation;
- identification of direct and indirect environmental aspects;
- criteria for assessing the significance of environmental aspects;
- analysis of all existing environmental management practices and procedures;
- assessing feedback from previous incident investigations.

Reporting period: 01.01.2024–31.12.2024.

GENERAL INFORMATION

AS Estonian Cell is an aspen pulp producer located in the Northern Estonian town of Kunda (cadastral code: 34501:008:0015). The area of the company territory is 79,8 ha and it consists of 50% production land and 50% commercial land.

AS Estonian Cell is a plant where BCTMP – **B**leached **C**hemi-**T**hermo-**M**echanical **P**ulp is produced. The factory started production in April 2006.

Estonian Cell produces four grades of bleached chemi-thermo-mechanical aspen pulp (Aspen BCTMP) distinguished primarily by **freeness**, **brightness**, **bulkiness** and **tensile index**:

- ASPEN **350/84 B**
- ASPEN **350/84 BS**
- ASPEN **350/84 MB**
- ASPEN **350/85 HT**
- ASPEN **450/80 HB**

Aspen pulp is one of the raw materials used for paper production. Depending on the particular end-use, our customers add up to 40% of aspen pulp for further processing into other products such as printing and writing paper, paperboard and tissue papers. Specialty paper producers convert our product into perfume packaging, sticker base paper, paper bags and wallpapers. Interestingly, our pulp is also used for producing premium footwear soles. There is an increasing demand for BCTMP as raw material for specialty and cardboard production. The particularities of our production enable us to be flexible in producing tailor-made products for our customers.

The plant was built to the Liiva land unit in Kunda, while a thorough Environmental Impact Assessment (EIA) was conducted prior to construction. EIA was carried out by an independent Estonian environmental impact assessment company, Ecoman OÜ, which employed specialists recognised in the field in Estonia. In addition to expert assessments, data from plans, projects, technological processes and professional literature were analysed during the evaluation process. To assess the environmental impact, a calculation model, laboratory tests and analyses were used.

The Lääne-Virumaa Environmental Board issued Environmental Complex Permit (ECP) No. 1 to Estonian Cell in 2003.

The construction work was completed in 24 months and the plant started work in the spring of 2006. The 153 million euro investment is one of the biggest foreign investments ever made in the Estonian industrial sector..

We use low-value aspen wood with a minimum diameter of 6 cm as raw material. According to Environmental Complex Permit we can consume up to 600,000 m^3 of aspen wood per year. Pulp production consists of the following production stages: supply and storage of wood, debarking, chipping, impregnation, refining, screening, bleaching, drying, pressing, storage and packaging of the finished product.

The chemical treatment process consists of two-stage impregnation followed by refining. As a result of these processes, the wood chips are broken down into fibres and hydrogen peroxide gives the fibre mass an initial brightness, which is raised to the required level in the final bleaching step. The bleached pulp is washed, dried in a flash dryer, pressed and packed. We use only hydrogen peroxide as an active chemical substance in the bleaching process. This is why the mill does not generate wastewater containing toxic organochlorine compounds, which are the results of regular cellulose production.

TECHNOLOGY

Since the establishment of our pulp mill, minimal environmental impact has been one of our policies. In production, we apply Best Available Techniques (BAT) established pursuant to EU directives and the Baltic Marine Environment Protection Commission (Helsinki Commission, HELCOM), which enables us to meet the highest environmental requirements.

Due to the energy-intensity of our production, we acknowledge that environmental protection and the efficient use of resources must be reflected in our financial results. Throughout our operating years we have invested into energy and resource efficiency and eliminated issues in order to increase environmental sustainability. We have invested over 28 MM EUR into environmental sustainability over the 2006–2018 period, and an additional 23 MM EUR in 2019-2023.

Table 1 Extract of most notable investments in the years 2006–2023

Year	Investment description	Investment cost	Impact
2010	LC-Refiner & HC-Refiner feeding system rebuild	2.5 MM EUR	Energy consumption decreased by 10%
2013	Slab press & bailing line rebuild	4.8 MM EUR	Production capacity increased by 10%
2014	Screening plant extension	0.9 MM EUR* *0.3 MM EUR *EU Cohesion Fund (EIC)*	Product quality improved (shives' content decreased by 66%); off-grade volumes decreased by 2.2%
2014	Construction of anaerobic wastewater treatment plant & biogas production complex; mechanical treatment of wastewater	10.7 MM EUR	Compliance with BAT requirements of wastewater treatment. Organic content in wastewater is converted to biogas
2018	Aerobic wastewater treatment plant	5.2 MM EUR* *0.5 MM EUR European Regional Development Fund (EIC)	Energy consumption decreased by 30%
2019	Perisplitter	1 MM EUR	Natural gas consumption savings up to 6.5 Nm^3/adt (air dry ton)
2019	Chip washer with dewatering screw and disc filter	1.6 MM EUR	Chip washing efficiency increased up to 25%. Improvement in chip quality
2019	New bleaching system	2.5 MM EUR	Decrease of residual-H_2O_2 load to WWTP. Bleaching chemical savings up to 15 kg/adt
2019	Twin-roll presses	4.7 MM EUR	Increase of stability and production rate; lower maintenance costs
2019	Additional slab press and conveyors	3.5 MM EUR	Increase of production volume up to 185,000 adt/a
2020	Enterprise resource planning software SAP4HANA	0.8 MM EUR	Integration of all business areas in one ERP software
2021	New bark shredder	0.15 MM EUR	Increase in productivity
2021	New forklift	0.26 MM EUR	Better availability and lower repair costs
2022	Frequency converters	0.19 MM EUR	Decrease of energy consumption
2022	Log loader	0.26 MM EUR	Better availability and lower repair costs

Year	Investment description	Investment cost	Impact
2022	Gas boiler	0.14 MM EUR	Increase in productivity
2022	Two impregnator screws	0.11 MM EUR	Increase in productivity
2022	Separation of domestic WW	0.06 MM EUR	Environmental demands
2023	Preparation of Boiler project	0,48 MEUR	Reduction of natural gas
2023	New forklift in warehouse	0,25 MEUR	Increased availability and reduced repair costs
2023	Refiner's motor repair	0,10 MEUR	Ensuring quality requirements
2023	Replacement of frequency converters	0,13 MEUR	Electricity savings
2024	Replacement of the HC bleaching tower bottom	0,52 MEUR	Increased availability and reduced repair costs
2024	Energy project-related expenses, design	0,90 MEUR	Reducing the use of natural gas
2024	Reactor overhaul	0,17 MEUR	Ensuring quality requirements
2024	1 MW spare engine for flash dryer fan	0,15 MEUR	Increased availability and reduced repair costs
2024	Replacement of frequency converters	0,16 MEUR	Electricity savings
2024	Refurbishing of HC refiner rotor	0,11 MEUR	Increased availability and reduced repair costs
2024	Repair of blower in WTP	0,11 MEUR	Ensuring quality requirements

Most equipment used in the production processes originates from the Austrian company Andritz AG and Swedish supplier Valmet AB. The Swedish company Purac AB was the supplier of the biogas production complex. The technology used for producing BCTMP is innovative and modern, with lower energy and raw water consumption per tonne of product as compared to other similar technologies.

Our advantages over traditional chemical pulp producers are:

- zero usage of toxic chlorine compounds owing to our chlorine-free production process;
- zero odour from sulphur compounds owing to our to sulphur-free production process;
- the main raw material is aspen timber, which has limited value for other purposes;
- high yield as 90% of fibres are included in the final product

STRUCTURE

AS Estonian Cell is a subsidiary of the international company ***Heinzel Holding GmbH***, which has industrial locations in Austria (***Laakirchen Papier AG***, ***Zellstoff Pöls AG***), Germany (***Raubling Papier GmbH***) and Estonia (***Estonian Cell AS).*** The Group is among the largest producers of market pulp, corrugated containerboard and magazine paper in Central and Eastern Europe.

The Group's trading division includes ***Wilfried Heinzel AG***, a globally active pulp and paper trading company, and ***Europapier International AG***, the leading paper merchant in the CEE region. ***Bunzl & Biach GmbH*** is one of the largest and most important waste paper treatment and distribution companies in Austria as well as the leading wholesaler in Central and Eastern Europe.

All activities in the mill are coordinated by the management board consisting of the CTO and CFO. The management team consists of eight people in addition to management board members.

As of December 31, 2023, Estonian Cell employs 86 people, the majority of whom are running production processes. The company consists of the following departments.

- **PRODUCTION**. All activities from log storage to packaging the pulp on the baling line are the responsibility of the production department. The production department is coordinated by the **Production Manager** and the following employees report to them: five BCTMP Operators, four Drying Line Operators and five Baling Line Operators. The mill is operated 24/7 by four shifts. Each shift is led by a Shift Supervisor, whose responsibilities are to coordinate the production process and shift crew.

- **WOOD PREPARATION**. The department deals with storage and shredding the logs. The department is headed by the **Production Manager** and the following employees report to him: Senior Operator, four Woodyard Operators, four Log Lift Drivers, four Wood Room Log Lift Drivers and a Front Loader Driver. The department works in four shifts. Each shift is managed by the Shift Supervisor, who is responsible for the management of the technological processes and shift personnel.
- **LABORATORY**. Compliance with the pulp quality requirements and water-quality parameters is determined by lab staff. The **Environmental and Quality Manager** is responsible for coordinating the work of the four Pulp Laboratory Technicians and Water Laboratory Technician.
- **EFFLUENT AND WATER TREATMENT PLANT (EWTP)**. The plant is also coordinated by the **Environmental and Quality Manager** and the following employees report to them: the Head of Water Treatment Plant (WTP) and Technology and five WTP operators. The operators are responsible for controlling the fresh water treatment, effluent treatment and sludge dewatering.
- **PULP WAREHOUSE.** This is coordinated by the Logistics Manager and the following employees report to them: Dispatcher-Forklift Driver and two Forklift Drivers. All activities from storing to dispatching the pulp to clients are the responsibility of the pulp warehouse department.
- **MAINTENANCE DEPARTMENT**. The main objective of the department is to plan preventive maintenance and execute repair works. The department is coordinated by the **Maintenance Manager** who is responsible also for Safety issues**.** The Mechanical, Electrical, Automation and Instrumentation Engineer, Junior Mechanical Engineer, Diagnostic Technician and Electrical Technician report to the Maintenance Manager. Eight Mechanics and five Electricians work in shifts.
- **ADMINISTRATION.** This department consists of the **Head of Finance** (who is also responsible for HR), **Chief Accountant**, Financial Controller, Production- and Financial Analyst, **Sales Manager**, Sales Assistant, Logistics Manager, Purchase Manager, Purchase and Technical Specialist, **Wood Procurement Manager**, Regional Wood Procurement Manager, Wood Procurement Assistant and Spare Parts Storekeeper.

PURPOSE, MISSION, AND VISION

Estonian Cell conducts its business and acts in full compliance with the best corporate governance principles established in Heinzel Group. We follow the purpose and the sustainability principles of Heinzel Group, and in line with these, we have agreed upon our local mission and vision statements and translated the core values of Heinzel Group into the local context. In 2022, the concept of sustainability was added to our mission, following the example of Heinzel Group.

HEINZEL GROUP'S PURPOSE

Recreating value for our partners, our people, and our planet

At HEINZEL GROUP, we renew. We constantly recreate value, transforming the old into new in a perpetual cycle. We create new products from old materials, we create new services for long-standing business partners. We recycle, regenerate, resell, reinvent, and reinvest. We renew our businesses by investing into them and repositioning them for the future. We breathe new life into old companies. We derive joy and satisfaction from the process of renewal and circularity that we set in motion, always recreating value.

Our list of examples is long: From low-value wood we produce pulp and high-value paper. From wastepaper we create new paper. From old drink cartons we create recycled fibres. From the by-products of our mills we create organic chemicals, heat, and electricity. We evolve with the needs of our business partners, always offering new products and services.

Our understanding of value is broad: We create economic value for our partners. We create value for our planet by employing sustainable materials, by avoiding harm to the environment, and by helping to regenerate nature. And we create social value by offering meaningful and rewarding work opportunities in the communities where we are based. We believe that business is a force for good – for our partners, our people, and our planet.

HEINZEL GROUP'S MISSION

We circulate fibres sustainably. We supply our partners worldwide with the sustainable products they need.

HEINZEL GROUP brings sustainable products into circulation globally. We are members of the forestry value chain and a part of circular economy. Our products are made from renewable resources, and recycling is an integral part of our business.

Our mission is to serve our international customers with fibre-based products. Our focus is always on our business partners' needs and on finding sustainable, renewable, recyclable and innovative solutions for them, helping them make a positive impact on the environment. We consistently take a long-run perspective towards economic, environmental, and social sustainability because we aim to make a lasting difference for our partners, our people, and the planet.

HEINZEL GROUP'S VISION

We will drive our business sector to make a positive impact on society and nature.

By 2030, we will be recognised as a sustainability leader at the forefront of the pulp and paper industry. We will drive change and make a measurable positive impact on business, society, and nature. We will be part of the solution, not part of the problem, making a proactive

contribution to the global fight against climate change and environmental degradation. We will show what is possible by producing, selling, and promoting sustainable products and replacing unsustainable alternatives.

We aim to maximise our positive impact by growing our business globally. We will solve any contradictions between doing business and protecting nature, between growth and sustainability: We will minimise and positively counterbalance any harm to forests, rivers, the sea, and air, and we will drive our industry to do the same by using our influence with our business partners.

With the help of innovative technologies and products, we will reach the ambitious environmental targets that we set ourselves and achieve carbon neutrality earlier than our industry peers. We will seize the new business opportunities created by the circular and regenerative economy of the future – for the benefit of our partners, our people, and our planet.

VALUES

- **RESPONSIBILITY**

We accept full responsibility for our actions. We stand by our successes, commitments, and mistakes.

PARTNERS: RESPONSIBILITY TOWARDS BUSINESS PARTNERS

We always act professionally and we accept full accountability for our actions. We honour our commitments and we keep our promises. We take responsibility for the long-term success of our business partners.

PEOPLE: RESPONSIBILITY TOWARDS COLLEAGUES

Our daily goal is getting the job done by acting in a fair and professional way, finding solutions rather than problems. We admit mistakes and we take care of our team. We also take care of ourselves by observing health and safety guidelines.

PLANET: RESPONSIBILITY TOWARDS SOCIETY AND NATURE

We emphasise environmental sustainability in all our activities. We know that avoiding harm to the environment today is key for a better tomorrow. As a company and as individuals we act as responsible members of society. As promoters and beneficiaries of global trade we foster international understanding.

- **RESPECT**

We listen to each other and appreciate each other. We are open to giving and receiving constructive feedback. We show respect to everyone we are working with.

PARTNERS: RESPECT TOWARDS BUSINESS PARTNERS

We have a close relationship with our customers and suppliers based on a high standard of business ethics. We show respect for the wishes and concerns of our partners and we are always polite. The ability to deal with cultural differences and diversity is one of the main strengths of our company.

