

Sustainability Report 2023



With deep
commitment

VÄDERSTAD

About our Sustainability Report

This Sustainability Report is Väderstad's statutory sustainability report for the financial year 2023, which extends from October 2022 to September 2023. The report also summarises key events over the past year, covering Väderstad AB and all the subsidiaries included in the Väderstad Group.

The report was inspired by the guidelines of the Global Reporting Initiative (GRI). With regards to greenhouse gas calculations, we carry out climate calculations in accordance with the guidelines of the Greenhouse Gas Protocol.

This report is part of Väderstad AB's Annual Report 2023 and is presented as an independent report. The official financials are in Swedish crowns, SEK, see the Swedish version of Sustainability report. Both Swedish and English version is published on our website, www.vaderstad.com.

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Contents

About Väderstad

- 04 The CEO has the floor
- 06 The year in brief
- 08 This is the Väderstad Group
- 10 The Väderstad Way
- 11 Organisation
- 12 Väderstad around the world
- 13 Key events
- 14 Our strategic sustainability work

Profit

- 18 Stable economy – a prerequisite for our sustainability management
- 23 Sustainability risks and how we manage them

People

- 25 Health and safety is our top priority
- 30 Measures to improve health and safety
- 28 Our future employees
- 34 Manufacturing stoves for Ukraine builds teamwork
- 36 Human rights

Planet

- 38 Reduced environmental impact and a sustainable product life cycle
- 42 Our environmental focus areas
- 43 Measures regarding energy and climate
- 44 Optimised farming – efficient and sustainable

Product

- 46 Everything we do is designed to last
- 48 Product development 2023
- 49 Measures to further improve product quality
- 50 Testing – central to sustainable machines



A year marked by strong growth, extreme weather and noteworthy efforts

A busy year is a suitable way to summarise 2023 here at Väderstad. All three of our machine factories have been operating at full capacity, and never before have we manufactured, sold and serviced so many machines. Sales rose by over 87 MEUR to 610 MEUR and the profit margin was significantly higher than last year.

High demand combined with new product launches means that we no longer have sufficient capacity. For this reason, in 2022 we launched a major capacity expansion initiative that will run for several years. The rise in our profitability over the past year is a prerequisite for investing in continued growth. The initiative involves a total investment of around 87 000 MEUR over a five-year period. Once we have finished, the manufacturing capacity at our facility in Väderstad will have risen from 6,000 to 10,000 machines per year. In September this year, we moved into our new factory centre in Väderstad, Sweden, which represents the office part of this expansion. All buildings in the production part of the expansion are expected to be completed next year. In Wahpeton, the construction of our new 4,000 square metre office and customer centre is also progressing according to schedule.

While maximising the pace of production, we have also been working intensively on developing our internal processes. An extensive project is currently under way to implement a new, group-wide business system. This will give us better opportunities to work efficiently in a standardised way across countries and production sites. In parallel with the work on the new business system, we have conducted other process development activities, including the establishment of unified system support for product development in Sweden and North America.

It is thanks to our customers, the world's farmers, that we are able to continue developing our business at such a fast pace. We exist to serve them, and their challenges drive us to develop even smarter machines and methods for sustainable, efficient food production. It is well known that farmers have faced tough challenges this year, with volatile grain prices, rising costs of inputs and soaring interest rates. Many parts of the world have also seen extreme weather conditions with periods of very high temperatures, drought, torrential rain and hailstorms. In combination, these challenging conditions result in a general slowdown in the market, a situation we have huge respect for and are monitoring closely.

Farmers are facing growing challenges in a world where extreme weather is increasingly common, demand for larger harvests is rising to ensure food production, and government regulations are becoming stricter, for instance regarding pesticides.

These are issues that we at Väderstad are acutely aware of every day as we work to offer solutions that optimise yields and take all aspects of sustainability into account. Our latest example of such a solution is Proceed, a concept that was pre-launched last year. It is now ready for launch and start of sale is autumn 2024. Proceed has attracted enormous interest from the market and has already won several international awards. The results of field tests indicate a huge technological leap towards efficient, sustainable agriculture. Seedlings are becoming stronger and crops more consistent, resulting in equal or slightly higher crop yields in combination with lower seed rates. Proceed can deal with a wide variety of conditions, and the wider row spacing allows weeds to be controlled mechanically. During the year, we also developed and launched the Seed Hawk 600-900C, a direct drill based on technology from our factory in Canada, which creates excellent conditions for good, consistent emergence without soil cultivation.

We have also expanded our product portfolio for soil cultivation with a product that is completely new for us: inter-row cultivators. This came about when we acquired the Danish company Thyregod A/S's entire range of inter-row cultivators. The inter-row cultivators have been given the name Väderstad Extract. They are a perfect complement to our current portfolio of Tempo planters and to the Proceed, as we see a shift to more mechanical weed control solutions.



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When it comes to climate and sustainability challenges, agriculture is already part of the solution, although much still remains to be done.

Traditionally, mechanical weed control was mainly used in organic farming. However, interest is now growing among conventional farmers as restrictions are increasingly imposed on the use of various chemical pesticides. We are delighted to be able to offer our customers mechanical weed control in addition to our other concepts, and look forward to developing this product area further.

The high level of activity and significant growth during the past year here at Väderstad would not have been possible without the exceptional efforts of all our employees throughout our organisation. Thanks to their hard work and huge commitment, we achieved strong growth in virtually all our product areas and markets. There are also some extraordinary achievements that make me feel both proud and humbled. Needless to say, I'm referring to the approximately 2,000 camping stoves that many of our employees have manufactured in their free time to donate to Ukrainians who lost their homes in the war. The initiative came from our colleague Morgan Collin, who succeeded in getting many of our suppliers to sponsor the project. Read more about Morgan and the camping stoves on page 34.

