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About this report

Partnera's Sustainability Report 2022 covers sustainability at Partnera Corporation and its companies, Foamit Group and KPA Unicon. This report outlines the key aspects and impact of Partnera's as well its companies' responsibility actions and details the progress made within various areas of sustainability. Financial and operational information in this report should be read in conjunction with the information provided in Partnera's Annual report 2022.

Report structure

The primary stakeholders in this report are our customers, employees, partners and owners. In the beginning of the report, Partnera is introduced briefly, and core messages are outlined. The report moves on to describe the strategy, corporate structure, and the material topics of sustainability as well as ambition for the future and commitments. Then the report moves to Foamit Group's and KPA Unicon's material topics and management of sustainability. Finally, the report sums up the development of responsibility and presentation of the results achieved are categorised using environmental, social and economic responsibility.

Reporting principles and practice

The Sustainability Report reflects the scope of entire Partnera and its majority owned companies. Nordic Option is excluded from the reporting scope due it being an associate company.

The reported information has been compiled in the manner required by the GRI standard, using consistent policies and procedures also for Foamit Group and KPA Unicon. Reporting does not yet fully meet the scope of the revised GRI standard, but the aim is to reach the standard in the future. The reporting period is based on the Finnish calendar year and reporting sequence remains as annual (January 1st – December 31st). There is no external assurance of the sustainability indicators. Economic responsibility metrics are compiled from information based on the Board of Directors' Report and the consolidated Financial Statements 2022 that Ernst & Young Oy have audited.

Publication of the report

This report is published in Finnish and English in April 2023. It is available in digital format only and report can be found online at www.partnera.fi. Contact point for questions regarding the report: Jari Pirkola, CEO, jari.pirkola@partnera.fi.



Partnera's 2022 reporting consists of the Annual Report, the Report of the Board of Directors and the financial statements, as well as the Sustainability report.

Partnera in brief

Partnera's story – Our journey towards sustainable value creation

Partnera is an international business group that creates a more responsible society and promotes positive environmental impacts. The group currently includes Foamit Group, a glass recycling and foam glass manufacturing company, and KPA Unicon, a clean energy solutions company. Partnera is the majority owner of these companies and actively develops their business.

Partnera also has other holdings, including a stake in the venture capital fund Nordic Option, which invests in growth-stage companies primarily in Northern Finland. Partnera's history of more than 140 years shows its courage to modernise its business to keep pace with changes in society.

Partnera is the majority owner of Foamit Group and KPA Unicon

Foamit Group Oy is one of Europe's leading glass recycling and foam glass manufacturing company. It operates through its subsidiaries Uusioaines Oy in Finland, Hasopor AB in Sweden and Glasopor AS in Norway. Foamit Group's aim is strong growth and internationalisation by turning the circular economy into a business. Foam glass is a sustainable choice for lightening and insulating material used in infrastructure and building construction businesses. KPA Unicon Group Oy is a one of the leading manufacturers of clean energy solutions in the Nordics. Its energy production solutions reduce emissions and decrease the reliance on fossil fuels through the utilization of biomass and by-product streams. Offered life-cycle service promote efficiency of energy production and longevity of energy production facilities. KPA Unicon operates worldwide, and it has offices in Finland, Bosnia-Herzegovina, Chile, Croatia, France, Russia, and Spain.

Key figures for 2022

85.4 MILLION NET SALES

-10.9 MILLION

COMPARABLE OPERATING PROFIT

-769 MILLION

PROFIT BEFORE APPROPRIATIONS AND TAXES

31.5

Highlights of the year 2022

Highlight – Foamit Group

Verified LCA provides in-depth understanding of Foamit's environmental impact

In 2022, Foamit performed a new life cycle assessment (LCA) covering all environmental impacts of foam glass products and processes in all market areas. The Environmental Product Declaration (EPD), which contains third-party verified information about the LCA of Foamit foam glass aggregate, was published in November 2022. An EPD is a standardized and transparent way of publishing life cycle assessment (LCA) information.

The LCA shows which of the product's materials and processes have the greatest impact on the environment and the results will be used to prioritize measures in product and process development. The Foamit Group EPD report considers the entire life cycle from raw material to end of life, covering the modules of extraction and processing of raw materials(A1), their transportation to the production plant (A2), the foam glass aggregate manufacturing process (A3), end of life (C1-C4) and potential benefits (and loads) from the reuse and recycling of the foam glass aggregate at the end of life (D). In addition, this was the first foam glass manufacturer EPD that considers the oxidation of silicon carbide into carbon dioxide in the foaming process.

"Foamit Group is one of Europe's leading glass recycling and foam glass manufacturing companies."

The Partnera Group

employs people in nine countries including Bosnia-Herzegovina, Chile, Croatia, Finland, France, Norway, Russia, Spain and Sweden. It's headquarters is in Oulu, Finland.



299 PERSONNEL

Highlights – KPA Unicon

Based on our first handprint calculations, on average approximately 0.2 t CO₂eq are avoided per each MWh energy generated through our renewable energy solutions compared to alternative combustion solutions. The calculations are based on products delivered in 2021–2023 which fuel is not a waste stream (e.g. waste gas or wood waste) generated at or adjacent to the site where the plant is located.

According to information provided by ArcelorMittal Zenica, the main joint-venture partner of the Zenica plant, the new plant delivered by KPA Unicon reduced sulfur dioxide emissions by 80% compared to the old coal-fired boiler, and it significantly reduced nitrogen dioxide and particulate emissions. The new plant also reduced total carbon dioxide emissions of the steel plant by 18% and eliminated the use of 150,000 tons of coal a year. The Zenica plant is a great example of the GHG emissions reductions enabled by utilizing waste gas as a fuel.

"KPA Unicon Group is one of Nordic's leading manufacturers of clean energy solutions."



Towards a more sustainable future

The year 2022 showed once again that the world is in urgent need of a change of direction towards a more sustainable future. The war that started in Ukraine proved that democratic development was weak in some European countries. Similarly, the agreement reached at the UN climate conference did not contain sufficient measures to tackle climate change. Despite this, responsibility became an increasingly important theme in the actions of companies and individuals. The achievements also show that the work delivers results. For example, Finland's emissions have already been cut almost in half from their peak in the early 2000s by developing and implementing new solutions and technologies.

We at Partnera are also actively contributing to this change of direction. We have linked our own target to the United Nations Sustainable Development Goals (SDGs) to ensure our contribution to global sustainable development. We own and develop companies that accelerate the transition to a responsible use of natural resources and a carbon neutral world.

Our subsidiary Foamit Group receives, and processes recycled glass to produce glass cullet, lightening and insulating material and other products for industry. The use of recycled glass as a raw material saves virgin resources and reduces the carbon footprint of construction. KPA Unicon designs and implements clean energy solutions, upgrades, maintains and operates existing energy production plants and provides energy generation capacity as a service. These solutions replace fossil fuels as an energy source by using a variety of biomasses and by-products and waste streams.

The last few years have been very busy for Partnera, as our activities have grown through acquisitions and investments. During 2022, developments in the operating environment and the war in Ukraine presented us with a range of challenges as energy and raw material costs rose and general uncertainty weakened the outlook for our customer industries. The main challenges were caused by the slower than expected completion of KPA Unicon projects, and we also had to be prepared for credit losses at KPA Unicon's Russian subsidiary. The year also meant many positive developments. We received a major order for foam glass for a hospital in Drammen, Norway. Foam glass was chosen as a lightening material because of its technical and environmental properties.

Change always brings opportunities and we are developing our operations in a more sustainable direction. In this report, we share our ambitions and successes in 2022. Enjoy your reading.

Jari Pirkola CFO

Partnera's holdings

CORPORATE STRUCTURE



- A glass recycling and foam glass manufacturing company aiming for strong growth and internationalization by turning the circular economy into a business.
- The Foamit Group consists of Uusioaines Oy, Hasopor Ab and Glasopor AS, which together form one of Europe's leading foam glass manufacturers.
- KPA Unicon designs and implements new clean energy solutions for domestic and international customers.
- KPA Unicon's solutions use biomass and by-product streams to reduce the use of fossil fuels.
- Venture capital fund investing in growth-stage companies primarily in Northern Finland.
- A stake in the investment group Finda, both directly and indirectly.
- Liquid assets invested in low-risk bonds and other investment instruments.
- Project investments in which Partnera acts as a financier of a project phase, for example.

Partnera's strategy and company structure

Our target has remained the same over the last four years: To create value and a sustainable future.

- 1. We channel our investments into strategic ownerships according to the principles of impact investment.
- **2.** We are a majority owner and develop our companies in an active and sustainable manner.
- **3.** We seek to seize the opportunities arising from sustainable development to grow our business both organically and inorganically on an international scale.

Partnera Corporation is an international business group comprising of companies focused on promoting sustainable development.

Purpose and vision

Our purpose is to create value and build a more sustainable future by achieving measurable and positive impacts on the environment and society. Our Sustainable Development Goal targets are closely linked to our vision to be a partner and impact investor^{*)} that uses its capital to develop business that has a positive impact on society.

Strategy

We aim to advance sustainable development both nationally and internationally. We focus on our core themes: promoting the transition towards a sustainable use of resources and a carbon neutral society. Our focus that is derived from global megatrends also brings excellent business growth opportunities. We allocate our operations, investments, expertise, and networks to develop businesses within low carbon infrastructure and the circular economy. At the same time, we provide our owners the opportunity to act as impact investors and own unlisted companies that achieve measurable and positive impacts on the environment and society.

Partnera's strategy is derived from global megatrends. Our strategy focuses on two key ambitions: moving towards the sustainable use of resources and helping create a carbon neutral society. These goals are reflected in our businesses, which promote sustainable development in the circular economy and energy industry: the glass recycling and foam glass manufacturing company Foamit Group and the clean, renewable energy solution supplier KPA Unicon.



* As an impact investor, we aim to generate specific beneficial and measurable social or environmental effects in addition to financial gains.

Sustainability at Partnera

At Partnera, we understand that our actions have an impact on the future. Therefore, we dedicate our resources – our business, investments, expertise and networks – to creating sustainable value and building a better future.



e believe in industries that drive the transition to sustainable use of resources and a carbon neutral society. We also believe that this is where future growth will occur. Consequently, we seize the excellent growth opportunities arising from sustainable industries to create value.

In our upcoming investments and when developing existing businesses, we seek to create company value and generate measurable and positive impact on the environment and society.

Stakeholders

Partnera's businesses reach a wide range of stakeholders including employees, customers, business partners, shareholders, co-investors and other investors as well peers, vendors and different industry associations. Partnera frequently engages with their stakeholders in different ways and have taken the stakeholder into perspective when conducting a materiality analysis in 2022. Other than that, the stakeholder engagement program is defined in Partnera's communications strategy and guided by the annual communications calendar.

Material Topics

Stakeholder priorities are constantly changing, and we must continually evolve to meet expectations. Partnera's materiality assessment identifies the key sustainability topics for Partnera and its stakeholders. It was completed in November 2022 and helps identify and prioritize the issues that matter most to our business and stakeholders. As part of the broader materiality analysis process, the main trends and impacts in Partnera' business context were identified and analyzed to identify their risks, limit their potential negative impacts and take full advantage of their opportunities.

The top five most material topics are:

- Transparency, reporting & stakeholder engagement – Accurate and timely reporting to stakeholders, understanding how stakeholders currently keep themselves informed, reporting transparently and executing a systematic approach to stakeholder management.
- Circular economy Raw material recycling, improved product durability & extended product lifetime as well as reduction of consumption of virgin raw material.
- Climate handprint of products and services – Partnera's role as an enabler of the green transition. Verified positive climate impacts of Partnera Corporation.
- Climate footprint of own operations The entire group's climate footprint, emissions monitoring, measurement, setting goals and reducing the carbon footprint.
- Risk management Identifying liability, reputational and climate risks and opportunities, minimizing and managing risks and exploiting opportunities.

The results of the materiality analysis and other insights from the stakeholder surveys will ultimately guide our annual sustainability strategy work in 2023, our risk management process and the impacts we focus on. In addition, both Foamit Group and KPA Unicon have carried out materiality assessments for their respective companies.

Ambitions for the future

Environmental responsibility targets for the near future relate to the climate impact of our products, the climate impact of our operations, climate handprint, pollution prevention with our products, and the circular economy.

Social responsibility targets include safety in all operations, the harmonization of reporting and ensuring the availability of data. We also seek to ensure employee engagement, conduct employee surveys, and start measuring eNPS with our sustainability targets. In 2022, we invested in both management and employee trainings.

Governance targets for the near future include the implementation of our Corporate-wide Supplier Code of Conduct and the creation of a new Corporate-wide sustainability policy.

Responding to changing megatrends, risks and opportunities

Partnera's companies provide services and products that enable the shift to a low carbon and circular economy. The focus to invest in industrial companies that enable the shift towards a low carbon and circular economy for the rest of society is the main megatrend that is currently influencing, and will continue to influence, our sustainability agenda. Understanding how the environment around us changes and the risks and opportunities these changes bring is an essential part of running a successful business. Partnera's Board of Directors is responsible for risk management. Among other duties, the Board decides the Group's risk appetite and approves the Risk Management Policy. The risk management policy includes, among other things, risk definition and classification, risk management principles, roles and responsibilities, risk mapping and reporting principles. In the Partnera Corporation, the development of the reference framework for risk management and risk reporting is the responsibility of the group's CFO, who also supports the implementation of risk management in the subsidiaries.

Partnera's goal is to do profitable business while building a more sustainable future by creating measurable and positive impacts on the environment and society. Sustainable development plays an important role in Partnera's strategic decisionmaking, which is supported by the corporate sustainability strategy and targets. When investing in new businesses and when developing existing businesses, Partnera's goal is to create company value and generate measurable and positive impact on the environment and society. With every investment and acquisition made, the company follows a detailed due diligence process covering environmental, social and governance (ESG) aspects in addition to financial and legal aspects.

Action plans prepared in different due diligence streams are taken into use following the closing of a transaction, and the actions are prioritized for implementation during the integration phase. Progress is discussed and monitored in the Board of Directors' meetings.

Corporate responsibility and governance

Partnera Corporation is a limited liability company with headquarters in Oulu, Finland. Partnera's administration is divided between the Annual General Meeting, the Board of Directors and the CEO, in accordance with the Companies Act and the provisions of the company's Articles of Association. In all its operations, Partnera Corporation complies with laws and regulations issued pursuant to them.

Partnera's shares are listed on the Nasdaq First North Growth Market Finland. As a listed company, Partnera complies with the Finnish Securities Markets Act and follows the rules of Nasdaq First North Growth Market Finland.

Partnera's operations are also guided by Corporate policies, a code of ethics and other rules. Partnera's policies set the minimum levels to which the corporate companies must comply. Additionally, the corporate companies may follow additional and more specific policies. Partnera's Board of Directors approves the Corporate Sustainability Strategy and Targets. The Corporate Sustainability Strategy and Targets are reviewed and updated as necessary. Given the limited time elapsed since the acquisitions of KPA Unicon and Glasopor AS in

Partnera materiality risks & opportunities, 2022

OPPORTUNITIES

- Continued focus on enabling sustainable development
- Become a pioneer in circular economy solutions
- Enhance stakeholder engagement & ownership role
- Impact investing strategy in industrial solutions



RISKS

- Stricter regulation regarding sustainability matters in the EU (both threat and opportunity)
- Uncertain political and economic environment
- Strategy execution risk and staying ahead of the competition

2021, the harmonization of governing policies and procedures continues as part of the integration. In 2023, Partnera will implement a new sustainability policy spanning the whole group of companies.

Sustainability management at the corporate companies

Managing sustainable practices is a key priority at both Foamit Group and KPA Unicon. At Foamit Group, different aspects of sustainability are discussed in Executive Management team meetings. At KPA Unicon sustainability from different perspectives is discussed in Executive Management team meetings and sustainability performance data is presented and discussed as part of management reviews biannually.

Certifications

Certified management systems help our businesses to identify and meet customer requirements and to systematically improve product quality, environmental and occupational health & safety management.

Foamit Group's subsidiaries Glasopor and Uusioaines have certified ISO 14001, ISO 9001 and ISO 45001 systems. Glasopor has also obtained certificates for ISO 50001 management systems.

KPA Unicon has certified ISO 9001, ISO 14001 and ISO 45001 management systems in place. KPA Unicon has set a target to roll out ISO 9001, ISO 14001 and ISO 45001 certifications to all its international locations as well. In all developments related to information security, requirements of ISO 27001 information security management system are considered to ensure quality and continuous development of information security.

Code of Ethics

Partnera Corporation and its employees are committed to acting responsibly and ethically towards colleagues, customers, partners and other stakeholders. Partnera is committed to the principles of the International Declaration of Human Rights and does not condone acts that violate human rights. Partnera does not accept bribery or corruption in any form and does not give or receive direct or indirect gifts or benefits that may be considered bribes.

These key principles and other guidelines for good business practice are brought together in the Partnera Code of Ethics that is followed in its day-to-day operations and decision-making. The Code of Ethics applies to all the employees of the Corporation's companies, regardless of their job description and position, and actions that violate the Code of Ethics may result in sanctions. We also expect our partners to comply with our Code of Ethics.

