Senseair

Sustainability Report 2024

Introduction

This is Senseair AB's second sustainability report. It has been drawn up in accordance with the regulations in ÅRL chapter 6. Senseair's board has responsibility for our sustainability reporting and the focus areas specified in the sustainability report.

The purpose of the report is to give Senseair's stakeholders a transparent picture of our sustainability work.

Offices in Sweden and China | Sales in 40+ Countries | No. of FTE Employees 148 | Sales/Turnover 224 MSEK

Message from our CEO

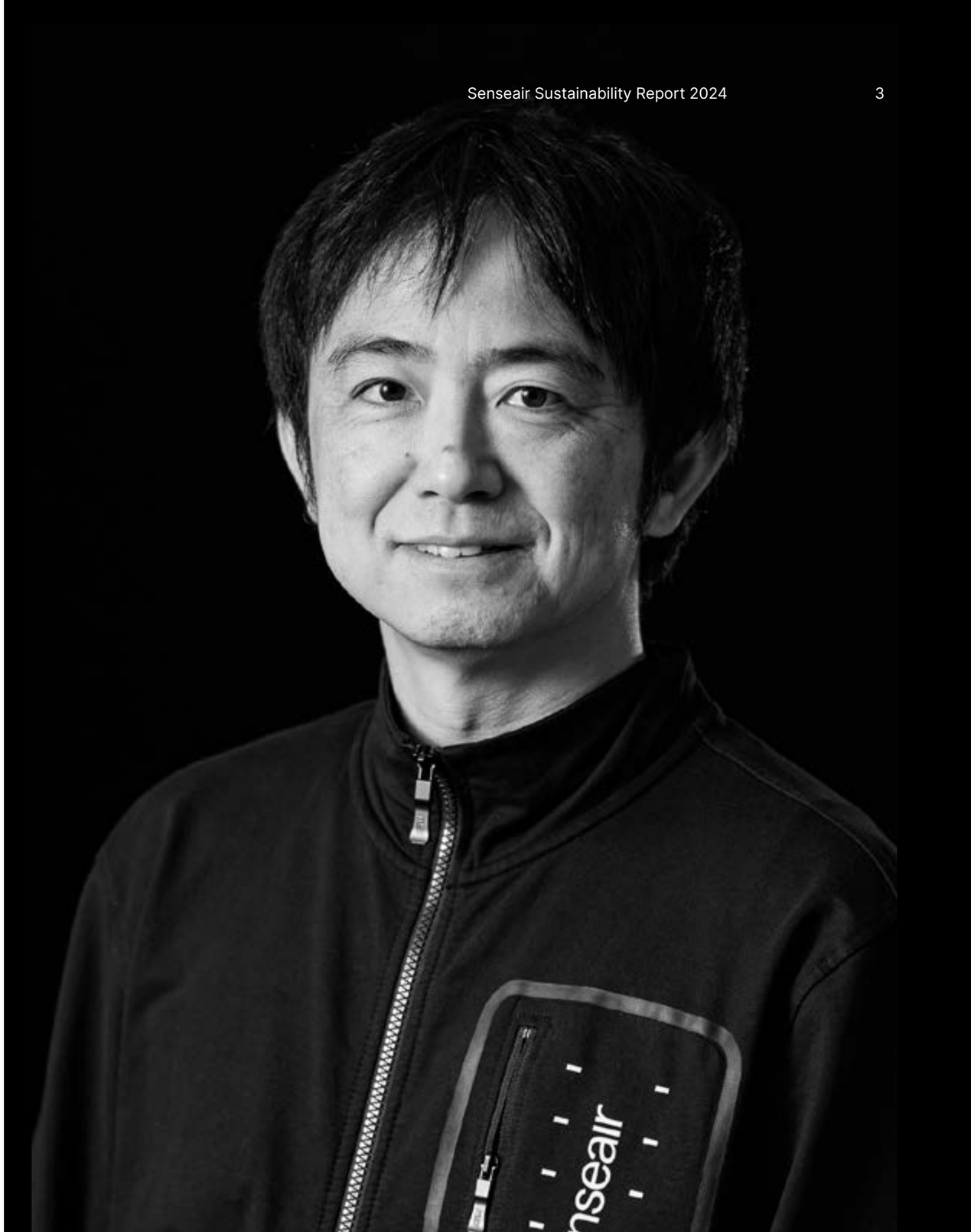
Since our founding in 1989, Senseair has been dedicated to “making sense of air,” delivering advanced gas measurement solutions based on NDIR technology. Since joining the Asahi Kasei Group in 2018, we have shared a common mission: “We, the Asahi Kasei Group, contribute to life and living for people around the world.”

Guided by this mission, we strive to be an innovative solution company that creates safer, more comfortable, and more sustainable lives. Even as the global environment grows increasingly complex and uncertain, our philosophy remains unchanged: we continue to challenge ourselves and deliver new breakthroughs through technology, integrity, and collaboration.