In the current challenging global conditions, with war in Europe, a looming recession and significant climate challenges, it is easy to become pessimistic. However, history has shown that people have an ability to find solutions in the face of crisis. And when it comes to climate and sustainability challenges, agriculture is already part of the solution, although much still remains to be done. That is why it is crucial for politicians to consider all aspects of sustainability when developing new regulations. The world's farmers need to be given the best possible conditions for achieving high and increasing crop yields with resource-efficient cultivation methods, in order to ensure food supply, improve soil health and sequester more carbon in the soil. One thing is certain: we at Väderstad are committed to doing everything we can to make agriculture more sustainable and resistant to extreme weather and help farmers achieve higher yields with lower effort.

Henrik Gilstring
CEO Väderstad Group

The year in brief

39,7%

Equity ratio

28

Profit 2023, MEUR
(EBT = earnings before tax)

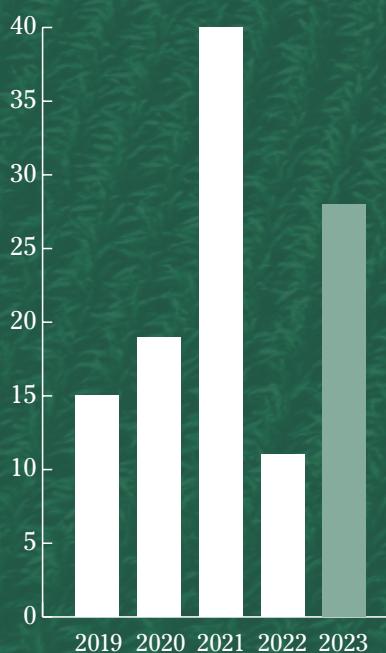
610

Turnover 2023:
610 MEUR

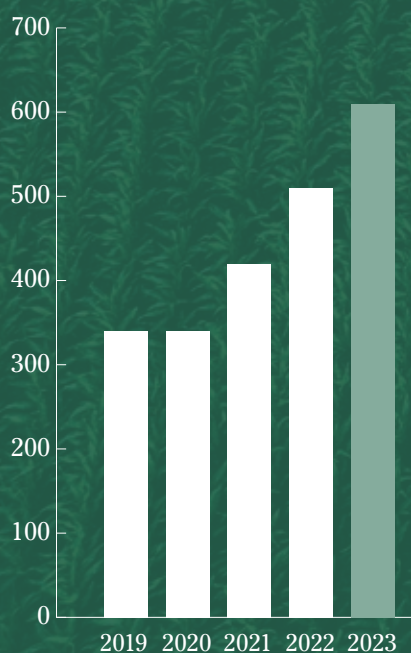
7613

Machines manufactured
in 2023

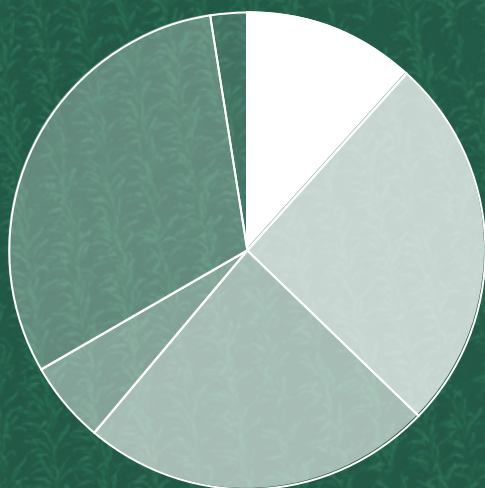
Profit MEUR



Turnover MEUR



The official financials are in Swedish crowns, SEK, see the Swedish version of Sustainability report.



Our markets

- Nordic region EUR 71 million
- Western Europe EUR154 million
- Eastern Europe EUR 146 million
- Rest of Europe EUR 33 million
- North America EUR 187 million
- Rest of world EUR 14 million



Purpose

To make global food production more efficient and sustainable

Vision

To be the world's leading partner for outstanding emergence

Mission

We simplify work and improve results for the farmer



Proceed won
“Farm Machine award”
2023

This is the Väderstad Group

At Väderstad, we enable our farmers to produce more food efficiently and sustainably. A growing global population is resulting in rising demand for sustainably produced food, while the amount of arable land is decreasing. Farmers play a key role in this equation. We stand behind our farmers.

When Väderstad was founded in 1962, it was with the ambition to create machinery of outstanding quality and durability that was better than the agricultural machinery available on the market at the time. Simplifying the work and improving the results for farmers worldwide has always been our ultimate motivator, and all of us at Väderstad see it as our most important task to develop new solutions that promote sustainable, efficient crop production in the long term.

For over 60 years, Väderstad has been a driving force in agricultural development. Innovation is part of our DNA, and Väderstad has developed several new machines that have resulted in doubled capacity. Machines that can perform several steps in a single pass, thus reducing fuel consumption and saving time for farmers while improving their end results.

Väderstad operates in a global market and a high-tech world. Our business model is based on developing and manufacturing machines for soil cultivation and seeding as well as wear parts at our production units in Sweden (Väderstad and Överum), Canada (Langbank, Saskatchewan) and the US (Wahpeton, North Dakota).

We use efficient production methods that give us control of the entire process. It all starts with the processing of sheet metal and steel tubes, which are welded together, painted and finally assembled into finished machines that are sold in some 40 countries through our own sales companies and sales representatives. We also manufacture and purchase wear parts and spare parts for our machines, which we sell to our customers to enable them to get optimum use out of their machines for a long period of time.

We work to promote long-term sustainability in everything we do, from our choice of materials and the environmental impact of our machinery to the way we take care of our customers and employees. Just as healthy soil is crucial to successful crop production, solid and clear core values are a prerequisite for being a successful company.

Names of our companies:

- Väderstad AB (VAB)
- Väderstad Components AB (VCAB)
- Vaderstad Industries Inc. (VCA)
- Vaderstad Inc. (VUS)



We work to promote long-term sustainability in everything we do, from our choice of materials and the environmental impact of our machinery to the way we take care of our employees and customers.



