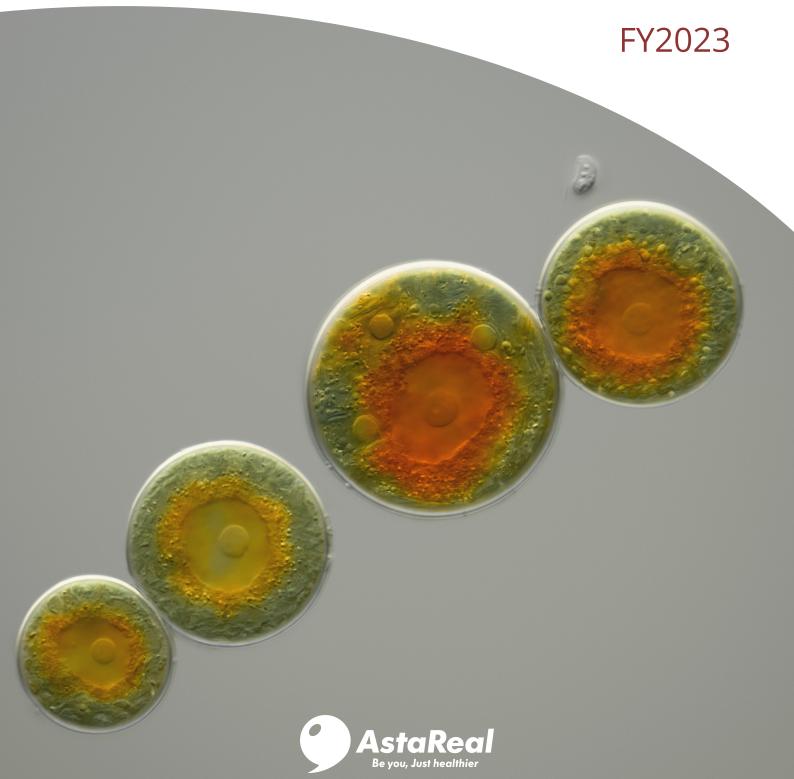


# Sustainability Report

AstaReal AB



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# About AstaReal AB

AstaReal AB has the following vision: "to contribute to better health and wellbeing". To reach this, we are actively implementing a sustainability strategy that strives towards sustainable development where social values, environmental responsibility and financial longevity go hand in hand.

Each day, we enhance the well-being of our consumers through our products, while continuously advancing our business with a strong focus on customer needs. Our aim is to ensure that sustainable development is an integrated part of all our processes, including decision-making, and thus use our resources in the best possible way.

AstaReal has been a pioneer and world leader in producing natural astaxanthin products for the last 35 years, and our first human supplement Astaxin<sup>®</sup> Original was launched back in 1995.

Since then, our astaxanthin supplements have contributed to better health and well-being. Astaxanthin is a powerful antioxidant that can counteract oxidative stress and inflammation, which are the damaging mechanisms underlying many health conditions.

The scope of AstaReal AB business is cultivation and processing of microalga *Haematococcus pluvialis* and the development and manufacturing of products thereof, which are intended for use in food supplements, and as ingredients in food, feed and cosmetics. It also applies to the production and marketing of retail food supplement products, and to act as a strategic partner for companies with other ingredients that support and contribute to health and wellbeing.



This past year has been a transformative time for our company, highlighted by major milestones and a strengthened commitment to sustainability. As we continue our journey towards creating a healthier world with our natural astaxanthin, we are thrilled to share some of the highlights that define our progress and vision.

We have made remarkable strides in reinforcing our sustainability strategy. Our dedication to sustainable practices is at the core of everything we do, ensuring that our operations not only benefit our customers but also contribute to a healthier planet. This year, we have taken concrete steps to integrate more sustainable methods into our production processes, showcasing our commitment to environmental stewardship.

We are proud to announce that we have successfully scaled up to full production capacity with our current technology. This achievement allows us to meet the growing demand for our high-quality products while maintaining the highest standards of efficiency and reliability. Our ability to operate at full capacity underscores the effectiveness of our technological advancements and the hard work of our dedicated team.

In line with our sustainability goals, we have implemented process optimizations that significantly reduce water and energy consumption per kilogram of product produced. These improvements not only enhance our operational efficiency but also minimize our environmental footprint.