Mechanisms for advice and concerns about ethics

Partnera has implemented a communication channel for reporting concerns about unethical behavior or violations against the Finnish Securities Markets Act. The concern can be reported by e-mailing an authorized person outside the company at whistleblowing@partnera.fi. If there is a suspected or proven violation, the matter shall be brought to the attention of competent authorities.

Foamit Group took into use the anonymous Whistleblower channel during 2022 (Winningtemp). Whistleblower channel was communicated and introduced to all employees. In 2023, KPA Unicon has taken into use an anonymous whistleblowing channel for all KPA Unicon employees and suppliers. The reports are handled by an appointed whistleblowing team which is responsible for handling the matter and suggesting actions to be taken to the Board of Directors.

During 2022, the number of grievances were zero at Partnera. In Foamit Group there are four (4) reports of discrimination and harassment or bullying reported via anonymous weekly survey. In 2022 KPA Unicon had one (1) serious reported incident of discrimination. The processing of incidents was identified as an area that needs development and therefore the process of grievance handling was updated in 2022.

	FOAMIT GROUP OY	KPA UNICON GROUP OY	NORDIC OPTION OY1]
Established	Established in 2018 (as Partnera Glass Recycling Oy)	1990	1994 (previously Teknoventure)
Investment year(s) and ownership	2018, 2019, 2021,2022 (63% ownership)	2021 (70% ownership)	2014 (34% ownership)
Operations	Glass recycling and foam glass manufacturing	Solutions provided for clean energy	Investments in SMEs in northern Finland
Company structure	Subsidiaries include: Uusioaines Oy (founded in 1994), Hasopor AB (founded in 2006), and Glasopor AS (founded 2002)	Parent company to KPA Unicon Group Oy: Due2Energy Oy. Subsidiaries of KPA Unicon Group Oy include: KPA Unicon Oy, OOO KPA Unicon, KPA Unicon Bosnia D.O.O., KPA Unicon Chile SPA, KPA Unicon D.O.O., TOV KPA Unicon, KPA Unicon France SAS, Toplana Zenica D.O.O (15%), KPA Unicon Infra Oy, Leighton Services Spain SL, Varmalämmitys (40% A shares, 10% B shares)	Operations in Finland
Countries of operation	Finland, Sweden, Norway	Finland, Bosnia-Herzegovina, Chile, Croatia, France, Russia and Spain	Finland
Personnel in 2022 (vs 2021)	98 (100)	198 (205) ^{2]}	2 (2)
Revenue MEUR in 2022 (vs 2021)	45.7 (30.6)	39.7 [47.6] ^{3]}	N/A

Excluded from the report
 Total personnel covering all above listed companies
 Revenue for the period of 1 May – 31 December 2021 due to time of the acquisition

United Nations Sustainable Development Goals

We have adopted the United Nations Sustainable Development Goals (SDGs) and their targets as our primary framework. Partnera's priorities and focus areas are aligned with the SDGs 7, 8, 9 and 13 as follows:



Access to affordable and sustainable energy by 2030 requires investments in clean and renewable energy including for example solar and wind power and fossil-free heating. Partnera's objectives are to provide energy solutions that increase the share of renewables, waste and industrial side streams in energy generation and to increase energy efficiency for example by the means of heat recovery and energy storage.



Partnera is committed to sustainable economic growth by increasing productivity and with the help of circular solutions and technological innovations. With sustainable growth, Partnera is able to improve the health, safety and well-being of the employees of its companies and to support professional development of the personnel. One of the Corporation's targets is a return on equity (ROE) that exceeds 10% per year as well as a stable dividend for shareholders.



Sustainable investments in infrastructure and innovations are crucial for advancing the low carbon and circular economy, maintaining economic growth and developing new, sustainable technologies. Technological development is the key to finding sustainable solutions for economic and environmental challenges, such as the creation of new jobs and improving energy efficiency. Partnera's objective is to develop industrial activity, provide sustainable solutions such as foam glass aggregate for the construction sector, and to invest in the development of clean energy solutions and innovations.



Global warming will cause irreversible detrimental damage. With political will and the help of various technical solutions, it is still possible to limit the global temperature rise to a maximum of 1.5°C. Partnera aims at reducing the carbon footprint of their operations to reach carbon neutrality by 2035. In addition, Partnera provides solutions which enable their customers to reduce their carbon footprint in turn.

Commitments, targets and achievements 2022

In 2022, our sustainability work focused on climate impacts, streamlining sustainability operations and improving social aspects. New tools and processes have been adopted across the corporation and investments were made in responsible recruiting, the onboarding process, employee training and development as well as employee wellbeing.

Foamit Group focused on understanding the environmental impacts of Foamit Group's products and processes better. Foamit Group issued its first ever Foamit Group level EPD (Environmental Product Declaration). It is verified by Tecnalia Certification and published in the Environdec, also named The International EPD[®] System, a global program for environmental declarations. The system enables registration and central filing and publication of EPDs.

Climate workshops were held with KPA Unicon to calculate Scope 3 emissions and the carbon handprint of KPA Unicon's products and services. KPA Unicon reformed their organizational model to better leverage the competence within the organization.

In 2021, the data relating to the environment and climate change was too nascent to report but during 2022, significant progress to calculate GHG emissions was made and Partnera is now able to report Scope 1 and Scope 2 emissions in full for both KPA Unicon and Foamit Group, as well as the most material Scope 3 categories for KPA Unicon. In our last year's Sustainability Report, we had stated a goal of climate neutrality by 2030 on Partnera level. Now equipped with a deeper analysis of our investment needs and possibilities, and the changes in what type of power generation plants KPA Unicon owns and operates now, and in the foreseeable future, we have revised the target to becoming climate neutral in our own operations (corresponding to Scope 1 and 2 emissions as per GHG protocol) by 2035, in line with Finland's national climate neutrality target.

Our sustainability targets are as follows:

SDGs: 7, 9 and 13

MATERIAL TOPIC	TARGET SET IN 2021	UPDATED TARGET	ACHIEVEMENTS IN 2022	PROGRESS
Climate impact of ourproducts	2022: Set a key performance indicator (KPI) and a target demonstrating progress in an annual GHG reduction achieved with clean energy solutions.	2023: Set a key performance indicator (KPI) and a target demonstrating progress in an annual GHG reduction achieved with clean energy solutions.	We calculated our avoided emissions for the first time. However, given the calculation rules our handprint could be calculated only for the products delivered in 2021-2023 whose fuel is not a waste stream (e.g. waste gas or wood waste) generated at or adjacent to the site where the plant is located. Work will continue to assess how to track, measure and report the impact from other products and services.	In progress
Climate impact from our own operations	100% of the total purchased electricity at the production plants and workshops came from renewable sources by the end of 2021.	Purchase only renewable energy at the production plants and workshops	All purchased electricity at both KPA Unicon's workshops and Foamit Group's production plants came from renewable sources in 2023.	Achieved
Climate impact from our operations	2022: Calculate Scope 1, 2 and 3 GHG emissions and define a medium- (2030) and long-term climate strategy (2050) with the targets and the related actions.	Calculate Scope 1, 2 and 3 GHG emissions and define a long term (2050) climate strategy and actions for both the medium term (2035) and long term (2050) strategy.	Scope 1 and 2 GHG emissions were calculated for 2022 for both Foamit Group and KPA Unicon. Scope 3 GHG emissions were calculated for KPA Unicon, covering most material categories. Carbon neutrality in own operations by 2035 was set as a medium term target.	In progress
Climate impact from our operations	2030: Become carbon neutral.	2035: Become carbon neutral in own operations.	In the light of more detailed analysis about investment needs to reach the target, we redefined last year's commitment.	In progress
Pollution prevention with our products	2022: Define annual sales and/or pollution prevention KPIs and targets for the clean energy solutions.	Operate in compliance with applicable environmental laws and regulations and permit requirements for clean energy solutions.	Limited air emission measurements were carried out at KPA Unicon's joint venture heating plant in Kälviä, Finland, in 2022 and the JV power plants in Zenica and Aviles were equipped with continuous emissions measurements to enable monitoring of compliance with the applicable limit values. The target was redefined and is pollution control focused.	In progress
Circular economy	Set measurable target in 2022	Total amount of recycled glass in our operations increases by 3% starting 2023 compared to 2022 baseline.	The baseline for 2022 for received and processed recycled glass is 198 968 tonnes.	Achieved

Attracting new and retaining existing employees is necessary for our success and therefore employee well-being, health and safety and training were and continue to be our social focus areas. Our targets for 2023 are the following:

SDG 8

MATERIAL TOPIC	TARGET SET IN 2021	UPDATED TARGET	ACHIEVEMENTS IN 2022	PROGRESS
Health and safety	Zero accidents at our own production plants/ workshops and in projects for the next 12 months.	Zero lost time injuries in our own production plants, workshops and in projects over the next 12 months.	In 2022, a number of lost time injuries was 8 in the Corporate. There is no change at the Corporate level in comparison to 2021 results. A number of recordable injuries within the Corporation dropped from 17 to 15. KPA Unicon prioritized health and safety in 2021 and 2022 and as a result its number of LTIs reduced 28.6% and a number of recordable accidents by 20% in 2022.	Not achieved
Health and safety	2022 The harmonization of accident and incident reporting in the Corporation.		Unified reporting across the Corporate according to GRI standards. Both KPA Unicon and Foamit Group have independently improved Health & Safety related data collection. Within Foamit Group companies this harmonization started in late 2022 and will continue in 2023.	In progress
Health and safety	2023 Lost Time Incident (LTI) and Lost Time Incident Frequency (LTIF) data available for all used contractors and key suppliers.		KPA Unicon began to include requirements to report lost time incidents frequency (LTIF) data in contractor and subcontractor agreements in 2021. Furthermore, methods and tools for reporting and processing LTIs, near misses and safety observations were updated and training on reporting, responsibilities and roles was arranged in 2021 and 2022. Foamit Group is in the process of harmonizing the data collection and reporting system within the Group. Harmonization work started in late 2022 and will continue in 2023. Data not available for contractors or key suppliers.	In progress
Employee engagement and well-being	2022 Employee engagement surveys carried out, systems for implementing and monitoring improvement actions established and targets set.		In 2022, employee engagement surveys were performed in both Foamit Group and KPA Unicon and both have programs in place for improvement actions. Foamit Group launched weekly surveys in 2022.	Achieved
Employee engagement and well-being	2025 Employee Net Promoter Score, eNPS, in both Groups exceeds 30.		Employee engagement surveys were performed at KPA Unicon and Foamit Group in 2022 and action plans prepared to meet the target.	In progress

Responsible sourcing will be one of our shortterm focus areas. Our targets for 2022 relate to the harmonization of the sourcing procedures and their implementation, as well as carrying out customer satisfaction surveys in a coordinated way in both Groups. For 2022, we are committed to the following:

SDG 9

MATERIAL TOPIC	TARGET SET IN 2021	UPDATED TARGET	ACHIEVEMENTS IN 2022	PROGRESS
Responsible sourcing	2022 One supplier Code of Conduct for the Corporation and signed by all our suppliers.	2025: Signed Supplier Code of Conduct received from 90% of key suppliers.	One supplier Code of Conduct is in use. At Foamit Group 41% of the selected key suppliers signed the Supplier Code of Conduct in December and the supplier engagement process continues in Q1/2023.	In progress
Customer satisfaction	2022 Customer satisfaction surveys carried out for both Groups and if possible, using the same methodology throughout the Corporation. KPIs set.	2023: Set KPIs in Corporate's companies for customer satisfaction.	Customer satisfaction surveys have been carried out at both companies. Methodologies cannot be harmonized due to company specifics. Customer satisfaction surveys' harmonization and implementation planned for 2023 at Foamit Group.	Partly achieved

Foamit Group's approach to sustainability

Foamit Group offers a circular economy solution by receiving, and processing recycled glass to produce glass cullet for packaging industry and foam glass as a lightening and insulating material. While providing a circular alternative which reduces the need for virgin raw material, Foamit Group works to make their operations more responsible and sustainable every year.



SUSTAINABILITY REPORT 2022

oamit Group set a goal in 2023 to have all its subsidiaries certified according to the ISO 9001 quality management system standard, ISO 14001 environmental management system standard and ISO 45001 occupational health and safety management system standard. Foamit Group is also committed to promoting the United Nations Sustainable Development Goals and has set targets, actions and KPIs to work towards the goals. Foamit Group plans to renew its materiality assessment in 2023 or 2024 to identify actual and potential impacts as well as get the stakeholder perspective rooted more strongly in the sustainability strategy.

Material topics

Foamit Group's most recent materiality analysis was conducted in 2021, and the company also adopted the UN Sustainable Development goals as part of their targets.

The materiality assessment was carried out by listening to Foamit Group's internal and external stakeholders to identify actual and potential sustainability impacts to the business. The stakeholder groups included employees, suppliers, customers, financiers, neighbors to Foamit Group production site in Finland, other representatives from the supply chain and other representatives from the energy sector.

The material topics identified were:

- To minimize own carbon footprint and become carbon neutral
- To focus on environmental factors that affect the immediate surrounding environment including dust and noise
- To develop the skills of employees and ensure proper information and retraining of all
- The development of new solutions to ensure circular economy in both own and stakeholders' operations.



Foamit Group supports all seventeen SDGs, and the goals 8, 9, 13 and 17 have been identified as the ones where Foamit Group has the largest impact through their operations and products. For these goals and the company's approach for the near future has been defined:



Foamit Group: employee training and well-being. Safe place to work.

- Active dialogue with all employees regarding well-being at work and occupational health and safety
- Active mapping of best practices to identify and reduce or eliminate risks factors at our plants

SDG 9 Industry, innovation and infrastructure

Foamit Group: development of new circular economy solutions

- Innovations promoting the circular economy are a significant part of our business.
 We measure and report projects that are completed with a significant sustainable innovation outcome. Our target is to have three (3) such projects per year
- Exploring new opportunities for utilizing glass, including e.g. new foam glass products for industrial projects



Foamit Group: minimizing our carbon footprint and becoming carbon neutral

- Updating our carbon footprint calculations and the verification of the EPD reports
- Creating a roadmap to reduce emissions. The roadmap will help us to monitor and reduce our carbon footprint and increase our carbon handprint
- Analyzing emissions of our supply chain. Target to have a thorough understanding by 2025
- Creating responsible sourcing principles for our entire supply chain and monitoring their implementation

SDG 17 Partnerships for the goals

Foamit Group: cooperation with institutions and policy makers to promote the circular economy

- Actively searching for partners with whom we can find new circular economy products, services and production methods, as well as digital solutions to promote the circular economy
- **2.** Exploring new opportunities to obtain sustainability certifications and commitments
- **3.** Raising the profile of the circular economy. For example, we cooperate with schools and educational institutions and with clusters enhancing circularity. In Sweden, we continue the cooperation with the Research Institutes of Sweden (RISE)

Commitments, targets and achievements 2022

Foamit group short- and medium-term ESG commitments

MATERIAL TOPIC	TARGET SET IN 2021	UPDATED / NEW TARGET	ACHIEVEMENTS IN 2022	PROGRESS
Employee training and well-being. Safe place to work.	2022: Employee engagement surveys are conducted, and their results develop positively. A digital survey is in use.		Digital survey is in use. Work continues in 2023 to achieve positive results.	Not achieved
Employee training and well-being. Safe place to work.	2023: Each employee is entitled to 3 days of training of their choice annually.		No action yet.	Not started
Employee training and well-being. Safe place to work.	2030: The concentration of dust in the ambient indoor air at the production plants is below the statutory limits.	Target no longer valid.	Target removed from the public commitments list as the matter is prioritized in daily operations.	
Employee training and well-being. Safe place to work.		Zero major accidents. Safety observations are reported in all countries and their amount develop positively.	Harmonization of the accident, incident and observation reporting within Foamit Group subsidiaries. This work will continue in 2023. 2022: Three lost time accidents in FG.	In progress
Management system certifications		All Foamit Group sites are ISO 9001, 14001 and 45001 certified by the end of 2023.	2022: Harmonization of the management systems. Norway already has these certifications. In 2022, Finland expanded the scope to cover also occupational health and safety (ISO 45001). Target in 2023 is to prepare the certified management systems also in Sweden.	In progress
Global Sustainability Ratings- EcoVadis		New target 2023: Foamit Group site Uusioaines Oy is conducting EcoVadis Assessment 2023. Goal is to achieve minimum Bronze-level. Target is to expand the scope to cover other Group countries in the future.	No action yet, new target 2023.	
Circular economy	2030: We are an active player in promoting the circular economy and removing its barriers both nationally and internationally.	Target no longer valid due to overlapping and similar targets. For circular economy targets see below.		
Circular economy	2050: We are known as one of the key players in the circular economy.	Target no longer valid due to overlapping and similar targets. For circular economy targets see below.		