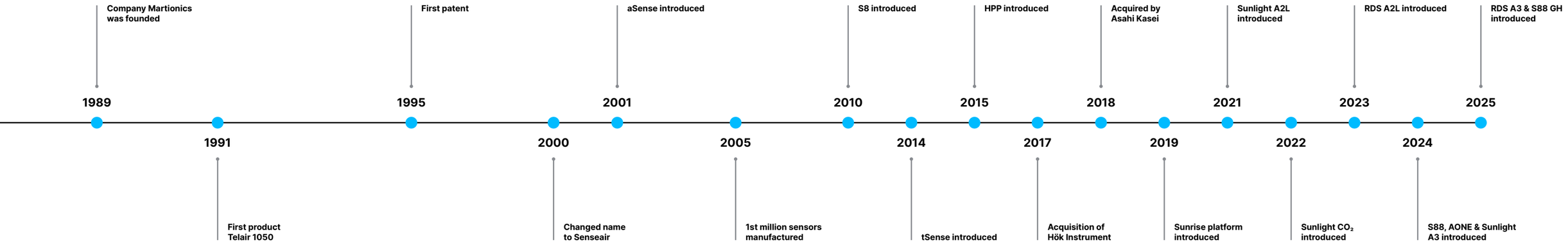
From our home in Sweden, we will continue to deliver value to the world, combining the innovation strengths of Asahi Kasei and Senseair to create global impact. We are committed to developing products with lower environmental impact and greater contribution to sustainability. We will contribute to a sustainable world through innovation, ensuring that every step we take aligns with environmental responsibility and social progress.

As the most important prerequisite, we will continue to contribute to a sustainable society while ensuring safety and quality, compliance, corporate governance, and respect for human rights. Through these unwavering principles, we aim to be a one-of-a-kind company that delivers unique value and helps build a brighter, more sustainable future for generations to come.

– Toshiaki Matsumoto, Managing Director



Our history



Senseair was founded in 1989 by Professor Hans Martin. What started out as a small business that allowed him to be closer to his family in Delsbo, Sweden has grown to become a leading global provider of air and gas sensing technology.

Over the course of over 30 years, the company has yielded countless sensors, patents and jobs. We started out by mainly producing CO_2 sensors. Being a vital part of the life cycle, we saw there was a great demand of CO_2 sensors within different applications. Eventually we began manufacturing other types of sensors as well, for measuring refrigerants, methane, alcohol and so on, and a major breakthrough in our business happened when we decided to branch out into the field of breathalyzers and alcohol interlocks.

An acquisition of Västerås-based Hök Instrument AB in 2017 brought the competence needed to grow in that field. Our participation in the DADDS project, funded by the US government, has provided valuable financial support.

Senseair has always strived to be an independent company and has managed to remain independent despite a contract of close cooperation with Asahi Kasei Microdevices. This culminated with the latter acquiring Senseair in 2018.

The relationship has been mutually beneficial, however, with Senseair providing design expertise and good experience, while at the same time receiving funding, components and competence from Asahi Kasei.

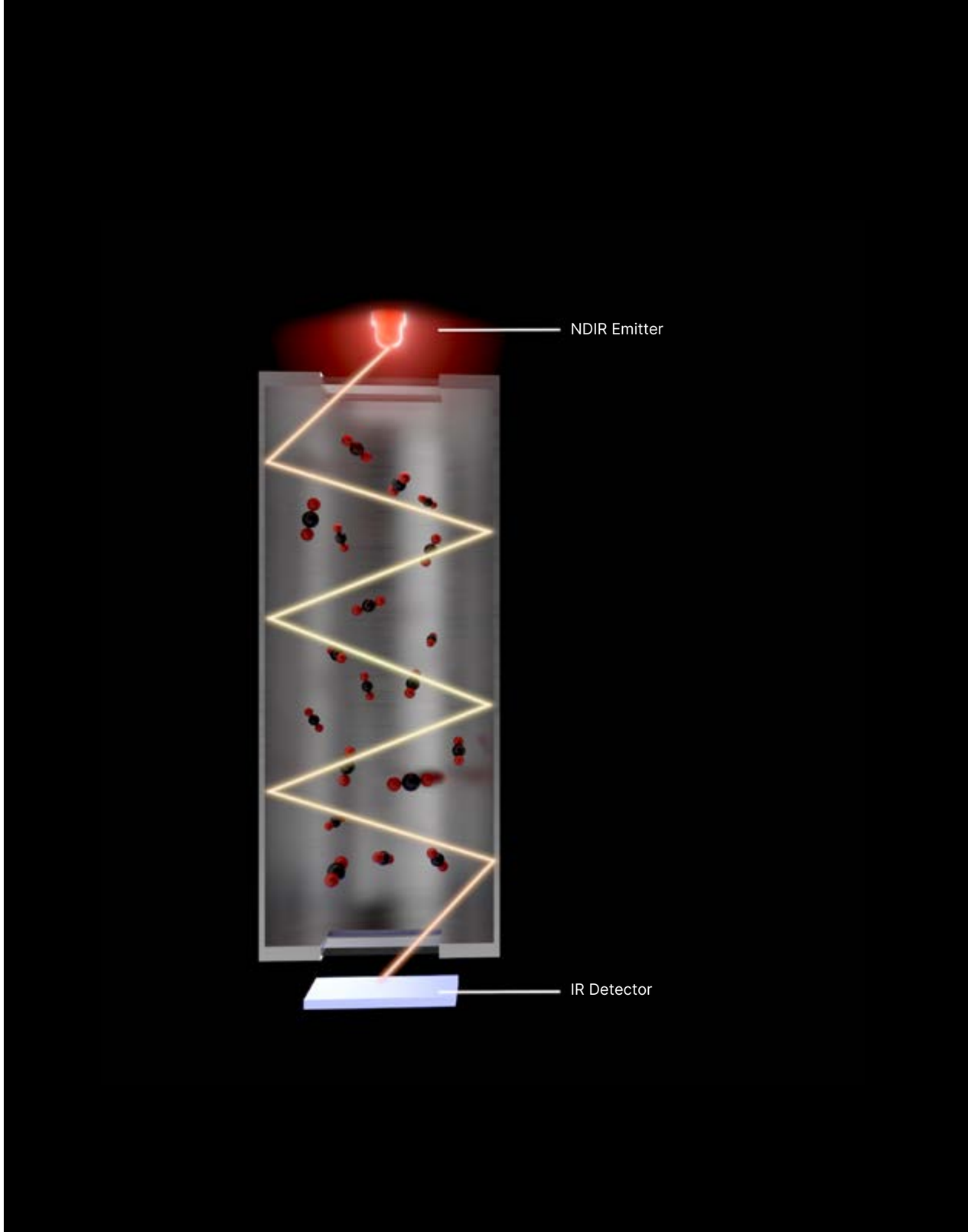
What is NDIR?