By reducing the usage of reverse osmosis (RO) water, we are able to preserve valuable resources and further our commitment to sustainable production practices.

This year has also been marked by exciting developments in our sales and customer base. We have welcomed new customers and expanded our market reach, reflecting the growing recognition of the benefits of our natural astaxanthin.

Additionally, we have introduced new products and innovative packaging solutions that meet the evolving needs of our consumers. Notably, our Astaxin rebranding initiative has been well-received, positioning our flagship product for even greater success.

Our natural astaxanthin, derived from the microalgae *Haematococcus pluvialis*, continues to be a cornerstone of our mission. Microalgae, a primary food source in marine and freshwater food chains, have enriched human diets for thousands of years. We take pride in producing a natural product that positively impacts the health and well-being of people globally.

As we look ahead, we are excited about the opportunities to further enhance our sustainability initiatives, expand our product offerings, and continue delivering great value to our customers. Thank you for being a part of our journey towards a healthier and more sustainable future.

Warm regards,

Peter Worsöe CEO AstaReal AB



# Governance

The CEO of AstaReal AB, Peter Worsöe, has the ultimate responsibility for the company sustainability strategy and performance. Together with the members of the management team, and with the support from our Quality Assurance and Sustainability Manager, our CEO is responsible to ensure that our business complies with the sustainability strategy, policies, and objectives.

The members of the management team are responsible for driving sustainability issues within their departments in cooperation with the QASM-manager.

The following governing documents guide AstaReal AB, and ensure that we follow our strategic sustainability plan to achieve our sustainability goals:

- One Page Strategic Plan
- Goals and Objectives (Company level, department level and individual)
- Sustainability Policy
- Quality & Food Safety Policy
- Travel Policy
- IT policy
- Employee handbook
- FSSC 22000 and ISO9001 Management systems

A follow-up of the sustainability goals and activities is performed twice a year and is reported to the management team, CEO and the board. The final sustainability report is approved by the same.





# **Our Vision**

AstaReal AB's sustainability strategy is based on improving our core belief and vision "to contribute to better health and well-being". It is structured around and encompasses four pillars which guide our daily work towards our sustainability goals:

- Climate and energy
- Circularity, water and waste
- Best employer and healthy employees
- Customer health and safety

Based on our materiality assessment, we ensure that we as a company work with a focus on the entire value chain in the areas where we have the greatest opportunity to make a difference. The cultivation and processing of the microalga *Haematococcus pluvialis* into our astaxanthin rich algae meal is conducted at our production facility in Gustavsberg Sweden. Our expertise in in algae cultivation and complete control over the production process empower us to make the right decisions, gradually transforming our production plant into a sustainable operation.

The image below illustrates our sustainability journey towards responsible production, spanning from 2019, when we released our first company climate report, to the present day.

#### Responsible production





# Our Sustainability Work

# Sustainability Strategy

During FY2023, efforts have been made to strengthening and improving the company's sustainability strategy. A materiality assessment has been conducted and has laid the basis on what areas to focus on to give the greatest opportunities for AstaReal AB to make a difference and to contribute to a more sustainable world.

As part of this, strategic documents have been updated, and devotion given on spreading the sustainability agenda in the company, to include and engage all departments and colleagues in our vision as we strive towards implementing sustainability in all our processes.

The management of sustainability issues has been strengthened by giving the department managers a pronounced responsibility for directing the sustainability issues within their department.

Starting from next year, FY2024, all departments at AstaReal AB will have their own measurable goals and activities within sustainability to contribute towards lowering our climate impact and actively improve our performance within our materialities.

#### Process Optimization in the Cultivation Process

This year we have managed to reach full production capacity with today's production technology and started a journey towards increased production capacity through among others optimization of light and nutrients in our cultivation process. We are continuously working on increasing the yield per cultivation tank and this transition will give several positive effects:

- Higher product yield per cultivation tank will result in less usage of water per kg produced product.
- Higher product yield per cultivation tank will result in less usage of electricity per kg produced product.
- Improvements in light technology will result in longer lifespan of the lights which will result in reduced amount of waste.



#### Reduced Usage of RO Water

We have implemented a project where we through the installation of a water decalcification unit could replace some of the use of RO water in the production process into decalcified water. Since the process of producing RO-water from tap water involves a loss of approx. 40% water to the drain this project has led to a reduced water consumption. The reduction of usage of RO-water is part of our long-term goal to reduce our water consumption and achieve a more sustainable water management.