PEOPLE: RESPECT TOWARDS COLLEAGUES

We value honest and open behaviour and promote an environment of mutual trust and respect. We respect the need and desire for personal growth and we support talent development. We are united in our diversity, which makes us strong and supportive team players.

PLANET: RESPECT TOWARDS SOCIETY AND NATURE

We show respect for the environment, international and local laws and regulations. We respect the concerns of our neighbours, the communities we work in and all our other stakeholders.

- **EXCELLENCE**

We strive to exceed expectations when it comes to quality, service, and efficiency.

PARTNERS: EXCELLENCE TOWARDS BUSINESS PARTNERS

We hold ourselves to high professional standards and exceed our business partners' expectations by providing products and services of the highest quality. We strive for continuous improvement in our operations, our market expertise and our product know-how to guarantee that we are the best partner for our customers.

PEOPLE: EXCELLENCE TOWARDS COLLEAGUES

We aim to create a rewarding work environment that motivates us to go the extra mile and allows us all to excel. We inspire our colleagues to be the best they can be. We know that working as a team, we can achieve outstanding results that are better than any one of us could have achieved alone. We believe in constant learning, training and improvement of ourselves and our company. We encourage each other to bring new business ideas and to share our knowledge with each other.

PLANET: EXCELLENCE TOWARDS SOCIETY AND NATURE

Whatever we do, we are not content with being average. We always strive to set high standards and exceed expectations in our actions for the environment and for society, setting an example for others to follow. We aim to be renowned for our excellence in and beyond our field of business.



HOW WE CONDUCT OUR BUSINESS

Rules of conduct

Responsibility. Excellence. Respect.

Honest, lawful and fair behaviour is a matter of course in the Heinzel Group. Every employee of the Heinzel Group acts responsibly for the benefit of our business partners, the owner of the companies and our group. We support excellence by constant learning and advancement. Our company culture provides an environment of respectful cooperation, where such misconduct as discrimination, harassment or alike is inappropriate and unwanted.

Compliance

The compliance management system is deeply-rooted in the entire Heinzel Group and includes guidelines and measures securing the conformity of the business processes of Heinzel Group with the respective country-specific legislation, legal frameworks and regulations as well as with captive directives. All relevant employees of Heinzel Group are regularly trained and sensitised to compliance risks in specifically tailored workshops and training units.

Our business partners

We support fair and unaltered competition and aim at complying with all legal rules. Violation of competition and cartel law is strictly prohibited. Our employees may not demand or offer, directly or indirectly, illicit gifts, allotments, services or other personal favours in connection with our business activities. Heinzel Group supports certain non-profit organisations and projects with donations and sponsoring. Education, science, health, culture, art and welfare, sport are admissible fields for donations. All relevant activities must comply with local legislation and internal rules.

Protection of health and the environment

We commit ourselves to supporting the security and health of our employees with a variety of specific measures, thus increasing efficiency and job satisfaction. We aim at improving the sustainable processing of our raw material, wood. in order to secure ecologically compatible production processes.

Conflicts of interest

We emphasise the importance of the strict separation of private and business interests. Cases of conflict of interest have to be disclosed immediately. All employees of Heinzel Group are obliged to dedicate their entire work capacity to the employer. As a basic principle, any side activity affecting this obligation is prohibited. Unless specifically agreed, our employees may use company assets only for business purposes.

Information

Internal and external reports and documentation are prepared truthfully and in complete form. We respect data protection and information security regulations. All employees of Heinzel Group are obliged to maintain the confidentiality of all business and operating secrets as well as all personal data, which were revealed to them in the course of performing their professional functions.

International conventions

Our business behaviour is subject to the relevant legal framework and internationally valid conventions. Among others, the most important conventions are the Universal Declaration of Human Rights (UNO, 1948), the European Convention on Human Rights (1950), various

declarations of the International Labour Organization, mainly relating to the prohibition of child and forced labour, non-discrimination rules, etc., and the OECD guidelines for multinational enterprises (2000 and 2011).

Environmental, social and governance risks

Risk evaluation and management policies are in place to manage all environmental, social and governance risks. Risk evaluation is performed at least once per year by the top management of the company, and action plans are prepared for all risks with considerable potential impact.

Sustainability is not our job – it is our way of life

We care about the environment and cooperation in this matter is important to us. That's why we strive for an eco-friendly value chain in our everyday life. We also seek to ensure sustainable cooperation among our employees, customers and within society. Sustainable cooperation is our philosophy. We use our resources consciously and aim to avoid environmental impact. By permanently optimising production processes, we continuously reduce our consumption of raw materials and energy. Through close cooperation with the wood industry, we have committed to sustainable forest management. Our goal is to further enhance our eco-efficiency by using raw materials efficiently. Based on close cooperation with the wood industry, we have committed to sustainable forest management. We use recycled paper and work 99% waste free in our paper production.

- Every day, we design and develop things as a team, always keeping in mind the importance of sustainability in our stakeholder relationships. Based on our fundamental values, we face the challenges of the rapidly changing market as a company and as a team and grow continuously this way.
- In our work we focus on sustainability and future orientation. We look at sustainability from both an ecological and economic perspective. We actively contribute to creating a circular economy in the pulp and paper industry by using renewable raw materials and making recycling an integral part of our business.
- The joy of creating is what drives and motivates us. We enjoy creating added value for our customers and business partners. We are proud of our work and value the challenge of coming up with and developing ideas.
- We want to grow continuously, build on our success and explore new ideas and perspectives. We are future-oriented, think globally, and are always open to new opportunities. We keep challenging ourselves and never stop.
- We strongly rely on long-term relationships with our employees and business partners. We care about our colleagues, our team, our partners, our customers and our stakeholders. We know that we depend on them and believe that value is created in human relationships.

Estonian Cell conducts its business in full compliance with the best business conduct principles established by the Heinzel Group. In line with these principles we have agreed on standards of conduct for our employees and business partners, including our suppliers and published it on our website: https://files.heinzel.com/EC_Code_of_Conduct_for_suppliers.pdf

2 Environmental Policy

The aim of the environmental policy is to continuously improve our activity in line with the principles of sustainable development.

Estonian Cell follows these environmental policies and principles:

- we implement suitable working methods and technologies and improve these constantly in order to control and minimise the environmental impact of our activities;
- we follow the legal and other requirements imposed on the environmental aspects of our activity;
- we avoid or try to reduce pollution, use natural resources in a rational manner and conserve energy;
- we use environmentally friendly materials and methods in our production process;
- we prefer environmentally friendly suppliers;
- we reduce waste and make sorting more effective, preferring recycling;
- we prevent and address potential environmental problems openly and publicly in cooperation with official agencies and proprietors, guaranteeing information on and the transparency of our actions concerning the environment;
- we are constantly developing our environmental management system to improve our environmental performance.

The environmental policy serves as basis for setting environmental goals and tasks. It has been published both within the company and to partner companies, and is available to interested parties (more information www.estoniancell.ee).

3 Environmental Management System

The company has fully implemented quality, safety, environmental and energy management systems that are certified based on ISO 9001, ISO 14001, ISO 45001 and ISO 50001 standards.

The environmental management system is a part of the general management system, which has been created to control and minimise the negative environmental impact of our activities and to increase the company's competitiveness owing to its good reputation as an environmentally friendly company.

In December 2017, the company's energy management procedures were audited, and as a result, AS Estonian Cell was issued the ISO 50001 certificate, being the sixth company in Estonia to receive it.

At the beginning of 2023 the energy management system based on ISO 50001 was recertified. An interim audit of the quality and environmental management system based on ISO 9001, 14001 & the occupational health and safety management system based on ISO 45001 and an EMAS (Eco - Management and Audit Scheme) verification audits were also carried out.

The Environmental Management System (EMS) has been implemented in accordance with the requirements of the Eco-Management and Audit Scheme Regulation approved by the European Parliament and of the Council. Estonian Cell started implementing the EMS in accordance with the requirements of the EMAS in 2020. The environmental report is a document where Estonian Cell describes its environmental activities and impact. In order to characterise the environmental impact and assess the effectiveness of environmental activities, the report presents data on the company's resource needs.

The operation of the EMS proceeds from the structure of the company. The main responsibility for the use and improvement of the EMS lies with the management and the heads of the structural units. We measure, monitor and evaluate environmental performance indicators at least quarterly and prepare an annual environmental report based on the results.

EMAS
TÕENDATUD KESKKONNAJUHTIMINE
EE-000024

CERTIFIED
ISO 9001
ISO 14001
ISO 45001
BUREAU VERITAS

4 Environmental Aspects and Impact

We have identified the environmental aspects of our operations and the environmental impact of these aspects. In this report, we consider the environmental aspects that have a significant environmental impact (both positive and negative) and which the company can influence through its operations.

Indirect environmental aspects arise from interactions with third parties and relate, in particular, to the activities and performance of subcontractors and customers. We have evaluated major suppliers and map the compliance of companies' operations with quality management standards. We actively communicate with customers and ensure the recycling of aspen wood – our pulp is used for products with a long life cycle (wallpaper, money, printing paper, cardboard, etc.), which are largely reused as waste paper.

We also contribute to the green revolution by constantly increasing resource efficiency. Our factory is able to increase the value of wood five times compared to the export of raw logs. Our packaging is waste-free, which means that the packing paper is fully recycled at the customer's premises.

The management is responsible for identifying environmental aspects and assessing the significance of their effects. The assessment is carried out once a year, when the production, technology or equipment changes, or at the request of stakeholders. The actual and potential negative or positive environmental impact related to each aspect identified by the company are documented in the next table. The following criteria are used to assess the environmental aspects: the extent of the impact (A); frequency of effect (B); compliance with legal requirements (C) and impact on stakeholder relations (D).

Table 2 Significant environmental aspects

Activity or service	Environmental aspect	Impact
Use of wood in the production of pulp	Use of aspen and birch wood	Use of renewable natural resources, impact of deforestation on forest ecosystem
Effluent treatment at an effluent treatment plant	Effluent treatment plant and pipeline route accidents (direct)	Groundwater, soil and marine pollution, deterioration of the living environment
Use of chemicals in production (impregnation and bleaching)	Use of $Mg(OH)_2$, EDTA, Na_2SiO_3, NaOH, H_2O_2 (direct)	Use of non-renewable natural resources, impact of chemical production
Diesel fuel storage	Diesel tank explosion or fuel leak (direct)	Soil and water pollution
Generation of effluents during wastewater treatment	Wastewater generation (direct)	Groundwater, soil and marine pollution, coastal ecosystem change
Taking raw water from Kunda River	River water use (direct)	Use of renewable natural resources, changes in river water levels
Use of chemicals in production (impregnation and bleaching)	Chemical Leakage (direct)	Release of chemicals into the environment (water, soil, air), pollution
Stacking of bark, mixing of biosludge and bark in a composting field and storage	Odour Emissions (direct)	Spread of an unpleasant odour, disturbance of surrounding population
Level measurement in the tank	Ionising radiation (direct)	Effects of ionising radiation on human health and the environment
Storage of finished goods	Fire (direct)	Emissions to air, destruction of finished goods
Wastewater from the production process and the composting field	Effluent generation (direct)	Increase in the pollution load of the water treatment plant, reduction of the risk of environmental pollution
Composting in pots	Hydrogen sulphide, ammonia, NMVOC formation (direct)	Air pollution, emissions to ambient air

Activity or service	Environmental aspect	Impact
Generation of wastewater during effluent treatment and discharge through deep-sea outlets into the Gulf of Finland	Deep-sea outlet leakage (direct)	Coastal pollution, changes in the marine ecosystem

Table 3 Positive environmental aspects

Activity or service	Environmental aspect	Impact
Compliance with environmental requirements	Implementation of the environmental management system	Systematic management of environmental activities, ensuring compliance with legislation and other requirements, ensuring compliance with environmental objectives
Compliance with environmental requirements	Organisation of environmental monitoring and measurements	Compliance with the requirements of the environmental complex permit and environmental objectives; reduction of the risk of environmental pollution
Reduction of the environmental impact	Making planting pots from compost, contributing to reforestation	Reducing the ecological footprint
Peeling of roundwood and use of chipping waste	Use of bark and wood waste	Waste recovery, landfill pollution reduction
Gas production at effluent treatment plant	Biogas conversion	Replacement of fossil fuels with renewable biofuels
Emissions trading	Monitoring of CO_2 emissions according to plan	Compliance with the requirements of the plan, ensuring compliance with the environmental objectives
Use of wood in pulp production	Use of aspen and birch wood	Possibility to collect wood from older aspen stands, facilitating the management of aspen forests
Sale of sawdust and bark to partners	Waste recycling	Waste reduction, waste recycling
Use of specialised waste management services for the reception of sorted waste	Sorting and transfer of waste	Reduction of environmental pollution, reduction of pollution load of landfills
Use of chemicals in manufacturing (impregnation and bleaching)	Efficiency investment in the bleaching process	Reduction of the consumption of bleaching chemicals, reducing the effects of chemical production
Drying of pulp	Use of biogas	Reuse of self-produced biogas, reduction of the use of fossil fuels
Residual heat recovery system – use of steam in boilers	Use of residual heat	Heat recovery, reduction of the effects of heat production
Composting of bark with biosludge	Compost production	Waste recovery, increasing soil fertility
Sludges from on-site effluent treatment	Use of sludge	Waste recovery, landfill pollution reduction
Wastewater treatment at the wastewater treatment plant	Biogas production	Generation of renewable energy source

5 Environmental Objectives and Targets

We constantly work on minimising our impact on the environment and neighbourhood. For us, this includes:

- strict compliance with all legal regulations with respect to air and water protection;
- avoiding unpleasant odours and noise pollution;
- waste recycling and reducing the generation of non-recyclable waste.

Environmental goals and tasks have been established on the basis of the environmental policy and execution is planned according to the environmental programme. The important environmental aspects of the company, requirements of applied acts of law and other accepted requirements (also those of clients), as well as the company's business demands and technological possibilities are considered in establishing environmental objectives and targets.

Environmental objectives and targets are as follows:

- to assure a high yield resulting from the wood consumption involved in the production process;
- to consume electricity economically;
- to assure the economical use of natural gas;
- to consume ground water resources economically and recirculate water;
- to increase the proportion of FSC®/PEFC® certified wood;
- to ensure the proper treatment of effluent sludge;
- to treat wastewater to such a level that it has no effect on the flora or fauna of the marine environment.
- to raise public environmental awareness and enhance the availability of information about the company and its products;
- to assure the efficient surveillance and measurement of substantial environmental aspects;
- to inform the public about the result of our environmental activities;
- to prefer the habitants of Lääne-Viru county in the recruitment process;
- to assure stable production.