Many gases have invisible colours that can be seen with Infra-Red light. A non-dispersive infrared (NDIR) sensor has an Infra-Red light-source and a detector that measures how much infrared light of a specific wavelength that is absorbed by the surrounding air. This measurement is then used to calculate the concentration of a specific gas.

Compared to electrochemical sensors, the lifespan of the NDIR sensor is lengthy. This is mostly because NDIR sensors have no sensor burn-out, nor any sensor deterioration upon exposure to gases. Furthermore, the interference from other gases in the measurements is minimal to zero for NDIR sensors, depending on which gas is to be measured.

The competing semiconductor sensor technology performs best in higher concentrations (2,000 – 10,000 ppm) and are cross-sensitive to humidity and temperature fluctuations. The semiconductor sensors can deteriorate as non-target gases may be absorbed by the oxide surface, so called poisoning.

For the gases where NDIR-sensors can measure the concentration, the sensors have none of these problems and work well for all concentrations of the target gas. Altogether, the major advantages of NDIR sensors are low life-cycle cost and a precise and stable long-term operation without need for maintenance.



Our products

All of Senseair's products contribute to a more sustainable society. They save energy, prevent alcohol related accidents on the road, and warn if there is a leakage of dangerous gases.

"Improve quality of life through our sensors"
– Contributing to a carbon neutral & sustainable society

Carbon dioxide sensors

Senseair's CO_2 products contribute significantly to both economic and environmental sustainability. Designed for long term reliability, their extended operational lifespan minimizes replacement costs and enhances overall cost efficiency.

When integrated into demand controlled ventilation systems, our sensors enable precise regulation of indoor air quality, reducing unnecessary HVAC energy consumption and lowering carbon emissions.

This not only supports the achievement of sustainability goals, but also promotes healthier indoor environments, improving comfort and well-being for building occupants. When the indoor air quality gets better, productivity increases, and bad decisions, sick leave, and accidents decrease, which increases the profitability of businesses. In a school environment, good indoor air leads to higher grades and lower absence.

We spend 90% of our time in different indoor environments, and the Covid-19 pandemic proved to us the importance of good indoor air quality since viruses spread more easily in poorly ventilated spaces. Aside from various health benefits, maintenance costs decrease as well, which makes our CO_2 sensors a profitable investment.

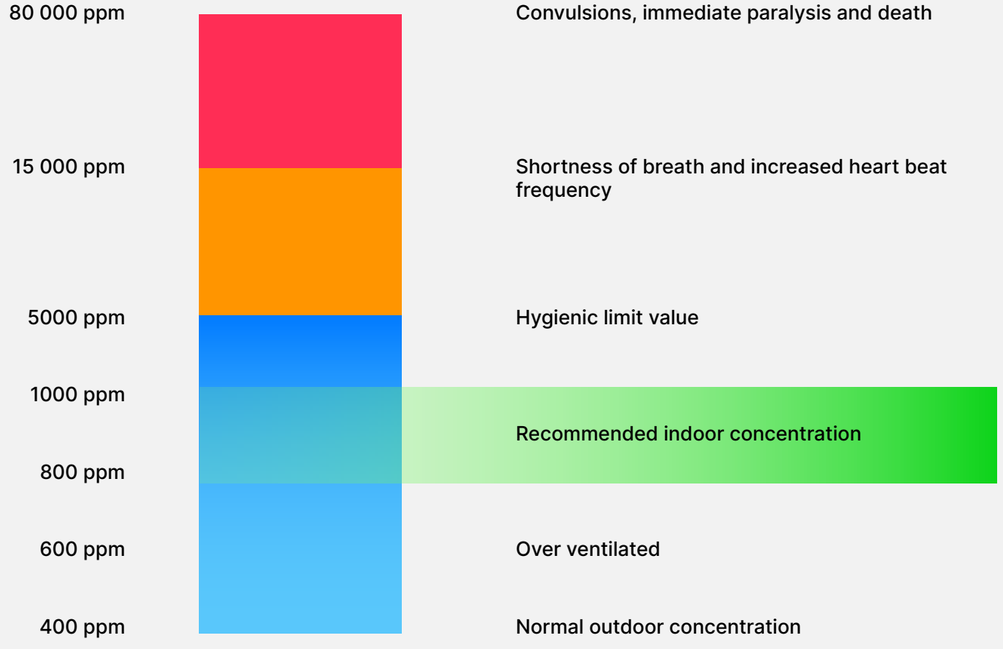
Our products have many fields of application. For example, they can also alert about gas leaks. Not only can leakages be expensive, but they can even be lethal since certain gases may cause suffocation or poisoning. In applications dependent on gas, disturbances can be caused by leakages. This can get costly and constitute a danger to life, for example when lifeboats leak gas and they do not get mended before usage. Aside from the environment and possible economic gains, human lives are saved.

Another field of application is the cultivation and transport of fruits, vegetables and other produce. Photosynthesis converts CO_2 and water to energy, and in greenhouses the CO_2 levels have to be controlled through ventilation or generation of CO_2 to achieve the best result in cultivation. The transport of fruit must take place during strictly controlled conditions to prevent decomposition, which leads to food waste and economic losses.