## Contribution to Better Health & Wellbeing

AstaReal® is the most studied source of natural astaxanthin worldwide, with over 150 studies, including 70+ human clinical trials with a broad range of benefits. This year we have focused on sports nutrition and to broaden our research network. Edge Hill University has initiated a study to evaluate the role of astaxanthin for cognitive function after strenuous exercise, and they recently published a review paper in the same area.

In FY2023 we also initiated a research network called ANSN (AstaReal Network of Sports Nutrition), a research collaboration community for astaxanthin. In Q4, AstaReal Group published a thorough review paper, which will add to the understanding of astaxanthin's health properties.

This year we rebranded our Astaxin® products with a more modern and Nordic look, and introduced bottles made from recyclable PET plastic. Most of our new products will be plant-based to reduce our carbon footprint and meet the increasing consumer demand of responsible and sustainable products.

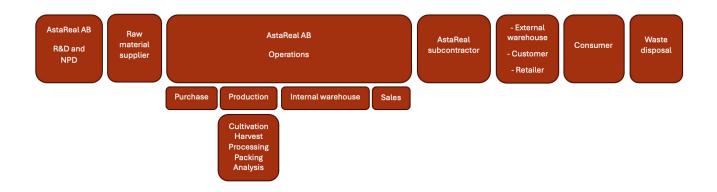
We are also exploring the possibility to include other algae ingredients in future formulations. To enhance our brand and increase awareness of astaxanthin's health benefits, we have partnered with a new Astaxin® ambassador.

In addition, we are closely collaborating with our brand owners and distributors to improve their knowledge about astaxanthin and general health. This year our presence in the UK and Ireland expanded successfully via a new distributor.



# Value Chain

Our company is devoted to ensuring that our commitment to sustainability is reflected and incorporated at every level of our value chain. We constantly strive to improve our standards, both within our organization and among our suppliers and subcontractors, to work against unethical business practices, waste of natural resources, human rights abuses, and labour law violations.



#### **New Product Development Process**

Sustainability and food safety is an integrated part of our R&D and NPD (New Product Development) processes. The NPD routine has been thoroughly updated during FY2023 to include important sustainability parameters. The entire production chain is assessed, including production, packaging materials, raw materials, and country of origin.



#### Sub-Contractor & Supplier Assessment & Audit

AstaReal AB has a procedure for assessing and approving suppliers, sub-contractors, and external warehouses. This outlines expectations and requirements based on certifications (ISO 9001, FSSC 22000) and internal sustainability, food safety, and quality criteria. An annual risk assessment determines the frequency of on-site or digital audits of sub-contractors and self-assessments for material suppliers. Audits and self-assessments are performed to verify and ensure

compliance with AstaReal AB requirements and to promote responsible and ethical practices throughout the value chain. Regular audits will provide assurance that suppliers are upholding the expected standards and help identify areas for improvement to ensure a transparent, ethical, and socially responsible supply chain. Through this process AstaReal AB can ensure safe and responsible products.

# Certifications, Partnerships, Memberships & Internal Audits

AstaReal AB's Quality & Sustainability team collaborates closely with major certification bodies to ensure the delivery of the safest and most ethical products to our customers. Together, we strive to find sustainable solutions for the future.

AstaReal AB is certified according to FSSC 22000 and ISO 9001, and the products produced at the production site in Gustavsberg, Sweden fulfil the criteria of Halal, Kosher, Informed ingredient and Vegan Society.

In addition to the external audits mentioned, AstaReal AB performs yearly internal audits covering all internal processes to make sure that we comply with external certifications as well as internal criteria. The production property in Gustavsberg, Sweden has since 2021 been certified according to "Miljöbyggnad iDrift". Our subcontractors for further processing of products hold high level quality and food safety certification, many of them according to a GFSI-standard.













# Stakeholders

By conducting a stakeholder analysis, we have identified the demands and expectations of our stakeholders in our value chain. The table presents an overview of our strategies for engaging with stakeholders affected by or influencing our operations, along with highlighting key topics identified by these as critical to AstaReal AB's endeavours, throughout our value chain.