Table 4 Improvement activities implemented in 2024

No.	Improvement activity	Evaluation of the result (as at 31.12.2024)
1	Improve cooperation with OÜ GreenGas Energy for the use of biogas	The amount of biogas sold is 3,023 Milj.Nm^3/year. Target is not achieved
2	Implementation of new energy-efficient solutions	1,19 MWh/adt and gas 70 Nm3/adt. Electricity target is not achieved but gas target is achieved.
3	Ensuring the stability of the plant, circular use of raw water	15,3 m3/adt due to reduced production rate. Goal was not achieved.
4	We installed frequency converters for motors that do not need to run at 100% power one by one	A continuous process. The work planned for the year has been completed.
5	We focused on production process stability and cost optimization	OFF share 3,89 %. The goal was not achieved.
6	Preparations for the procurement of a biomass boiler house	Designing stage
7	Improved water system for sludge dewatering	Water consumption reduced by approximately 700 m3/month. Project completed.

Table 5 Environmental goals and their indicators in 2024

Goal	Activity	Indicator	Evaluation
Compliance with wood pulp quality indicators included in the specification	Ensuring stability, smooth quality changes	OFF quantity less than 1.5%	The OFF content of the year came to 3,89 %
Reduction of electricity consumption per unit of product	Introduction of new energy efficient solutions (frequency converters, efficient electric motors, LED luminaires)	<1.19 MWh/adt	1,19 MWH/adt. Goal is not achieved
Reduction of raw water consumption per ton	Ensuring factory stability, recycling raw water	15 m^3/adt	15,3 m^3/adt
Reduction of the cost of chemicals in the production process	Fine-tuning the investment, minimising the cost of chemicals	H_2O_2 63.72 kg/adt and NaOH consumption 46.8 kg/adt	Consumption for H2O2 58.4 kg/adt ja NaOH 43,2 kg/adt.
Compliance with the requirements of the complex permit and staying within the limits of the effluent limit values	Optimisation of the aerobic purification step. Regular effluent sampling	There are no comments or complaints from the Environmental Board. The effluent samples do not exceed the limit values	OK
Biogas conversion	Improving cooperation with GreenGas, reducing losses, ensuring stable work	The amount of biogas sale is 5,1 milj.Nm^3/year	The amount of biogas sales was 3,023 milj. Nm^3/year
Determination of the efficiency of the cyclone of the flash dryer 1 time every two years	Measurement protocols for direct measurements	Dust emissions according to permit	Completed 02.05.2024
Prevention of sea pipeline leaks	Sea pipe leak control, diving inspection once a year	Diver inspection carried out	Completed
Assessment of greenhouse gas (GHG) emissions	Internal GHG reduction strategy and activities. Submitting an emissions report for the previous calendar year together with a verification report prepared by the verifier	Periodic reports	Submitted
Keeping records of materials used, energy, diesel, raw materials, waste generation, etc.	Data collection and analysis	Register/report of annual data collected	Completed
Monitoring the groundwater quality of four monitoring wells	The company determines groundwater quality indicators from four monitoring wells once every six months	Monitoring protocols KK1, KK, KK3 and KK4	Completed

6 Evaluation of Environmental Performance

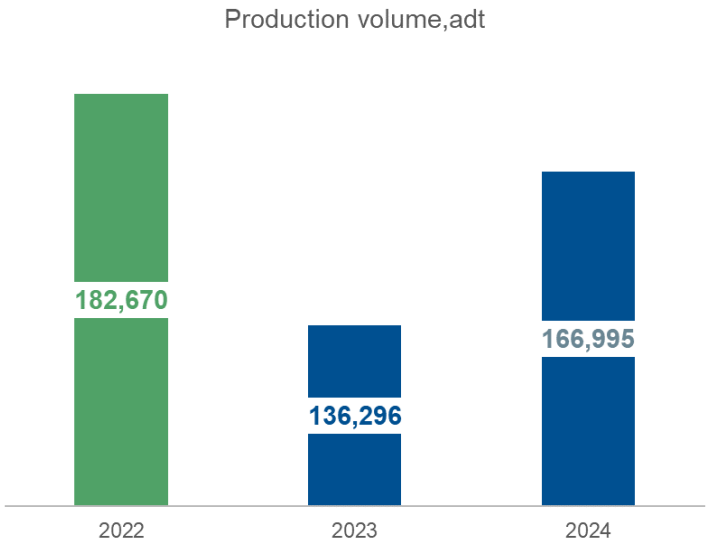
The fulfillment of goals and tasks is evaluated and updated once a year at the management meeting. The results of 2023 were used as the basis for setting the targets for 2024. The targets for 2024 were confirmed at the management meeting of 25 January 2024.

The targets set for 2023 were fulfilled and this is good, because the environmental aspects are under control.

The company keeps records of water, auxiliary materials used, as well as waste generated, effluent water, energy used, etc. In this report, only the key environmental performance indicators that fall within the scope of EMAS are presented. The main indicators show the input/output and the ratio per tonne of product.

RESULTS, MARKETS AND SUPPLY CHAIN

In 2024, the mill's production capacity was reduced to ~90% and the company produced 166,995 adt (air dry tons) of aspen pulp.

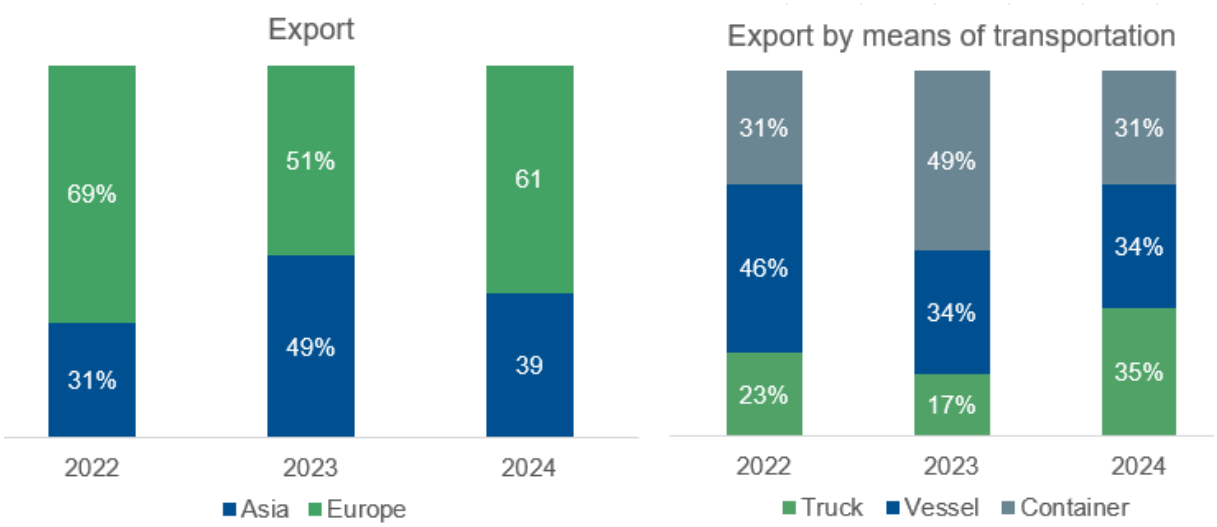


AS Estonian Cell's sales revenue was 93 million euros (86 million euros in 2023). The sales turnover of wood pulp was 95% of it, and the share of wood pulp exports continued to be 100%.

In 2024 we sold 155,444 tons of air-dried pulp, which was 5,3 % more than in the previous year.

The company’s products are 100% exported, mainly to Western Europe and Asia. In 2024, 61% of the total volume was sold to Europe and 39% to Asia. Our major European customers are located in Italy, France and Germany, and Asian customers in India. Our goal is to provide high-quality pulp and services to our customers, and not lose any customers due to the non-compliance of our products or services.

In 2024, the transport we used was 35 % terrestrial and 65 % sea transport (the share of vessels was 34% and containers 31%).

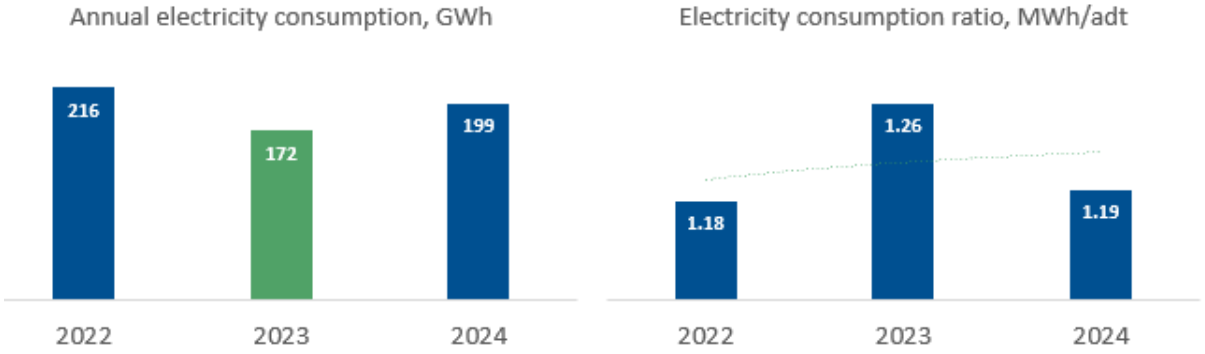


We always strive to find optimal transport solutions to align the efficiency of our company with the requirements of environmental protection. We evaluate our business partners regularly to ensure high sustainability standards across the supply chain.

ELECTRICITY

Energy sources necessary for producing BCTMP include electricity and natural gas. Estonian Cell is the largest electricity consumer in Estonia, consuming approximately 2.5% of the total electricity used in the entire Estonia.

In 2024, we used 199 GWh, (+ 27 GWh more compared to 2023) but this was mainly due to higher production volumes. The energy saving measures implemented during the year per ton of product were able to compensate for the inefficiency resulting from the lower production speed.

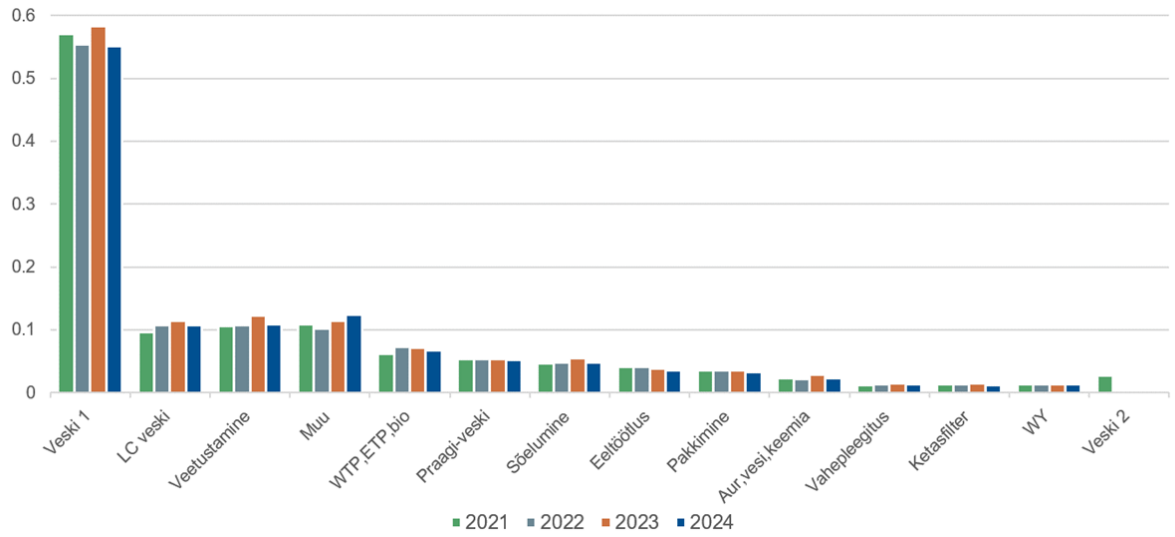


In 2024 the total consumption of electricity per tonne of product decreased by 5.88 %. The goal for next year is to keep the consumption at the level 1.17 MWh/adt.

Table 6 Electricity consumption, MWh, ratio MWh per t of product

	2022	2023	2024	2022 ratio	2023 ratio	2024 ratio
Electricity consumption	216,011	171,671	198,816	1.18	1.26	1,19

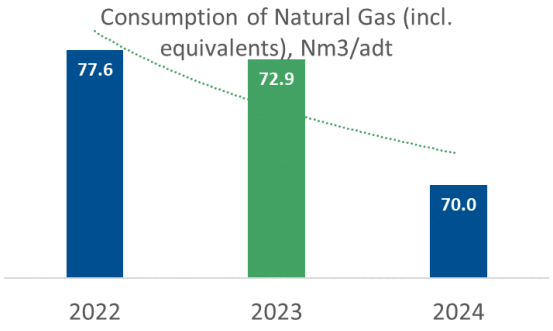
The plant uses all electricity to produce pulp and support the production process. The factory has 15 measuring points. The measurement data is stored in the Mill Information System (MIS) database. The available data displays figures with a second accuracy.



NATURAL GAS

Natural gas is used in drying line burners and steam boilers to produce steam, and in auxiliary boilers to produce heat.

In 2024, 11.7 million Nm^3 of natural gas was used in production processes. Total annual gas consumption decreased thanks to production stability. The total annual gas consumption decreased due to shutdowns due to the market situation and a decrease in the production volume.



Fuel consumption per tonne of product decreased by 3.7 % in 2024.The goal for next year is to keep the cost per tonne at least at the same level as in 2024.

Table 7 Natural gas and other fuels consumption and equivalent thermal energy

	2022	2023	2024	2022 ratio	2023 ratio	2024 ratio
Natural gas consumption, th. Nm^3/y	12,870	9 390	11 695	0.0705	0,0689	0,0700
LNG, MWh/y	823	740	0	0.0045	0,0054	0
Oil shale oil, MWh/y	3969	4 690	0	0.0217	0,0344	0
Total consumption, MWh/y	127,555	104,500	110 518	0.6983	0,7767	0,662
Equivalent thermal energy, TJ/y	459	376	410	0.0025	0,0027	0,0025

PRODUCTION OF BIOGAS

In 2014, Estonian Cell started biogas production using effluent water from BCTMP production as input material, which resulted in us becoming the biggest biogas producer in Estonia. We completed an 11 MM EUR investment into a modern biogas plant, which is not only equipped with the biggest single unit reactor, but is also the first to be used in tandem with mechanical pulp production in Europe.