MATERIAL TOPIC	TARGET SET IN 2021	UPDATED / NEW TARGET	ACHIEVEMENTS IN 2022	PROGRESS
Circular economy	2022: We will set a measurable target for the development of new circular economy solutions.	Target no longer valid as such. See below for circular economy targets.		
Circular Economy	2025: We can demonstrate the effectiveness of our operations by measuring the share of new business in net sales (2025).	2023: We can demonstrate the effectiveness of our operations by measuring the share of new business in net sales.		In progress
Circular Economy		Zero production raw material waste (glass waste, powder waste and foam glass waste) in foam glass production plants	New target, project will start in 2023. The objective is to eliminate the storage and potential deposits of glass waste, powder waste and foam glass waste by limiting the creation of waste, reusing it and/or making products out of it.	Not started
Circular Economy	We are well-known player in our industry, who shares information and expertise regarding the circular economy as well as innovation throughout the supply chain and our stakeholders. We measure and report started and finished innovation projects.	Target no longer valid due to overlapping and similar targets. For relevant circular economy target see below.		
Circular Economy	2030: We are playing an active role in finding new circular economy solutions that can be proved effective.		Our focus in 2022 was on being an active member in national and international associations promoting the circular economy.	In progress
Minimizing our carbon footprint and becoming carbon neutral	2022: Short term: Update of our carbon footprint calculations (Scope 1 and 2) and verification of the Environmental Product Declaration (EPD) at Group level.	2023: Target is to define business goals for scope 3, review reporting principles, identify scope 3 activities and set the scope 3 boundary	Scope 1 and 2 calculations were calculated for 2022 as part of this reporting project. A group-wide EPD was issued to cover all Foamit Group operating countries and foam glass planst.	Achieved
Minimizing our carbon footprint and becoming carbon neutral	2023: Reduce overall net energy consumption by 5% per produced cubic meter of foam glass compared to consumption levels in 2022.		New target, work starts in 2023	Not started
Minimizing our carbon footprint and becoming carbon neutral	2050: We achieve carbon neutrality.	2035: We achieve carbon neutrality in our own operations.	Carbon footprint and handprint calculations form the basis for GHG emissions reduction roadmap and the work is ongoing. Target revised to reflect Partnera Corporation's carbon neutrality target.	In progress

MATERIAL TOPIC	TARGET SET IN 2021	UPDATED / NEW TARGET	ACHIEVEMENTS IN 2022	PROGRESS
Minimizing our carbon footprint and becoming carbon neutral	2050: Foam glass kilns run on renewable electricity or biogas, or both.	2035: Foam glass kilns run on renewable electricity or biogas, or both.	At Hammar plant in Sweden both mills and all kilns have been run by certified renewable electricity since 2020. This is also the case for the Skjåk plant in Norway. Other plants will follow this progress.	In progress
			In 2022, the investment decision regarding factory expansion and electric conversion of kilns in Onsøy, Norway was made. The investment includes two new, efficient and environmentally friendly electric production lines, as well as the modernization of existing production lines to be electrically driven. The final investment decision will be made after the completion of the investment plan in the first half of 2023.The target was revised from 2050 to 2035 in line with Partnera's climate neutrality target.	
Minimizing our carbon footprint and becoming carbon neutral	2023: The preparation of an emissions reduction road map to monitor and reduce our carbon footprint and increase our carbon handprint.	Target no longer valid due to revised carbon neutrality target and 2023 climate action target.		
Minimizing our carbon footprint and becoming carbon neutral	2050: We achieve energy self-sufficiency.	Target no longer valid due to revised carbon neutrality target.		
Responsible sourcing	2022: The preparation of responsible sourcing principles for our entire supply chain and monitoring their implementation.		In late 2022 we started the implementation of the Corporate level Supplier Code of Conduct.	In progress
Responsible sourcing	90% of our main suppliers will have signed the supplier code of conduct by 2025		New target, work started in 2022.	In progress

CASE Towards an integrated ISO 9001, 14001 and 45001 system at Foamit Group

Certified management systems are a good way of demonstrating responsibility to an impartial third party. The Foamit Group set a target for 2022 that all its subsidiaries will achieve certification for ISO 9001 quality management system, ISO 14001 environmental management system and ISO 45001 health and safety management system. At the same time, we wanted to ensure that our management is systematic, and, in a spirit of continuous improvement, we use our resources wisely and learn from each other.

In 2022, we started a major project to harmonise our HSEQ processes and tools. We started the work in Finland, the result of which was the introduction of a new SharePoint-based HSEQ tool ("HSEQ Toolkit") and the achievement of the new ISO 45001 certification. The new tool includes risk management, compliance, regulatory monitoring, safety and environmental observations, deviations, corrective and preventive actions and documentation. Its modern reporting module enables up-todate reporting of HSEQ metrics and monitoring of the implementation of required measures.

We also started an HSEQ development project in Norway. Glasopor had already been operating under certified management systems, but the tools and processes needed to be updated. In Norway, a unified HSEQ Toolkit is under construction and will be launched in early 2023. Next year, the aim is to build HSEQ processes and tools also in Sweden, where they have not been used before. In 2023, the aim is also to develop a mobile tool for reporting safety observations, for example, in all countries.

Once the HSEQ development project is completed, we will be able to certify that all Foamit Group subsidiaries are operating responsibly and transparently, and we will be better able to develop our HSEQ activities in cooperation between countries.

Foamit Group's management systems and certifications

ТОРІС	CERTIFICATION	UUSIOAINES OY	HASOPOR AB	GLASOPOR AS
Quality	ISO 9001	Х		Х
Environment	ISO 14001	Х		Х
Occupational Health and Safety	ISO 45001	Х		Х
Energy efficiency	ISO 50001			Х

KPA Unicon's approach to sustainability

KPA Unicon is leading the way when it comes to furthering the use of clean energy solutions and reducing dependence on fossil fuels worldwide. The company aims to promote responsible, environmentally friendly, and economically viable energy production as well as be a responsible operator, partner, and employer. As an employer, KPA Unicon is committed to creating a safe and healthy work environment and investing in well-being at work.



PA Unicon's sustainability targets have been derived from the company's strategy and defined with responsible persons of respected business areas and support functions. KPA Unicon's business is based on providing clean energy solutions. Hence, driving positive environmental impacts form the basis for the business.

In 2021, KPA Unicon conducted a materiality assessment, set initial sustainability KPIs and targets and started a wide collection of sustainability data. In 2022 sustainability targets as well as action plans and programs have been further specified and data collection widened to ensure that sustainability data is available for internal use, decision-making and external reporting. In the summer of 2022 sustainability workshops were organized in KPA Unicon's workshops to gain the employees perspectives on sustainability targets, actions and programs. In 2023 an internal workshop focused on sustainability and environmental impacts will be arranged for the Executive Management team.

KPA Unicon continuously develops the sustainability of its operations. The quality, environmental, and occupational health and safety management system is ISO 9001, ISO 14001 and ISO 45001 compliant and certified. KPA Unicon has defined a Code of Ethics and HSEQ policy that guides the operations. These cover everything from complying with laws and regulations and doing business in a fair and sustainable way to respecting human rights and putting safety and environmental matters first. The Code of Ethics works as a day-to-day operating principle and guides KPA Unicon's employees to make the right choices. The company values and the importance of responsible operations are communicated openly to all stakeholders. For suppliers, KPA Unicon has implemented the common Partnera Supplier Code of Conduct.



KPA Unicon Group

www.kpaunicon.com

- Head office: Pieksämäki, Finland
- Offices: Finland, Bosnia and Herzegovina, Chile, Spain, Croatia, France and Russia
- Net sales 2022: EUR 39.7 million
- Number of employees at the end of 2022: 198
- Partnera's stake: 70% (Prounicon Oy 30%)
- Co-owned by Partnera since 2021







EBIT 2021

Material topics

In late 2021, KPA Unicon carried out a materiality assessment to identify actual and potential impacts as well as to assess and prioritize the most material sustainability themes to the company. A wide group of external and internal, as well as national and international stakeholders were considered when conducting the assessment.

Most important themes for external stakeholders were:

- Investing in the creation of solutions and services that promote the circular economy, e.g. by reducing the amount of waste streams needed to produce energy and developing solutions for new energy sources.
- Guaranteeing occupational health and safety in all company functions.
- Focusing on the commitment, development and training of personnel and the creation of personnel with high professional skills.

Most important themes for internal stakeholders were:

- Focusing on the commitment, development and training of personnel and the creation of personnel with high professional skills.
- Focusing on delivering high-quality products and services that meet customer needs.
- Emphasising continuity and flexibility of own operations, reliability of delivery and profitable business.

Managing the impacts

During 2022, the company has continued to focus on the areas identified during the materiality assessment, mainly on people, recruiting, onboarding, learning and development, employee safety and wellbeing, and other social aspects. To improve employee wellbeing and satisfaction at work, KPA Unicon conducted an organizational change to better leverage and ensure competence within project teams and the organization so that employees receive needed amount of management and support throughout the organization.

KPA Unicon supports all seventeen SDGs, and the goals 7, 8, 9 and 13 have been identified as those where the company can have the largest impact through operations and products. For these goals, we have defined short- and medium-term focus areas:

SDG 8 Decent work and economic growth

KPA Unicon focuses on the engagement, training, and development of our personnel, creating highly skilled personnel and ensuring that our employees' skillsets are compliant with local standards, to be a good place to work. To achieve this we will, in line with our human resources (HR) and health and safety (H&S), focus our strategy on:

• Improving employee satisfaction based on the performed employee engagement survey by preparing action plans, setting KPIs and starting to measure and monitor progress

- Implementing a leadership development program
- Providing professional training in key areas
- Extending communication of the company strategy, mission, vision, and values
- Cooperating with external service providers, for example insurance companies and healthcare service providers retained to support implementation of personnel development and engagement programmes
- Improving the orientation process for new employees as well as developing opportunities for employees to develop their expertise through diverse tasks, through changing tasks, and by building career paths inside the company. We will also focus on developing our mentoring process.

The occupational health and safety target is set at zero lost time injuries. To meet this target, the focus will be on developing the occupational health safety culture through providing specific training, improving communication, identifying risks and hazards, bettering investigation of accidents, and improving implementation of corrective actions related to safety observations and all incidents. Data gathering methods are being improved to better indicate the level of health and safety performance and to produce reliable data. Data gathering methods will be extended to include our contractors.





Delivery and development of clean energy solutions and services that promote the circular economy and introduce new energy sources

• Continued evaluation of industries and plants with waste and side streams representing a great potential for energy production and heat recovery and/or fuels not currently utilized

- Encouraging customers to renew existing energy production instead of building new to save resources
- Long-term partnerships and life-cycle service offering to ensure predictable and profitable operation
- The assessment of opportunities and candidates for heat storage solutions in industry and current power generation
- Research and development (R&D) regarding recycled, demanding fuels and new ways of producing energy
- Growth in international markets



- Carbon footprint to update Scopes 1, 2 and to also cover Scope 3 emissions
- Setting carbon reduction targets and defining short- and medium-term actions. Commitments, targets, and achievements 2022

Commitments, targets and achievements 2022

KPA Unicon short- and medium-term ESG commitments

MATERIAL TOPIC	TARGET SET IN 2021	UPDATED TARGET	ACHIEVEMENTS IN 2022	PROGRESS
Engagement, training and development of our personnel – Best Place to Work	2022 Survey on equal opportunities.	Group-wide equality plan will be updated every two years, the next update is H1 / 2023	Equality survey conducted with positive results. Development needs identified.	Achieved
Engagement, training and development of our personnel – Best Place to Work	Obtaining 100 initiatives annually, from all teams and subsidiaries.	Obtaining 100 initiatives annually (from the entire company)	In 2022, 97 initiatives were received. From the beginning of 2023, an appointed initiative committee will start its activity to ensure timely initiative processing.	Not achieved
Engagement, training and development of our personnel – Best Place to Work	2025 Positive eNPS achieved.	2023 Positive eNPS achieved	Annual work community survey was conducted, and development areas were identified from results. According to the results, management and new employee orientation will be focus points for 2023. Management training has started in Q4 / 2022 and will be continued in 2023. Operating instructions for orientation have been updated and close help in recruiting and orientation has been given to supervisors.Organizational change has been implemented in 2022.	In progress

MATERIAL TOPIC	TARGET SET IN 2021	UPDATED TARGET	ACHIEVEMENTS IN 2022	PROGRESS
Safe place to work	Zero accidents in own operations.	2023 Zero lost time injuries in operations	ISO 45001 certification was obtained in 2022.	In progress
Safe place to work	2022 LTIF below 15	2023 LTIF below 10	 LTIF in 2022 was 14,07. Accident investigation has been conducted considering all lost time injuries. Annual risk assessments in workshops have been conducted in 2022. In addition to this in 2022- 2023 work phase specific risk assessments are conducted in production and need for conducting these for other functions will be assessed. Safety focus has been on Tidiness of workshops to avoid any incidents resulting from disordered working environment Continuous promotion of occupational health and safety trough communication Timely processing of reported accidents, near misses and safety observations in workshops and on installation sites HSE (Health, Safety and Environment) inductions 	Achieved
Safe place to work	The development of the analysis and reporting of the types and severity of incidents. Improvement of the processing of the reports.		In 2022, processing of safety-related reports has been continuously tracked and analysis of incidents have been conducted for all reported accidents and near miss-situations. Training on reporting has been conducted for personnel.	Achieved
Safe place to work	2022 Systematically harmonized reporting and analysis methods taken into use.		In 2022, both Partnera subsidiaries have the 12-month rolling incident frequency rate in use.	In progress
Safe place to work	Annual sick leave rate below 3%	Annual sick leave rate below 3%	In 2022, Sick leave rate was 2.52%.	Achieved
Safe place to work	2022 At least 500 proactive actions including for example safety observations and initiatives filed and processed annually to improve safety culture.		In 2022 338 proactive safety measures were reported. Conducting and reporting of proactive safety actions (safety rounds, safety sessions, safety observations, health and safety initiatives and near miss -situations) are continuously encouraged. Processing of reports has been identified to be a development area. In 2023 further attention will be paid to processing of reports and the target for the processing rate (12-month running) of reports is 80%.	Not achieved
Safe place to work	2023 All initiatives and observations processed annually, information from all teams and subsidiaries.		 2022: Processing rate of reported Initiatives: 46.39% Safety observations: 77.02% Environmental observations: 0% In 2022 97 initiatives, 234 safety observations and 4 environmental observations were reported. Reporting activity of subsidiaries low, and further communication will be conducted in 2023. 	Not achieved
Safe place to work	2023 Extending the incident reporting and analysis methods to cover (sub)contractors at all production and installation plants.		Communication with subcontractors has taken place in 2022 and will be continued to ensure reporting in 2023.	In progress

MATERIAL TOPIC	TARGET SET IN 2021	UPDATED TARGET	ACHIEVEMENTS IN 2022	PROGRESS
Safe place to work	2025 Health and safety performance criteria set for (sub)contractors.		The process for supplier HSEQ-assessment has been updated and HSEQ-information from material suppliers will be collected in 2023 to help create the health and safety performance criteria.	In progress
Development and delivery of clean energy solutions	Targets will be defined in 2022.	2023: Start assessing how to track, measure, and report the impact from the products utilizing waste streams aiming at later setting a key performance indicator (KPI) and a target demonstrating progress in an annual GHG reduction achieved with clean energy solutions.	Avoided emissions calculated but due to calculation rules not covering products utilizing waste streams.	In progress
Minimizing our carbon footprint	2022 Calculate greenhouse gas (GHG) emissions for Scope 1, 2 and 3 GHG emissions and define a medium (2030) and long-term climate strategy (2050) with the targets and the related actions.	Calculate Scope 1, 2 and 3 GHG emissions and define a long term (2050) climate strategy and actions for both the medium term (2035) and long term (2050) strategy.	 GHG inventory calculated comprehensively for Scopes 1 and 2, and for Scope 3 categories 1, 6 and 11, of which 1 and 11 are by far most material. Medium term climate target set: KPA Unicon complies with Partnera Corporate's carbon neutrality target for 2035. 	In progress
Minimizing our environmental impact	2022 KPIs and targets set and action plans in place.		Medium term climate target set:KPA Unicon compliant with Partnera Corporate's carbon neutrality target for 2035	Achieved
Minimizing our environmental impact	2022 Particulate and NOx emissions from our joint venture power plants in commercial operation verified.		Emissions measurements conducted in Kälviä. Continuous emissions measurements in place in Zenica and Aviles joint venture boiler plants.	Achieved
Minimizing our environmental impact	2030 Modernization of the backup energy sources at our workshops.	2035 Modernization of the backup energy sources at our workshops.	Target revised in line with Partnera's carbon neutrality target. The current backup energy sources are light fuel oil fired but small in capacity, these will be modernized before 2035.	Not started
Minimizing our environmental impact	2022 90% of the waste originating from production recycled and recovered.	2023: 90% of the waste originating from the production recycled and recovered.	Our non-hazardous waste utilization rate in 2022 was over 99%%.	Achieved
Sustainable operations		2040 All KPA Unicon's operations covered by a certified management system (ISO 9001, ISO 14001 and ISO 45001)	-	Not started
Sustainable supply chain		2025 80% of all suppliers and 100% of suppliers from risk countries HSEQ- audited	In 2022 material suppliers and process of HSEQ-audits defined.	In progress
Customer satisfaction		2023 All customer groups will be covered by an extensive annual customer survey and target for customer satisfaction will be set.	-	Not started

ENVIRONMENTAL RESPONSIBILITY

Enabling sustainable use of natural resources and a carbon neutral society



Partnera's approach to environmental responsibility

Climate change, loss of natural diversity and the increasing scarcity of resources are among the focal challenges of our time and are significant global megatrends altering the boundary conditions within which companies need to navigate. At Partnera, we acknowledge that our decisions and actions have an impact on these dimensions, now and in the future. That is why our business is derived from these global megatrends and is focused on promoting sustainable development. In selecting our future investments and industries, and in developing our existing businesses, we seek to both create sustainable company value growth, and generate measurable and positive impact on the environment and society surrounding us.