Stakeholder	Channels of dialogue	Frequency	Material impact and important issues
Employees	<ul> <li>Recruitment</li> <li>Feed-back through digital platforms</li> <li>Sustainability survey</li> <li>Company activities</li> <li>Ongoing dialogue</li> </ul>	<ul><li>1/year</li><li>1/week</li><li>1/year</li><li>4/year</li></ul>	PROMOTE HUMAN RIGHTS: Working conditions, secure employment, working hours, and adequate wages and benefits. PREVENT DISCRIMINATION SECURE DATA HANDLING HEALTH & SAFETY KNOWLEDGE SHARING
Customers	<ul><li>Fairs &amp; exhibitions</li><li>Product releases</li><li>Contract/agreement</li><li>Newsletters</li><li>Homepage</li></ul>	Product releases Contract/agreement Newsletters	
Consumers	<ul><li>Instagram</li><li>LinkedIn</li><li>Facebook</li><li>Homepage</li><li>Newsletters</li></ul>		HEALTH NEW PRODUCT DEVELOPMENT CLIMATE RELATED ISSUES
Nature	<ul> <li>Scientific reports and publications</li> <li>Information from NGO's and experts</li> </ul>		REDUCE GREENHOUSE GAS EMISSIONS CLIMATE ADAPTATION NATURE POSITIVE ACTIVITIES WATER, ENERGY & RAW MATERIAL CONSUMP.
Suppliers (producers & distributors)	<ul><li>Approval process</li><li>Audits/evaluation</li><li>Risk assessment</li><li>Contract/agreement</li></ul>	<ul><li>Once</li><li>1/3 years</li><li>1/year</li></ul>	REDUCE GREENHOUSE GAS EMISSIONS CLIMATE ADAPTATION PROMOTE HUMAN RIGHTS FOOD SAFETY
Sub-contractors	<ul> <li>Approval process</li> <li>Audits/evaluation</li> <li>Risk assessment</li> <li>Contract/agreement</li> <li>Climate data collection</li> <li>NPD-process</li> </ul>	<ul><li>Once</li><li>1/year</li><li>1/year</li><li>1/year</li></ul>	REDUCE GREENHOUSE GAS EMISSIONS CLIMATE ADAPTATION PROMOTE HUMAN RIGHTS FOOD SAFETY INNOVATION
Retailers	Contract/agreement		PROMOTE HUMAN RIGHTS HEALTH & SAFETY
Authorities & other relevant organizations	<ul> <li>Certification audits</li> <li>Regulatory updates &amp; newsletters</li> <li>Clinical trials, applications</li> <li>Other business-related networks &amp; lobbying</li> </ul>	• 1/year	HEALTH AND FOOD SAFETY R&D LEGISLATIONS

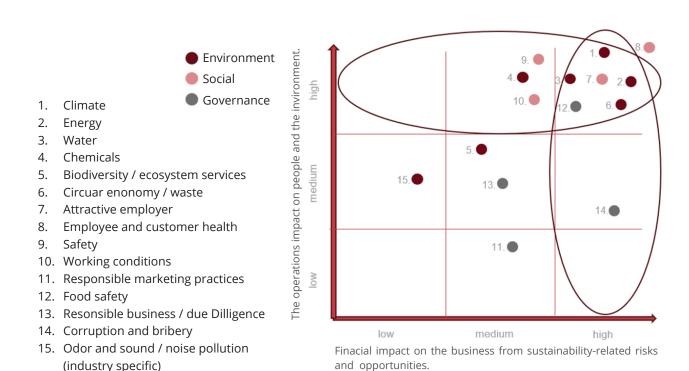
# Materiality Assessment

This is the first step towards compliance with the Corporate Sustainability Reporting Directive (CSRD). The directive requires detailed disclosures on how sustainability issues affect a company's business and the impact of its activities on society and the environment.

The double materiality matrix is a comprehensive tool that evaluates the Environmental, Social, and Governance (ESG) impacts of a company's operations. This has guided us to identify and prioritize issues that are both material to our performance and relevant to our stakeholders.

By considering both internal and external perspectives, the materiality matrix enables AstaReal AB to make informed decisions that address sustainability challenges while also meeting the expectations of our stakeholders.

Through the materiality assessment we have identified fifteen areas essential for the company, where of seven are of double high impact.