There are also different health applications. For example, an anaesthetist measures the patient's exhalated air to see how far they have come in their anaesthesia. The progress of a treatment can also be measured with CO_2. Aside from that, CO_2 can stimulate breathing after apnoea, destroy warts through freezing, and cure bronchial spasms, among many other fields of application. Our solution ensures CO_2 can be measured without breaching the patient's integrity, aside from saving human lives.

Metabolism can also be measured through outdoor air to see if you need to eat more or less, or what you need to eat more or less of.

How does CO_2 affect the human body?



Refrigerant gas sensors

In line with our sustainability strategy and commitment to climate action, we have developed and implemented NDIR sensor technology specifically designed for A2L and A3 refrigerants.

A2L refrigerants, such as R32 (difluoromethane) and R32 mixtures are mildly flammable, while A3 refrigerants, including R290 (propane), are highly flammable but non-toxic. The shift toward these alternatives reflects a broader industry movement to reduce environmental impact while maintaining system performance and safety. The adoption of A2L and A3 refrigerants is driven by regulatory frameworks in both the United States and the European Union.

In the United States, the Environmental Protection Agency (EPA) enforces the American Innovation and Manufacturing (AIM) Act, which mandates a phasedown of HFCs (HydroFluorCarbons) by 85% over 15 years. As of January 1, 2025, new HVAC and refrigeration systems must use refrigerants with a GWP of 700 or lower. This regulation is part of a broader effort to align with the Kigali Amendment to the Montreal Protocol and reduce the climate impact of cooling technologies.

In the European Union, the revised F-Gas Regulation enforces a rapid phase-down of HFCs, aiming for a complete phase-out by 2050. From 2027, monobloc air conditioning units and heat pumps with a GWP(Global Warming Potential) above 150 will be banned, with further restrictions on stationary refrigeration systems from 2030. These regulations are aiming to accelerate the shift at HVAC and refrigeration industries toward climate-friendly alternatives such as A2L and A3 refrigerants.

Our sensors are engineered to detect even minimal refrigerant leaks, enabling early intervention and preventing emissions that contribute to climate change. Their design prioritizes long-term reliability, low energy consumption, and operational stability, ensuring they support both environmental and economic sustainability.

By enabling safe and efficient use of low-GWP refrigerants, our A2L and A3 sensors contribute to several key sustainability outcomes:

- **Reducing direct greenhouse gas emissions through early leak detection.**
- **Supporting energy-efficient system operation.**
- **Enhancing indoor air quality and occupant safety.**

This initiative reflects our broader commitment to sustainable innovation, regulatory compliance, and the advancement of technologies that support global climate goals.

Alco sensors

Our other application area is measurement of alcohol in exhaled breath. Alcohol-impaired driving remains one of the leading causes of traffic accidents and fatalities—yet it is also among the most preventable. Beyond relying solely on individual responsibility, proactive safety technologies can significantly reduce, or even eliminate, drunk driving incidents. Our solution has been implemented by haulage contractors and public transport companies and may eventually become mandatory in personal vehicles.

By using carbon dioxide as a tracer gas in human breath, our system eliminates the need for disposable mouthpieces. This not only simplifies user interaction but also reduces environmental impact by eliminating single-use plastics—ultimately contributing to safer roads and a more sustainable future.

Innovation

Senseair is a leading global provider of gas sensing technology. Our purpose is to make sense of air by providing the best possible measurement solutions, services, and intelligence for various applications within gas measurement. With over 25 years of experience and a strategic focus on innovation and research, Senseair has become the centre of excellence in the field of non-dispersive infra-red (NDIR) technology. Research and innovation are in our DNA and we consciously use research to pave the path into our future.

For a company, to be successful in the longer run, sustainability is important. Our research strategy is developed to keep Senseair competitive and profitable in a 3 to 10 years perspective. In our strategy we have stated that our research should be aligned with global ethical and societal challenges such as the UN Sustainability Development goals. We constantly work for the world to be a better place which benefits us all, our markets and long-term financial growth.

To boost our innovative power, we use public research grants such as EU grants and national grants to partly fund a large research team with a wide range of competences from electronics design, optics and materials sciences to environmental measurement instrumentation. We act as an in-house mini-university. This research team is strong enough to maintain Senseair's position as a world leading innovation force within NDIR gas sensing. The public grants also facilitate formation of valuable research clusters and competence networks including close collaboration and knowledge sharing with world leading scientists at universities, institutes, sub suppliers and users.

Product size and power consumption are important for the ecological footprint during the lifetime of our products. We use innovation and our expert competence within semiconductors, electronics and optics to constantly push the limits. Our Sunlight product family is currently by far the world leading product regarding power consumption and reliable performance over a long lifespan. This helps us and our customers to keep a small ecological footprint.

Further on, this family of low power products are used in applications to significantly reduce energy consumption within buildings by optimizing the ventilation need to a minimum without sacrificing healthy indoor air quality. They are also used in air conditioning systems as an essential component for the transition into more environmentally friendly refrigerants. For this application we also use expertise and research efforts on production technology to reduce emissions of potentially harmful calibration gases to a minimum. For our high-volume products a holistic perspective is essential to maximize the positive environmental impact from our products and minimize the negative.

Several of our EU-funded projects aim at developing instrumentation for greenhouse gas measurements. These projects provide tools to scientists for more rigorous and accurate modelling of greenhouse gas influence. In many applications the Senseair research prototypes can replace scientific instruments at less than a tenth of the cost. It does not only help science but also develop new markets for more widespread monitoring of harmful gases, as well as helps Senseair to improve technology and make it even more competitive.