We acknowledge that we are only at the start of our journey with regards to managing sustainability. Building on the basis from 2021, when we published our first sustainability report whilst focusing on accommodating the then new acquisitions of KPA Unicon and Glasopor AS, we have continued to strengthen our capabilities in 2022. This year, our sustainability focus was in deepening the understanding of our foam glass products - by conducting an LCA and publishing a verified EPD (Environmental Product Declaration) study - as well as helping our customers reduce their environmental impacts with our ongoing power plant delivery projects. In addition, we enhanced our internal technology knowledge by creating an internal wiki on KPA Unicon way of working and having weekly technology trainings.

Aligned with our commitments from 2021, we have progressed in defining and refining our environmental and climate change-related targets and implementation plans for the future years. Our stated targets relate to the climate impact of our products, the climate impact from our operations, pollution prevention with our products, and the circular economy.

Our approach to energy and carbon

The business of our companies is founded based on climate change mitigation and preservation of limited resources. Besides continuously reducing our carbon footprint, we actively strive to increase our carbon handprint to contribute to the reduction of greenhouse gas (GHG) emissions and the drive to cap global warming at 1.5°C. We acknowledge also our own role and responsibility in reaching that target, and have committed to carbon neutrality in own operations by 2035. Besides development in the technologies used, reducing energy consumption in parallel with increasing the share of energy produced from sustainable sources are key elements in decarbonizing our own and our customers' operations alike. Based on our first handprint calculations, on average approximately 0.2t CO₂eq are avoided per each MWh energy generated through our renewable energy solutions compared to alternative combustion solutions. The calculations are based on products delivered in 2021-2023 whose fuel is not a waste stream (e.g. waste gas or wood waste) generated at or adjacent to the site where the plant is located. We continue to assess how to track, measure and report GHG reductions from our other clean energy solutions products and services.

In addition to increasing the share of renewable energy in our own operations, we significantly contribute to our customer's capabilities to decarbonize their energy use via our renewable energy generation solutions. We also help our customers to increase the efficiency of their energy production through modernization of plants and optimization and emission control technologies, as well as through maintenance and other life-cycle services to maximize the utilization and lifetime of the solutions.

As in 2021, we have not identified Partnera Corporation's businesses and the associated plants to have been negatively affected by climate impacts during 2022.



Emissions

Following changes in Partnera Corporation's structure in 2021, that year was the first one during which information on energy and fuel consumption, and related Scope 1 and 2 GHG emissions was systematically collected. In 2022, significant changes took place in KPA Unicon's fully and partly owned plants portfolio, which had a significant impact on KPA Unicon's and therefore Partnera's emissions.

In 2022, we utilized the same structure to report on the GHG emissions developments and as mentioned above expanded the scope of our reporting to include energy generation of the power plants that are fully or partially owned by KPA Unicon and that were in use in 2022. KPA Unicon also determined its Scope 3 emissions for the first time in 2022.

Foamit Group's Scope 1 emissions increased slightly as the oxidation of silicon carbide in the production process is now also taken into account. Otherwise Foamit Group's GHG emissions were similar to the emissions in 2021.

KPA Unicon's joint-venture plants Zenica and Aviles utilize waste gas streams as their fuel. Waste gases arise from the production of steel. Although the associated greenhouse gas emissions of the two plants are significant, their delivery is in line with Partnera's objectives as the plants utilize waste gases that would be otherwise emitted into the atmosphere, and they also contribute to cleaner air quality. The plan for 2023 is to further develop greenhouse gas emissions reporting and to facilitate comprehensive Scope 3 reporting for both companies.

Partnera's GHG emissions were total 245 593 tCO_2 in 2022.

Waste

No significant amounts of waste are generated in Partnera companies' own operations. Metal and scrap metal comprise the main waste streams derived from the companies' operations. In 2022, the amount of wood waste increased due to increased amount of window frames received and processed at the Uusioaines site. Different types of oil wastes and paint residues are the main hazardous waste fractions generated in KPA Unicon's operations. Foamit Group and KPA Unicon have separate waste management procedures in place. Both companies strive to eliminate waste generation, source segregate as efficiently as possible, and prefer waste management partners that are able to offer comprehensive recycling solutions for the waste streams and that have comprehensive compliance and R&D programs in place to ensure legal compliance and continuous improvement. Energy consumption within the organization in 2022 and comparison to 2021. All figures are reported as MWh

COMPANY	CORPORATE TOTAL 2022	CORPORATE TOTAL 2021
DIRECT ENERGY CONSUMPTION: NON-RENEWABLE		
Natural gas ¹⁾	79,195.33	
Basic oxygen furnace gas ¹⁾	92,669.56	
Blast furnace gas ¹⁾	81,261.87	
Coke oven gas ^{1]}	35,769.50	
Liquefied natural gas (LNG)	1,081.89	1,232.33
Liquefied petroleum gas (LPG)	52,726.70	52,533.44
Diesel	3,502.34	2,877.24
Gasoline	10.40	24.30
Light fuel oil ²⁾	1,790.24	2,072.20
Non-renewable electricity ¹⁾	2,548.39	639.25
DIRECT ENERGY CONSUMPTION: RENEWABLE		
Wood chips ¹)	5,384.73	
Renewable electricity	43,767.27	44,911.38
INDIRECT ENERGY CONSUMPTION		
District heat	1,723.03	1,671.97
TOTAL ENERGY CONSUMPTION	401,431.25	105,962.10

Please see company specific breakdowns for further details.

1) Consumed exclusively in fully and partially owned power plants of KPA Unicon.

2) Consumed in power plants and in vehicles.

Partnera Corporate's GHG emissions in 2022 compared to 2021

EMISSION TYPE	CORPORATE TOTAL 2022	CORPORATE TOTAL 2021
DIRECT EMISSIONS (SCOPE 1), METRIC TONS $\rm CO_2$		
Fuel consumption and refrigerants ^{1]}	13,669.69	13,345.08
Fuel for energy generation ²⁾	161,227.34	
Other process emissions ^{3]}	1,557.92	
SCOPE 1 TOTAL	176,454.95	
INDIRECT EMISSIONS (SCOPE 2), METRIC TONS $\rm CO_2$		
District heating	132.17	204.36
Electricity – Market based ¹⁾	0.00	125.77
Electricity – Market based – Energy generation ²⁾	1,332.87	
Electricity – Location based ¹⁾	9,962.05	7,219.97
Electricity – Location based – Energy generation ²⁾	1,332.87	
SCOPE 2 TOTAL (MARKET-BASED)	1,465.04	330.13
INDIRECT EMISSIONS (SCOPE 3) ⁴⁾ , METRIC TONS CO_2		
Cat 1 Purchased goods and services	10,547 ⁵⁾	
Cat 2 Capital goods	625]	
Cat 4 Upstream transportation and distribution	4775)	
Cat 6 Business travel	2496]	
Cat 11 Use of sold products	56,338 ^{7]}	
SCOPE 3 TOTAL	67,673	
Scope 1 biogenic CO ₂		
Scope 3 biogenic CO ₂	2,993,088	

Please see company specific breakdowns for further details.

- 1) Includes Foamit Group's plants, KPA Unicon's Kiuruvesi and Lapua workshops and vehicles owned by Foamit and KPA Unicon.
- Includes KPA Unicon's fully and partially owned Aviles, Kälviä, and Zenica plants (100, 40, and 20% share respectively).
- Oxidation of silicon carbide (SiC) in Foamit Group's foaming process.
- 4) KPA Unicon only
- Calculations are based on the spend-based method. DEFRA categories and the associated emission factors were used. Emissions reported as CO2e.
- Emissions consists of business travel by air (based on DEFRA factors, CO2e), trail (VR sustainability report for 2021, 2.2 gCO2e/ km) and road (147.1 gCO₂/km, https://liikennefakta.fi/fi/ymparisto/ henkiloautot/hiilidioksidipaastot)
- 7) The emissions from use of sold products are calculated based on the estimated amount of fossil fuels combusted in plants sold in 2022 during the entire lifetime of the plants (assumes 25 years). Emissions for CO₂ only.

Non-hazardous waste generated in 2022 compared to 2021

WASTE FRACTION, TONS	CORPORATE TOTAL 2022	CORPORATE TOTAL 2021
Mixed waste	208	194
Combustible	462	393
Metal / scrap metal	509	503
Other recyclable	0	22
Cardboard	5	2 ^{*]}
Wood	398	158
Food waste	6	
Glass waste	135	
Mineral wool waste	2	
WEEE	1	
Total	1,726	1,272

*) The 2021 amount of cardboard waste disposed of in 2021 was 1.54 tons, not 95 tons as reported in the 2021 report.

Hazardous waste generated in 2022 compared to 2021

HAZARDOUS WASTE FRACTION, KG	EWC code	CORPORATE TOTAL 2022	CORPORATE TOTAL 2021
Solid paint waste	080111	108	558
Polymerizing liquid waste	080501	40	0
Wax and grease	120112	31	30
Hydraulic oils	130111	0	50
Spent lubricant	130205	1,200	0
Lubricants and gear oils	130208/200101	890	1,462
Other oil containing hazardous waste	130899	370	1,248
Non-halogenated solvent waste	140603	1,366	0
Packaging with non-halogenated solvents	150110	4	0
Solid oil waste	150202	82	0
Aerosol waste	151011	120	0
Break and coolant waste	160113	192	0
Glycol	160114	0	14,820
WEEE, hazardous	160209/160213	735	0
Discarded electrical and electronic equipment	160211	48	91
Solid aerosol waste	160504	15	50
Chemical wastes	160508 / 200115	47	0
Lead acid battery waste	160601	257	62
Heavy metal containing battery waste	160603	22	0
Oily waste	160708	170	0
Chemical concentrate	161003	3	0
Solvent waste	200113	22	0
Fluorescent tubes	200121	1,282	61
Waste oil	200126	525	0
Total		7,529	18,432

Foamit Group's approach to environmental responsibility

Knowing your environmental impact in detail is the first step when improving the company's strategic environmental performance. Although all four Foamit Group plants produce foam glass, each plant uses slightly different production processes and technologies. Consequently, Foamit Group carried out a life cycle assessment (LCA) of the foam glass product manufactured at the four plants.

The LCA shows which of the product's raw materials and processes have the greatest impact on the environment, and thereby allows us to better identify which production processes and raw materials have the greatest environmental impact and allows us to allocate process improvement and development actions to the most relevant processes and raw materials.

A life cycle assessment of the foam glass product manufactured at the four production plants was carried out during the summer and fall of 2022. The LCA was then used as the basis for an Environmental Product Declaration (EPD) that is a widely used standardized and transparent way of presenting life cycle assessment (LCA) information in an easily accessible format that allows Foamit Group and it's stakeholders to obtain a better understanding of the key environmental impacts related to the production of foam glass in each of the four production sites and to obtain transparent third-party verified data that allows comparison of the life-cycle environmental impacts of the foam glass product to other manufacturers' foam glass products as well as to other similar products.

Foamit Group's third-party verified Environmental

Product Declaration (EPD) for foam glass aggregate was published online in November 2022. The EPD report considers the scope of 'cradle to gate up to the end of the product's life', covering the modules of extraction and processing of raw materials (A1), their transportation to the production plant (A2), the foam glass aggregate manufacturing process (A3), end of life(C1-C4) and potential benefits (and loads) from the reuse and recycling of the foam glass aggregate at the end of life (D). For the sake of transparency and data completeness, Foamit Group's LCA and EPD includes oxidation of the silicon carbide foaming agent into carbon dioxide in the production process that is not taken into account in other publicly available EPDs of other foam glass products.

Our approach to energy and carbon

The two main raw materials of foam glass are glass and silicon carbide. Manufacturing of glass and silicon carbide are also among the most energy intensive industries and therefore, in accordance with the principles of circular economy and waste hierarchy, it is imperative to ensure that these materials are kept in use for as long as possible and to keep them at their highest value. Although the production of foam glass is also energy intensive, it enables recycling of reject waste glass and fine grained silicon carbide that would be otherwise landfilled. Technical lifespan of foam glass in construction and infrastructure applications is at least 50 years, and even after that foam glass can be utilized in less demanding applications, and possibly even as raw material in the production of foam glass. Long lifespan on foam glass products ensures that the resources used during the entire life span of foam glass and its raw materials are used as efficiently as possible.

The foaming process is the most energy intensive process in the production of foam glass. In the foaming process, glass and foaming agent mixture is heated in a kiln to a temperature where the glass sintered (heating to a temperature below point of liquefaction) and the foaming agent reacts and forms a gas and causes the sintered glass to expand. Two of Foamit Group's kilns run on electricity and two on propane. In order to optimize energy consumption and use, a portion of the waste heat generated in the foaming process is used for drying of feedstock as well as for heating of the production area. Foamit Group is constantly assessing and evaluating options that allow energy to be used as efficiently as possible and to substitute fossil energy sources with renewable sources.

Climate risks and opportunities

Climate change mitigation as a theme provides opportunities also for Foamit Group. In general, the foam glass produced from fine waste glass fraction – which would otherwise end up at a landfill – can be utilized as an alternative to more carbon-intensive fill materials. To better understand the opportunities related to our product, an LCA was performed in 2022 followed by a publication of an EPD (Environmental Product Declaration) project during 2022. Comparing the results to available EPDs for alternative products, GHG impacts of Foamit Group's products in relation to a given amount of the final product are lower, indicating a positive outlook in cases where our customers value the GHG impact as a procurement metric.

The production processes for foam glass and alternative products are all currently quite energyintensive due to process steps requiring heating of the raw materials – thus being able to utilize low-carbon energy during production is key to keeping the final products' carbon footprint as low as possible. By committing ourselves to Partnera's shared goal of carbon neutrality in own operations by 2035 we are positioning ourselves also in the longer term as an enabler of low-carbon insulation solutions.

In 2022, Foamit Group's operations were not negatively affected by climate impacts. In the 2021 sustainability report we told about the flood event which occurred in 2018 and affected the entire industrial park. Discussions about liabilities and corrective actions continued in 2021. Decisions were made in 2022 and as a result the State authorities will construct a flood barrier in 2023. Foamit Group has no retained liability regarding the matter.

GHG emissions

Greenhouse gas (GHG) emissions are the most significant environmental aspect related to Foamit

Group's operations, as the production process is energy intensive. Since 2021, we have reported our direct (Scope 1 and Scope 2) emissions. Our Scope 1 GHG emissions in 2022 were almost the same as in 2021 with minimal variation at a site level only. The most relevant factor affecting the Scope 1 emissions were the shift from LNG to LPG at the Hasopor plant in Sweden. and that we included the impact of the use of silicon carbide (SiC) in the calculations. We have assumed that all carbon is silicon carbide oxidizes into carbon dioxide during the foaming process. Our Scope 2 market based GHG emissions were 0 t CO, because all plants use renewable electricity and none of the plants use district heating. Scope 3 emissions were not calculated in 2022 but they will be in our focus in 2023.

Reducing GHG emissions from our own operations

The production of foam glass is energy-intensive, as the drying, grinding and foaming of raw materials requires energy. To achieve our carbon neutrality goal, we are looking for alternatives to fossil fuels as an energy source.

LPG kilns are the Foamit Group's main source of carbon dioxide emissions, accounting for around 85% of the Group's Scope 1 greenhouse gas emissions. The phase-out of fossil fuels in the kilns is planned to be phased out when the kilns reach the end of their useful life.

At Hasopor, liquefied natural gas (LNG) was first used for drying, and later liquefied petroleum gas (LPG) was used for drying, and LPG is also used for the Onsøy and Uusioaines kilns. Diesel and light fuel oil are used in some vehicles. In Norway, the Skjåk plant does not use fossil fuels for production, as the plant uses an electric kiln and the raw material predried at the Onsøy plant. Foamit Group has set the following short-term targets with regards to GHG emissions:

- 1. In order to minimize GHG emissions, Foamit Group's plants made the transition to green electricity prior to 2021.
- 2. In 2022, revising the carbon footprint calculations and verification of the Environmental Product Declarations (EPD) and
- **3.** In 2023, defining business goals for scope 3, reviewing reporting principles, identifying scope 3 activities and setting the scope 3 boundary

Glass is a 100% recycle product and there Foamit Group's core business is circular economy.

Our approach to circular economy

Glass is a 100% recyclable product and therefore Foamit Group's core business is circular economy. Foamit Group can recycle everything that is made of glass and thus effectively minimize both the amount of landfill waste and the potential need for virgin glass material. Using recycled and cleaned glass cullet as a raw material in the glass industry has many advantages. Recycled glass has a lower melting point temperature compared to virgin glass and its usage saves energy and minimizes CO_2 emissions. At the same time, it reduces the need for a virgin raw material.