Based on our materiality assessment, we ensure that we work with a focus on the entire value chain in the areas where we have the greatest opportunity to make a difference. We have combined the seven double high impact areas into the following four pillars of materialities for AstaReal AB:

- Climate and energy
- Circularity, water and waste
- Best employer and healthy employees
- Customer health and safety

In addition to the AstaReal AB four pillars of materialities, ethics and business conduct are also of importance for us as a company. The topic of relations with suppliers and ethics are important for us internally as well as from the perspective of external stakeholders.

## Climate & Energy

Through active work within several clearly stated and measurable activities spread across the business processes, we work to reduce our climate footprint.

In our annual climate report, we measure and follow up our results for the entire scope 1 and 2 as well as for relevant selected categories of scope 3. By choosing fossil-free alternatives, and replacing travel with digital meetings, we work towards minimizing the impact of our transports and travel.

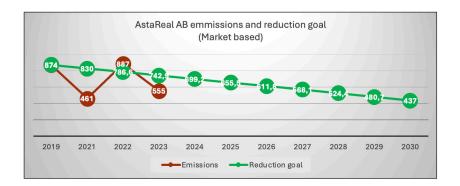
By choosing renewable energy sources, optimizing processes, and striving towards a smarter and more frugal use of electricity, we work to reduce our energy consumption. We have close contact and cooperation with our suppliers and sub-contractors to fulfil the mission to together reduce climate impact at all levels.

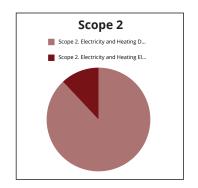
	Materiality			
	Climate & Energy			
Long-term commit- ment (5 years)	<ul> <li>Do our utmost to halve our emission by 2030 (base year 2019).</li> <li>A climate report according to our stakeholders demands ready by 2026.</li> </ul>			
Short-term com- mitment (1 year)	• Reduce CO2 emissions with 7%.			
Risk and opportunities	<ul> <li>Risks:</li> <li>Our production processes consume energy, leading to greenhouse gas emissions. Since our well-being is tied to the planet's health, it is crucial for us to use its resources responsibly. The depletion of Earth's resources impacts their prices, which consequently can affect our profitability.</li> <li>Opportunities:</li> <li>Our vision, "to contribute to better health and well-being," encompasses the health of humans, animals, and the planet. Addressing sustainable climate issues is crucial for us to maintain credibility and lead in environmental commitment. This dedication to the environment adds value both to our company and to our customers.</li> </ul>			
Activities FY2024	<ul> <li>Implement a plan to reduce our climate impact from transportation.</li> <li>Continue cultivation optimization project to reduce energy consumption (per kg produced product).</li> <li>Start working more systematically with continuous improvements via PDCA in the production.</li> <li>Improve climate report by extend data collection to a significant part of scope 3.</li> </ul>			
Results FY2023	<ul> <li>Achieved full production capacity with today's production technology and technique.</li> <li>Continuous improvements in climate data collection. E.g. climate data (scope 1 and 2) collected from 36 % of our sub-contractors, compared to 18% 2022.</li> <li>Reduction of scope 1 emissions into zero tCO2e.</li> </ul>			

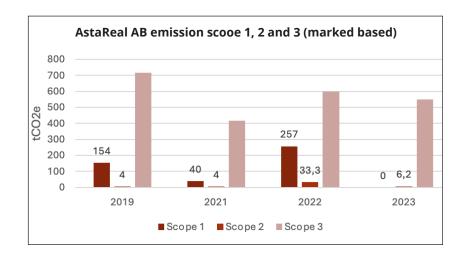


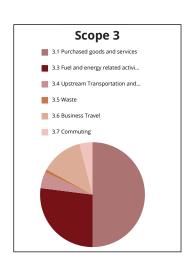
#### **Emissions & Reduction Goal**

We are committed to do our outmost to halve our emissions by 2030. For 2023 we have achieved a reduction of our total emission with 37.5%. This has mainly been done through a significant decrease in our scope 1 emissions, which is a result of an investment made in 2022, where we replaced the cooling equipment in our production. We have also shown improvements in scope 3 due to E.g. reductions in waste and purchases.