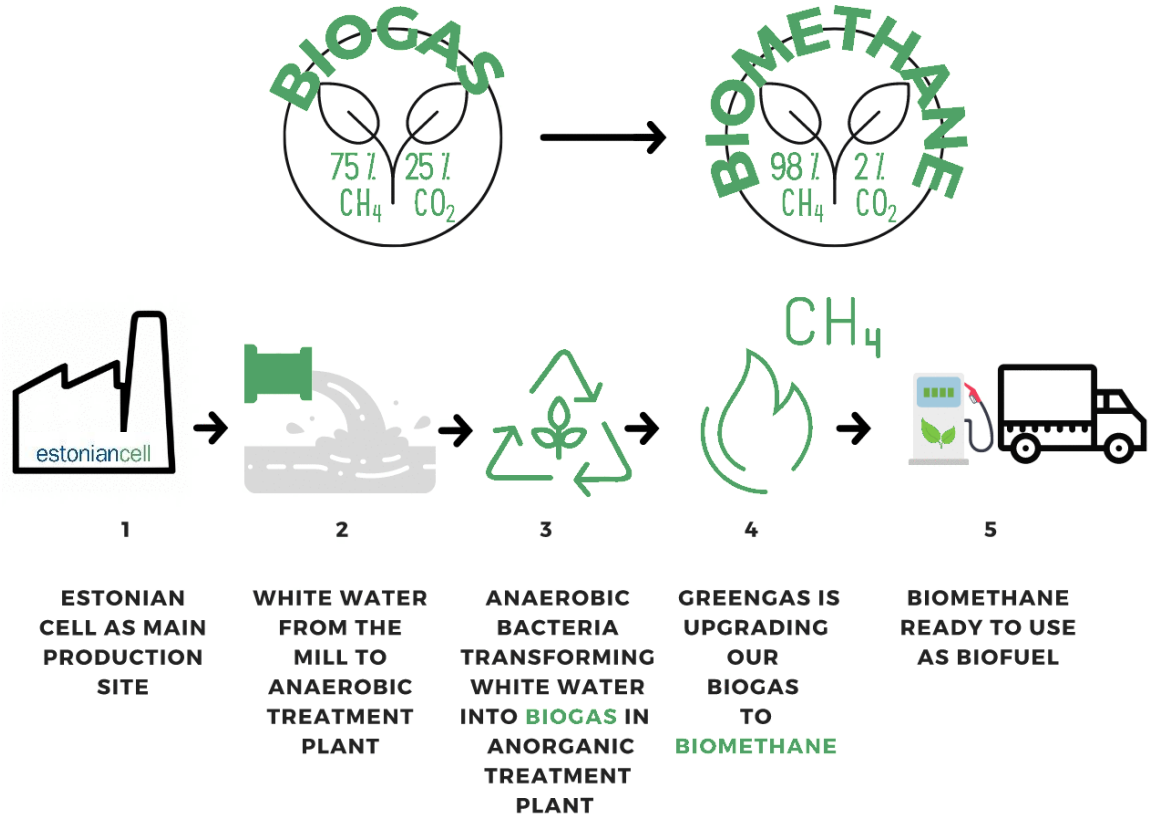
Annually, we are capable of producing up to 8,000,000 Bm^3 of biogas with a methane content of *ca* 75%. The amount of biogas produced, the CH_4 and H_2S content are measured consistently with an online analyser and the CO_2 content is measured once a week with a portable device. The biogas produced can be used in the pulp production process itself or delivered to a partner who converts the biogas into a natural gas equivalent or biomethane in his plant.

Starting from April 2018, we sell all the biogas we produce to OÜ Greengas, where methane concentration is upgraded to grid natural gas quality to be used as renewable natural gas. The production of biomethane (used as biofuel for transportation) has become significantly important to the Estonian energy economy, as the cooperation project between Estonian Cell and Greengas contributes to the achievement of renewable energy targets that allow to fulfil the EU's commitment of using 20% of renewable energy by 2020. However, it also contributes to the reduction of fossil fuel usage in Estonia generally. Domestic biomethane upgraded by Greengas first became commercially available in April 2018 in gas filling stations located in Tallinn, Tartu, Narva and Pärnu. The total environmental footprint will not change as a result of the cooperation project. While Estonian Cell reduced its carbon footprint by as much as 1/3 by consuming biogas itself, the effect is passed on to the level of the Estonian state upon supplying biogas to a partner.

In 2024, we continued to look for solutions to the setbacks in loading the biogas reactor that had already started earlier. The reactor plays an important role both as part of the water purification process and in the production of biogas.

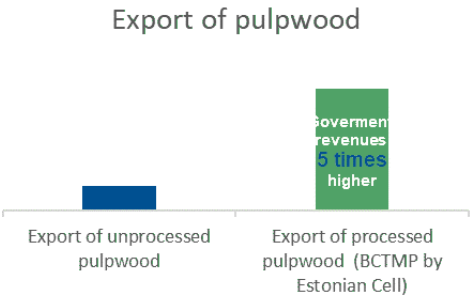
The Mill produced 4.0 million m^3 of biogas (2023: 4.0 million m^3). The company sells the produced biogas to a partner who cleans it to a level comparable to natural gas and supplies it as biomethane to the public gas network.

Unfortunately, in 2024 there were also problems with biogranule settling and reactor loading, and the maximum expected biogas production level was not achieved.



ASPEN WOOD

The sole raw material used to produce BCTMP in Estonian Cell is fast-growing aspen *Populus tremula*. Before the establishment of our mill, there was relatively limited value-added industrial use for aspen wood, which resulted in exporting aspen timber as pulpwood or was left in the forest to rot. Each year, up to seven times more raw pulpwood is exported compared to processed wood. Exported pulpwood will provide added value to paper, but the revenue received by the Estonian government will be limited to the value of pulpwood, which is five times lower compared to that of pulp.



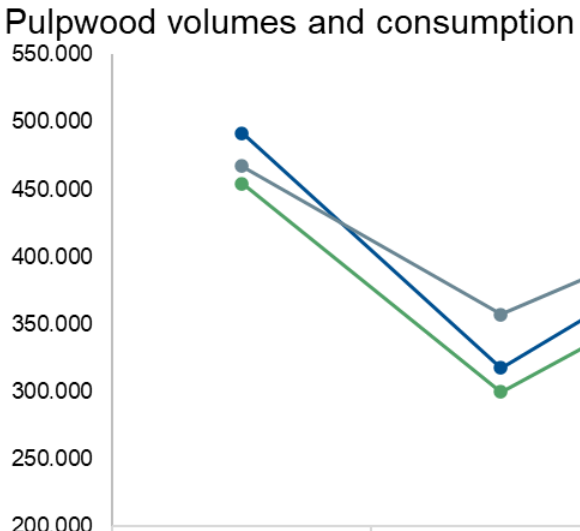
The mechanical treatment of pulpwood enables us to use aspen resources sustainably. Compared to chemical pulp producers, our annual timber wood volumes are two times lower, as 90% of the processed wood is included in our finished pulp product, whereas chemical pulp producers are capable of including up to 45% of initial raw wood in the finished product.

Additionally, the technology in our mill, which allows using lower-quality wood, is an important consideration. Also, trunk rot is admissible if it does not affect more than 60% of the roundwood diameter. Our plant is able to handle both coarse and fine material (log diameter of 6 to 60 cm). The

establishment of our mill made it possible to significantly increase the use of aspen from stagnated aspen forests and trunk rot infected coarse aspen in older mixed stands.

From the establishment of the mill until the end of 2020, we purchased wood from private forests through a selected partner. To be more efficient and in direct contact with the forest owner, AS Estonian Cell launched a successful separate timber purchasing department on 1 January 2021.

The proportion of certified wood in the supply of pulpwood is an important environmental aspect for us and our customers. Our goal is to increase the proportion of certified pulpwood. As wood from Estonian private forests is mostly not certified (but meets the requirements of the FSC verified origin certificate), we have purchased a part of the wood from the Latvian State Forest or from Russia in order to obtain the required amount of certified wood (supplies from Russia were stopped immediately after the start of the war in Ukraine).



	2022	2023	2024
Annual purchased pulpwood volumes (m3)	491.754	317.705	432.01
Pulpwood consumption in production (m3)	467.161	357.276	439.13
Proportion of certified wood (m3)	454.405	299.749	403.428

We received the FSC® certificate NC-COC-009128 in 2011. The goal of implementing the standard is to promote sustainable forest stewardship, creating a market edge. In 2012, we additionally received the PEFC certificate NC-PEFC/COC-000002 (*Chain of Custody).* In 2024, 94% of wood purchased was considered as certified material. 47 % of the wood had 100% FSC or PEFC certification.

100% of our purchased wood meets the requirements of FSC controlled origin.

Controlled wood provides the possibility of purchasing products from certified and controlled sources, and under controlled wood standards, organisations must commit to obtaining their raw materials from low-risk sources, which accordingly excludes five unacceptable categories:

- areas where genetically modified trees are planted;
- illegal sources;
- forest areas where traditional and civil rights are violated;
- forests where high conservation values (HCV) are threatened;
- natural forests, which have been harvested for the purpose of converting the land to plantations or other non-forest use.

On average, Estonian Cell consumes 450,000 m^3 of aspen in a year. The average wood consumption per ton of pulp is 2.6–2.7 m^3.

The company's use of wood material fell in 2023 due to a decrease in production volume. Year after year, we have been able to use putu more efficiently, and the cost of wood material per ton of product has decreased.

Table 8 Consumption of wood

	2022	2023	2024	ECP
Consumption of wood, m^3/a	467,161	357,276	439 130	600,000
Consumption of wood per tonne, m^3/adt	2.557	2.600	2,63	

CHEMICALS

We use the following chemicals in our production:

- hydrogen peroxide;
- sodium hydroxide;
- EDTA;
- sodium silicate;
- sulphuric acid;
- magnesium hydroxide.

Estonian Cell is classified as a A-category dangerous enterprise due to the amount of peroxide used. Dangerous enterprises handle hazardous chemicals in a quantity that exceeds the threshold quantity or the minimum level of hazardousness for the purposes of the Chemicals Act.

At the water treatment plant, the following chemicals are used:

- hydrochloric acid;
- urea;
- phosphoric acid;
- sodium hypochlorite;
- PAC (Polyaluminium Chloride);
- polymers.

The consumption of all chemicals is monitored with daily accuracy in the MIS management system. The quantities of chemicals used in the production and water treatment have not exceeded the permitted quantities.

In 2024, a total of 19,801 tons of basic chemicals and 2,350 tons of auxiliary chemicals were used in water treatment.

The company has its own modern double-bottomed fuel tank and petrol station on the territory, which is located on paved surface and does not pose a threat to the environment. In addition, there is an absorbent container next to the gas station. If the fuel spills on a hard surface upon refuelling, it can be mixed with absorbent and then collected. The fuel is used to refuel transport vehicles and trucks.

Raw materials and consumables are stored in a dedicated storage facility or in containers equipped with safety pools, depending on the nature of the material. There are safety pools around the tanks big enough to fit all of the chemical substance in the tank. From the safety pool, the chemical substance can be directed to the emergency pool of the water treatment plant. The base of the storage areas is made of concrete. In case of the leakage or rupture of the tank, raw materials, auxiliary materials or hazardous substances will not seep into the soil, surface or groundwater. The storage facility of the raw and auxiliary materials is not located near water bodies, boreholes or drainage pipelines.

During production and water treatment, employees' direct exposure to chemicals is avoided. The exposure to chemicals is only possible during maintenance and repair work. Chemicals are delivered to the mill in container trucks and unloading is conducted by the truck driver. Unloading manuals for proper unloading have been prepared and chemical safety data sheets are available in all control rooms.

AUXILIARY MATERIALS AND SEMI-FINISHED GOODS

Auxiliary materials and semi-finished products are used in the packaging of products or in maintenance. The storage and transport of raw and auxiliary materials, including chemicals and lubricating oils, takes place only in hard-surfaced (concrete or asphalted) areas.

Table 9 Consumption of auxiliary materials and semi-finished goods, kg/y

Item	Unit	2022	2023	2024	ECP	Consumption per ton, kg/adt		
						2022	2023	2024
Wrapping paper	kg	723,979	540,353	667 948	714,000	3.963	3.965	3,999
Wire	kg	429,337	315,718	375 902	672,000	2.350	2.316	2,251
Lubricants	kg	19,053	25,938	19 575	60,000	0.104	0.190	0,117
Liquefied petroleum gas, nitrogen	kg	600	600	2 400	1,800	0.003	0.003	0,014
Diesel fuel	kg	174,887	153,926	178 219	450,000	0.960	1.129	1,067

The quantities permitted in the ECP have not been exceeded. The consumption of packaging paper and wire per tonne of product has decreased. The use of lubricants and diesel per tonne of product has increased slightly.

WATER

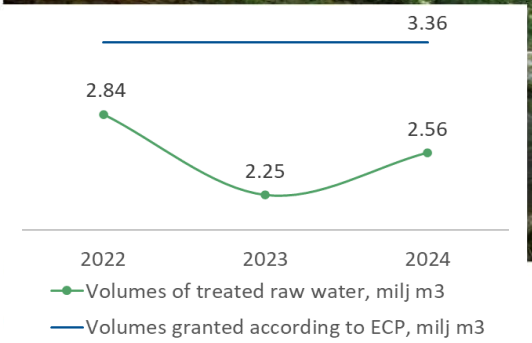
The daily average consumption of fresh water is approximately 7,000 m^3, but the ECP allows daily raw water intake volumes of up to 10,000 m^3.

The facility takes technological water from the Kunda River at the artificial dam built in 2011 (approximately 45 m of artificial rapids with an average decrease of approximately 3%, Kunda II dam). Water inlet: Kunda aspen pulp mill, water inlet code: PIH0000067. River Kunda is officially included among Natura 2000 sites. Estonian Cell consumes about 1.4% of the river's average flow, which has zero effect on the living conditions of fish and other fauna.

Water is pumped from Kunda River to a raw water treatment plant. The designed capacity of the water treatment plant is 10,000 m^3/day. The plant's pumping station has automatic equipment (daily automatic equipment), which can be used to check the exact flow rates and estimate the water level fluctuations in the Kunda River. Water intake is recorded on the basis of the reading of a calibrated water meter.

River water is used for the following:

- lattice cleaning;
- chemical treatment;
- flocculation and gravitational clarification;
- filtering;
- softening.



In the raw water treatment plant, the water is treated with chemicals such as sodium hypochlorite (NaOCl) and polyaluminium chloride (PAC) and then clarified in a flocculation clarifier. Smaller fraction impurities are captured in sand filters and the water is softened with ion exchange softening filters extracting minerals that cause limescale. Treated water is pumped to the mill according to the needs of the production process.

The wastewater resulting from raw water treatment (sludge from flocculation and clarification, sand filter backwash water, ion exchange resin recovery stream water) is sent to the effluent treatment plant. The water sent to the effluent treatment plant makes up about 5% of the treated water.

The fresh water treatment plant treated 2,562,000 m^3 of water in 2024. The ECP allows to use 3,360,000 m^3 of fresh water annually.