The Väderstad Way summarises the company's core values, and is the cornerstone of our corporate culture and outlines attitudes, approaches and actions to adopt in order to attain our goals. It conveys the values that guide us in our daily work, our decision-making and our chosen priorities.

Accessible

Our success is based on our close relationship with our customers and each other. No matter where in the world we are, the Väderstad family is a team that works together. We show respect and are accessible – to our customers and each other.

Innovative

We work with continuous improvements and we are happy to challenge ourselves to find new solutions and create outcomes. We encourage each other to think in sustainable, new and different ways, and we want to make use of everyone's skills and innovation power.

Reliable

We are a reliable and stable family-run company that keeps our promises. With our roots in farming and with long-term thinking, we create security and clarity for both our customers and our employees.

Organisation

Corporate structure



Sales companies / sales representatives

Australia	Germany	Serbia
Canada	Hungary	Sweden
Czech Republic	Latvia	Ukraine
Denmark	Lithuania	United Kingdom
Estonia	Poland	USA
Finland	Romania	
France	Russia	

Management team



Väderstad around the world

19

Sales companies /
sales representatives

40+

We are represented in
more than 40 countries
and on all continents

20+

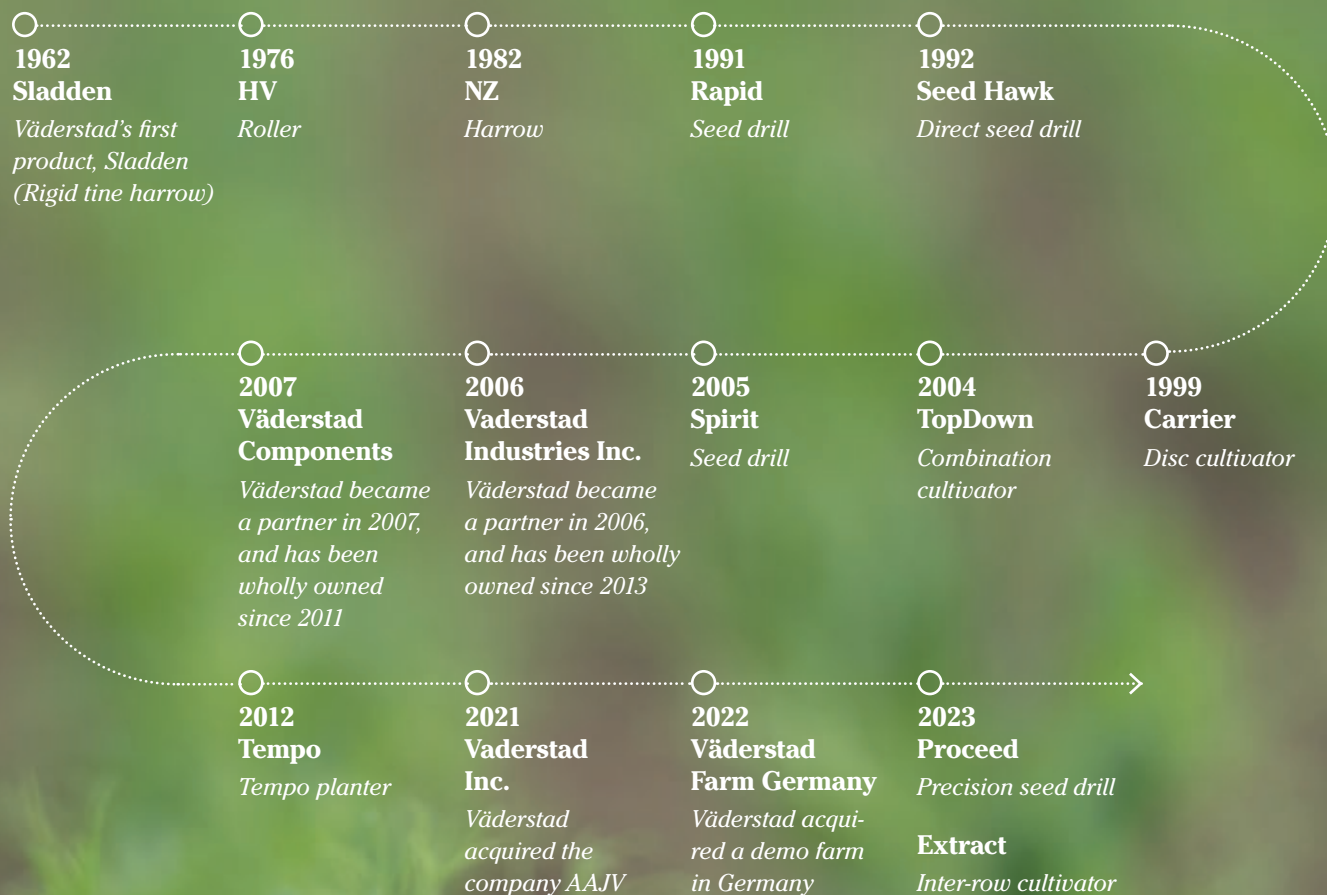
Number of importers
worldwide



- Manufacturing
- Sales companies/sales representatives
- Importers

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For 60 years, we have been launching agricultural machinery that has doubled the capacity and improved the work results of farmers around the world.





Our strategic sustainability work

At Väderstad, sustainable development is about seeing the big picture in all areas and issues that we deal with. Väderstad's Board of Directors has overall responsibility for sustainability issues. It comprises several members of the ownership group, two union-elected members and three external members. The Board represents and has knowledge of all parts of the company, our environment and its requirements and possibilities.

Sustainability is a focus area defined in the Ownership Directive and in the Group's business plan. Väderstad Group shall undertake systematic sustainability efforts with concrete goals and activities, linked to the UN's Global Goals for Sustainable Development.

Global goals for sustainable development

The UN's Sustainable Development Goals in Agenda 2030 aim to eradicate hunger and poverty, fight inequalities and ensure lasting protection for the planet and its natural resources. Väderstad Group works with most of the 17 goals in Agenda 2030, but we can influence some of them more than others. We primarily contribute to these nine goals.