#### Improved Climate Report FY2023

#### During 2023 the climate report has been improved in several ways:

- 1) For better comparison and to follow the advice from the new ESRS-directive we have changed the reporting of climate data from calendar year into our financial year.
- 2) To increase the engagement and to follow our performance during the year we have increased the frequency of climate reporting internally from once into twice a year.
- 3) Broadening scope and improved accuracy in climate data collection in scope 3:
  - Extended scope for data collection of "waste".
  - Extended scope of data collection from subcontractors, and correction of how to report this in the climate portal (now added as part of our scope 3.1, and not as part of our scope 1 and 2).
  - Changed how we report emissions from transportation to follow the vocabulary and categories of the GHG-protocol (incoming and outgoing into upstream and downstream).
  - Correction of formula for calculating emissions from transportation.

Goals and activities have also been established to achieve a complete climate report by 2026, to ensure that we can provide requested data to our customers.

# "Contribution to better health and well-being"

### Circularity, Water & Waste

AstaReal AB strives towards increased circularity and resource efficiency in our own production, as well as at the sites of our subcontractors. This means that we work consciously to reduce our use of resources, E.g. by reducing the use of environmentally hazardous chemicals, working towards reduced water usage, and minimizing the usage of paper and plastic as well as increasing the use of recycled and recyclable materials.

We investigate and develop circular solutions in our production process, E.g. by reusing heat and process water. Since November 2022, AstaReal AB has a business partnership with one of Europe's largest producers and suppliers of electricity and heat – Vattenfall.

The excess heat produced in our production process is transferred to the district heating network and provides approximately 20% of the heat required in Gustavsberg's residential area (south of Stockholm in Sweden). This is equivalent to heating around 2500 apartments.

	Materiality			
	Circularity, water and waste			
Long-term commitment (5 years)	<ul> <li>Reduce usage of water with 50%/kg produced product by 2030. (base year CY2022).</li> <li>6-10 new initiatives regarding circular solutions.</li> </ul>			
Short-term commitment (1 year)	<ul> <li>Reduce usage of water with 12%/kg produced product.</li> <li>Two new initiatives regarding circular solutions.</li> </ul>			
Risk and opportunities	<ul> <li>Risks:         <ul> <li>The cultivation of algae is dependent on clean freshwater and light, which means that the production of our products could have a potential negative impact on the groundwater level and an increased use of energy.</li> </ul> </li> <li>Opportunities:         <ul> <li>The dependence on water and electricity opens paths and increases motivation and commitment to find circular and more sustainable solutions to water and energy use.</li> </ul> </li> </ul>			
Activities FY2024	<ul> <li>Reduce water consumption per kg product produced by increasing the yield per cultivation tank.</li> <li>Circular initiatives:         <ol> <li>Present three alternatives for circular solutions for water and/or CO<sub>2</sub>.</li> <li>Increase the efficiency of the circular solution, waste heat installation.</li> </ol> </li> <li>New initiatives for waste reduction in production, focusing on reducing components usage and optimizing/reducing packaging materials.</li> <li>New initiatives for packaging and waste reduction in retail, focusing on reducing material usage, increasing the use of recycled materials and enhancing the proportion of recyclable packaging.</li> </ul>			
Results FY2023	<ul> <li>Reduced the usage of RO-water in the production with approx. 200 m³/month.</li> <li>Rebranded our Astaxin products and introduced bottles made from recyclable PET plastic.</li> </ul>			



#### Water

The cultivation and processing of green microalga *Haematococcus pluvialis* is conducted at our production site in Gustavsberg Sweden. Raw materials and cleaning chemicals used in the production process at our facility are all carefully selected for the environment, and the wastewater from the cultivation and production process goes to treatment plants.

According to World Resources Institute, Sweden is regarded as a country with low water stress (<10%). The further processing and manufacturing of AstaReal AB products are performed at sub-contractors in the following European countries.

- •Germany (medium-high water stress i.e. 20-40%)
- •France (low-medium water stress i.e. 10-20%)
- •Belgium (extremely high water stress i.e. >80%)
- Switzerland (low water stress i.e. <10%)</li>
- •Italy (high water stress i.e. 40-80%)

Water withdrawal is part of our annual climate data collection from sub-contractors, and as part of our sub-contractor and raw material approval process and yearly risk assessment we check if the company in question has a water management program and reports on absolute targets.

"AstaReal actively promotes diversity and inclusion. As the AstaReal family, we all contribute to better public health through innovative preventive health products, scientific and educational services, and sustainability efforts."