Table 10 Use of raw water for the mill

	2022	2023	2024	ECP
Raw water from the River Kunda, MM m^3/a	2.84	2.25	2,56	3.36
Consumption of water per ton, m^3/adt	15.55	16.54	15,34	16.6

In 2024, the consumption of raw water per ton of product has increased, the main reason for this is the reduced production speed at the factory. We constantly monitor the consumption of water per ton produced, and across the group we have set a goal of reducing the consumption of fresh water per ton by -25% by 2030 (compared to 2021).

Groundwater is not extracted from the site. Domestic water is taken from the waterway of Kunda Vesi AS. The consumption of domestic water is recorded on the basis of the reading of a calibrated water meter.

Table 11 Use of domestic water

	2022	2023	2024
Domestic water, m^3/a	7,968	5,999	7 075
Domestic water per ton, m^3/adt	0.044	0.044	0,042

In 2023, the use of domestic water for normal use has remained at the same level.

There are four control wells (KK 1; KK 2; KK 3 and KK 4) on the territory of the company, from which certified samplers from the Environmental Research Centre regularly take water samples.

The company has determined the quality indicators of the groundwater from four monitoring wells once every six months in accordance with the procedure provided in the ECP.

Table 12 Requirements for monitoring wells

Type of monitoring	Location of measuring point	Analysis and sampling requirements	Name	Monitoring frequency
Groundwater monitoring	MV1 MV2 MV3 MV4	Monitoring the groundwater pollution in a well located on the mill's territory	Ammonium (NH_4 +), suspended solids, PHT (Permanganate oxidizability), chloride, dry residue, colour, total hardness, Fe total, sulphate SO_4, electrical conductivity, pH, water temperature, dissolved oxygen, phenols	Once every six months

Figure 1 Location of monitoring wells on the territory of the enterprise (in blue MV1, MV2, MV3, MV4)

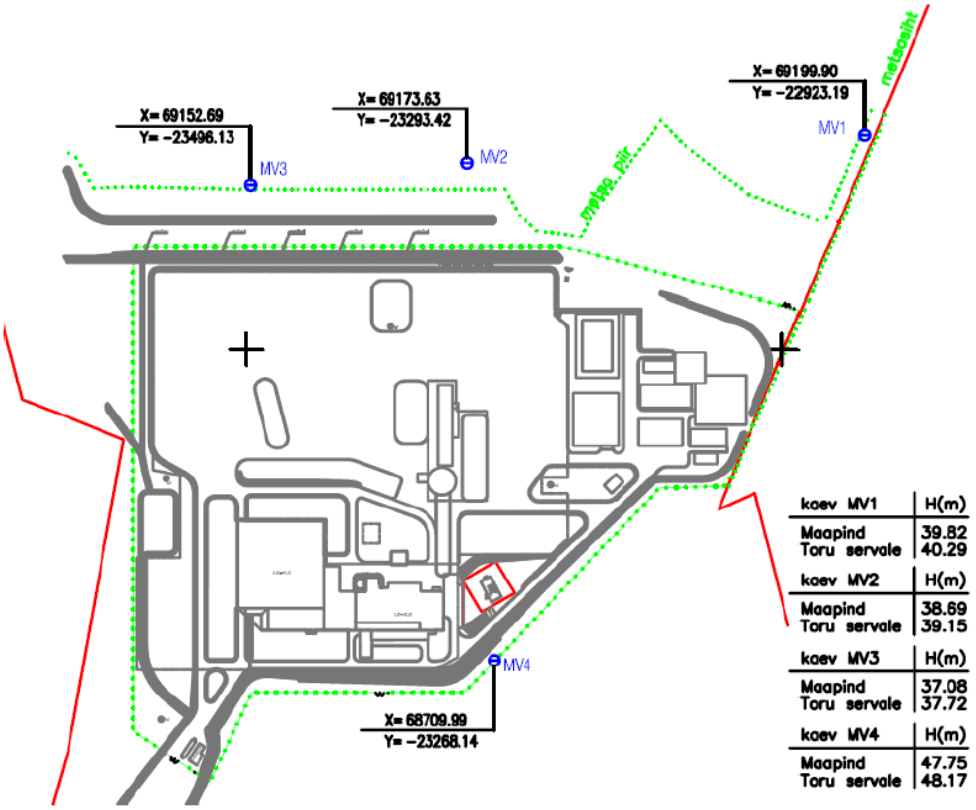


Table 13 Groundwater quality indicators for monitoring wells

Sampling point	Date	NH_4 (mg/l)	Turbidity (FTU)	PHT (mg/l)	Cl (mg/l)	Dry residue (mg/l)	Colour (mg/l)	Tot hard (mgekv/l)	Tot Fe (mg/l)	SO_4 (mg/l)	Conductivity (µS/cm)	pH
KK1	27.04.2022	0,27	140	19	8,1	760	40	12	7,3	250	1048	7,1
KK1	11.10.2022	0,34	55	20	11	700	50	10	4,6	220	967	7,2
KK1	18.05.2023	0,29	140	17	12	840	40	12	7,1	180	1099	6,9
KK1	23.10.2023	0,22	67	17	9,4	780	60	11	4,1	300	1059	7,1
KK1	08.05.2024	0,36	72	20	8,6	710	60	11	7,4	200	969	7,1
KK1	29.10.2024	0,26	120	20	12	730	91	9,6	11,0	190	960	7,1
KK2	27.04.2022	0,02	49	37	3,9	370	120	4,7	6,9	120	548	7,3
KK2	11.10.2022	0,09	31	36	8,1	510	100	6,9	5,5	170	789	7,1
KK2	18.05.2023	0,06	57	26	9,2	530	100	6,9	5,6	170	680	6,8
KK2	23.10.2023	0,09	14	30	6,8	410	140	5,4	1,8	88	601	8,8
KK2	08.05.2024	0,037	20	26	4,4	380	80	5,1	3,5	110	569	6,9
KK2	29.10.2024	0,087	39	28	8,3	640	139	7,9	8,0	210	820	7,0
KK3	27.04.2022	0,05	79	25	21	1300	40	15	4,0	600	1615	7,2
KK3	11.10.2022	0,01	90	45	28	1400	50	18	2,0	430	1865	7,4
KK3	18.05.2023	0,26	31	13	48	1700	20	20	3,9	900	2010	6,8
KK3	23.10.2023	0,16	21	23	37	1600	60	18	2,4	760	1860	7,9
KK3	08.05.2024	0,066	58	26	13	1200	40	16	6,8	510	1562	7,2
KK3	29.10.2024	0,038	100	39	27	1500	83	11	1,8	520	1900	7,2
KK4	27.04.2022	0,23	460	6,5	5,1	1600	10	21	42	910	1845	6,7
KK4	11.10.2022	0,59	500	9,4	11	1300	18	18	54	610	1647	7,2
KK4	18.05.2023	1,2	520	12	19	1200	10	16	65	590	1458	6,9
KK4	23.10.2023	0,53	81	6,6	5,3	1500	20	19	11	820	1706	7,2
KK4	08.05.2024	0,93	34	3,0	3,1	1100	20	16	6,3	580	1371	6,7
KK4	29.10.2024	0,43	260	9,0	9,9	1300	10	8,7	23	500	1600	7,3

EFFLUENT WATER

Year after year, we have been able to ensure that even cleaner wastewater is discharged into the sea, we have an ever smaller environmental footprint and consume even less energy. To guarantee this, we have made significant investments in the previous years and will continue to fine-tune our processes to achieve and even exceed the requirements established by environmental standards, using the best available technology. In parallel, we carry out regular marine surveys to ensure the safety of the treated effluent water discharged into the marine environment.

The plant's effluent water is treated at an anaerobic treatment plant consisting of an anaerobic reactor and pre-treatment facility (combined anaerobic/aerobic wastewater treatment). All effluent from the pulp production process, the bark site and the raw water treatment plant is collected and directed to the water treatment facilities.

The company has invested into a rainwater conversion project, as a result, all polluted rainwater is pumped to the effluent treatment facility through the plant's emergency pool.

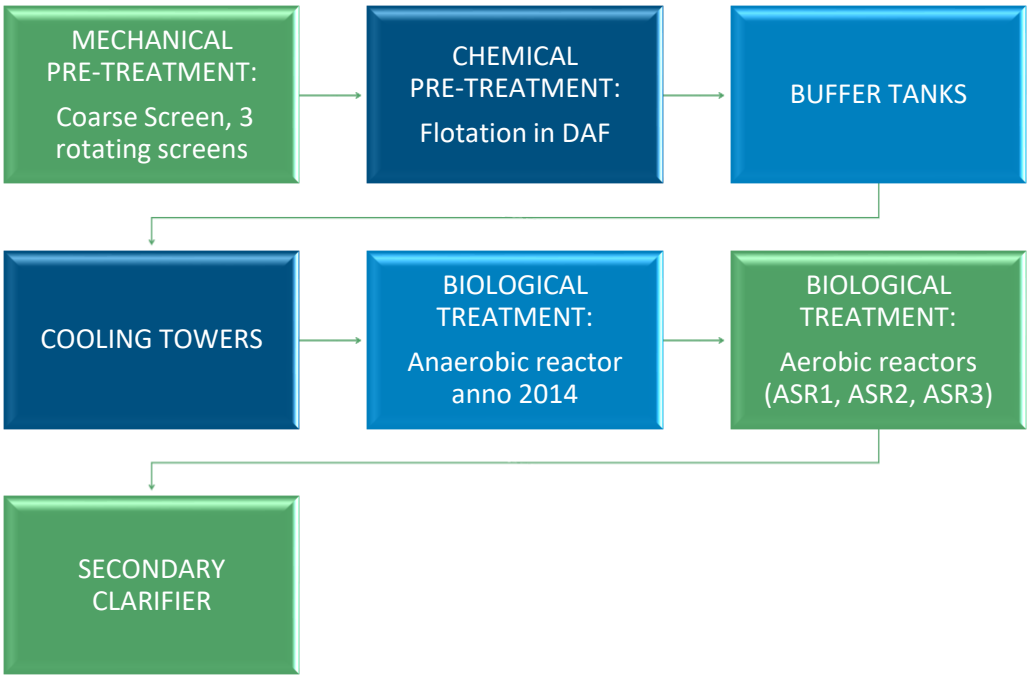
In 2019, a new investment was completed to expand and improve the aerobic process of effluent treatment. The new investment helps to eliminate issues in effluent treatment, increase energy efficiency and further improve the quality of treated water.

The aeration pool, which was built in 2018 and started work in 2019, consists of three separate selectors and three aeration tanks. New and more reliable aerators that ensure the required concentration of dissolved oxygen have been installed to the bottom of the tanks.

The following stages are at work in the effluent treatment plant:

- mechanical solids and impurities (sawdust, fibres) are removed by coarse screen and three rotating screens;
- smaller excess solids (fibres, sawdust and dissolved high molecular weight organic compounds) are removed by primary flotation (DAF unit);
- primary sludge generated from primary flotation is pumped to the sludge dewatering system;
- the effluent is cooled in cooling towers to achieve 38 ºC, which is the optimum temperature for biological processes;
- effluent water is further processed in an anaerobic reactor, where biodegradable compounds are converted to biogas (75% of methane) in a zero oxygen environment;
- the aerobic process is based on an air-activated sludge process with an aerobic selector. A part of the excess sludge from the secondary clarifier is pumped to the aeration basin, the other part is removed with the dewatering sludge system;
- mixed sludge from the DAF unit and primary clarifier (Flocomat) is dewatered with a belt filter presses and centrifuges.

The effluent treatment plant consists of the following steps:



The efficiency of the effluent treatment is evaluated with two automatic samplers: one is located after the drum screens and the other is in the flow chamber. Both sampling points must be monitored once a year for BOD, suspended solids, COD, pH, SO_4, P-tot, N-tot. In order to determine the efficiency of effluent treatment, samples must be taken simultaneously from the water that enters and leaves the plant.

The degree of purification must be assessed once a year on the basis of the average of one incoming water and one outgoing water sample.

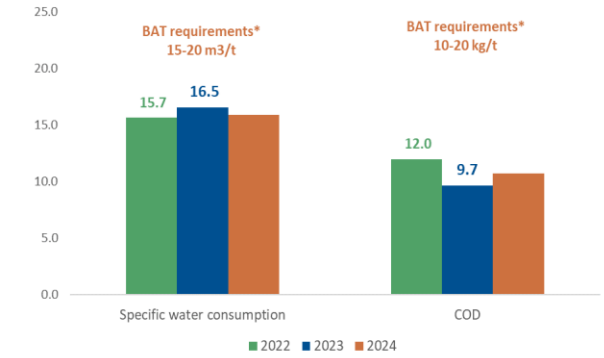
The degree of purification must be determined at the same time as the pollution load.

Table 14 Efficiency of the treatment, %

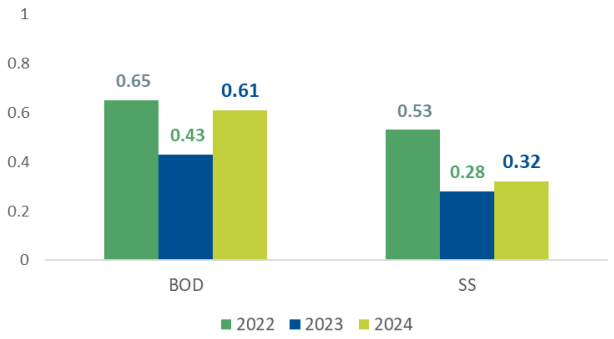
Indicator	2023	2024
BOD7	99.4 %	99,50
COD	95.1 %	95,80
Suspended solids	98.8 %	98,90
N-tot*	78.7 %	73,5
P-tot*	91.1 %	86,6
SO4	84.4 %	80,9

**In the case of nitrogen and phosphorus, it is not correct to calculate reductions, because nutrients are added artificially in the form of urea and phosphoric acid.*

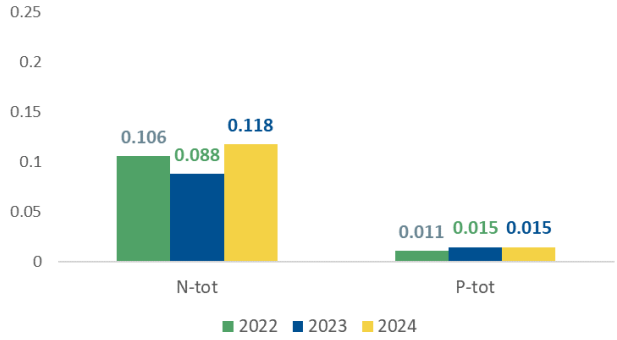
The company's wastewater treatment meets the requirements applicable to the best available mechanical pulp technology (BAT, *in case of H_2O_2 bleaching), and the average waste emission has been the following:



In 2024, the annual average specific water consumption was 15.9 m^3/t and COD was 10.7 kg/t.



In 2024, the annual average BOD level was 0.61 kg/t and there were 0.32 kg/t of suspended solids (SS).



In 2024, the annual average total nitrogen (N-tot) level was 0.118 kg/t and the total phosphorus (P-tot) emission level was 0.015 kg/t.