The business plan defines our long-term strategic goals for 2030 and our short-term goals for achieving them. Relevant goals for our sustainability work are described under each area later in the report.

During the year we developed our onboarding process for new employees at Väderstad, which now also includes sustainability. We also developed the information about our sustainability work that appears on our intranet and produced a sustainability page for our website which will be launched early next year. In addition, we set up an internal sustainability council to help create optimal conditions for enabling Väderstad to conduct active and firmly consolidated sustainability efforts.

Corporate Policy

The objective of making long-lasting equipment that farmers can always rely on has been there right from the start. This is the challenge that motivates us in our day-to-day operations and is also our reason for being. Väderstad enables our farmers to produce more food in an efficient and sustainable way. A growing world population calls for a higher demand for sustainably produced food while the arable land is decreasing. Farmers play a key role in solving this challenge. We strive for long-term sustainability – in everything from material choices and environmental impact to how we care for our customers and employees.

We do this by:

- Having everyone's health and safety as a top priority, and in doing so we create a healthy workplace where no one gets hurt or sick because of their work.
- Continuously reducing environmental impact and working actively to protect the environment. Complying with the laws and other requirements imposed upon us.
- Working closely with our stakeholders, such as employees, customers, suppliers, government authorities as well as other internal and external stakeholders.
- Working as a global team so that we can take advantage of everyone's skills and experience. Being at the leading edge, which entails always applying the best practices of the industry while actively striving for continuous improvements and innovations.
- Always focus on "right from me" to be able to deliver only top-notch equipment.
- Developing, maintaining and continuously improving our standardised working methods to optimise our operations.

The company's other policies (IT Policy, HR Policy, Communication Policy, etc.) shall be in accordance with Väderstad's Corporate Policy



Our overarching principles guide our operations, and thus also guide our sustainability efforts.

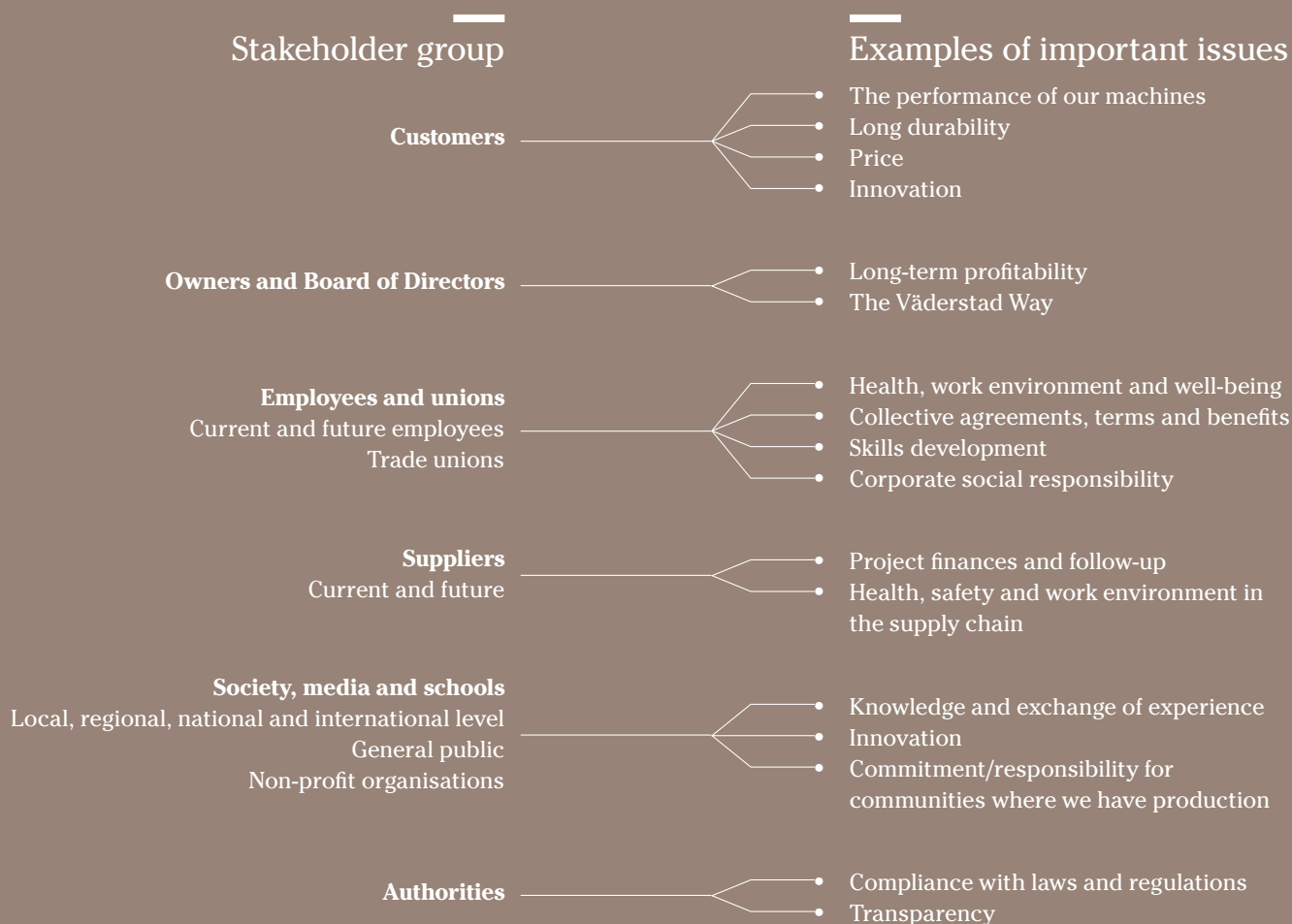
- Standardised work procedures
- Management by objectives
- Continuous improvements



Our stakeholders

Our stakeholders include everyone who influences or is affected by our business. We have identified our main stakeholders based on which players have the greatest need for information on sustainability from our company. Our most important stakeholders are our employees, customers, suppliers, owners and society.