Today Senseair can deliver commercial sensors, or research prototypes, for accurate monitoring of nitrous oxide, carbon dioxide or methane at a low cost. In the five to ten years perspective, we see a potential change in the NDIR technology going from open space sensing to chip integrated waveguide-based sensors.

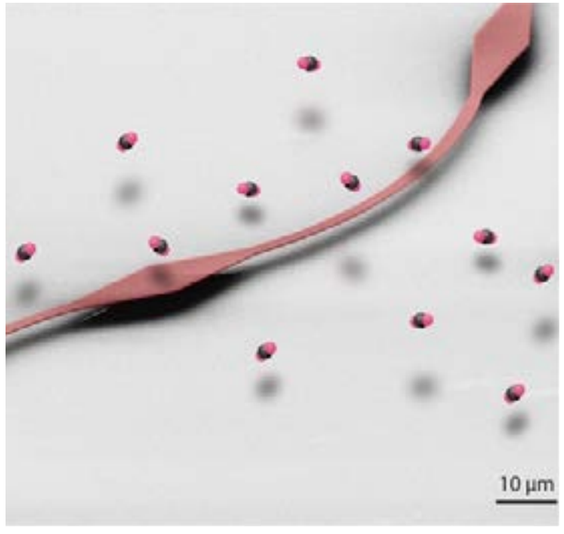
Air quality mapping in Brussels using low cost NDIR-sensors.

This can reduce size of the full sensor as well as the power consumption about 10 to 100 times compared to current solutions. We have a strong IP portfolio in the field, and in the Stockholm region, close to the Royal Institute of Technology, we have a research lab mainly focusing on integrated waveguide-based NDIR sensing.

Today, our sensors are based on classical free-space optics. To get good sensitivity infrared light must be guided several centimetres up to a meter in the sensors. With constraints of classical optics there are limitations how far we can reach within miniaturisation.

Sensors are getting smaller but will not get from the centimetre to mm size. Waveguides, or optical fibres, can be etched at low cost as a spiral on top of semiconductor chips. A 10 cm long spiral can be integrated on a 3 by 3 mm chip. If the waveguide is made thin enough, the infra-red light will follow the spiral with a large amount of the light energy outside the waveguide in contact with the air.

This part of light is named evanescent field and can be used for gas sensing, just as in a traditional NDIR sensor. Senseair employees in collaboration with scientists at the Royal Institute of Technology are responsible for this disruptive technology breakthrough.



SEM image of a waveguide section on a chip, illustrating NDIR gas sensing using evanescent field around infrared waveguides.

Quality assurance

Senseair products are produced under rigorous manufacturing standards, calibration and testing processes. Our Production unit is certified by DNV (Det Norske Veritas) to ISO 9001 and ISO 14001. Furthermore, we have UL certification for products where customers require it. Our products are the benchmark for the industry for accuracy, longevity, power consumption and quality.

Senseair also fulfils the stringent Swedish regulation for Environmental and Health and Safety requirements. We are regularly monitored and audited to ensure compliance.

Senseair´s Quality Policy

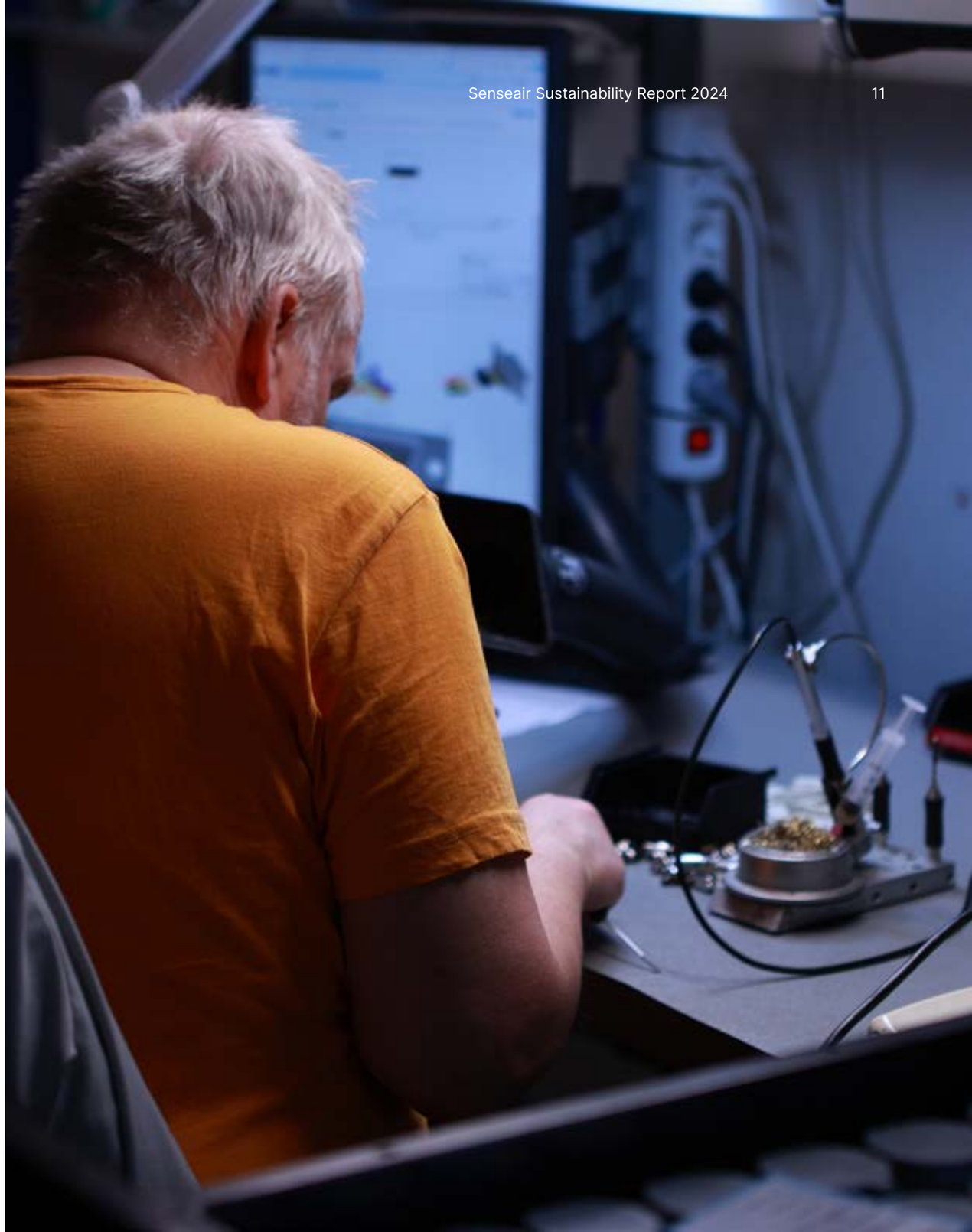
We shall fulfil agreed requirements, responsibilities and time plans.