Purified and color-sorted glass cullet is sold to customers who utilize it in the production of different glass products: glass packages, glass wool and flat glass. The rest of the recycled glass material, which is typically the fine particles that cannot be re-used in packaging glass production without reprocessing, goes to foam glass production. Foam glass production ensures that nothing is wasted or landfilled in a glass recycling process. Foam glass is made almost entirely from recycled glass material comprising shredded household glass, glass powder and silicon carbide (SiC) used as a foaming agent. Foam glass is a pure example of a circular economy product. Since the foam glass business started some decades ago, glass has been seen as a valuable resource that needs to be used efficiently and every fraction is to be reused.

Other emissions to air

Besides generating GHG emissions in the production process, Foamit Group's operations also result in some local air emissions. As foam glass aggregate is manufactured out of fine glass particles and glass dust, the operations generate dust during product storage, transport and loading at the plant. Additionally, dust is derived from waste glass processing. Dust emissions at Foamit Group plants are generally limited to the plant area. Foamit Group has implemented various dust minimization measures at all plants to date and continues to implement corrective actions in accordance with the authority-approved plans. Dust is frequently measured at the plants and in their immediate surroundings. Stormwater is also frequently monitored for suspended solids at production sites.

Waste

Although Foamit Group plants use almost exclusively waste based materials as raw materials, the operations of Foamit Group yield only a small amount of mainly non-hazardous waste streams. Foamit Group is in regular contact with waste management companies that provide the glass waste streams to the foam glass production plants. Contractual agreements regulate the composition of incoming glass waste streams. The foam glass production process does not generate wastes except during process disruptions.

In general, the waste streams generated at Foamit Group's plants are related to packaging materials associate with incoming goods and waste streams generated in service and maintenance work. The only exception is Uusioaines glass treatment operations in Finland. As some of the waste streams originate from households and construction and demolition sites, there may be impurities in the incoming waste stream. Glass treatment process separates impurities from the glass waste stream to ensure that the reject glass stream used in the foam glass production process and the End-of-Waste cullet sold to customers meet the technical and quality criteria. Typical impurities include but are not limited to various metal impurities such as bottle caps, mainly packaging related plastics, wood waste such as window frames, and other energy waste streams such as pieces of labeling.

The process also separates unwanted glass streams of which some may be hazardous waste impurities such as lead glass and cathode ray tube (CRT). Almost all foam glass is dispatched to customers as bulk shipments without packaging. A small portion of the production is dispatched in big bags and in smaller packaging.

All plants source segregate their waste streams and collaborate with adequately permitted waste management companies that offer recycling options for as many waste streams as possible. In addition to emphasis on their recycling solutions, Foamit also reviewed waste management companies' compliance programs during the selection process. Almost all companies are among the largest waste management companies in their respective countries. Foamit Group is also initiating a project in the near future to eliminate formation of production related waste (glass waste, powder waste and foam glass waste).

In 2022, the amount non-hazardous waste generated in Foamit Group's plants increased by almost 85%. This is explained mainly by disposal of certain waste streams separated at Uusioaines' glass treatment plant's process such as wooden window frames and scrap metals including bottle caps. Due to storage area constraints the Skjåk site had to dispose of a portion of the off-spec foam glass in 2022.

Hazardous waste generated consists mostly of various oils and lubricants needed for the production machinery. All hazardous waste is systematically collected and disposed of by standard procedures by local waste management services, in accordance with local legislation.

Environmental compliance

In 2022, Uusioaines applied for an amendment to the environmental permit to move the foam glass storage area to a better location with pavements that meet the authorities' requirements. In November 2022, the municipal environmental authority inspected the Hasopor production area and found no non-compliance. Dust emissions from the process were measured in December 2022 and found to be below the environmental permit limit value of $5 \text{ mg/m}^3 n$ (dry gas). There were no non-compliances or pending regulatory requests in 2022. In Norway, Glasopor's Onsøy plant was operating under an existing permit in 2022. In 2021, Glasopor initiated a permit renewal process due to the acquisition of Glasopor by Foamit Group. In early 2023, the Onsøy plant will apply for a new permit due to a planned expansion of the plant site. The Skjåk plant was operating in compliance with the permit requirements in 2022. The Skjåk plant is assessed to need a new permit as increased production volumes approach the permitted capacity.

CASE Hasopor's building blocks

Hasopor, a subsidiary of the Foamit Group, has developed, together with its partner specialising in concrete, a way to use production waste (glass dust, glass powder, foam glass crushed and foam glass dust) as an ingredient in the production of concrete building blocks for own use.

The recycling of production waste results in high costs and negative environmental impacts. Therefore, its use in the production of precast concrete elements for the rehabilitation of the Hasopor plant will reduce both costs and environmental impact. Concrete building blocks, used for the construction of industry standard solid

CASE Increasing energy efficiency

In 2022, Foamit Group explored new sources of waste glass and additives, as well as ways to further reduce energy consumption and emissions. An energy recovery system was introduced at the Skjåk plant in Norway, with the aim of saving up to 10% of total energy consumption. The plant is already fully powered by hydroelectricity. At the Forssa plant, the introduction of new foaming agents in production was started to reduce the consumption of additives by up to 40%. In 2023, this technology will also be transferred to our other production plants.

Foamit Group's Board of Directors approved plans to expand the capacity of the Onsøy plant and convert it to a fully electric plant, making it not only emission-free but also the most energy-efficient foam glass production barriers suitable for walls, pockets and compartments in warehouses for raw materials and finished products, weigh about 2 000 kg, of which 60-70% is production waste and the rest cement product.

Once Hasopor's own demand for the ingots is satisfied, we will consider manufacturing them for sale as a product on the market. The information and concept will of course also be shared within the group as a possible way of handling production waste, also in Finland and Norway.

facility seen so far. Plans include state-of-the-art electric furnaces to optimise productivity and energy consumption, and the entire factory will use energy recovery and energy management systems that will surpass any existing foam glass factory.

We will continue to focus on finding new sources of raw materials for recycling. In 2022, we established relationships with new suppliers of recycled glass scrap in Europe, securing supplies and ensuring better use of fines and material that would otherwise end up in landfills. Foamit has also been working with our partners to explore new sources of waste glass, so that in the future even more waste glass can be turned into a unique recycled building material with outstanding properties. Energy consumption in 2022 and comparison to 2021. All figures are reported as MWh.

COMPANY	FOAMIT GROUP 2022	FOAMIT GROUP 2021	
DIRECT ENERGY CONSUMPTION: NON-RENEW	ABLE		
Natural gas (LNG)	1 082	1 232	
Propane (LPG)	52 727	52 533	
Diesel	3 184	2 557	
Gasoline			
Light fuel oil (LFO)	1 483	1 404	
DIRECT ENERGY CONSUMPTION: RENEWABLE			
Renewable electricity	42 889	44 356	
INDIRECT ENERGY CONSUMPTION:			
District heating			
TOTAL ENERGY CONSUMPTION	101 364	102 082	

Non-hazardous waste generated in 2022 compared to 2021

WASTE FRACTION, TONS	FOAMIT GROUP 2022	FOAMIT GROUP 2021
Mixed waste	181	145
Combustible	462	393
Metal / scrap metal	453	310
Other recyclable		22
Paper and cardboard	4	
Wood	389	15
Food waste	6	
Off-spec foam glass	146	
Mineral wool waste	2	
WEEE	1	
Total	1,644	885

Foamit group's GHG emissions in 2022 and compared to 2021

EMISSION TYPE	FOAMIT GROUP 2022	FOAMIT GROUP 2021		
DIRECT EMISSIONS (SCOPE 1), METRIC TONS CO ₂				
Fuel consumption and refrigerants	13 597	13 345		
Other production emissions (SiC)	1 558			
SCOPE 1 TOTAL	15 155	13 345		
INDIRECT EMISSIONS (SCOPE 2), METRIC TONS CO ₂				
District heating	0	0		
Electricity – Market-based	0	0		
Electricity – Location-based	9 710	6 899		
SCOPE 2 TOTAL (MARKET-BASED)	0	0		

Hazardous waste generated in 2022 and in comparison to 2021

HAZARDOUS WASTE FRACTION, KG	EWC CODE	FOAMIT GROUP 2022	FOAMIT GROUP 2021
Paint residues	080111	12	558
Wax and grease	120112	31	30
Hydraulic oils	130111	-	50
Lubricants and gear oils	130208/200101	890	1,462
Other oil containing hazardous waste	130899	370	1,248 ¹⁾
Packaging with non-halogenated solvents	150110	4	
Solid oil waste	150202	82	
Aerosol waste	151011	120	
WEEE, hazardous	160209/160213	735	
Discarded electrical and electronic equipment	160211	48	91
Gases in pressure vessels	160504	2	50
Chemical wastes	160508/200115	47	
Batteries	160601	155	62
Chemical concentrate	161003	3	
Solvent waste	200113	22	
Fluorescent tubes	200121	1,204	61
Waste oil	200126	525	
Total		4,250	3,612

1) 1,100 tons of material recovery at Uusioaines

KPA Unicon's approach to environmental responsibility

Our approach to energy and carbon

KPA Unicon's product portfolio consists of solutions for clean and low-carbon energy production and utilization of waste and byproduct streams as energy, thus facilitating the transition towards sustainable energy sector and decreasing reliance on fossil fuels. In addition to delivering new production plants, we have a significant focus on modernizing the existing energy production base to reduce consumption of natural resources and optimizing the lifetime output of our customers' investments. Our comprehensive service offering throughout the power plant lifecycle, including increasing of efficiency, emissions control, operation and maintenance are aimed to ensure maximum energy production efficiency, low emission levels and optimized lifetime for the plants, further contributing to minimizing the carbon footprint of our customers.

KPA Unicon's clean energy solutions are based on the evaluation and use of the following: renewable fuels, recycled fuels, heat recovery, energy storage and future solutions.

The majority of our solutions are renewable energy production facilities. Part of these replace either fossil-based energy generation or another older, less energy- and carbon-efficient solution. Furthermore, the majority of our oil & gas –based solutions turn industrial waste gas into energy, for example steam to be used in the industrial process.

In addition to considering our own carbon footprint, for 2022 we have also for the first time estimated our carbon handprint by quantifying the emissions avoided through the use of our renewable energy solutions via the Avoided Emissions Framework by Mission Innovation, a global initiative launched in the Paris Climate Conference in 2015. Based on our first handprint calculations, on average approximately 0.2 t CO₂eq are avoided per each MWh energy generated through our renewable energy solutions compared to alternative combustion solutions. The calculations are based on products delivered in 2021-2023 whose fuel is not a waste stream (e.g. waste gas or wood waste) generated at or adjacent to the site where the plant is located. We will continue assessing how to track, measure and report the GHG emissions reduction achieved with our other products and services. In the near future, we are aiming to further develop our capabilities in providing solutions for utilizing more complex, waste-based fuels for energy production and expanding our offering to new technologies, for example in heat storage.

KPA Unicon's combustion technology solutions, Unicon Renefluid, Unicon Biograte, Unicon Pellet, Unicon Renegrate and Unicon Bioliquid are all designed to use primarily renewable fuels. Unicon Renefluid is a bubbling fluidized bed (BFB) combustion technology developed for solid fuels including milled peat, wood based biomass and clean recycled wood; Unicon Biograte is a combustion technology for steam and hot water production with biomass; Unicon Pellet is a pellet-fired boiler plant that acts as a backup plant or to generate process heat; Unicon Renegrate is a hot water boiler plant most commonly used for district heating and Unicon Bioliquid is a boiler plant generating superheated steam that is used both as a base or a backup plant.

One of KPA Unicon's strategic targets is to increase sales of renew-business and thus encourage customers to renew existing energy production instead of constructing new facilities. KPA Unicon's renew product offer solutions for efficiency, emissions control and extending the life span of energy production plants. Retrofits offer solutions for improving efficiency of existing energy production systems and reducing emissions with a variety of plant renovations, which typically are needed 5–10 years after the initial investment. Bag Filter, Condenser and De-NOx offer solutions for emissions control. Unicon Bag Filter helps reduce particle emissions efficiently: Unicon Condenser helps increase efficiency in both process and district heating applications, and De-NOx offers a solution for nitrogen oxide reduction.

In addition, KPA Unicon offers digital solutions for boiler plant operation, maintenance, reporting and material flow management in the form of Plantsys software. With Plantsys customers can better monitor the use of the plant including condition monitoring to better anticipate and notice need for maintenance and optimizing the use of the plant to maximize efficiency and minimize emissions of the energy production. Currently development for emissions reporting is ongoing, due to emission measurements becoming mandatory to plants over 25MW annually and once every three years for plants below 25MW. The aim is that emission reports could be offered to customers straight from Plantsys.

Furthermore, a cooperation agreement with Polar Night Energy was signed in 2022 to offer sandbased, renewable energy thermal storages in connection with its boiler plant deliveries. The sand battery helps to reduce use of fossil energy sources in heat and steam production by storing energy to be used for peaks and minimums of production.

Since its establishment, KPA Unicon has delivered more than 2000 boiler and power plants, and todays primarily focus is on renewable solutions. Between 2017 and 2021, 396 MW capacity of biomass-based renewable fuel energy solutions were delivered, with 265 MW of these directly replacing a solution utilizing fossil fuels. During 2022, an additional 35 MW capacity of biomass-based renewable fuel energy solutions was delivered. These did not replace solutions utilizing fossil fuels. In the future, KPA Unicon will aim to increasingly provide solutions for utilizing complex feedstocks (e.g. recycled wood, waste streams such as industrial slurries and waste gases) and novel solutions to heat storage, in addition to conventional biomass boilers.

GHG Emissions

KPA Unicon began systematic collection of Scope 1 and 2 GHG emissions data in 2021. Minor gaps in data collection were reported in last year's sustainability report. In 2022, KPA Unicon developed and expanded its data collection to also cover the energy generation plants that are fully or partially

owned by KPA Unicon. In 2021, only the Kälvia plant, which has been taken into use in 2020, was included in the calculations. ArcelorMittal plant in Zenica was taken into use in 2021, but was not included in the reporting. ArcelorMittal plant in Aviles was taken into use in 2022. Given that Aviles is currently fully and Zenica 20% owned by KPA Unicon their emissions are included in KPA Unicon's and hence Partnera's GHG emissions for 2022. Given the scale of these plants GHG emissions from these plants are significant. Scope 1 emissions from our own workshops were only 30% of the emissions in 2021, due to decreased use of energy. As a consequence of significant reduction of the emissions factor (from 104 gCO_/kWh in 2021 to 3 gCO_/kWh in 2022) applied in the calculation of district heating related carbon dioxide emissions of the Kiuruvesi workshop, KPA Unicon's Scope 2 emissions from district heating were 65% of the emissions in 2021.

KPA Unicon also determined its Scope 3 emissions for the first time in 2022. For that purpose, KPA Unicon performed a screening of materiality from GHG emissions perspective. Due to the nature of operations, the most material categories by far are 1 (Purchased Goods and Services) and 11 (Use of Sold Products). This year, KPA Unicon is able to report on those for the first time and includes also categories 2 (Capital Goods), 4 (Upstream transportation) and 6 (Business Travel) in the reporting. Category 1 and 11 comprise 99% of our Scope 3 emissions and Category 11 alone comprises 83% of emissions. CO. emissions for Category 11 were calculated based on the estimated amount of fossil fuels combusted in plants sold in 2022 during the entire lifetime of the plants (assumed 25 years).

Reducing GHG emissions from our own operations

Fossil GHG emissions from KPA Unicon's operations are significantly higher in 2022 than in 2021. This is due to two plants, Zenica and Aviles, which are currently owned or partly owned and operated by KPA Unicon, being operational and added to reporting. Both are plants utilizing primarily the furnace gases of steel factories for generating process steam, and in the case of Zenica also heat for local district heating network. Although these plants are contributing to utilizing a waste stream which without our solution would be directly emitted in the air, we acknowledge these operations increase the GHG emissions, and we are interested in investigating opportunities and technologies to reduce or neutralize the emissions impact.

KPA Unicon's joint-venture plants Zenica and Aviles utilize waste gas streams as their fuel. Waste gases arise from the production of steel. Natural gas is used as a support fuel. Although the associated greenhouse gas emissions of the two plants are significant, their delivery is in line with Partnera's objectives as the plants utilize waste gases that would be otherwise emitted into the atmosphere. and they also contribute to cleaner air quality. The Zenica plant replaced an old coal fired power plant and reduced particulate and sulfur dioxide emissions in addition to greenhouse emissions and thereby improved local air quality, and reduced dependency on fossil fuel sources. The Zenica plant also supplies district heating to the city of Zenica. KPA Unicon's workshops in Kiuruvesi and Lapua have used green electricity since the summer of 2021. Oil-fired back-up for energy at the Kiuruvesi workshop is occasionally used, mainly to support the paint shop. Moving away from the use of oil as source for back-up energy at the Kiuruvesi workshop will be carried out as part of the carbon neutrality in own operations – target.