We maintain regular dialogue with them to learn about their challenges, needs and priorities. Knowing and understanding these aspects plays an important role in our strategic sustainability management. Below are some examples of issues that are important to our stakeholders.



Our prioritised sustainability aspects

Based on a situation analysis, risk assessment and our stakeholder analysis – in which employees, customers, suppliers and owners took part – we conducted a materiality analysis that highlighted the sustainability aspects that are most important to work on at present. Objectives and activities for these priority areas are established in our business planning process.

Four focus areas and seven prioritised sustainability aspects



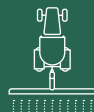
People

- Create a healthy, safe and pleasant workplace
- Contribute to a safe work environment for farmers



Planet

- Promote agri-environmental measures
- Streamline use of materials, minimise emissions that are harmful to plants and animals, and prevent the generation of waste



Product

- Develop innovative, efficient and sustainable products
- Ensure high product quality



Profit

- Ensure stable, long-term and sustainable profitability for the company






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Our purpose inspires me to drive sustainability forward. Just imagine being able to contribute to making global food production more efficient and sustainable – this motivates me every day

Elin Iseskog
Director Sustainability

How the Väderstad Group contributes to the UN's 2030 Agenda and the Sustainable Development Goals

Target area	Strategic target long term	Priority sustainability aspects	UN's Sustainable Development Goals
People 	<ul style="list-style-type: none"> • 0-vision, no accidents • Be the most attractive employer for the competencies and talents we need 	<ul style="list-style-type: none"> • Create a safe, secure and healthy work environment • Contribute to a safe work environment for farmers 	   
Planet 	<ul style="list-style-type: none"> • Reduce GHG-emission to net zero 2045 	<ul style="list-style-type: none"> • Promote environmental improvements in the agricultural sector • Optimize material use, minimize emission that are harmful to plants and animals, and work on minimizing waste 	       
Product 	<ul style="list-style-type: none"> • Vision is to be best in our industry • Perceived as the innovation leader in the market in all our product areas 	<ul style="list-style-type: none"> • Develop innovative, efficient and sustainable products • Ensuring a high product quality 	       
Profit 	<ul style="list-style-type: none"> • 8% pre-tax profit • 10% average annual sales growth 	<ul style="list-style-type: none"> • Prioritize stable financial results and long-term profitability in the company 	 



Profit





Stable economy – a prerequisite for our sustainability management

Profit for the year

During the 2023 financial year, Väderstad's sales increased by 25% year on year, from 510 MEUR to 610 MEUR.

There were some disruptions in our operations during the year in the aftermath of the pandemic, but overall we were able to produce and supply the products our customers requested. The Group's profit before tax was 28 MEUR and profit after tax was 23 MEUR. Overall, our financial situation means that we are contributing to positive and sustainable societal development, for instance through our ability to continue investing in production capacity increases and product development, which means we contribute to society by employing staff and paying taxes.

Strong finances are the foundation of good sustainability management

Väderstad is on a growth journey. We've come a long way from our first rigid tine harrow to the highly efficient machines and methods we offer today, and this is just the beginning.

In a high-tech world with a focus on performance and sustainability, we continue to develop our business through smart investments that contribute to the long-term management of both natural capital and social capital.

Strong financial development is a prerequisite for developing safe products for farmers, thus also promoting agri-environmental measures, and for offering a safe and inspiring work environment for our employees. It is also a

prerequisite for being able to invest in new green technologies and be involved in driving the development of tomorrow's sustainable agricultural machinery.

Money is useful when it is used for something good. For us at Väderstad, this means reinvesting our surplus in achieving long-term sustainability, which involves everything from material choices and environmental impact to how we take care of our customers and employees.

War in Ukraine

Russia's war against Ukraine continued to have a major impact during the year. Väderstad has staff in both countries, and before the war, both Russia and Ukraine were large and important markets for us. When the war began in 2022, we made a decision in principle not to accept any new machinery orders from Russia. This decision continues to stand. Relatively soon after the start of the war, we were able to continue our deliveries of machinery and spare parts in Ukraine, mainly to the western and southern parts of the country, where farmers are still keeping some food production going. We have continued to do so, although at significantly lower levels than before the war.

Investing in the future

We have strong confidence in the future and are making major investments to expand and optimise our own production in all our production units. Having in-house manufacturing enables us to ensure first-class production and safe delivery throughout the chain. During the year, we completed the construction of offices in a new factory centre in Väderstad and began construction of new production facilities in Väderstad as well as new offices and a customer centre in Wahpeton.

Our sustainability aspect

Ensure stable, long-term and sustainable profitability for the company



In addition, we decided to make further investments in production which will give us the capacity to manufacture 10,000 machines in Väderstad, and next year we will apply for extended authorisation in accordance with the Environmental Code. We have finished implementing a new global management system, started introducing a new enterprise resource planning system and set up a new system support for product development in the company. We have also acquired a new range of inter-row cultivators, a product that enables mechanical weed control. To secure our long-term position in the market, we began work on developing our brand during the year.

Anti-corruption

Corruption negatively impacts people, the environment, organisations, businesses and countries. Väderstad dissociates itself from all forms of corruption, bribery and money laundering, as well as illegal restriction of competition. We work actively and try to be close to and understand our business throughout the entire chain from order to final delivery to our end customers, i.e. farmers. Through this approach, we try to minimise the risks of corruption, bribery and other types of non-acceptable business practice.

We have brought our guidelines and working methods together in this area in a Code of Conduct applicable to

everyone in Väderstad Group. This ensures we have an overview of this area and are better able to educate our staff as well as follow up on and correct any deviations in the area. The Code of Conduct clarifies, among other things, what is regarded as bribery and what we should do if we feel we are being subjected to bribery.