We shall sell, design, manufacture and supply products and services which meet or exceed our stakeholders' expectations.

We shall take responsibility for the support and product maintenance in a way that we are always perceived to be a reliable supplier.

We shall comply with laws and regulatory requirements that apply to our products and our company.

In our work we shall continuously improve our products and quality management system.



Code of conduct

As a member company of Asahi Kasei Group, Senseair follows the Code of Conduct of Asahi Kasei. Not only the global version of Code of Conduct, but we also provide a Swedish version for local employees. The Swedish version of Code of Conduct is available in the intranet for all employees at Senseair.

We continuously provide training for new employees at Senseair. We work steadily to raise awareness through training and promote actions that are based on a strong sense of ethics.

Environment

EMS description/Certificate

Senseair promotes sustainable development by identifying, measuring and reporting the environmental impact caused by its activities. Senseair's ambition is to consider the environmental impact throughout the value chain, ranging from the development, procurement of raw materials to production, distribution, and recycling possibilities. All of our operation is part of a certified ISO 14001-compliant environmental management system.
The utilization rate of all input components & materials is optimized to ensure the efficient use of resources and decrease the amount of waste created. Waste materials are recycled to a very high degree.

Senseair environmental policy

Senseair, part of the Asahi Kasei Group, develops and markets infrared gas sensors for a better environment, such as improved indoor air quality, reduced energy consumption and safe roads. Our environmental work shall be a part of Asahi Kasei´s ambition to contribute to the creation of a sustainable society.

Senseair shall therefore:

- **Develop products that support energy saving, emission reduction and security enhancing purposes.**
- **Reduce our carbon footprint (Scope1, 2 & 3) and limit GHG emissions through reduction plans.**
- **Consider the environmental impact from the entire life cycle in the development of new products.**
- **Proactively collaborate with customers and suppliers in environmental issues.**
- **Throughout our business, comply with applicable laws and regulations.**

We are in our daily operation committed to:

- **Reduce and prevent emissions to land and air**
- **Minimize waste to landfill by reducing, reusing and recycling.**
- **Reduce energy consumption.**
- **Use energy from renewable and fossil free sources.**
- **Preserve water resources.**
- **Handle hazardous materials responsibly.**
- **Strive towards sustainable travel and transports.**
- **Educate our employees in environmental issues and make use of their commitment, knowledge and awareness.**
- **Setting targets and objectives, within the scope of the environmental management system, to achieve continual improvement.**

Each manager is responsible to communicate the environmental policy so it is understood and applied within his/her organisation

Reduce carbon footprint

Senseair commits to reducing its carbon footprint. In 2024 the result was a 34% reduction (Scope 1-2) of CO_2 emission per produced sensor vs our baseline year 2022.

As a globally operating company, employees' business travel is necessary, while the company seeks to reduce it, for example, by utilizing the possibilities of the latest technology and by favouring virtual meetings.

The travel practice always guides the employees to choose the most environmentally friendly alternative for travel and meetings. The company's updated travel policy favours local travel by train and low-emission cars, such as electric or hybrid models.
Employees are able to work to work remotely or from home. As a result, emissions from commuting are decreasing.

Permits

Senseair AB develops sensors for detection of refrigerants. For calibration of these the refrigerant gas R32 is used. The gas is released after the calibration. R32 is a fluorinated greenhouse gas with a GWP factor of 675. Senseair AB has a special permit from the Municipality of Hudiksvall for limited emission of the refrigerant R32 for calibration of sensors. We are also evaluating gas-free calibration in the production environment, if successful this will substantially reduce our emissions.

In order to reduce emissions as much as possible we limit the amount of other refrigerants emitted by streamlining operations as far as is technically possible and economically reasonable.

Chemicals - RoHS & Reach

Within our Development process we include a thorough review of all components so that we are compliant with existing regulation regarding the contents of our sensors. We maintain constant awareness of the regulations in every territory to ensure that our products are compliant. For Europe this means that we place extensive efforts to verify that we meet the strict restrictions coming from EU's RoHS and REACH regulations.

Heating/water/electricity

Senseair consumes energy in the heating, cooling and lightning of its facilities, and in the use of production machinery.
In 2024, Senseair's total energy consumption was 2 036 MWh, a reduction from having been 2 124 MWh in the previous year, despite increased production.

Our energy consumption in Production is 100% fossile free since 2022. The origin of our electricity is hydropower and the heating for the production facility in Delsbo has been district heating. During 2024 we installed a new heat pump in collaboration with the property owner. With this installation we hope to reduce our consumption of externally provided district heat with approximately 40%.