The treated effluent is discharged through the existing pipeline to the Gulf of Finland (Name of the water body: Sitturikivi reefs (destination code VEE3109000); Name of the water body: Coastal water of the Gulf of Narva-Kunda (EE_1)).

The treated wastewater is directed to Mahu Bay through a marine pipe, where it is discharged 2.4 km away from the beach, 11 meters deep on the sea floor. We plan to organise diving surveys every year across the length of the sea pipeline. This helps to identify potential risk areas more quickly and prevent leaks.

The mill's biological water treatment plant was an extensive investment, enabling us to achieve more than a 90% treatment level in dealing with the chemical oxygen demand (COD) and a 96% treatment level in dealing with the biological oxygen demand (BOD) – the highest level in this industrial sector. The quality of wastewater discharged into the sea is defined by legislation and the ECP. In order to evaluate the efficiency of the treatment process and the quality of the effluent, the quality indicators of both the water entering and leaving the treatment plant are

regularly analysed in the water laboratory of the plant. The basic parameters are also analysed after each technological step to ensure maximum efficiency and the optimal dosing of nutrients.

The Estonian Marine Institute of the University of Tartu has been monitoring the deep-sea outlet since 2005. The results confirm that the seawater in the discharge area is clean. In 2019, monitoring was carried out with the aim of specifying seawater quality, the state of groundwater flora and fauna. The content of heavy metals in the effluent discharge area is also examined annually.

Table 15 Amount of effluent water discharged into the sea

	2022	2023	2024	ECP
Amount of effluent water, MM m^3/a	2.84	2.31	2,65	3.0
Effluent water per ton, m^3/adt	15.650	16.934	15,897	

The effluent flow permitted in the ECP has not been exceeded. The amount of waste water per ton of product in 2024 decreased compared to 2023, due to plant stability and production speed.

In 2024, the monitoring of heavy metals in the marine environment by the researchers of the Estonian Maritime Institute of the University of Tartu was carried out, and the limit values for the concentration of heavy metals have not been exceeded.

Table 16 Deep-sea outlet monitoring requirements

Outlet name	Outlet code	Indicator	Frequency of sampling
Estonian Cell deep-sea outlet	LV135	Biochemical oxygen demand (BOD7)	Twice a month
		Chemical oxygen demand (COD)	Twice a month
		Suspended solids	Twice a month
		Total nitrogen (N-tot)	Twice a month
		Total phosphorus (P-tot)	Twice a month
		Sulphate (SO_4)	Twice a month
		Hydrogen ion concentration (pH)	Twice a month
		Cadmium (Cd)	Once a quarter
		Chrome (Cr)	Once a quarter
		Nickel (Ni)	Once a quarter
		Lead (Pb)	Once a quarter
		Zinc (Zn)	Once a quarter
		Copper (Cu)	Once a quarter

Estonian Cell's deep-sea effluent meets the requirements of the ECP and the monitoring has been carried out in accordance with requirements.

Name of the issue: Estonian Cell Deep Sea Outlet

Table 17 Pollution load of the effluent on the sea

Year	Date	Component, analysis result mg/l												
		pH	SS	BOD7	CODCr	P-tot	N-tot	SO_4	Cd	Cr	Cu	Ni	Pb	Zn
Effluent to the sea (Unit mg/l)														
2022	I quarter	8,23	23,80	51,33	845	0,57	5,57	94	0,00066	0,0045	0,0069	0,016	0,0096	0,13
2022	II quarter	8,23	34,83	31,50	716	0,91	5,57	92	0,0011	0,0037	0,013	0,011	0,0079	0,16
2022	III quarter	8,27	36,17	55,67	821	0,50	7,47	79	0,0019	0,0052	0,0064	0,01	0,0055	0,13
2022	IV quarter	8,23	40,17	28,33	681	0,80	8,37	96	0,0017	0,0043	0,0048	0,0065	0,0012	0,16
2023	I quarter	8,15	24,57	34,17	631	0,68	5,92	91	0,00077	0,006	0,021	0,013	0,0068	0,14
2023	II quarter	8,22	18,02	26,50	625	0,99	4,70	82	0,0016	0,0019	0,0038	0,0079	0,00091	0,11
2023	III quarter	8,17	14,78	25,32	442	1,28	4,88	73	0,0033	0,005	0,0027	0,012	0,0025	0,19
2023	IV quarter	8,17	10,85	18,00	588	0,61	5,28	72	0,0031	0,0034	0,0062	0,0092	0,0019	0,15
2024	I quarter	8,17	21,32	22,92	700	0,67	6,6	54	0,0014	0,0054	0,0079	0,0076	0,00093	0,088
2024	II quarter	8,0	19,67	17,83	627	0,79	6,60	47	0,0013	0,0034	0,0083	0,0048	0,0008	0,20
2024	III quarter	8,18	23,00	69,83	732	1,44	9,60	111	0,001	0,0052	0,013	0,018	0,005	0,084
2024	IV quarter	8,07	17,63	42,10	633	1,06	7,93	102	0,0015	0,005	0,01	0,011	0,005	0,12
Permitted mg/l														
		6–9	50	125	1,250	2	15							

On the western side of the mill's territory there is a pond, which is mainly drained into groundwater. The water flows through the ditch in a north-west-north direction. The purpose of the pond is to impregnate and settle rainwater. The pond flows out into the nature through two plastic pipes. Most of the rainwater flows from Lontova Hill down to the Kunda River (the outlet is next to Lontova Bridge). The flow rate is calculated with the volume or weight method. The discharged water is visually monitored and samples are taken and analysed by an accredited laboratory. Name of the issue: West Cell West Pond issue, issue code: LV004.

Table 18 Wastewater amount from pond

	2022	2023	2024
Wastewater, m^3/y	12,407	8,424	7 344
Wastewater per ton, m^3/adt	0.068	0.062	0,044

Table 19 Monitoring requirements

Outlet name	Outlet code	Indicator	Frequency of sampling
Outlet of the western pond of Estonian Cell	LV004	Biochemical oxygen demand (BOD7)	Once every six months
		Chemical oxygen demand (COD)	Once every six months
		Suspended solids	Once every six months
		Total nitrogen (N-tot)	Once every six months
		Total phosphorus (P-tot)	Once every six months
		Sulphate (SO_4)	Once every six months
		Hydrogen ion concentration (pH)	Once every six months
		Petroleum products	Once every six months

Table 20 Pollution load indicators of the pond

Year	Date	Component, heavy metals analysis result, mg/l						
		pH	SS	BOD_7	COD_{Cr}	Oil	P-tot	N-tot
Wastewater discharged into the river (Unit mg/l)								
2022	I quarter	8,1	3	<3	<14	<0,02	<0,02	<1
2022	II quarter	8,1	3	<3	<14	<0,02	<0,02	<1
2022	III quarter	8,1	8	<3	<14	<0,02	<0,02	<1
2022	IV quarter	8,1	8	<3	<14	<0,02	<0,02	<1
2023	I quarter	8,1	2	<3	<14	<0,02	<0,02	<1
2023	II quarter	8,1	2	<3	<14	<0,02	<0,02	<1
2023	III quarter	8,2	2	<3	<14	<0,02	<0,02	<1
2023	IV quarter	8,2	2	<3	<14	<0,02	<0,02	<1
2024	I quarter	8,0	8	<3	<14	<0,02	<0,02	1,1
2024	II quarter	8,0	8	<3	<14	<0,02	<0,02	1,1
2024	III quarter	8,1	2	<3	<14	<0,02	<0,02	<1
2024	IV quarter	8,1	2	<3	<14	<0,02	<0,02	<1
Permitted mg/l								
		6–9	40	15	125	5	1	45

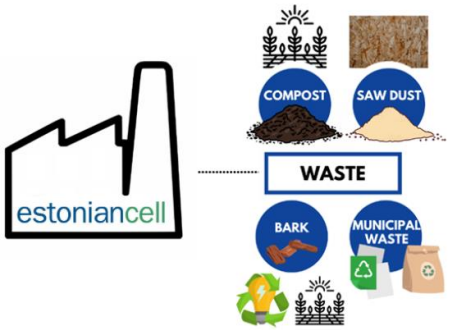
The water from the western pond of Estonian Cell meets the requirements set out in the 2024 ECP and the monitoring has been carried out in accordance with the requirements.

WASTE MANAGEMENT

Five different types of waste are generated at Estonian Cell:

- biosludge from the effluent plant;
- wood waste (aspen bark, sawdust);
- screening residuals;
- municipal waste;
- hazardous waste.

The majority of the generated waste is biosludge from the effluent treatment plant. The quantity of the biosludge depends on effluent volumes and concentration, which in turn depends on the specific product and production capacity. Half of the generated bark volume is used for composting, the other half, and screening residuals, are sold as renewed biomass to boiler houses for heat generation. Sawdust is marketed to producers of particle boards.



The waste resulting from the operation of Estonian Cell is collected separately as much as possible to increase recycling and decrease the waste load to landfill sites. Waste management companies have installed containers for recyclable (plastic, paper, cardboard, glass) and hazardous waste on the company's premises at an agreed location. The containers are provided with a sticker or letter describing the type of waste collected.

The company organises the proper collection of waste, avoids mixing waste and sorts it. Recyclable and hazardous waste is placed in special containers and handed over to a waste manager. Wood and bark waste is stored on at an asphalted and drained storage site. Part of the bark and sawdust from production is resold as biofuel and is not considered as waste. In 2022, our waste handler changed, and we aim to organize our waste management even better. All oily and dirty packages were collected to the same container before but now we sort all hazardous waste separately. We collect paper and cardboard, which is pressed into cubes with a cardboard press and is reused later.

In 2022, a total of 56,967 tons of waste was generated (42,858 tons in 2021). The higher amount is because we used more bark to mix into the compost.

Table 21 Waste quantities, t/year

Type of waste	2022	2023	2024	ECP	Qty per ton, kg/adt		
					2022	2023	2024
Bark and wood waste 03 03 01	23,663	14,975	26 238	86,100	129.54	109.9	52,9
Sludges from on-site effluent treatment 03 03 11	33,188	20,252	40 300	61,300	181.44	148.6	157,1
Secondary formation	32,048	38,102		-	175.44	279.6	241,3
Non-hazardous waste							
Paper and cardboard packaging 15 01 01	0	4.906	0	-	0	0.036	0
Plastic packaging 15 01 02	0.17	0	0	-	0.0009	0	0
Construction and demolition waste 17 09 04	17.50	15.78	11,74	-	0.0958	0.116	0,070
Paper and paperboard 20 01 01	12.336	4.906	0	-	0.067	0.036	0
Municipal waste 20 03 01	35.493	40.799	37,626	-	0.194	0.299	0,225
Iron and steel 17 04 05	43.18	0	0	-	0.236	0	0
Discarded metal equipment 16 02 14 01	0	.	0	-	0	0	0
Hazardous waste							
Engine and lubricating oils 13 02 08 *	0.99	35.086	15,90	-	0.0054	0.257	0,095
Packaging containing dangerous substances 15 01 10 *	0.613	2.895	1,784	-	0.0033	0.021	0,011

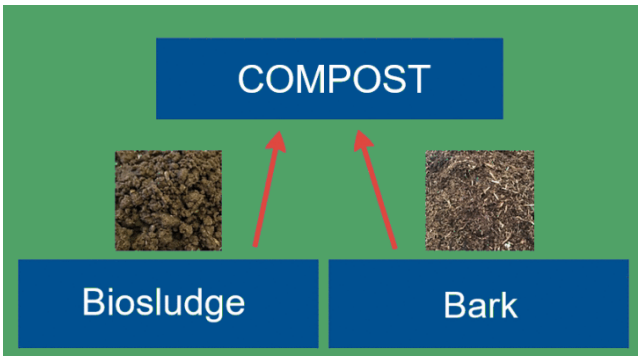
Type of waste	2022	2023	2024	ECP	Qty per ton, kg/adt 2022	2023	2024
Cleaning cloths contaminated with dangerous substances, etc. 15 02 02 *	4.235	3.282	2,677	-	0.0232	0.0241	0,016
Laboratory chemicals 16 05 06 *	0.149	0.097	0,169	-	0.0008	0.0007	0,001
Waste containing Hg 20 01 21 *	0	0.089	0,046	-	0	0.0006	0,0003
Batteries and accumulators 20 01 33 *	0	0.043	0,03	-	0	0.0003	0,0002
Small appliances containing dangerous substances 20 01 35 04 *	0.289		0	-	0.0016		0
External wires and cables for electrical and electronic equipment 16 02 16 11 *	0	0.405	0,363	-	0	0.0029	0,0022
Waste containing oil 16 07 08 *	16.891	0	0	-	0.0925	0	0

** hazardous waste*

The table shows the quantities of waste generated. Secondary formations include compost which is made from bark and wood waste, and sludges from effluent treatment.

The amounts of waste permitted by the complex permit have not been exceeded, the amount of bark and wood waste, waste water on-site treatment and hazardous substances per ton of product has decreased. The amount of municipal waste, construction and demolition waste and secondary material per ton of product has increased. The remaining amount of waste has remained at the level of the previous year.

COMPOSTING



The purpose of composting is to convert biodegradable waste into humus-like material through fermentation. On-site composting is carried out aerobically in open piles. The plant produces up to 86,000 tons of bark and sawdust per year. Approximately 20,000 tons of bark is mixed with sludge and compost is made from this mixture. The mixture is then stabilised and analysed. The compost is provided to contract partners on the basis of a registration certificate to increase fertility in the fields of Viru-Nigula municipality.

Composting guarantees useful application for two of our side products, as the main implementation areas of nutrient-rich compost include soil improvement, fertilisation and the provision of vital humus in agriculture, but also landscaping. We keep a composting diary where the temperatures reached are recorded.

Biosludge is not stored alone in the production area. On weekdays, it is constantly mixed with bark, stored in pots and composted. The finished compost is stored on an asphalted and drained site (1.5 ha). Compost is mainly stored on the site during the cold season, when the export of compost is prohibited.

The regular mixing of compost helps to avoid anaerobic conditions and this way, we can reduce odour emissions. Compost is not stored on the site for more than six months. The wind direction is taken into account while transporting the compost.

The pH, content of heavy metals (cadmium, copper, nickel, lead, zinc, mercury and chromium), dry matter, organic matter, nitrogen, phosphorus and the stability of the sediment must be determined at least four times a year before the sludge and compost are used in agriculture, landscaping or reclamation.

38,102 tons of compost were handed over to partners in 2023. The company has been in close dialogue with the Environmental Board and the Ministry of the Environment in order to comply with the regulatory requirements established primarily on the basis of municipal wastewater parameters. In addition, together with researchers from the Estonian University of Life Sciences, we will continue various research projects related to compost to further investigate its impact on soil fertility and the environment. The reports were also submitted to the relevant experts of the Environmental Board and Ministry.