During the year we conducted workshops on our Code of Conduct for many of our work teams. Group-wide material was produced that offers the possibility to focus on areas that are relative to each team.

We also produced a supplier code of conduct during the year. It will be rolled out among our suppliers in the coming year, and it will be a mandatory part of our contracts.

We are not aware of or have any indicators any indications or concerns that we have been subjected to, involved in, or have either directly or indirectly participated in, bribery or similar misconduct within our business.

We have a whistleblower system in compliance with European legislation. This system provides us with an additional means of checking and ensuring that irregularities and misconduct do not occur.

Material risks and risk management

Events in the surrounding world can affect our business both positively and negatively. For example, they can result in new business opportunities or have consequences for our employees, the environment or our profits. Various events can also affect our ability to deliver machinery.

We identify risks on an ongoing basis in the organisation. This is done, for example, through external monitoring and dialogue with our stakeholders. We identify risks at all levels in the company, including risks that could affect the entire Väderstad Group and risks that affect part of our business. After identifying potential risks, we perform a risk assessment, decide appropriate measures and appoint persons who are responsible for remedying risks that we cannot accept. An important part of the risk management process is to follow up on the measures




carried out to make sure they have had the desired effects. We have procedures for carrying out regular analysis, risk assessments, safety inspections and audits. We currently have system support for documenting and summarising health and safety risks throughout the organisation, and for environmental risks for our organisation in Sweden. During the year we began developing a common deviation process in our new business system, which will allow efficient, systematic management of operational risks. Väderstad has crisis management plans in place. The purpose of these plans is to provide good preparedness in the event of a crisis and ensure that the right measures are taken by designated persons at the right time.

Overall risks and our management of them are reviewed at least once a year by the Board. This is a fixed item in the Board's rules of procedure.

Strong financial development is a prerequisite for developing safe products for our farmers



Sustainability risks and how we manage them

Focus area	Prioritised sustainability aspect	Examples of risks	How we manage risks
People 	Create a healthy, safe and pleasant workplace	Accidents and occupational injuries Sick leave Spread of infection War Infringement Insufficient diversity Difficulty recruiting and retaining skills	Systematic health and safety management Active risk and incident reporting Training Crisis management organisation Occupational health services Aim for more even gender distribution Strategic workforce planning
	Contribute to a safe work environment for farmers	Lone working More complex machines Different machinery safety requirements in different markets	Product safety board CE marking of our machines Information about our products
Planet 	Promote agri-environmental measures	Climate change The new EU Common Agricultural Policy (CAP) directive Regulations on glyphosate Uncertainties regarding climate calculations for carbon sequestration	External monitoring and participation in research projects Customised machine concepts
	Streamline use of materials, minimise emissions that are harmful to plants and animals, and prevent the generation of waste	Climate change Emission of chemicals into soil and water Emission of solvents into the air	Systematic environmental management Procedures and instructions on handling of chemicals and maintenance of the treatment plant Maintenance Training
Profit och Product¹ 	Ensure stable, long-term and sustainable profitability for the company Develop innovative, efficient and sustainable products Ensure high product quality	IT technology Raw material shortages Commodity price increases Fluctuating grain prices Climate change Infringement Fire Power outage Currency exchange rates Interest rate risks Market risks	Secure IT systems Business intelligence Market analysis Systematic fire safety management Planning for power outages ISO 9001 certification for manufacturing in Sweden Internal audits
	Other sustainability aspects	Examples of risks	How we manage risks
Anti-corruption	Employees who accept bribes and accept corruption Indirect risks through suppliers operating in countries with higher risk of corruption	Code of conduct Whistleblower system Procedures for auditing and monitoring of suppliers	
Human rights	Risk of human rights violation	Equal opportunities plan Whistleblower system Code of Conduct, both internal and for our suppliers Social and ethical requirements for the purchase of goods and services Follow-up on suppliers	

¹ Because there are many risks that regard both Profit and Product, we report them collectively.



People

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Health and safety are our top priority

About the focus area and our goals

Väderstad is a family business with over 2,200 employees worldwide, where relationships and mutual care and respect are core elements of the corporate culture. We work together as a global team to harness all the expertise and experience in the Väderstad Group.

We want all our employees to feel they have a safe and pleasant workplace. That's why we're continuously working to develop and improve the work environment. A good work environment, where employees' safety, health and skills development are given high priority, is a prerequisite for achieving our long-term goals and developing the entire organisation. In other words, nurturing and developing our internal relationships is at least as important as nurturing our relationships with farmers around the world.

Safety is our top priority. This includes both the farmers who use our machines and our own employees. For our customers, we need to be able to guarantee a safe work environment for farmers and the high quality of our products. For our employees, we have a long-term target of zero work-related accidents in our operations. Väderstad aims to be a sustainable and attractive employer that offers its employees a safe work environment and unique opportunities to grow. The fact that employees choose to work for us is crucial to maintain a stable supply of skills that meets both current and future needs.

How we work

A safe work environment for farmers

In order to provide a safe and secure work environment for farmers, it is important to do things the right way from the start. To eliminate accidents, we work preventively to identify and remedy existing risks to farmers. All our machines produced in Sweden are CE marked as well as third-party audited by SMP, the Swedish Machinery Testing Association. Our machines manufactured in North America comply with the requirements and standards applicable to the manufacture of agricultural machinery there. We are confident that our machines meet all the necessary safety requirements. In addition, practical tests are always carried out in the field before a machine is delivered to the customer. You can read more about our testing activities on pages 50–51. During the year, we started using our own test track near our production facility in Väderstad, which facilitates the testing of our machines in accordance with applicable certification requirements. Our QuickStart guides and practical training courses help customers to operate machines safely. If an accident should still occur in the field despite our preventive measures, the accident will be investigated by our product safety board. We will investigate what happened, what caused the accident and what measures may need to be taken to avoid similar accidents happening again.