Waste management

First and foremost, we maximize our efforts to ensure that no waste occurs. Our main environmental target is to reduce the amount of product scrap in the production process. By minimizing the number of rejected sensors we can impact our environmental impact from different life cycle environmental aspects, such as use of electricity, production of metals, PCB´s etc.

For the waste that inevitably occurs, we have an extensive program for recycling and minimizing the waste going to landfills. In 2024 100 % of our waste was recycled. Together with our partner Stena Recycling we sort our waste in over 20 fractions to achieve the best recycling possible according to the waste hierarchy.

Social issues

HR Management

For the future and development of Senseair, it is important to have the employees and development in focus. By putting people at the forefront, Senseair takes overall responsibility in sustainability, which results in content employees who contribute to continued good business development. It is important to be part of society and, via Senseair's products, be able to contribute to an improved environment.

Company Culture

Senseair is proud to share the same values as Asahi Kasei; Sincerity, Challenge and Creativity, which describes the culture as a continuously developing organization and business that constantly needs to be challenged in order to deliver qualitative and premium products.

Competent and committed employees are the core of the contribution to Senseair's success and the ambassadors of the company's future.

Individual Development

Senseair shall be an attractive workplace, offering good development opportunities and good conditions for a career within the group. Senseair has its manufacturing process and development in both Sweden and Japan, which creates opportunities to share in each other's lessons, culture and knowledge.

All employees have annual development meetings with their immediate manager, where they discuss both short- and long-term goals regarding work tasks and skills development. This process identifies employee needs at the same time as valuable competence is made clear within the group.

Senseair must be a long-term attractive employer where employees feel seen and are offered developing and challenging responsibilities and tasks - regardless of where in the organization they are.

Diversity, Equity and Inclusion

There is excellent value in having an ethnic and cultural diversity with an even age and gender distribution throughout the entire operation. Senseair strives to achieve an equal employee composition and to get more women into leading positions.

Senseair has a discrimination policy to prevent discrimination from taking place. At their introduction, all employees receive a review of this policy and the whistle-blowing system that all employees are aware of and have access to.

Physical H&S

Senseair improves its occupational safety by continuous active measures. Our production environment is clean, bright and without noise, and designed with employee safety in focus.

The ISO 45001 occupational health and safety management standard is used as a benchmark. The development of safety is also monitored by the Safety Council, which meets four times a year.

Senseair reacts to all occupational accidents and near-miss incidents appropriately to prevent them from recurring. In addition, the Process Engineering teams participate in ensuring the safety and efficiency of production areas.

In order to become more proactive we have implemented the use of the incident reporting tool IA. With this easy to use system all employees can report risks and incidents. By this we have improved our ability to reduce accidents to occur. Most risks are related to the handling of gas bottles, chemicals and materials and the use of tools at workstations.

Challenging postures and extended sedentary work present a challenge in assembly and office work. Their negative impact is avoided through high ergonomics.

Regular training is conducted for all employees in health and safety issues, including CPR, fire evacuation, chemicals and ergonomics.

We follow up our accidents by the same KPI as the whole A-K group, lost time injury rate per 1 million working hours. The group target is to have a LTIR below 0,1.

Psychosocial H&S

Physical activity is encouraged, and all employees are offered one hour of wellness per week with access to a swimming pool, wellness allowance and occupational health care. Pulse measurement tools are used to give all leaders and managers a good measuring tool for how employees feel and experience their daily work situation.

Local communities

Contributing to Environmental Protection and Harmony with Local Communities The Asahi Kasei Group is committed to operating in harmony with the environment and with local communities and to contributing to the development of local communities through our business activities.

Our employees endeavour to contribute to our local communities through our business activities and to actively participate in community fellowship activities. Our employees also endeavour to gain a sufficient understanding of local culture to deepen our communication with local communities.

Senseair has always had in mind to support the region, mainly through creating jobs, but also if Senseair could support in other ways e.g. networking and participating in collaborations that promotes the region, dialogues with both Hudiksvall and Ljusdal municipality about e.g. attractiveness. Another example is collaboration with RISE (Hudiksvall) in innovation creating activities. Supporting the region's education and competence in exchange with pupils and students is another area. Study visits, internships (since 2012) are examples.

Through increased efficiency and initiative, we increase our competitiveness, which secures jobs in the region. This lays the foundation for a maintained community service in the municipality. Our products themselves aim for a better and safer indoor and outdoor environment as well as safe driving by using alcohol sensors with vehicles.

Governance

CSR procurement

Procurement makes up approximately two-thirds of our turnover, which is why efficient procurement is a significant competitive factor for Senseair. Senseair has a broad network of local, regional, and international suppliers and partners, which Senseair seeks to develop to ensure good quality and cost-effectiveness. Suppliers to Senseair are going through an extensive evaluation process, which also includes CSR questions, before approval.

Conflict minerals

Senseairs most important document for procurement is the General Purchasing Conditions. The document states that the supplier always shall comply with the latest directives concerning Conflict Minerals. A link to the latest updated document is attached to all Purchase Orders sent out from Senseair to highlight the importance. Procurement is also following the Senseair Conflict Mineral Policy by not directly procure any conflict minerals from any source and endeavours not to procure products that may directly or indirectly finance, or benefit armed groups in the DRC or adjoining countries.

Procurement is communicating our expectations to our suppliers that they have a conflict-free sourcing policy, provide conflict-free metals, and monitor their supply chain. Procurement requires suppliers to demonstrate due diligence in the procurement of conflict metals, show corrective action if conflict minerals are traced to unverified sources, and use the Minerals Reporting Template (CMRT).