Table 22 Sediment sample characteristics

Indicator	Unit	Concentration, 2022	Concentration, 2023	Concentration, 2024
Organic matter	%	82,87	86,00	77,2
Dry matter	%	45,87	41,4	31,75
Cadmium	mg/kg KA	2,92	2,00	1,5
Chrome	mg/kg KA	2,41	1,23	10,65
Copper	mg/kg KA	19,07	12,50	12,0
Mercury	mg/kg KA	0,015	0,015	0,019
Nickel	mg/kg KA	7,08	1,85	6,0
Lead	mg/kg KA	2,35	1,55	3,8
Zinc	mg/kg KA	256	195	165
Total nitrogen	g/kg	1,97	1,5	1,25
Total phosphorus	g/kg	0,25	0,21	0,13

ODOUR AND NOISE

The aeration pool and composting saunas are sources of odour. The instantaneous emissions of odour have been calculated using the odour units specified in Regulation 81 of the Estonian Minister of the Environment for the production of aspen pulp. According to Regulation 81, the level of nuisance for the receiver starts at 15% of the annual odour hours. If the hourly average odour concentration exceeds 0.25 OU/m³, it is considered one odour-hour. This means that the concentration of odour for the receiver may not exceed 0.25 OU/m^3 in more than 15% of the annual odour hours. The level of odour is not exceeded for the recipients, i.e., the nearest residential buildings, at the company. Noise is generated by the operation of the plant (quick dryer, loading of wood, crushing) and the transport that serves the plant. The company has performed noise measurements through self-monitoring. The noise level is below the specified limit at the border of the site.

AMBIENT AIR EMISSION

The company's emissions of ambient air pollutants are related to burning equipment (steam boilers 2 x 8.5 MWth), flash dryer (heaters 13 MWth and 10 MWth), steam fan, emergency burner (12 MWth), aeration pool and composting saunas. For ambient air, two different scenarios have been considered:

- scenario I – natural gas and biogas are used as fuel in burners. An emergency burner is in use;
- scenario II – only natural gas is used as fuel in burners, emergency burner is not used.

The emergency burner is used only in cases where technical problems do not allow OÜ Greengas to receive the biogas produced by AS Estonian Cell. The gas is then burned in the emergency burner (scenario I). Based on the results of the dispersion calculation, the maximum pollution level does not exceed the established limit value in neither of the scenarios. The pollution is below limits also in interaction with other companies (AS Estonian Cell, AS Adven Eesti and AS Kunda Nordic Tsement).

Ambient air quality and emissions are carefully monitored in order to achieve the standards of emissions specified in the ECP. The gas mixture emitted to the ambient air consists of usual burning products of natural gas, mixed in the flash drying process with water vapor and pulp dust. The majority of the dust is removed by cyclone devices on the drying line. The steam boiler, which generates steam necessary for the process start-up is also a source of ambient air pollution.

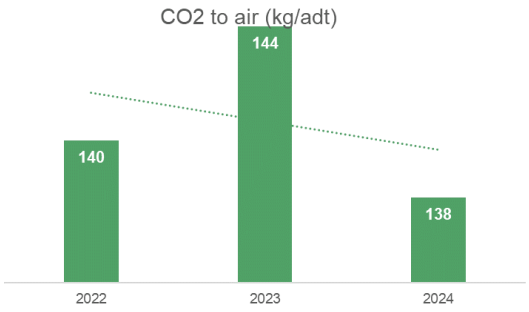
From the perspective of the production process, ambient air is also polluted by chip impregnation and refining, which are accompanied by high temperatures and added chemicals. The steam-gas mixture is purified and condensed in the scrubber, which collects most of the additives. The plant processes only aspen, and sulphuric compounds are not used in the impregnation process, which means that pollutants emitted to the ambient air do not contain badly scented sulphuric compounds and terpenoid by-products created in softwood treatment.

Ammonia (NH_3) and volatile organic compounds (NM-VOC) are emitted from the aeration basin of the wastewater treatment plant, dihydrogen sulphide (H_2S), ammonia (NH_3) and volatile organic compounds (NM-VOC) are emitted from the composting basins.

Table 23 Emissions to air, t/year (total from all sources)

POLLUTANT	2022	2023	2024	ECP / NEW 2022	Qty per ton kg/adt		
					2022	2023	2024
Nitrogen dioxide	36.273	28.824	33,205	54.99/50.735	0.198	0.211	0,199
Carbon monoxide	16.668	15.728	18,447	28.99/28.107	0.091	0.115	0,110
Carbon dioxide	25.586	19.628	23 159	34,905/34,308	140	144	139
Total solids	17.591	9.71	15,731	35.65/20.626	0.096	0.071	0,094
Ammonia	1.705	1.251	1,525	0.569/1.708	0.0093	0.0092	0,0091
Dihydrogen sulphide	2.659	2.146	2,226	0.016/2.659	0.0145	0.0157	0,0133
Carbon dioxide from biomass	209.406	191.078	161,501		1.146	0.402	0,967
Non-methane volatile organic compounds	45.384	36.946	40,860	61.761/54.364	0.248	0.271	0,245

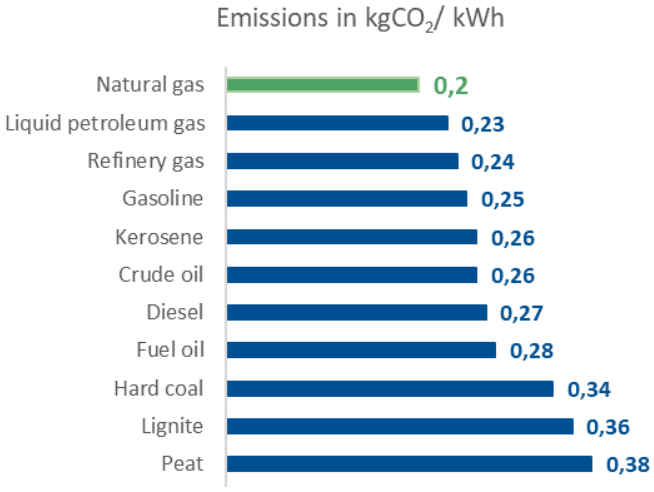
Due to new input fuels, a new ECP (permitted emissions) project has been made in 2022, and the emission coefficients of various indicators and permitted total emissions have changed.



All emissions meet the requirements stated in the ECP, which once again represents the responsible patterns in the entire scope of our activities. Advanced atmospheric pollution dispersion model calculations, which take into account the downwash effects of nearby buildings within the path of the dispersing pollution plume, short term fluctuations in pollutant concentration, chemical reactions, pollution plume rise as a function of distance, etc. show that atmospheric pollution occurs only on the territory of Estonian Cell.

This, in turn, means that people who live next to EC territory may remain our neighbours without concern when clouds of steam are released from the stacks – more than 90% of the cloud is water vapor (total amount of 350 tonnes per day), the remaining 10% is made up of solid pulp residues and natural gas combustion product mixture.

Not all fuels are equal – especially when considering carbon dioxide emissions. Natural gas is well-known for being less carbon dioxide intensive based on specific carbon dioxide emissions (Source: Fachbuch Regenerative Energiesystem, 2019), which helps to reduce emissions and contribute to climate protection.



CLIMATE CHANGE AND CARBON FOOTPRINT

The European Green Deal is a political guideline approved by the European Commission in 2019 with the aim of making Europe climate-neutral by 2050, while advancing economic competitiveness and protecting the environment in a way that will not put the security of the union's economy at risk or adversely affect the most vulnerable groups in society. Climate neutrality can be defined as a situation where greenhouse gases released by human activities are (re)captured or avoided, meaning that man-made greenhouse gases have a neutral effect on the climate.

The European Green Deal provides an action plan to:

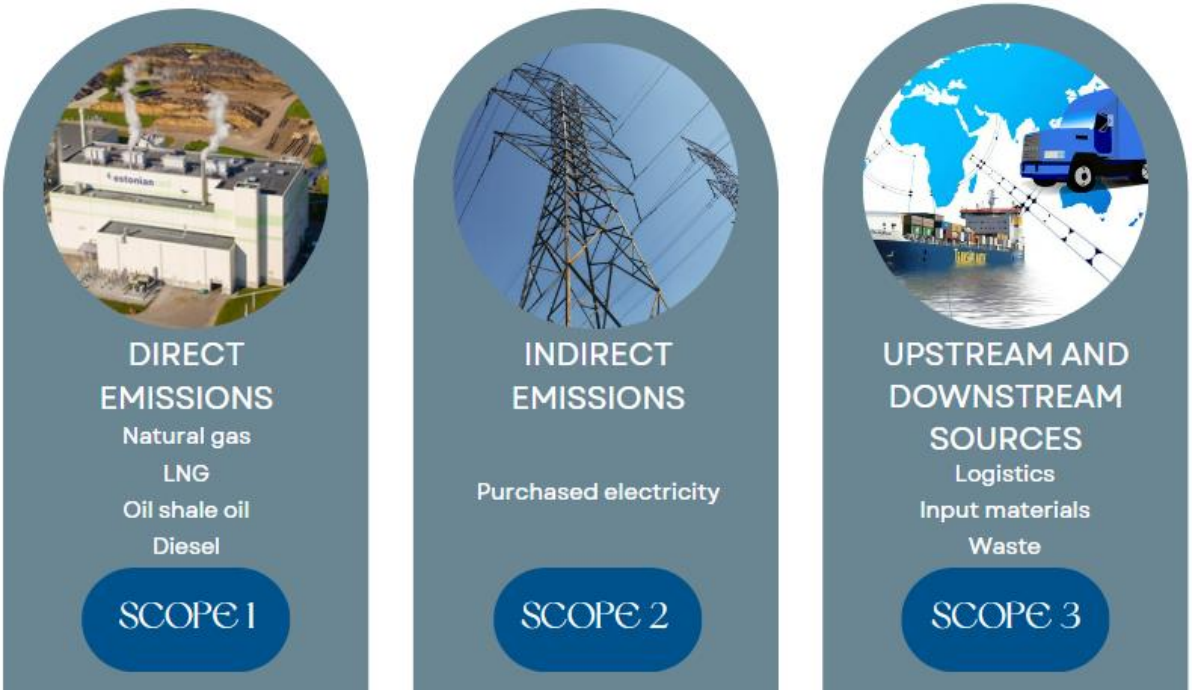
- boost the efficient use of resources by moving to a clean, circular economy;
- restore biodiversity and cut pollution.

Reaching this target will require action by all sectors of our economy, including

- investing in environmentally-friendly technologies;
- supporting the industry to innovate;
- introducing and rolling out cleaner, cheaper and healthier forms of private and public transport;
- decarbonising the energy sector;
- providing buildings that are more energy efficient;
- cooperating with international partners to improve global environmental standards.

In view of the severity of this topic, Heinzel Group and AS Estonian Cell have initiated the mapping and evaluation of our processes, therefore we constantly evaluate our own greenhouse gas emissions. When measuring our carbon footprint, we use the Greenhouse Gas (GHG) Protocol methodology, and in order to include both direct and indirect emissions, we divide the carbon footprint into three groups: scope 1, 2 and 3. Heinzel Group, the parent company of Estonian Cell, has joined the SBT initiative. On a group level we have set a target

to reduce our scope 1+2 emissions by 42% and scope 3 by 25% by 2030 (compared to 2021) and climate neutrality by 2050.



We have established an internal GHG reduction strategy and corresponding activities. Thanks to the increase in energy efficiency, we have been able to reduce emissions per ton year after year. In 2024, emissions increased in absolute terms due to an increase in production volume.

Table 24 CO_2 emissios, tCO_2e.

	2022	2023	2024	Qty per ton, t/adt 2022	2023	2024
Scope 1	26 086	20,052	23 491	0,14	0,15	0,14
Scope 2	137 508	122,755	138 086	0,75	0,90	0,83
Scope 3	255 254	203,136	205 672	1,40	1,49	1,23
Total	**418 848**	**345,943**	**367 249**	**2,29**	**2,54**	**2,20**

* methodology change in 2023 (includes GHG protocol categories 1-15)

Our priorities for the coming years are related to two strategic projects:

- To reduce the environmental footprint, our focus is on a possible bio-boiler house or a cogeneration plant, where we plan to use the bio-waste generated in the mill to reduce the dependence on outsourced natural gas and in cogeneration plant also purchased elecricity. We are in a phase with the project where we have gathered the necessary basic information, made a preliminary selection of possible solutions and are engaged in profitability calculations.
- In addition, we are also working on smaller projects in parallel to increase the energy efficiency of the factory and reduce greenhouse gases.

BIODIVERSITY

Biodiversity is expressed through the land use at the company. The aspen pulp mill is located in Lääne-Virumaa, Viru-Nigula municipality, Kunda town, at the Jaama street 21 land unit (cadastral code 34501:008:0015). The area of the land unit is 79.8 ha, out of which 14.5 ha is paved.

Table 25 Mill's land use, ha

	2022	2023	2024	2022 ratio	2023 ratio	2024 ratio
Land use	79.8	79.8	79.8	0.00044	0.00058	0,00048
Part of hard-covered land	14.5	14.5	14.5	0.00008	0.00011	0,00009

BIODIVERSITY AND WILDLIFE

We have initiated the mapping and evaluation process to decrease CO_2 emissions at the group level. We apply the principles of circular economy in our mill daily, working consistently towards energy efficiency, reduction of resources, adding value to wood, waste recovery and reduction of potential environmental impact.

By producing mechanical aspen pulp, we create a value-added alternative to aspen wood, which was previously left to the forest, as it is predominantly affected by rapid decaying. Before the establishment of our mill, aspen pulpwood was exported, while the Estonian government only got revenue from pulpwood, which is five times lower compared to the price of the pulp we are producing now. Aspen was also used as firewood. With the establishment of Estonian Cell, governmental revenue is five times higher owing to our value-added mechanical pulp.

In principle, the production of Estonian Cell is waste-free, as waste generated by the mechanical pulp production is recycled: sawdust is used for the production of particle boards, aspen bark for energy production, wastewater is transformed into valuable biogas, biosludge is used for improving soil fertility.

In the last year, together with the Estonian University of Agriculture, we have carried out several applied studies to improve composting, evaluate the possibility of production and investigate the fertilizer value.

7 Legal Environmental Requirements

Our environmental activities are regulated by the requirements of both European and Estonian national and local government legislation.

According to the Industrial Emissions Act, a complex permit is required for the pulp and paper industry. Lääne-Virumaa Environmental Board issued an ECP to Estonian Cell on 3 January 2003. The Environmental Board initiated the procedure for amending the permit due to the need of bringing the data into line with the actual situation. The updated permit was issued on 6 December 2022.

An ECP is issued simultaneously for discharging pollutants into the ambient air, a water body, soil or groundwater layer and for the handling of waste. An ECP gives the right to use the plant in a way that ensures the least possible adverse impact on the environment. An ECP regulates emissions to ambient air, water and soil along with waste management. The conditions stipulated in an ECP must assure the protection of water, air and soil, and also waste management in a way that decontamination would not be carried from one environmental element to another (water, air and soil).