Our sustainability aspects

Create a healthy, safe and pleasant workplace
Contribute to a safe work environment for farmers

A healthy, safe and pleasant workplace

At Väderstad, we want all our employees to feel they have a safe and pleasant workplace. That’s why we work to develop and improve the work environment. To be an attractive employer, we also need to have committed leaders who, together with their employees, work to achieve our goals and develop the entire business.

Employee survey

We carry out employee surveys twice a year, which include questions about job satisfaction and workload. These surveys help us identify areas for improvement so that we can become the attractive workplace and employer we strive to be. The survey provides us with our engagement index.

Systematic health and safety management

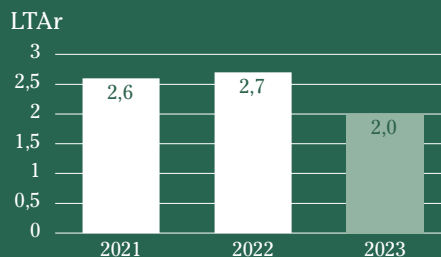
Systematic health and safety management involves paying attention to and taking into account all conditions and factors in the daily work environment that could affect employees’ health and safety. We assess the risks of occupational illness and accidents, both on an ongoing basis and when we implement changes.

All our production units use system support to record and manage observed risks, incidents and accidents. In these systems, we perform root cause analyses, register implemented measures and follow up to check that the measures have had the intended effect. The systems also register risk assessments, safety rounds and fire safety rounds to enable any necessary rectifying measures to be carried out systematically.

KPIs within People

LTAr (lost accident rate) shows the number of accidents resulting in absence, relative to the number of working hours of 100 full-time employees in a calendar year. The target for 2023 was to reduce the number of LTAr incidents by 10% from the previous year’s figure, to an LTAr of 2.5.

We achieved this target and predict a positive trend over time. Now we are continuing our systematic health and safety efforts to further reduce accident risk.

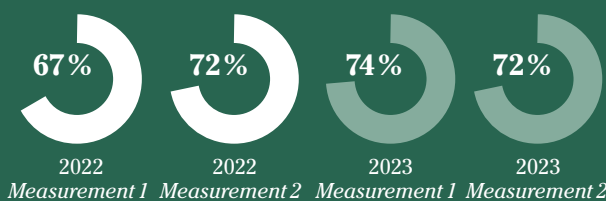


KPI for employee index: The goal for 2023 was to achieve a response rate of 75% for the employee survey, and for the engagement index (weighting of survey questions) to exceed 8.4 (out of 10).

Employee Index



Response frequency



Our engagement index decreased in line with the increased response rate, and our result was below the target. However, we are above the industry average for the manufacturing industry. As a result of the outcome, we have introduced several measures.

In addition to these KPIs, we monitor a variety of metrics associated with the work environment, such as number of risk observations and incidents, as well as sick leave figures and the time for managing risk observations, incidents and accidents in our system support. We also monitor the number of machine-related accidents and incidents reported by our customers.

We monitor the safety of our machines based on the number of cases received by our Product Safety Council, and we noted fewer cases in FY23 than the previous year. No serious accidents occurred.



In addition to our general business policy, which includes health and safety, we have the following policies related to the area of People:

- Fire Protection Policy
- HR policy
- Equal opportunities plan
- Väderstad Group's Policy for the Processing of Personal Data
- Privacy Policy



Risk observations and incidents are continuously followed up on in safety committees (or equivalent) in all our operations. We have action plans in place for managing any serious accidents that may occur, and during the year we improved our internal communications in the event of accidents, to ensure that everyone gets the information they need and prevent rumours from spreading. Accidents resulting in absence are reported monthly at group management level.

In the Health & Safety Collaboration team, where representatives from all Väderstad's production units share information and experiences, we develop best practices in the Group and work together as One Team for Global Growth. We identify similar challenges for our production sites and collaborate with them. During the year we introduced an HS specialist for VUS, a new role in the area of health and safety.

Each employee has an individual responsibility for ensuring a safe, healthy work environment by complying with procedures and safety rules, reporting deviations, suggesting improvements and reporting observed risks and accidents in our reporting tool. Information on crisis management and preparedness is available on the intranet. The information provides details of the crisis and preparedness structure, who to contact in case of an unplanned event and what to do if a serious incident happens.

We conduct ongoing health and safety training for managers and health and safety representatives to ensure that we meet legal requirements and our internal requirements regarding knowledge of how health and safety management should be carried out in our operations. Since health and safety is our top priority,

it is important that we have work procedures in place to ensure that all staff have the relevant and necessary expertise to manage matters related to health and safety. All staff are introduced to their duties and receive the training needed for their tasks on an ongoing basis. Examples of training carried out during the year include safe lifting, welding, forklift operation, working at height, ergonomics, CPR, fire safety and chemical handling.

We also carry out ongoing safety-enhancing measures, such as converting premises to make them safe to work in. Moreover, at all our production sites, hand tools are replaced on an ongoing basis with tools that have better vibration and noise performance.

Health-promoting activities

Väderstad aims to stimulate, motivate and offer all employees opportunities to invest in their health and encourage regular active participation in health-promoting activities. At VAB there is a gym that everyone has access to, and employees can also use their wellness allowance for massage. Wellness allowance is offered to all our employees in Sweden. The level of reimbursement for the wellness allowance was raised during the year.

Employee development

Good, sustainable leadership plays a crucial role in successfully achieving growth and fulfilling our priorities and goals in the company. We will continue to prioritise leadership development in order to coach and develop leaders and enable them to achieve good, sustainable performance. The aim is to support our leaders in their mission to create conditions that enable our teams to achieve results that help develop Väderstad, equip employees for their career development and be an attractive employer.



All employees attend performance and development reviews with their managers, and personal goals are set with the aim of developing each individual and making it easier to manage the achievement of our targets.