Avoided emissions

The emissions avoided by using KPA Unicon's renewable energy products were calculated based on design data for plants delivered and to be delivered in 2021, 2022 and 2023. The initial data set for these years consisted of 16 plants, of which nine were included in the scope of the calculation. The calculation is based on calculating the difference in emissions of a baseline plant and KPA Unicon's plant. The baseline plant represents emissions from the most likely current alternative to the KPA Unicon plant. The baseline plant either consumes a different fuel or the emissions of a baseline plant represent e.g. the national average emission of similar plants. In order to achieve credible baseline values, we used LNG and natural gas as baseline fuel for steam generating plants. The national district heating fuel mix (in Finland and Sweden) and national CHP plants' average fuel mix (in Poland) were selected as baselines for other plants. The remaining six plants were excluded from the calculation as their fuel is a waste stream (e.g. waste gas or wood waste) generated at or adjacent to the site, as such waste streams would in all cases be used to fuel the respective plant. The avoided emissions were calculated comparing 1) the GHG emissions associated with the combustion as well as upstream emissions of the fuel(s) combusted in our sold plants and 2) the emissions

of the selected baseline including both combustion and upstream emissions of the fuel(s). For the nine plants (the plants sold in 2021-2023 and included in the calculation) the avoided emissions during their expected lifetime (assumed 25 years) are 6,523,653 t CO_aeq and the average avoided emissions factor is 0.209 t CO₂eq/MWh of generated energy. It should be noted that although the emissions from district heating are expected to decline over time due to the share of fossil fuels decreasing, this decline was not included in the calculations. This is due to such data not being available in the otherwise used units (CO₂eq) or not at all. Consequently, the actual avoided emissions of the plants whose baseline was selected to be the district heating fuel mix are slightly lower than indicated by the calculation.

The majority of our solutions are renewable energy production facilities.

ArcelorMittal Zenica plant is an example of positive climate impact resulting from waste gas combustion. According to information provided by ArcelorMittal Zenica, the main joint-venture partner of the Zenica plant, the new plant reduced sulfur dioxide emissions by 80% compared to the old coal-fired boiler, and it significantly reduced nitrogen dioxide and particulate emissions. The new plant also reduced total carbon dioxide emissions of the steel plant by 18% and eliminated the use of 150,000 tons of coal a year.

Our approach to circular economy

For KPA Unicon, circularity is material through the solutions we provide to our customers, enabling them to better utilize side and waste streams – such as sawmill side and waste streams – as well as waste gases for energy generation. By utilizing these side streams our customers are able to reduce the amount of virgin or otherwise better-quality raw materials used as fuel and decrease the energy sourced from outside as heating or steam, or in some cases as electricity.

Of our product portfolio, the biomass and waste solutions Unicon Reneflex, Unicon Waste Gas and Unicon Heat Recovery are designed to recycle industrial side and waste streams into energy:

- Unicon Reneflex is a bubbling fluidized bed (BFB) combustion technology developed for solid fuel and uses locally treated waste streams by converting them into for local heat, steam and power production
- Unicon Waste Gas convert industrial waste gas streams and other types of liquid and gaseous waste to energy that can be utilized to produce steam, power or hot water
- Unicon Heat Recovery is a steam generator that captures lost heat and uses it to produce steam energy. When heat is captured from flue gases, the emissions released to air are lowered

We are further aiming to develop our offering to enable the use of more complex fuels – such as fuel from municipal solid waste – for energy generation, both freeing the higher-quality feedstocks to be used elsewhere and reducing the amount of waste that would need to be landfilled or otherwise recycled.

In addition, a significant proportion of our sales are related to renewals and upgrades of our customers' existing facilities. With the modernization of assets, it is possible to avoid dismantling existing physical structures and still viable infrastructure, thus reducing the embedded carbon impact and need to use virgin raw materials, compared to building a greenfield site. We are planning to further develop our capabilities in modelling these impacts and thus helping our customers select solutions that credibly reduce their resource and climate footprint.

Other emissions to air

Direct air emissions from KPA Unicon's own production sites are limited to infrequent CO_2 , NOx, and particulate emissions from the backup energy sources (less than 100 kW each and no obligation to monitor emissions). Volatile organic compound (VOC) emissions, which are considered minor, result from painting operations. Total VOC emissions increased from 1.5 tons in 2021 to 2.1 tons in 2022 (up by 40%) due to increase in purchased products for painting activities.

The joint venture heating plant in Kälviä was taken into use in 2020 and its CO emissions were measured in 2022. Joint venture power plants in Aviles and Zenica are both equipped with continuous emissions measurements for e.g. CO, particulates, SOX and NOx. In addition to direct emissions from our own operations and operated power plants, indirect air emissions result from use of district heating and electricity in production. In the downstream supply chain – at our customers' sites – KPA Unicon's solutions have a significant positive impact on local air quality by reducing NOx, SO₂ and particulate emissions.

Despite capabilities of KPA Unicon's solutions in reducing local air emissions compared to fossil alternatives, the combustion of renewable fuels even with modern technology generates some NOx and particulate emissions, and in some cases SO₂ emissions, depending on the source of the fuel. To ensure applicable limit values are met, air emission minimization techniques can be implemented and installed at boiler and power plants delivered by KPA Unicon. In addition to air emissions, energy generation also generates boiler water and ash. Boiler water is collected, treated and circulated back to the boiler, and no effluents are discharged to sewers. All ash from power plants supplied by KPA Unicon meets the requirements set for utilization of ash in fertilizer production.

Waste

KPA Unicon's Kiuruvesi and Lapua workshops generate mainly scrap metal and packaging waste including wood waste such as wooden palettes. The amount of waste generated depends on the projects and the type and scope of inhouse fabrication and painting activities. Both workshops source segregate their waste streams and collaborate with adequately permitted waste management companies that offer recycling options for as many waste streams as possible.

In 2022, the amount non-hazardous waste generated in the two workshops decreased by approximately 62% mainly because the amount of scrap metal and mixed waste reduced by almost 71 and 45% respectively. The amount of hazardous waste generated depends on the activities carried out during the reporting year and whether centrally collected hazardous wastes are disposed of during the reporting year. Typical hazardous waste streams include liquid and solid oily wastes and painting related wastes. All reported hazardous wastes originate from the Kiuruvesi workshop.

Environmental compliance

KPA Unicon's production does not require environmental or chemical permits. Power plants in Zenica and Aviles are equipped with measuring devices enabling online monitoring of compliance with the applicable limit values. Due to test uses in 2022 representative results will be available in 2023. Combustion efficiency of the Kälviä plant was measured in 2022 however verification of other emissions will be carried out later in accordance with the environmental permit requirements. In 2022, no environmental incidents involving a non-compliance with environmental legislation or a permit, or a significant stakeholder concern related to environmental performance occurred in KPA Unicon's operations.

CASE New bio boiler plant reduces Naantali port emissions

Adven, the leading provider of energy and water solutions in the Nordic and Baltic countries, ordered a 30 MW boiler plant complex for the Naantali port area. The project was developed in 2022 but the delivery of the power plant was in early 2023. The Unicon Renegrate 10 MW bio boiler produces steam for Adven's end customer Finnfeeds Finland Oy, which manufactures betaine separated from sugar beet-based solutions. Betaine is used in the cosmetics, feed, nutrition and chemical industries. The plant uses renewable wood-based fuels, and after completion, it will reduce the annual carbon dioxide emissions of Finnfeeds Finland Oy's factory by 2,000–3,000 tons.

CASE Waste and recycled fuels boost clean energy production

In 2022, KPA Unicon continued a development project to explore the potential of waste and recycled fuels. Solid, liquid and gaseous by-products are generated in households and industry and are not yet sufficiently recovered. These include sorted waste, demolition wood, alcohols and hydrocarbons, and hot gases from the steel industry. Waste treatment plants need to be able to recover these by-products and burn more challenging fuel fractions.

Industrial processes generate environmentally harmful emissions such as fine particles, sulphur and nitrogen oxides and heavy metals. The project has developed combustion and plant technologies for recycled fuels and methods to control emissions from combustion. "For example, the Unicon bag filter can effectively filter fine particulate emissions, sulphur oxides and heavy metals. The Unicon Condenser flue gas filter both removes emissions and captures excess heat from the flue gases, making the process more efficient," Timo Itävuo, Technology Manager at KPA Unicon, explains.

The project has involved existing customers as well as research and educational institutions such as Åbo Akademi, VTT Technology Research Centre and Savonia University of Applied Sciences. The project, which started in 2021, has borne a lot of fruit. Progress has been made in particular in co-incineration of waste and biomass, which has generated new concepts for future products. The development of waste incineration will also contribute to future research and development.

CASE AI project offers data for tomorrow's energy solutions

In 2022 KPA Unicon has had an ongoing development project exploring the potential of AI and machine learning. Traditional optimisation of heat and power plants are mostly based on current state analysis, although industrial operators and municipalities, for example, would benefit from a more proactive approach.

The project aims to use artificial intelligence, machine learning and data mining to improve the efficiency of heat and power plant operations, predictive maintenance as well as service and spare part processes. Moreover, it will provide insights into how AI-based solutions and tools can be used more widely in different areas of energy production.

The project has found that AI not only enables the automatic optimisation of heat and power plants, but also provides a completely new way of operating: it enables plants to be optimised in real time, considering, for example, short- and long-term forecasts of weather or production conditions. Thanks to its exploratory approach, the AI project has also experimented bold ideas. Ideas have included optimising the energy system, forecasting through real-time condition monitoring, and raising awareness of the state of the energy system.

The results of the study can be used around the world, and the next development project is looking for pilot customers globally. In the future, we will be able to offer our customers digital solutions that will improve the efficiency of heat and power plant operations, save fuel, and prevent uncontrolled shutdowns.

CASE Fortum Kivenlahti: parallel combustion tests

KPA Unicon, together with Fortum Power and Heat Oy, conducted a pilot project to study the functionality of co-incinerating small amounts of recycled fuel at the Kivenlahti heating plant during the autumn of 2022. The aim of the study was to investigate how mixing recycled fuel with the fuel mixture used at the plant affects the plant's operations. The plant under review was a 49MW bubble fluidized bed (BFB) boiler, which usually uses a mixture of forest biomass and demolition wood as its fuel and produces heat for the district heating network in the area, supplied by KPA Unicon. One of the key goals was to not increase the impact on the environment from the current levels. The functionality of the plant was studied both with theory-based modelling and with practical tests at the department. The effects of fuel change on the combustion process, heat transfer, as well as boiler emissions were studied on the operation of the boiler.

In the pilot permit for the co-incineration of recycled fuel, the plant was granted a temporary permit to add 15% by mass of SRF (Solid Recovered Fuel) to the biomassbased fuel mixture normally used at the plant. The purpose of the tests was to verify the functionality of the fuel mixture at the plant, and to determine the effects of the fuel change on the plant's operations and emission levels. The test incinerations were successful, and the plant can be found to be suitable for co-incineration of recycled fuel. However, after two weeks of combustion tests, there were areas which require further testing to ensure that the plant's service life is not shortened, its functionality is not reduced, and that the boiler's emission levels do not increase due to fuel changes.

CASE Junnikkala sawmill flue gas particle filtration test

KPA Unicon has delivered a boiler plant and a condenser to Junnikkala Oy's Kalajoki sawmill. In 2021, KPA Unicon delivered a bag filter to the same facility. A bag filter is a very efficient way for filtering flue gas particles. The idea of the bag filter is that the flue gases are led through parallel cylindrical fabric pipes. The particles remain on the surface of this filter, from where they are dropped to the bottom of the filter with compressed air. Additives can also be added to the hose filter, which can also be used to filter other flue gas impurities (Sox, HCI, HF + dioxin, furans, heavy metals, mercury). Measurement of the functionality and efficiency of the bag filter in filtering flue gas particles was conducted at the facility on May 18–19, 2022. Before the bag filter, the emissions of the Kalajoki sawmill boiler were 1015 mg/m³n. After the bag filter, the emissions were 1 mg/m³n. When the boiler was run at lower power, the emission figures were 208mg/m³n before and 3mg/m³n after. The official result is reported in the so-called 6% residual oxygen, which enables the comparison of results between institutions. At its highest, this value was 3.4 mg/m³n. In other words, the particle emissions were reduced for about 99% due to the installed bag filter.

The law specifies that similar facilities must have a cleaning system for particle emissions. Statutory emission limits vary between 30–50mg/m³, depending on the type of facility and with the bag filter getting clearly below legal limits have been possible. Energy consumption at KPA Unicon in 2022 and comparison to 2021. All figures are reported as MWh.

COMPANY	KPA UNICON 2022	KPA UNICON 2021	
DIRECT ENERGY CONSUMPTION: NON-RENEW	ABLE		
Natural gas	79,195.33 ^{1]}		
Basic oxygen furnace gas	92,669.56 ^{1]}		
Blast furnace gas	81,261.871]		
Coke oven gas	35,769.50 ^{1]}		
Liquefied petroleum gas (LPG)	0.00		
Liquefied natural gas (LNG)	0.00		
Light fuel oil	307.17 ^{2) 3})	668.02 ^{2] 3]}	
Diesel	318.15	320.54	
Gasoline	10.40	24.30	
Non-renewable / other electricity	2,548.391]	639.25 ⁴⁾	
DIRECT ENERGY CONSUMPTION: RENEWABLE			
Wood chips	5,384.731		
Renewable electricity	878.504]	555,784]	
INDIRECT ENERGY CONSUMPTION:			
District heating	1,723.034]	1,671.97	
TOTAL ENERGY CONSUMPTION	300,066,62	3,862.27	

Data above excludes electricity and district heating of leased office locations in Pieksämäki, Helsinki, Tampere, Kuopio, Jyväskylä, Oulu, Haapavesi, Aviles, France, Zenica, Moscow, St. Petersburg, Kälviä, Croatia, and Chile with a total floor area of approximately 1,725 m².

Consumed at the Aviles, Kälviä, and Zenica power plants and scaled to 100, 40 and 20% ownership respectively.
 Includes the backup energy source in Kiuruvesi, Finland (assumes all fuel purchased in reporting year was consumed during the reporting year).

3) Includes the light fuel oil consumed in the Kälviä, Finland joint venture heating plant for which KPA Unicon has operational control.

4) Includes only the Lapua and Kiuruvesi workshops in Finland. Both premises have used renewable electricity since June 2021.

KPA Unicon's GHG emissions in 2022 and compared to 2021

EMISSION TYPE	KPA UNICON 2022	KPA UNICON 2021
DIRECT EMISSIONS (SCOPE 1), METRIC TONS $\mathrm{CO_2}$		
Fuel consumption and refrigerants	72.5 ^{1]}	250.971)
Fuel for energy generation	161,227.34 ²⁾	
INDIRECT EMISSIONS (SCOPE 2), METRIC TONS CO	2	
District heating	132.17 ³⁾	204.36 ³
Electricity – Market-based - workshops	0.00	125.77
Electricity – Market-based – energy generation	1,332.874]	
Electricity – Location-based - workshops	252 ^{4]}	320.48
Electricity – Location-based – energy generation	1,332.874]	
SCOPE 2 TOTAL (MARKET-BASED)	1,465.04	330.13
INDIRECT EMISSIONS (SCOPE 3), METRIC TONS CO	2	
Cat 1 Purchased goods and services	10 5475)	
Cat 2 Capital goods	625)	
Cat 4 Upstream transportation and distribution	477 ⁵⁾	
Cat 6 Business travel	2496]	
Cat 11 Use of sold products	56 338 ^{7]}	
SCOPE 3 TOTAL	67 673	
Scope 1 biogenic CO ₂		
Scope 3 biogenic CO ₂	2 993 088	

1) Includes the backup energy source in Kiuruvesi, Finland (assumes all fuel purchased in reporting year was consumed during the reporting year).

2) Aviles, Kälviä, and Zenica power plants and scaled to 100, 40 and 20% ownership respectively.

3) The Lapua site is connected to the Lapuan Energia district heating system. Lapuan Energia does not disclose their emissions factors on their webpage and did not respond to inquiries. Consequently, the emissions factor of heating in Finland (177 g/kWh) was used.

- 4) KPA Unicon does not have information on source of electricity at the Aviles, and Zenica plants and no information on the greenhouse gas emission intensity of electricity supplied by Kokkolan Energia Oy to the Kälviä plant. Consequently, the market based emissions are based on AIB residual mix for 2021 [<u>https://www.aib-net.org/facts/european-residual-mix</u>] of the respective countries. AIB 2021 residual mix was also used to determine location based consumption data.
- 5) Calculations are based on the spend-based method. DEFRA categories and the associated emission factors were used. Emissions reported as CO2e.
- 6) Emissions consists of business travel by air (based on DEFRA factors), trail (VR sustainability report for 2021, 2.2 gC02e/km) and road (147.1 gC02/km, <u>https://liikennefakta.fi/fi/ymparisto/henkiloautot/hiilidioksidipaastot</u>)
- 7) The emissions from use of sold products are calculated based on the estimated amount of fossil fuels combusted in plants sold in 2022 during the entire lifetime of the plants (assumes 25 years). Emissions for CO₂ only.

Non-hazardous waste generated at KPA Unicon in 2022 compared to 2021

WASTE FRACTION, TONS	KPA UNICON 2022	KPA UNICON 2021
Mixed waste	27	49
Metal / scrap metal	56	193
Other recyclable	0	
Cardboard	1	2*
Wood	9	
Total	93	244

*) The 2021 amount of cardboard waste disposed of in 2021 was 1.54 tons, not 95 tons as reported in the 2021 report.