The ECP is public and available in the environmental information system KOTKAS. In accordance with the requirements set in the permit, the company submits information on the collected/treated waste (waste report), emissions to air (ambient air report) and water monitoring data (water report) to the Environmental Board. Compliance with obligations is assessed during regular audits and internal controls, as well as inspections by various agencies. Internal audits are performed in accordance with the company's annual internal audit plan.

The application for an environmental permit includes the description of the company's integrated management system, the description of the technological processes, technical equipment, best available techniques (BAT) and a comparison with the best available techniques.

Compliance with the best available techniques has been provided in Table 5 of ECP No. 1.

The company complies with the following BAT documents:

- 2014/687/EU Commission Implementing Decision of 26 September 2014 establishing best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council for the production of pulp, paper and board;
- Commission Implementing Decision (EU) 2018/1147 of 10 August 2018 establishing best available techniques (BAT) conclusions for waste treatment, under Directive 2010/75/EU of the European Parliament and of the Council (WT BAT conclusions).

In order to be up to date with legal and other requirements and to fulfil its compliance obligations, the company has created an electronic database of requirements. The updating of the database is the responsibility of managers and specialists in the field. The database of legal issues is under the supervision of the Environmental and Quality Manager and is updated, when necessary. The company uses *Riigi Teataja* to follow the changes.

In its daily environmental activities, the company follows requirements arising from the relevant legislation of the European Union, the Republic of Estonia and local government units. At the local level, the company complies with the waste management regulations of the various municipalities and other relevant regulations and requirements.

The main national legal acts that we must comply with are:

- Waste Act
- Packaging Act
- Environmental Charges Act
- Environmental Impact Assessment and Environmental Management System Act
- Environmental Monitoring Act
- Chemicals Act
- Fire Safety Act
- Industrial Emissions Act
- Quality limit values and requirements for the use of effluent sludge for landscaping, reclamation and agriculture
- Water Act
- Requirements for the use of petroleum products and the specified scope
- Atmospheric Air Protection Act
- laws based on these acts

Together with parent company HEINZEL GROUP, Estonian Cell is committed to the 17 sustainable development goals (SDGs) of the United Nation’s Agenda 2030 for Sustainable Development. These goals encompass important global challenges such as combating poverty, education, gender equality, and climate action. We have identified eight of these goals as being particularly relevant and linked these to our commercial activities in 2022 in a materiality assessment.

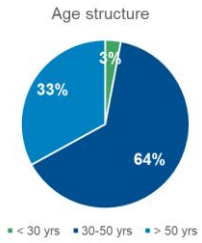
HEINZEL GROUP prepares an annual sustainability report based on the final version of the ESRS (European Sustainability Reporting Standard). Not all data points have been sufficiently collected and described yet, but the reporting will be supplemented annually to meet all requirements in a timely manner. The data presented in the report is aggregated at group level, which requires the scope of consolidation to be defined in the same way as in the company's financial report.

Due to its size, Estonian Cell should be obliged to prepare ESRS sustainability reporting, but since the parent company prepares a consolidated report, the subsidiary does not have to prepare it separately. Heinzel Group's sustainability reports are available at: https://www.heinzel.com/en/downloads/

8 Other Environmental Performance Activities

EMPLOYMENT OVERVIEW

Over 500 employees are involved in the production value chain from harvest to delivery to our customers. The company employs 86 full-time employees, of whom 15 are women and 71 are men.



We ensure equal opportunities, fair and equitable treatment in matters of employment and occupation, providing the same opportunities to all people to the maximum extent that is valid and feasible considering particular circumstances. For us, it is necessary to ensure the protection of persons against discrimination on grounds of age, sex, race, nationality (ethnic origin), language, religion or other beliefs, heritage and other aspects.

In order to fill all vacancies, we first inform employees internally about jobs, as we strongly encourage the development and movement of our employees between our teams, offering career opportunities. If it is not possible to find a person with the required competence within the company, we will announce a public competition on our company's website.

OCCUPATIONAL HEALTH AND SAFETY

Our company conducts satisfaction surveys of the entire staff annually, and takes into account the subsequent feedback to ensure a motivating and secure working environment. We have appointed an occupational health and safety specialist and employees have elected their representative within every department. The Safety Manager conducts a health and safety audit monthly and documents non-conformities, necessary measures and deadlines for eliminating the non-conformities in the audit report. The audit report is distributed to all shift supervisors and heads of departments. A daily safety check is carried out by shift supervisors, who also organise the elimination of non-conformities.

Health and safety instructions are implemented for all equipment and all works. Instructions are available in all control rooms and electronically in the mill information system. We have signed an agreement for joint activities in occupational health and safety with our suppliers and cooperating partners. We have also issued general safety rules at the AS Estonian Cell mill site, which provides information about all hazards and appropriate accident mitigation measures.

We consider safety and health an integral part of all our activities.

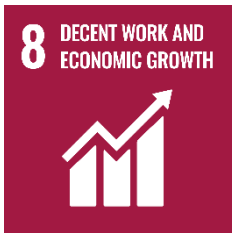
Focus areas in our safety management during 2023 include:

- providing a safe working environment for all people at the mill site;
- preventing infections with viral deseases, ensuring the health of every employee and the smooth functioning of working processes;

- conducting consistent risk assessments, and adequacy assessments of existing activities;
- preventing or minimising the impact of a potential emergency situation to the people on the site;
- providing regular safety training for the entire staff;
- identifying and preventing possible injury risks regularly;
- providing employees a reasonable amount of resources for constant development and improvement, considering OHS topics;
- boosting staff motivation and satisfaction;
- guaranteeing no occupational accidents.

The safety of employees is central in performing work. In 2023, there were 2 accidents at work, for which a thorough analysis has been carried out.

STAFF DEVELOPMENT AND TRAINING



Estonian Cell conducts safety training for all employees on an annual basis. In 2024, safety days were held in collaboration with foreign lecturers to practice cooperation in possible emergency situations, and the topic discussed was behavior in the event of a fire.


Photo by:: Estonian Cell

In 2024, development discussions were once again conducted with all employees to increase employee satisfaction and motivation, to provide employees with adequate feedback from the manager's perspective on the performance of their work tasks, and to provide employees with the opportunity to provide feedback to their direct manager regarding improvements to work organization, management culture, and the work environment.

Several employees have also participated in further training programs or courses in 2024:

- Forestry sector training program 56 h
- Forklift driver training 16 h
- Electrical safety awareness 64 h
- Technical systems insulation training, 48 h
- Boiler operator training 160 h
- Ventilation work, 26 h
- Nuclear Energy Conference, 8 h
- Fire safety training, 8h.

It is important for the company to recognise long-term experience and contributions to the development of the company, which is why additional days of leave depending on the working hours are offered, and, in addition, the company recognises long-term employees at work. In 2024 a total of 2 employees celebrated their 15th work anniversary, and in addition to financial recognition, each employee received a shovel and a gift card from a gardening shop so that they could choose and plant their own tree.

In 2024, EC's best employees from all departments were selected. In addition to internal company awards, we also selected two candidates for the best employee of the Heinzel Group from among the featured employees. In addition, the best employees are selected and recognized.


Foto: Estonian Cell

COOPERATION AND COMMUNICATION WITH EXTERNAL PARTIES

It is important for us to demonstrate our social and environmental responsibility by being open to all-round communication. We are ready to provide knowledgeable information about the whole plant, its strategy and goals, and to talk about minor issues of daily importance. In addition, we conduct numerous field trips and factory tours for school and work groups each month. We believe that only honest, open dialogue and cooperation with all stakeholders can ensure long-term success in the face of technological advances in the modern world.

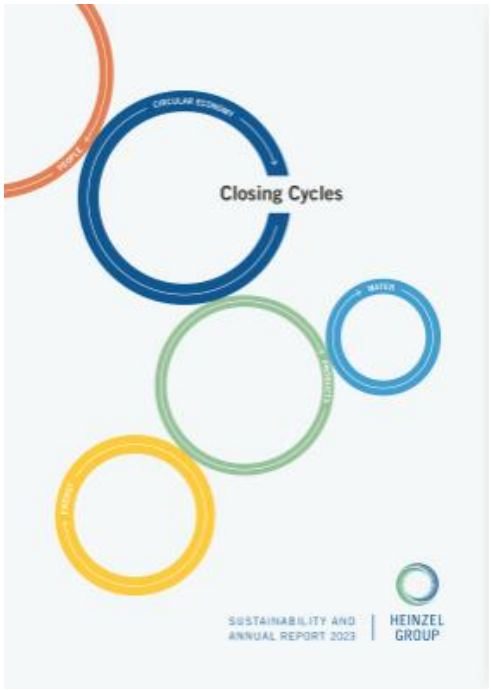
Throughout the years, the company has been consistently working to improve safety, employee satisfaction, environmental protection, community engagement and awareness. Estonian Cell publishes an Environmental Bulletin every year, which in addition to the most important environmental aspects, provides an overview of the company's overall developments, collaborative projects with the community and the working environment. The environmental paper is distributed free of charge to all residents of the area and is sent to a selective list of environmental and government agencies.


Photo by: Estonian Cell, *Metsarahvapäev*

In 2024, AS Estonian Cell participated in the popular pan-Estonian Forest People's Day (*Metsarahvapäev*), during which forest owners presented their forests and forestry and wood industry companies also opened their doors. AS Estonian Cell opened its doors to those who wished and it was a pleasant opportunity to introduce our automated and environmentally friendly production process and to explain how our factory valorizes aspen wood and how it affects the Estonian economy.

Estonian Cell also participated in the initiative "Tööle kaasa!" implemented by the Estonian Chamber of Commerce and Industry, and we offered young people the opportunity to get to know the world of work.

Children of all employees had the opportunity to visit their parent's workplace.



The purpose, vision, mission and values of Heinzel Group undergone a course of innovation in the beginning of 2022, including the launch of a new corporate purpose statement: “Recreating value for our partners, our people, and our planet.”

The highlights of the company are published in Heinzel Group’s annual report, which is accessible to anyone interested. The company distributes information on major events to the press at its own initiative, and is ready to answer questions about its operations or activities honestly and openly.

Sustainability reports of Heinzel Group are available at: https://www.heinzel.com/en/downloads/

SOCIAL RESPONSIBILITY

The company supports the active participation of managers and top professionals at various levels in educational projects. The company also considers it important to popularise modern and environmentally friendly industry, which is why regular tours introducing the factory and production process are organised.

Estonian Cell values the life of the Kunda and Lääne-Virumaa communities and has supported local community education, cultural and sports projects for many years. Throughout the years the company has supported different running events, sporting activities for the young, also the establishment of sports tracks and robotics courses at Kunda secondary school, which allow all elementary school students to benefit from a technology education.

In 2024, in a difficult economic situation, the company supported only a few smaller projects.

INVOLVEMENT OF EMPLOYEES

The operational goals of AS Estonian Cell can only be achieved with the help of employees who share our common core values. The core values of our employees are entrepreneurship, responsibility, respect and excellence. Our employees understand the environmental policy of AS Estonian Cell and the environmental aspects related to their work. The company conducts regular tours to assess safety and environmental aspects and to identify areas for improvement. All improvement activities are recorded in writing with a performance deadline and the employees responsible for fulfilling them.

Environmental goals and other important environmental issues are covered in the company's internal newsletter and at the annual information event that takes place every autumn. In the fall of 2022, a new intranet Heinzel Net was introduced. All employees have access to the system where news and information are shared also in 2024 to further improve the flow of information.

We also provide the opportunity to submit suggestions for improvements, which is encouraged through financial rewards. All employees can make suggestions to improve both environmental and technical processes.

Our goal is for every employee to leave work at the end of the working day as healthy as they were when they came to work.

In 2024, the company had 1 lost-time accident, and we implemented additional measures to prevent such accidents in the future (2023: 2 accidents). We also want to increase employee motivation by developing employees and taking into account employee feedback to the company. The company also conducts annual performance reviews with all employees.

RECOGNITION

Estonian Cell continues to contribute to responsible and sustainable business goals as evidenced by our Corporate Responsibility Certificate and Gold Level Award in the years 2020-2023. The Quality Label is awarded to companies that have participated in the Estonian Corporate Responsibility Index, which attach importance to the sustainable development of their company and strategically contribute to the development of the social and natural environment.

At the beginning of 2024, Estonian Cell received a great recognition in the field of sustainability, when the Ecovadis platform recognized Estonian Cell's sustainability efforts with a gold medal worthy evaluation. Ecovadis is the world's largest and most trusted corporate sustainability assessment platform, used by many of the largest pulp and paper manufacturers around the world. The purpose of the platform is to give an unbiased assessment of the sustainability

programs of the joined companies and to enable this assessment to be shared with clients and cooperation partners.

9 Certification

The company has implemented full quality, occupational safety, environmental and energy management systems certified based on ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 and ISO 50001:2018 standards.

In December 2017, the company was audited in view of energy management procedures, which resulted in AS Estonian Cell being the sixth company in Estonia to receive ISO 50001 certification.

In 2024, in addition to the occupational safety management system ISO 45001: 2018, the quality, environmental management systems ISO 9001: 2015 and ISO 14001: 2015 and ISO 50001: 2018 were audited and renewed.

APPROVAL OF THE ENVIRONMENTAL REPORT

Bureau Veritas Estonia OÜ is an accredited verifier EE-V-0002 in Estonia. The verifier's declaration issued by Bureau Veritas Estonia OÜ is a certificate that the organization has implemented and operates an environmental management system that complies with the requirements of the EMAS regulation. Bureau Veritas Estonia OÜ assesses the compliance of the company's environmental management system and environmental report with European Community Regulation No. 1221/2009 / EC (EMAS Regulation), as amended by European Commission Regulations (EU) No. 2017/1505 and (EU) 2018/2026.

The environmental report implements:

- European Commission Regulation (EU) 2017/1505 of 28 August 2017
- European Commission Regulation (EU) 2018/2026 of 19 December 2018 amending the European Parliament
- Annexes I, II, III and IV to Council Regulation (EC) No 1221/2009.

The environmental report has been approved in 13.March 2025.

Andres Martma

EMAS verifier

Bureau Veritas Estonia OÜ

www.bureauveritas.ee

EMAS
VERIFIED
ENVIRONMENTAL
MANAGEMENT
EE-000024

HEINZEL GROUP

estoniancell

AS ESTONIAN CELL

Jaama 21 · 44106 Kunda · ESTONIA
Phone +372 687 0000 · Fax +372 687 0099 · info@estoniancell.ee · www.estoniancell.ee
Commercial Reg. no. 10679323 · VAT no. EE100641453
Swedbank · IBAN EE95 2200 2210 2591 0145 · BIC / SWIFT HABAEE2X