CSR evaluation

Senseair requires that all its partners comply with the law and agreements and operate according to Senseair Code of Conduct. The Code of Conduct sets the standards that Senseair expects all suppliers to follow. It is the starting point for any new or existing business relationship, and it covers areas such as health and safety, child and forced labour, human rights, anticorruption, compliance with laws and regulations, environment and climate change.

Senseair suppliers shall have policies in place to assure that tantalum, tin, tungsten and gold in the products they manufacture do not have any connection with perpetrators of serious human rights in the Democratic republic of Congo or an adjoining country. Senseair selects its suppliers carefully, and our cooperation with key suppliers is long term. Senseair only uses approved suppliers that fulfil Senseairs strict criteria in terms of quality, delivery reliability and cost-efficiency. Senseair performs audits at our suppliers regularly and monitors their compliance with the Code of Conduct.

Anti-corruption

As a member company of Asahi Kasei Group, Senseair complies with the Asahi Kasei Group Policies for Prevention of Bribery. The Asahi Kasei Group endorses the UN Global Compact and has proclaimed that it will “strive to prevent all forms of corruption including coercion and bribery.” Corruption including bribery is clearly prohibited within the Asahi Kasei Group Code of Conduct as well. The Asahi Kasei Group considers bribery to be a particularly important risk factor which could seriously jeopardize our corporate reputation.

The Asahi Kasei Group Policies for Prevention of Bribery clarify basic policies to prohibit bribery and procedures to follow to prevent bribery. These policies are made known to the entire Group based on a clear internal framework.

https://www.asahi-kasei.com/sustainability/governance/compliance/pdf/about_compliance_02.pdf

Whistle blower

Senseair should be characterized by an open culture where all employees feel they can express themselves freely. The Whistle blower function has been developed to encourage reporting of serious improprieties suspected of being committed, sanctioned, or deliberately overlooked by a senior or key position within Senseair. Serious improprieties refer to serious misconduct concerning accounting, internal accounting controls, auditing, bribery, serious environmental crimes, major deficiencies in workplace health and safety, serious forms of discrimination and harassment or other serious improprieties concerning the vital interests of the company or the life or health of individual persons.

Senseair’s Whistle-blower function and these rules aim to ensure:

- **An opportunity for employees and other stakeholders to inform Senseair of serious improprieties within the Company**
- **That the information submitted is handled correctly in line with the legislation and regulations in force.**
- **That every person who informs Senseair of serious improprieties in good faith is protected from reprisals.**

Governance

Risk management

This section describes Senseair's most important sustainability risks.

Supply chain

Senseair's global supply chain includes procurement from countries with different risk levels. Potential risks in the supply chain include, e.g., compromising human rights or labour rights, risks to occupational health and safety, and causing environmental damage. Senseair's suppliers can cause notable reputation or business risks to the company if they engage in such unethical behaviour.

To effectively manage risks in the supply chain, Senseair has a broad supplier evaluation process, and each supplier is compelled to commit to Senseair's Code of Conduct.

Health and safety

In our own operations, the greatest threats to employee health and safety, such as work-related illnesses and accidents, arise from a working culture where our health and safety processes are not followed, and risks in the work environment are not controlled or even recognized. Our employees are involved in health and safety decisions through consultation and cooperation.

We comply with legal requirements and develop and implement appropriate health and safety procedures and working practices. Senseair has a Safety Council, which monitors all work safety aspects. The Safety Council gathers quarterly to review corrective actions and preventive best practices.

In addition to that, sick leaves, accidents and risk observations are monitored monthly. The occupational risk analyses are performed regularly at all locations to verify if any potential occupational diseases may result from our operations.

Unethical behaviour

Employee-related risks may also arise from violations of Senseair's Code of Conduct and related principles, such as practices related to bribery, fraud, corruption, and misconduct, which could impact the company's reputation and its financial position.

Climate-related physical risks

Due to climate change e.g., extreme weather conditions are becoming more common. For example, floods or tornadoes could pose a threat to the continuity of Senseair's operations. The company has business continuity plans in place in all factories to manage possible impacts

ESG KPI Index

Environment

Year	2021	2022	2023	2024
Total waste	26.1 ton	30.7 ton	30.31 ton	17.9 ton
Scrap electronics	3.3 ton	2.42 ton	1.65 ton	1.47 ton
Landfill waste	0.5 ton	0.32 ton	0.18 ton	-
Recycled waste	25.60 ton	30.38 ton	30.13 ton	17.0 ton
Waste recycling share	98.08%	98.96%	99.41%	100%
Total energy use (Electricity & heating)	2 340 MWh	2 089 MWh	2 124 MWh	2 036 MWh
Emissions of HFC to air (ton CO2-eq)	44.8 ton	66.30 ton	24 ton	115 ton
Water use		3 446 m³	2 024 m³	1 553 m³
Carbon footprint, scope 1 (Ton CO_2-eq)		88.6 ton	41.5 ton	83.29 ton
Carbon footprint, scope 2 (Ton CO_2-eq)		330 ton	362 ton	81.3 ton

Social

Year	2021	2022	2023	2024
Number of LTI´s (Work Accidents with sick leave)	N/A	0	0	0
LTIR AK standard	N/A	0	0	0
Number of all accidents (incl. commute)	N/A	16	14	21
Number of incidents	N/A	8	14	7
Number of risk observations	N/A	40	75	63
Sick leave	2.82%	4.07%	4.67%	5.19%
Women of work force	38%	34%	32%	33%
Women in top management	30%	20%	30%	30%

Governance

Year	2021	2022	2023	2024
Whistle-blower cases	0	1	0	0
Legal incidents	0	1	1	0