Hazardous waste generated in 2022 compared to 2021

HAZARDOUS WASTE FRACTION, KG	EWC CODE	KPA UNICON 2022	KPA UNICON 2021
Oily waste	16 07 08	170	0
Lead acid battery waste	16 06 01	102	0
Fluorescent tubes	20 01 21	78	0
Solid aerosol waste	16 05 04	13	0
Solid paint waste	08 01 11	96	0
Break and coolant waste	16 01 13	192	0
Non-halogenated solvent waste	14 06 03	1,366	0
Heavy metal containing battery waste	16 06 03	22	0
Polymerizing liquid waste	08 05 01	40	0
Spent lubricant	13 02 05	1,200	0
Glycol	16 01 14	0	14,820
Total		3,279	14,820

KPA Unicon's operational joint venture boiler and power plants in 2022

PLANT	OWNERSHIP %	OPERATIONAL CONTROL	IN USE SINCE	NOMINAL CAPACITY MW	ENERGY GENERATION MWH	FUEL	BASIS FOR GHG CALCULATIONS
Kälviä	40	Yes	2020	6.5	9,000.046	Biomass (light fuel oil as support fuel)	40% to Scope 1
Zenica	20	Yes	2021	150	651,875.9	Coke and blast furnace gas, natural gas	20% to Scope 1
Aviles	100	Yes	2022	61	118,364.5	Basic oxygen furnace gas, natural gas	100% to Scope 1

SOCIAL RESPONSIBILITY

Building healthy and competent work communities



ARTNERA CORPORATION

Partnera's approach to social responsibility

We believe that building healthy work environments where people can feel safe and develop themselves professionally is paramount to company success. Investments into employee well-being and health and safety training has been carried out to varying extents in our companies and the harmonization of policies and processes continues to be a focus area. Social responsibility targets for the near future include minimizing accidents in all operations and ensuring the availability of health and safety data. During 2022, talent attraction, retention and improving the recruitment processes were also emphasized. Both Foamit Group and KPA Unicon also conducted employee engagement surveys to measure eNPS score at the end of 2022.

Our people, Partnera as a work community

In 2022, the number of employees within the Partnera Corporation was 300, compared to 309 in 2021. Partnera has personnel in nine countries. 25% of Partnera's parent company employees are women. 9% of Foamit Groups employees are women, and in KPA Unicon women account for 11% of the employees.

Out of all Foamit Group employees, 62% work in production and 19% belong to management. In KPA Unicon, 55% are office workers while 41% work in production. KPA Unicon also engages workers who are not employees, e.g. site workers. Partnera and Foamit Group does not engage external construction workers or other workers. In the entire Partnera Corporation, 10% of the staff hold managerial positions.

It is important that employees feel motivated. Engagement surveys were carried out in 2022 in both Foamit Group and KPA Unicon. Foamit Group met its target for 2022 to conduct employee engagement surveys across all units. KPA Unicon conducted the engagement survey in all units as well and tightened its eNPS target for 2023. Within Partnera Corporation we had 68 joiners and 78 leavers and the corporate's staff turnover was 36.82%.



Learning and development

Employee learning and development to improve job performance and help motivate employees is a priority for Partnera. During 2022, several different competence development and training initiatives took place at Foamit Group and KPA Unicon. Foamit Group has developed a group-wide award program for best safety organization that will be implemented during 2023. Training was provided in areas such as the use of production equipment, sales and first aid. At KPA Unicon, the largest emphasis was placed on managerial and supervisor skill development. The regular safety inductions for all new employees and employees on specific installation sites continued in 2022 and new trainings for occupational health and safety representatives were organized. A select group of employees also received qualification trainings related to welding and electrical skills, and an annual information security training was held for personnel. Other subject-specific training needs for individual employees were arranged when needed.

Equal opportunities, diversity and inclusion

In Finland, the Act on Equality between Women and Men and the Non-Discrimination Act guide our actions. The purpose of the Equality Act is to promote gender equality and to prevent discrimination based on gender, gender identity or expression of gender and the Non-Discrimination Act prohibits all discrimination on the basis of gender, age, origin, nationality, language, religion, belief, opinion, political activity, trade union activity, family relationships, state of health, disability, sexual orientation, or other personal characteristics. We believe diversity, equity and inclusion strengthens our competitiveness and are prerequisites for success. We acknowledge that we are only at the start of our journey with regards to diversity, equity and inclusion. The Partnera Board of Directors has six (6) regular members out of which two are women. Partnera's leadership team consists of two members, both men.

Foamit Group's Board of Directors consist of four (4) members and KPA Unicon's of three (3) members, all of which are male. Foamit Group's Executive Management team has five (5) members and KPA Unicon's six (6) members. Women's share in Executive Management teams is 20% in Foamit Group and 0% in KPA Unicon.

Health and safety

In 2022, Foamit Group focused on two larger health & safety initiatives. The first was to develop a new health and safety toolkit which will be implemented across the entire Foamit Group including all three markets in 2022 and 2023. The second was to get the occupational health and safety management systems ISO 45001 certified in Finland.

KPA Unicon has focused on improved safety both in the workshops and on the installation sites. Also a few larger initiatives that concerned the whole company were performed including updating the safety induction materials, as well as improving tidiness of work environment in the workshops, HSE guidance and documentation on installation sites, and processing of reported incidents and observations. No fatalities or high consequence work-related injuries occurred in Partnera corporation in 2022. The types of injuries included slips and cuts. A number of LTIs increased at the Foamit Group from one to three and as a result the Corporate's LTIF rose from 15 to 16 although a number of recordable injuries decreased and the number of LTIs remained the same within the Corporation. Health and safety was prioritized at KPA Unicon in 2021 and the work has continued since. As a result, a positive trend has started at KPA Unicon and a in 2022 number of recordable accidents reduced with 20% and a number LTIs with almost 29% comparing to 2021.

KPA Unicon's major safety culture improvement measures included frequent health and safety communication and bettering of the processing of proactive safety measures which include safety observations, health and safety initiatives, safety rounds, safety sessions and near miss -situations. Furthermore, accident investigation was conducted to all lost time injuries, annual risk assessments in workshops were conducted and the next step in bettering work task risk management is conducting task-specific risk assessments in workshops in 2023. In 2022, 338 proactive safety measures were reported, 234 of which were safety observations and 7 health and safety initiatives. In 2022, 77% of reported safety observations and 100% of reported health and safety initiatives were processed.

KPA Unicon has started the process to require all their contractors to report their LTIs and LTIFs as of 2023. In 2023 information on suppliers' and subcontractors' HSEQ (health, safety, environment, quality) performance will be collected as part of supplier HSEQ assessments.

Total amount of own employees

UNINEL 2021
309

Employees by gender



Employees by group on 31.12.2022

	2022			2021		
	MANAGEMENT	OFFICE WORK	MANUFACTURING	MANAGEMENT	OFFICE WORK	MANUFACTURING
PARTNERA CORPORATION TOTAL	29	129	142	33	134	144

Employees by age group 31.12.2022

	2022					2021				
	18-29	30-39	40-49	50-59	60+	18-29	30-30	40-49	5059	60+
PARTNERA CORPORATION TOTAL	32	87	86	67	28	38	90	87	64	30

Partnera's Board of Directors, age group and gender 31.12.2022

Amount: 6	Men: 4 Women: 2	Age groups: Above 50: 3 men Under 50: 2 women 1 man
		Under bu: Z women, T man

Injuries, lost time injuries and lost time injury frequency rate in 2022 (and 2021)

	NUMBER OF RECORDABLE INJURIES	NUMBER OF LOST TIME INJURIES	LOST TIME INJURY FREQUENCY RATE ^{1]} , LTIF, %
PARTNERA CORPORATION TOTAL	17 (19)	8 (8)	16 (15)

1) Lost time injuries per one million hours worked. The numbers include Foamit Group and KPA Unicon.

Social responsibility at Foamit Group

Our approach to social responsibility

Foamit Group invests in the wellbeing of their employees and wants to be an inclusive employer. One of Foamit Group's strategic targets it to have an active dialogue with all employees regarding wellbeing at work and occupational health and safety. In 2022, Foamit Group invited the employees to participate in the company's strategy execution to foster commitment to common goals. Foamit Group introduced an inclusive strategy execution method and tool in all countries. Our people, Foamit Group as a work community

Our people, Foamit Group as a work community

To ensure that employees are satisfied with their work, employee engagement surveys are conducted on a weekly basis. A digital survey is in use in all countries, results are monitored frequently, and action plans exist to get results to develop more positively.

In 2022, the number of employees within the Foamit Group was 98, compared to 100 in 2021. Out of all Foamit Group employees, 62% work in production and 19% belong to management.In 2022, we had 10 joiners and 15 leavers in Foamit Group and the staff turnover was 6.31%.

Learning and development

Foamit Group has set a target to provide each employee with three days' annual training of their

choice, to be implemented no later than 2023. In 2022, an extensive key account management training was arranged for the sales team to develop the customer experience, develop customer communication skills and build trust in the customer relationships. The Human Resources, Health and Safety (HR&H&S) strategy that was put in place 2021 continued to be implemented during 2022. The strategy stresses the importance of professional competence and a commitment to support it. Training was provided in areas such as the use of production equipment, sales and first aid. Foamit Group also conducts annual development discussions with their employees each year to encourage and support career development.

> Number of employees was 98 in 2022. Foamit Group conducts employee engagement surveys on a weekly basis.

FOON

Equal opportunities, diversity, and inclusion

The Finnish branch of Foamit Group, Uusioaines Oy, implemented an equality survey in September 2022 which covered all employees in Finland. The report was prepared primarily as background material for the equality plan, which was updated in 2022.

It was possible to answer the survey using both anonymous paper forms and an anonymous electronic questionnaire. In the survey, all grounds of discrimination named by The Occupational Safety and Health Administration in Finland were investigated, as well as a ground of discrimination related to gender. No answers were received to the survey which Foamit Group interprets as the personnel feels that there is no discrimination at Uusioaines Oy.

Health and safety

In 2022, HSEQ processes and tools were unified and a new HSEQ toolkit was created. The first market to adopt the toolkit was Finland and the toolkit will be adopted by each Foamit Group subsidiary in all markets. The new tool contains e.g., risk management, compliance, legislation monitoring, safety and environmental observations, HSEQ deviations, control methods, reporting and documentation. In 2023, the goal is to implement the HSEQ toolkit and unify underlying processes in Sweden and Norway as well as develop a mobile tool for reporting safety and environmental observations in all countries. Work safety has always been a key priority at Foamit Group. In 2022, occupational health and safety activities were further optimised to meet the requirements of ISO 45001 occupational health and safety standard. ISO 45001 certification was awarded at the beginning of 2023.

An indoor air quality measurement was carried out at the Hasopor plant in Sweden in late December 2021. The scope of the measurement included e.g. inhalable dust. The concentration of inhalable dust slightly exceeded the limit value. Identification and assessment of potential corrective actions, including follow-up measurements, related to the exceedance of the inhalable dust limit value a are still ongoing.

There was an increase in LTIs from one to three and as a result the LTIF rose from 6.16 to 22%. The types of injuries included slips and cuts. All Foamit Group employees are covered by occupational health services.

Responsible sourcing

In 2022, Foamit Group started to map the key suppliers in each subsidiary's supply chain to ensure that they comply with the company's responsible sourcing guidelines and the Groupwide Supplier Code of Conduct. The Code includes requirements for environmental responsibility, social responsibility and good governance. The Supplier Code of Conduct was sent to a total of 162 key suppliers, of which 66 (41%) had signed the commitment by the end of the year. The target is to achieve 90% coverage by 2025.

CASE Winningtemp adopted in Foamit Group

In autumn 2022, Foamit Group adopted Winningtemp as a system and method of employee engagement. The Group previously did not have a consistent way of engaging all employees on a consistent basis in the areas of employer net promoter score (eNPS), leadership, job satisfaction, meaningfulness, autonomy, job satisfaction, participation, personal development and team spirit.

Since September 2022, Foamit Group has been surveying employee satisfaction in an automated, sys-

tems-supported, measurable and scientifically-based way on a weekly basis. The overall report for 2022 shows that Uusioaines Ltd has a very good response participation rate of 82%, but the resulting ratings and eNPS score are below the industry average. Winningtemp -eNPS results was -15 at the end of the year, when our target is at least +15. The main objective for 2023 is to improve the results in each category as well as the eNPS result. It is also important to encourage employees to provide written comments and responses to find the right ways to improve.

CASE

Employees implement the strategy

The Foamit Group wanted to make its strategy and objectives transparent to all, while ensuring commitment to common goals. During 2022, Foamit Group introduced a common strategy execution methodology and tool. The methodology used is the Hoshi Kanri methodology, familiar from the world of Lean. The Hoshin Kanri management model provides a clear prioritisation of objectives and actions to maintain focus on achieving common goals. At the same time, we also introduced the "Amplon" tool that supports the methodology, an easy-to-use and clear browser-based application that promotes collaboration across the organisation. The strategy is structured to clarify actions at each level of the organisation. This enables efficient progress towards common goals. Amplon provides a real-time overview, enabling the organisation to be managed coherently and effectively. The method provides particularly good

support for projects that are common to several Foamit Group companies. Common projects are visible and easy to update. Nevertheless, each country company also has its own individual target matrix (X-matrix). The review of the long-term objectives and the setting of new objectives is carried out in accordance with the annual management calendar in the context of the extended management team workshops, which are attended by the management teams of all country companies. The country targets are agreed accordingly in the extended management teams and workshops of the country companies.

Total amount of own employees and share of female employees on 31.12.2022

*Foamit Group consists of Foamit Group Oy an it's subsidaries Uusioaines Oy, Hasopor Ab and Glasopor As

	PERSONNEL 2022	NUMBER OF WOMEN 2022	PERSONNEL 2021	NUMBER OF WOMEN 2021
Foamit Group	98	9	100	12

Employees by group on 31.12.2022

	2022			2021		
	MANAGEMENT	OFFICE WORK	MANUFACTURING	MANAGEMENT	OFFICE WORK	MANUFACTURING
Foamit Group	19	18	61	21	16	65

9% of Foamit Group's and it's subsidiaries employees are women.

Employees by age group 31.12.2022

	2022					2021				
	18-29	30-39	40-49	50-59	60+	18-29	30-30	40-49	50-59	60+
Foamit Group	7	30	26	28	7	9	31	25	28	7

	LEADERSHIP TEAM	BOARD OF DIRECTORS
Foamit Group	5 members, 4 men 1 woman. Age groups: 2 men 50–60 yrs, 1 man 30–40 yrs, 1 woman & one man 40–50 yrs	4 members, all men (0 women), 3 members 50–60, one between 30–40 yrs

Injuries, lost time injuries and lost time injury frequency rate in 2022 (and 2021)

	NUMBER OF RECORDABLE INJURIES	NUMBER OF LOST TIME INJURIES	LOST TIME INJURY FREQUENCY RATE ¹⁾ , LTIF, %
FOAMIT GROUP TOTAL	5 (4)	3 (1)	22 (6.16)

1) Lost time injuries per one million hours worked.

Social responsibility at KPA Unicon

Our approach to social responsibility

KPA Unicon wants to offer meaningful work in a safe working environment. KPA Unicon's main values guide the operations: empathy, awareness, and passion. The company has established strong values to ensure that they are constantly aiming to promote well-being, fairness, and environmental friendliness both locally and globally.

Our people, KPA Unicon as a work community

Every year, KPA Unicon conducts a work community survey to get a holistic understanding of employee satisfaction rates and find areas to develop to make KPA Unicon a better place to work. The results showed that employees view supervisors' approachability and trust in employees positively and see that development needs to happen in areas of taking responsibility together and developing new ways of working together. In the 2022 survey eNPS was -67 and the target for 2023 to reach positive eNPS. Based on the results, KPA Unicon has set the development focus areas for 2023 to:

- Orientation of new employees to better integrate new employees into the work community, improve the employer experience and distribute workload more evenly.
- 2. Provide more robust management training. With to improve the quality of management and thereby clarify operating models and improve the functionality of the work community.

In addition to the annual survey, a new, monthly eNPS survey has started running at KPA Unicon and the results are monitored by the management and presented in monthly personnel information sessions.

🕥 kpa unicon

Number of employees was 198 in 2022. KPA Unicon conducts a work community survey every year.

KPA Unicon remains committed to engaging, training and developing our personnel, creating a highly skilled workforce and becoming the "Best place to work in the energy sector". To achieve this, the company will continue to focus on:

- Improving employee satisfaction based on the performed employee engagement survey by preparing action plans, setting KPIs and starting to measure and monitor progress
- Implementing a leadership development program
- Providing professional training in key areas. In early 2023, knowledge and skills of project personnel and project operations will be a development focus area
- Extending communication of the company strategy, mission, vision and values
- Cooperating with external service providers, for example insurance companies and health care service providers retained to support implementation of personnel development and engagement programs
- Improving the orientation process for new employees as well as developing opportunities for every employee to develop their expertise through diverse and changing tasks, and to build career paths inside the company. We will also focus on developing our mentoring process.