/Behnaz Shakersain, Scientific Affairs Manager, AstaReal AB "I was drawn to AstaReal's long history of research and innovation in algal products, focus on health and wellness, and commitment to sustainability. As someone passionate about algae and sustainability, I was eager to bring my skills and dedication to the team and contribute to the continued success of AstaReal. I enjoy being part of an international company with good work-life balance, opportunities for development, and supportive workplace."

/Ioannis, Senior Algal Specialist, AstaReal AB "I chose to work for AstaReal because of its leadership in the astaxanthin market, producing a powerful antioxidant that promotes health and well-being. Their dedication to sustainability and environmental protection strongly aligns with my values, making AstaReal the clear choice for me."

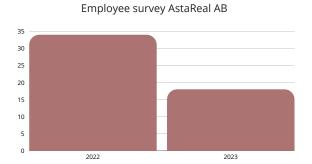
> /Olivia Spain, Algal Specialist, AstaReal AB

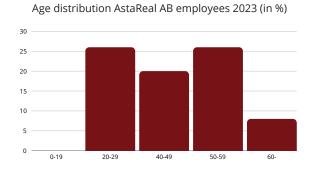
# Best Employer & Healthy Employees

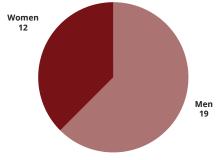
AstaReal AB's employees are our most important resource, and we actively promote health and safety. We try to reduce illness through preventive measures. We do this through e.g. arrangement of health-promoting activities, by creating awareness about well-being, and by constantly improving the working environment. We treat all employees equally and with respect regardless of gender, gender identity or expression, ethnic affiliation, disability, religion or other belief, sexual orientation and age.

Materiality					
	Best employer and healthy employee				
Long-term com- mitment (5 years)	<ul> <li>Employee survey (Cultural Entropy*) &lt;10.</li> <li>* (Cultural Entropy® is a measure of dysfunction (conflict, friction, frustration and stress) that exists within the group and results in a low level of engagement in the individual.)</li> </ul>				
Short-term com- mitment (1 year)	Employee survey (Cultural Entropy) <12				
Risk and opportunities	<ul> <li>Risks:</li> <li>An adverse work environment can lead to human suffering through physical and mental health issues, resulting in increased costs due to sick leave and decreased employee performance. Not being an attractive employer is a risk in missing out on competent colleagues who choose another employer.</li> <li>Opportunities:</li> <li>Our vision is "To contribute to better health and well-being". It is of great im portance to live our vision and to show it to both employees and stakeholders. It's also a double win since happy, healthy, and satisfied employees perform better, and the chances of attracting and keeping competent colleagues increases.</li> </ul>				
Activities FY2024	• Further improve our feelgood strategy with at least two new health initiatives, and continuously arrange activities for our employees.				
Results FY2023	<ul> <li>Employee survey (Cultural Entropy) = 18</li> <li>Employees expressed contentment with their involvement in the survey. This feedback provided valuable goals for future actions of the company.</li> <li>Arrangement of activities</li> </ul>				

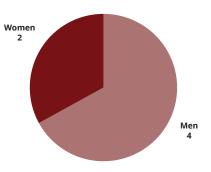












Gender distribution AstaReal AB management team 2023

# Customer Health & Safety

AstaReal AB strives to inspire and enhance health and well-being among our stakeholders. We do this by actively working with health-promoting initiatives, and by initiating stakeholder collaborations around health issues of importance to society. This is done through E.g. sponsorship and charity. We make demands on our suppliers and subcontractors, and through certifications (ISO9001, FSSC22000) and internal criteria for sustainability, food safety and quality, we ensure responsible products