In 2022, there were 58 joiners and 63 leavers in the KPA Unicon and the employee turnover was 30.56%.

KPA Unicon also procured external labor for production and other projects. For service and modernizations, external work is mainly used for site services, both as subcontracting and as hired labor. In 2022 KPA Unicon used 25 workers for a total of approximately 40 000 hours as procured labor for site services. This data is tracked by the person responsible for the procurement. In Kiuruvesi and Lapua workshops a total of 25 workers from different operators were procured as labor for different durations and tasks. Furthermore, labor has been procured to projects mainly for project management, commissioning and design functions.

Learning and development

In 2022, many kinds of employee trainings were organized according to needs arising from personnel surveys and other feedback. The largest investment in 2022 was placed on new supervisors and their orientation. Supervisor trainings have also been organized in connection with the renewal of the recruitment system and the improvements made to the recruitment process.

At KPA Unicon, trainings are organized for the personnel to maintain and develop their skills throughout the year. This is done to ensure that legal qualifications and standards are met as well as to ensure high quality results and employee development. Based on individual development needs and desires, subject-specific trainings can be arranged for the employee, which serves both the employee's development and the company's needs. In 2022, trainings were organized for personnel on information security and for occupational health and safety representatives on health & safety. Furthermore, qualification trainings related to welding and electrical qualifications were arranged to those who needed training.

In 2023, project staff trainings, management trainings, first aid trainings, occupational health and safety trainings, as well as English language courses, tool usage and qualification training for those who need it have already been planned.

In 2022, the average hours of training for employees were

- 26.75 hours for men and 16.64 hours for women
- 35 hours for management, 24.26 hours for white collar employees and 1 hour for blue collar employees

The documentation of training information has been identified as an area of development. In 2023 continuous tracking of a number of hours spent on training by employee will be improved. In 2022 training information was documented for

- 30.7% of men and 50% of women
- 25% of management, 56% of white-collar employees and 2.5% of blue collar employees.

KPA Unicon holds annual development discussions for all its employees each year. Development discussions are conducted each spring and annual targets are set in line with company level targets. Interim performance reviews to discuss targets, support and training needs are conducted during fall of each year. In 2022, 22.7% of personnel received the annual development discussion and this has been identified as a development area for the future.

Equal opportunities, diversity and inclusion

KPA Unicon has integrated a diversity and equality plan into day-to-day operations. In October 2022 an equality survey to maintain and update the statutory equality plan was carried out and the results show that the overall equality situation is perceived to be good.

- **1.** 85% of women and 58% of men fully or partially agreed that equality is realized in the workplace.
- **2.** 86% of women and 96% of men feel that gender has not been a meaningful factor in working life.

The results showed that the most significant need for development was in equality between personnel groups. In 2023, the focus will be on the development of management and orientation of turnover to improve the experience of equality between different personnel groups.

The results of the equality survey will be reviewed with the company trustees to update the equality plan in H1/2023. In the update of the equality plan, the focus areas for development and actions to be taken are determined. Monitoring of these is carried out in connection with the next update of the equality plan. The equality plan is updated every two years.In 2022, the number of employees within the KPA Unicon was 198, compared to 205 in 2021.

Health and safety

In 2022, the main safety focus at KPA Unicon was to improve tidiness and workflow in the workshops and HSE (health, safety, environment) inductions and documentation in the installation sites as well as on overall continuous promotion of occupational health and safety through communication. Furthermore, the guidance, education and supervision regarding personal protective equipment has been improved, and the processing of reported accidents, near misses and safety observations has continued. Encouraging the employees to report proactive safety measures such as safety observations and initiatives, and processing the reports is continuous work that has been a focus area in 2022 and will continue to be a focus area in 2023 as well. For every lost time injury an investigation has been conducted to go through the situation with an appointed group to prevent the recurrence of the accident. Annual risk assessments of the workshops were conducted in 2022 and work to implement risk assessment as a continuous process to daily operations is ongoing. Conducting work task specific risk assessments in the workshops will be the next step in bettering work risk management. Risk assessments are conducted under the guidance of a competent occupational safety manager.

The occupational health and safety target is set at zero serious accidents. We consider LTIs to represent serious accidents. To meet this target, the focus will be on developing the occupational health safety culture through providing specific training, improving communication, identifying risks and hazards, bettering investigation of accidents, and improving implementation of corrective actions related to safety observations, near miss -situations and all incidents. Data gathering methods are being improved to better indicate the level of health and safety performance and to produce reliable data.

No fatalities or high consequence work-related injuries occurred in 2022. The types of injuries included slips and cuts. Health and safety matters were prioritized at KPA Unicon in 2021 and the work has continued ever since. As a result, a positive trend has started at KPA Unicon as the number of recordable accidents reduced from 15 to 12, i.e., by 20 % and LTIs (lost time injury) by almost 29%. KPA Unicon's target for a sick leave rate is 3%. In 2022, the sick leave rate was 2.5%.

To promote employee health, KPA Unicon has regular surveys to collect data on personnel wellbeing, development discussions, models for substance abuse and early intervention, and several employee benefits. KPA Unicon has comprehensive occupational health care services which for example cover an agreed number of visits to a physiotherapist and annual flu vaccines.

KPA Unicon has an ISO 45001 certified occupational health and safety management system which gives us a comprehensive model for management and continuous development of occupational health and safety, including avoiding or minimizing occupational accidents and near miss -situations. For our stakeholders, the certification acts as a proof of our dedication to continuous improvement of occupational health and safety. The scope of the occupational health and safety management system covers all of KPA Unicon's operations, including all operations of its subsidiaries and operations on installation sites. On installation sites, the occupational health and safety system applies to cover all employees on site when KPA Unicon is the main contractor. In other cases (for example when KPA Unicon is a sub-contractor), the occupational health and safety system covers persons employed by sub-contractors working for KPA Unicon. Currently the externally audited and certified occupational health and safety management system only covers premises in Finland and total supply of water and steam boiler plants, as well as related lifecycle services. The certified system covers 77.8% of KPA Unicon employees. Expanding the ISO 45001 certification alongside with the ISO 9001 and ISO 14001 certifications to also cover premises abroad is a target set for the future.

CASE **Functionality through organization change**

In the past year, there have been many personnel changes in the organization, and the composition of the remaining teams was no longer appropriate. In the same context, we listened to the feedback from the organization and on the other hand we wanted to make sure that the know-how is effectively used without additional "silos". We believe that by renewing the organizational model, we can better highlight the skills and, on the other hand, develop the skills of the people as part of the function. The change aims for a more functional organization that is based on people's skills. Competence can be better targeted and managed as part of functions. The role of supervisors also becomes clearer compared to the previous model. In practice, however, the work of several people continues as part of project-specific / service delivery-specific teams

CASE Focusing on internal information sharing

In the spring of 2022 KPA Unicon's technology department started holding training meetings every Thursday on KPA Unicon's various technology solutions. The purpose of "Technology Thursdays" is to share information within the company on KPA Unicon's technology solutions and the KPA Unicon way of doing things. KPA Unicon has employees with many different backgrounds, and partly because of this, knowledge and skills have been very scattered, and sharing of information has been needed.

Every Thursday there is a new topic and a new speaker sharing their knowledge. The hope for the future is to engage personnel to highlight more areas where sharing of knowledge is needed and have personnel share their knowledge with others by participating in the trainings as a speaker, and to have external speakers on relevant issues.

In addition, in the fall of 2022 the concept has been duplicated for shorter weekly HSEQ training quarters where changing issues relating to health, safety, environment, quality and overall sustainability are presented to and discussed with the personnel.

CASE Responsible recruitment

During the past year, KPA Unicon has invested in the recruitment process with the aim of ensuring responsible recruitment.

The aim has been improving the applicant experience and the accountability and transparency of the process. To this end, the company has invested in a new recruitment tool that now allows for active communication and discussion and feedback between applicants and the company. In addition, internally, the aim has been to ensure that the operating models in accordance with the recruitment process are followed.

In connection with improving recruitment, improvements have also been made to onboarding orientation. Selforientation materials have been renewed and mentors have been appointed for new employees. Work for improved recruitment and orientation will continue in 2023 to ensure that people entering the company stay in the company.

Total number of own employees and share of female employees on 31.12.2022

	PERSONNEL 2022	NUMBER OF WOMEN 2022	PERSONNEL 2021	NUMBER OF WOMEN 2021
KPA Unicon	198	22	205	33

Employees by group on 31.12.2022

	2022			2021		
	MANAGEMENT	OFFICE WORK	MANUFACTURING	MANAGEMENT	OFFICE WORK	MANUFACTURING
KPA Unicon	8	109	81	10	116	79

In KPA Unicon women account for 11% of the employees.

Employees by age group 31.12.2022

	2022				2021					
	18-29	30-39	40-49	50-59	60+	1829	30-30	40-49	50-59	60+
KPA Unicon	25	56	59	37	21	29	58	61	34	23

	LEADERSHIP TEAM	BOARD OF DIRECTORS
KPA Unicon	6 members, all men. 4 men 30–50 yrs, 2 men 50–60 yrs	3 members, all men (0 women), 2 men above 50 yrs, one man between 30–50 yrs

Injuries, lost time injuries and lost time injury frequency rate in 2022 (and 2021)

	NUMBER OF RECORDABLE INJURIES	NUMBER OF LOST TIME INJURIES	LOST TIME INJURY FREQUENCY RATE ¹ , LTIF, %
KPA Unicon total	12 (15)	5 (7)	14.07 [19.47]

1) Lost time injuries per one million hours worked.

Sustainable economic growth



Partnera's approach to economic responsibility

Partnera delivers solutions that are integral to the transition towards the sustainable use of resources and a carbon neutral society. We dedicate our resources – our business, investments, expertise and networks – to creating sustainable value and building a better future. We also believe that this is where future growth will occur. Consequently, we seize the excellent growth opportunities arising from sustainable industries to create lasting value.

Another key objective is to increase competitiveness so that the ROE exceeds 10% per year.

Direct economic value

Although we are a small company on a global scale, we have a direct and indirect economic impact on our stakeholders. The direct economic impact includes our purchasing of goods from suppliers, dividends paid to shareholders, wages and benefits paid to our employees, and financial expenses such as tax incomes and community investments.

Supporting local communities

Partnera's companies, Foamit Group and KPA Unicon, have both supported communities through various activities, donations and participation in events and organizations.



Economic responsibility at Foamit Group

The Foamit Group is pursuing profitable growth through actions in line with its strategy. It aims to grow and share its value fairly with all its stakeholders and to ensure continuity of its operations in all circumstances through careful management and risk management.

The Foamit Group is pursuing profitable growth through actions in line with its strategy. In 2022, overall revenue and profitability developed well and the strategy was successfully advanced in all key areas. Foamit Group's revenue increased by 49% year-on-year to EUR 45.7 million, driven by the acquisition of the Norwegian company Glasopor, which was completed in September 2021. Revenue also grew organically by around 23%, in particular due to the successful expansion of the customer base. EBITDA was 14% of turnover (2021: 21%).

The year got off to a challenging start as the war in Ukraine resulted in an acceleration of the general price increase, weakening the Foamit Group's operating environment. The war had a negative impact on the profitability of the foam glass business, especially in the Finnish market where the cyclical nature of infrastructure construction has halted and postponed projects. The real estate construction market grew in Finland and Norway. In Sweden, the foam business developed steadily compared to the previous year.

The lifting of pandemic restrictions was reflected in a slight increase in the volume of recycled glass received in the glass business. Sales of cleaned recycled glass increased by around 35% compared to the previous year as high energy prices increased demand for recycled glass. Towards the end of the year, cost increases were partly passed on in prices and the company implemented various efficiency measures to improve profitability, which are still ongoing. In Norway and Sweden, the Foamit Group implemented and continues to implement efficiency measures focusing on improving sales profitability, production efficiency, energy savings and reducing fixed costs.

In the spring, Foamit Group received a major order to supply foam glass for a hospital construction project in Drammen, Norway, during 2022-2023. Foam glass was selected as the lightweight material for the hospital's foundations due to its technical and environmental properties.

A major strategic step forward was the decision to finalise the planning for the investment in the Norwegian factory. If realised, the investment will double Foamit Group's manufacturing capacity at the Onsoy plant. At the same time, fossil fuels will be replaced by renewable electricity and production will be virtually emission-free.

Sustainable sourcing

Foamit Group has set targets for sustainable supply chain

- 2022: The preparation of responsible sourcing principles for our entire supply chain and monitoring their implementation.
- 90% of our main suppliers will have signed the Supplier Code of Conduct by 2025.

In late 2022 Foamit Group started the implementation of the Corporate level Supplier Code of Conduct, which states that the company works with responsible companies. Further efforts will be made to extend the use of the guidelines to all main suppliers during 2023.

Economic responsibility at KPA Unicon

KPA Unicon is committed to operating as a responsible partner for its stakeholders, and therefore in 2022 KPA Unicon renewed its strategy and organization model to better answer to the needs of its internal and external stakeholders and to ensure continuous operation.

The results of a material assessment conducted in 2021 highlighted the following themes in terms of governance:

- Focusing on delivering high-quality products and services that meet customer needs.
- Placing emphasis is on the continuity and flexibility of own operations, reliability of delivery and profitable business.
- Strategic targets and Must win battles have been set to ensure development of the above mentioned material themes. These include being a strong specialist in circular economy and recycled fuels and a preferred partner as well as improving security of supply and growing in service business.

In accordance with the Corporate level target, KPA Unicon has taken a common Supplier code of conduct into use. In 2022, there were no significant fines for breaking laws or regulations.

Sustainable sourcing

KPA Unicon has set targets for sustainable supply chain:

• 2025: 80% of all material suppliers and 100% of suppliers from risk countries HSEQ-audited

Work on the target started in 2022 by updating the process of Supplier HSEQ-auditing. In 2023, extensive collection of supplier HSEQ-data will be conducted. This data will work as a base for setting Health & Safety criteria for used subcontractors in 2025.

KPA Unicon's code of ethics states that the company works with responsible companies. The company evaluates subcontractors prior to the start of cooperation and require all the necessary information to conduct an evaluation. KPA Unicon avoids working with companies who are seen to be in conflict with the company's code of ethics. KPA Unicon only uses suppliers they have approved themselves or their customer has approved. Internal guidelines on responsible sourcing have been defined and they highlight following common guidelines of sourcing to ensure fluency and quality.

The main material sourced by KPA Unicon is metal used in the manufacturing of for example pipes, parts, plate sections, pipe beams and plate flanges. In terms of chemical use, manufacturing mainly requires sourcing of welding gases and additives as well as painting products. When goods and services are sourced, it is checked that the supplier or subcontractor in Finland operates in line with the Act on the Contractor's Liability. KPA Unicon's new suppliers and subcontractors are required to deliver information considering their HSEQ (health, safety, environment, quality) performance as part of their assessment. Currently, there is no official criteria for HSEQ-performance.

Supporting local communities

Over the past year, KPA Unicon has participaöted in student fairs in addition to industry fairs, with the aim of increasing the company's visibility among potential job seekers. In addition, KPA Unicon supports the Aalto University Thermal Power Club, which aims to bring energy students together and develop their professional skills, but also to help potential employers get to know future experts in the field. KPA Unicon also supports sports and leisure activities for children and young people. The company also sponsors local sports clubs.

Considering bodies to deal with impacts for communities, KPA Unicon has an internal occupational health and safety organization and in installation sites an occupational health and safety cooperation in accordance with the occupational health and safety laws of each country is coordinated by the customer or the contractor. In 2022, no formal grievance process for local communities was available. The whistleblowing channel taken to use in 2023 will be open to KPA Unicon's subcontractors and suppliers.

Data Privacy

During 2021 and 2022, KPA Unicon has done a significant amount of development work in terms of information security and data protection. In 2021, simulated phishing attempts to examine personnel's ability to react to fishing messages were conducted and related training to increase personnel awareness on phishing attempts was organized for KPA Unicon's employees. In the beginning of 2022, an external partner conducted an information security risk survey, as part of which data protection risks were also examined. Information security and data protection risk mapping will be done annually in the future.

In 2022, an information security management model and information security policy were also prepared for KPA Unicon. In addition to these, an information security deviation management process, which also includes the management of data protection deviations, was created. KPA Unicon has a designated security breach management group, which is responsible for responding to security and privacy breaches in accordance with the security breach management process. The group includes the information security group and members from information management and communications who perform daily monitoring. The group is led by KPA Unicon's information security responsible. The first detection of a security breach can be made by anyone, for example a company employee, a partner, an information system administrator or an external online service user.

In 2022, no complaints regarding the violation of customer privacy were reported. Nor has any leak, theft or loss of customer data been detected. In 2022, there was one potential situation for a data leak, but thanks to a quick reaction, there was no data leak.

Every year, KPA Unicon organizes mandatory information security training for all employees, which also includes a data protection training section. In 2021, 89% of the personnel completed the training and in 2022, 87% of the personnel completed the training.

In 2023, the goal is to expand data protection training for personnel. In addition, in 2023, the goal is to create a separate management model for data protection as well as to prepare a data protection policy for KPA Unicon.







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