	Materiality				
Customer health & safety					
Long-term com- mitment (5 years)	<ul> <li>Find and implement five new measurable ways on how we contribute to our customer's and consumer's health.</li> <li>Increased awareness and knowledge of food safety throughout the company.</li> </ul>				
Short-term com- mitment (1 year)	<ul> <li>Find and implement two new measurable ways of contributing to our customer's and consumer's health.</li> <li>Increased awareness and knowledge of food safety throughout the company.</li> </ul>				
Risk and opportunities	<ul> <li>Risks:         <ul> <li>Misleading information to customers and consumers through statements in media not based on science.</li> <li>Producing and selling food/dietary supplements comes with a responsibility regarding the health and safety of the consumer. In which maintaining proper control and adherence to routines is essential to prevent consumer harm, as this could also negatively impact the company's reputation.</li> </ul> </li> <li>Opportunities:         <ul> <li>Prevent disease and improve human health by offering products rich in antiox idants.</li> <li>Through research and development contribute to increased knowledge and science that demonstrate the health benefits of our products.</li> <li>Through our certifications; FSSC 22000, ISO 9001, Halal, Kosher, Vegan Society and Informed Ingredient, show customers and consumers that we are a reliable partner with safe and trustworthy products.</li> </ul> </li> </ul>				
Activities FY2024	<ul> <li>New communication plan for higher health awareness of our customers.</li> <li>Continuously update documentation and processes regarding content accuracy and sustainability.</li> <li>Continue exploring new algae ingredients and other plant-based alternatives for future NPD formulations.</li> </ul>				
Results FY2023	<ul> <li>Initiated a new research network (AstaReal Network of Sports Nutrition).</li> <li>Publishing of review paper, which will add to the understanding of astaxanthin's health properties.</li> <li>Partnered with a new Astaxin® ambassador.</li> <li>Expanded presence in the UK and Ireland.</li> <li>Renewed certificate FSSC 22000, ISO9001, Halal, Kosher, Informed Ingredient, Vegan society.</li> </ul>				

# Reporting Structure, Performance Indicators & Results

In the writing of this sustainability report, we have had the Corporate Sustainability Reporting Directive (CSRD) as a target. We have also been inspired by the draft of the coming Voluntary standard for non-listed small-and medium-sized companies (VSME ED), published by EFRAG.

Based on article 3 of Directive 2013/34/EU which defines and distinguishes three categories of small and medium-sized undertakings based on their balance sheet total, their net turnover, and their average number of employees during the financial year, AstaReal AB fulfils the criteria of a medium sized company. The sustainability report has been prepared on an individual basis (i.e., the report is limited only to the information of AstaReal AB).

Environmental indicators	Unit	FY2019	FY2021	CY2022	FY2023
Total emissions	tCO <sub>2</sub> e (Location based /Market based)	1019/874	614/461	962/887	656/555
Total Scope 1 emissions	tCO <sub>2</sub> e (Location based /Market based)	154/154	40/40	257/257	0/0
Total Scope 2 emissions	tCO <sub>2</sub> e (Location based /Market based)	226/4	211/4	179/33.3	180/6.2
Total Scope 3 emissions	tCO <sub>2</sub> e (Location based /Market based)	639/716	363/417	526/597	476/549
Activity - Electricity and heating	tCO <sub>2</sub> e (Location based /Market based)	256.77/104.91	263.9/111.1	271/196	268/167
Activity - Materials purchased	tCO <sub>2</sub> e	472.12	216	322	262
Activity - Outbound third-party deliveries	tCO <sub>2</sub> e	27.11	53.5	70.8	26.3
Activity - Waste	tCO <sub>2</sub> e	0.14	0.4	7.81	0.0555
Activity - Business Travel	tCO <sub>2</sub> e	78.88	5.6	35.8	71
Activity - Commuting	tCO <sub>2</sub> e	13.27	11.4	15.5	23.2
Activity - Inbound third-party deliveries	tCO <sub>2</sub> e	15.53	21.6	2.85	0
Activity - Water	tCO <sub>2</sub> e			2.79	4.67
Social indicators	Unit	FY2	Y2022 FY2023		023
Tot. number of employees	No.	31 32		2	
Gender distribution of employees	No.	Men: 20 Women 12		Men: 19 Women: 12	
Staff turnover (Permanent- and probationary employees, i.e. fixed term employees not included)	%	28		6	
Collective agreement for employees	%	100		100	
Health activities arranged for employees	No.	2		3	
Health check for employees (Every second year)	YES/NO	NO		YES	
HLR-education for employees (Every second year)	YES/NO	YES		NO	
Wellness allowance for employees	YES/NO	YES		YES	
Employees using their wellness allowance	%	47		52	
Employee short term sick-leave	%	1.87		1.88	
Accidents at work leading to personal injury or illness.	No.	0		5	
Product recalls	No.	0		0	
Governance indicators	Unit	FY2019	FY2021	CY2022	FY2023
Number of convictions, total amount of fines incurred for the violation of anticorruption and antibribery laws.	No.	0	0	0	0