Flexible workplaces

Some tasks in our operations work well when performed remotely, which helps us meet our employees' need to optimise their work-life balance. We hope that by offering increased flexibility, we can help our employees achieve a more sustainable work situation by cutting travel times. Our production sites in North America have a four-day working week, which means less travel time for many of those working there. In both Canada and Sweden, we have offices in nearby major cities, Regina and Linköping, which shortens travel time for employees living near those offices. At the end of the year, many of the employees at VAB moved into offices in our new Factory Centre.

Equal rights and opportunities

Our values – accessible, innovative and reliable – express what we stand for and how we want to be perceived. We embrace our values in our daily work and strive to ensure that all employees know what our values stand for, apply them and believe in the importance of their day-to-day choices. All employees in Sweden are covered by various collective agreements. The Group's employees who work in Sweden are represented by the trade unions IF Metall and Unionen. Regular meetings are held with the trade unions and employers. In the coming years, contract negotiations will begin at the Wahpeton plant between the company and trade unions within the scope of the employees' collective agreement.

At Väderstad, all employees must have the same rights, obligations and opportunities, regardless of gender, transgender identity or expression, ethnicity, religion/beliefs, disability, sexual orientation and age. Our Code of Conduct, which we have worked on during the year, clearly sets out our positions regarding mutual respect, non-discrimination, freedom of association, working hours and compensation, as well as modern slavery and child labour. The equal opportunities plan for our operations in Sweden is followed up and revised annually by joint groups comprising representatives of the company and trade unions. In connection with our annual salary surveys, we address and remedy the few cases of unjustified pay discrepancies that may occur. VUS and VCA comply with existing legislation regarding a respectful environment and harassment, with the aim of protecting all employees and everyone who collaborates with them in various ways.

The company also trains all leaders and provides tools that support employees in our efforts regarding equal treatment.

We are not satisfied with the gender balance in our organisation. During the year, we worked on developing goals and activities to increase the proportion of female employees. Our long-term goal is to have 30 percent women in total and 30 percent women as leaders by 2030.

Measures to improve health and safety

Traffic safety

To improve safety, we have redirected the traffic flow at VCA and initiated similar work at VUS. We have developed our safety training for tractor drivers so that it includes both theory and practice and offers everyone who drives a tractor the opportunity to practice especially risky operations. At our Väderstad factory, we have introduced a train for visitors, which increases the safety of both our visitors and our staff.

Onboarding at Väderstad

In conjunction with our introduction of a new HR management system, we have developed our onboarding processes for new employees. The aim is to ensure that everyone is informed about our work procedures, processes and applicable routines. We have also introduced an assembly course for all new assembly staff at VAB. Its purpose is to inform staff about our ways of working and train them in operations of key importance to both safety and quality.

“We give our new employees the necessary prerequisites to perform their work safely,” says Oscar Paulsson, Production Leader, Assembly.

Correct handling of chemicals

We have cleared and sorted through the chemical products we have in storage and implemented a new chemical management system for our facilities in Sweden.

“Everyone at VCAB has been trained in our new chemical management system, iChemistry, resulting in a greater awareness about safe chemical handling,” says Linda Svensson, QE coordinator.

We have also replaced several products with other products that pose less of a health risk. Now the same will be done in North America. We have also clarified which types of products should not be used, in order to prevent new chemicals that pose a health hazard from being used in our operations.

New exchange programme at Väderstad

We have introduced an exchange programme that will increase opportunities for more efficient collaboration between our countries and promote better cooperation. It will also contribute to disseminating best practices and help build understanding about the various parts of the organisation, different cultures and different ways of working. This will help us to further optimise our internal skills and expertise, while offering employees an opportunity to live and work in another country for a limited period of time.

Safety culture

Our journey towards a strong safety culture continues. All leaders at VAB have been trained in behaviour-based safety and approaches, thus increasing their understanding of the importance of encouraging safe behaviours in order to achieve a strong safety culture.

“I came away from the training with an even stronger conviction that it’s what we do that influences people, not just what we say,” says Susanne Pettersson, Production Leader, Component, VAB. “It’s not enough to just talk about what sort of safety culture we want. Some fairly simple things we can do are to set a good example and gently remind each other if someone makes mistakes. This is valid for all Väderstad’s core values.”

Focus on hands

Our analysis of accidents for the whole of Väderstad shows that one of our most common accident types involve hands being injured by crushing or catching. For this reason, we have introduced a project to reduce this type of accident, which will begin at VAB.

“We analysed the causes of all accidents during the year,” says Åsa Eklöv, health and safety specialist at VAB. We will continue by analysing the root cause every time a hand is injured by crushing or catching over the coming year. Our aim is to be able to prevent this type of accident through technical solutions.



Welding fumes

Our machines comprise many steel parts that are welded together, both by robots and manually. Several measures to improve indoor air quality have been implemented at VAB over the past few years, such as optimising ventilation, screening off welding areas and training our welders. Alongside various technical measures, we have also participated in a study conducted by the Department of Occupational and Environmental Medicine at Linköping University Hospital. The results showed an improvement in the indoor environment during the three-year duration of the study.

However, towards the end of the year, we noticed our air quality deteriorate again. On analysing the situation, we found that the causes included that our new welding equipment did not meet our requirements, and that our ventilation did not work optimally due to changes in air flows during a reconstruction.

“Now we are conducting additional measures to take us back to at least our previous level. This is one example of how health and safety management is an ongoing process that never ends,” concludes Timo Kjellberg, Director Operations Component.



A career
at Väderstad

Our future employees

Finding the right talent is a challenge for us. We are seeing shortages in several of the professions that Väderstad needs. During the year, we conducted several activities aimed at making more people aware of Väderstad and what we have to offer:

- New “Careers” page on our website
- Workshops conducted with students from SLU Alnarp on the future of agriculture and students from Linköping University on how we can reduce the climate impact of our employees’ commuting
- Participation in trade fairs in municipalities near our production sites
- Welding of stoves for Ukraine in collaboration with the Student Association of Mechanical Engineering at LiU
- Activities implemented as part of “IGE – Introduce a Girl to Engineering Day” and participation in the Code Summer Camp
- Participation at agricultural fairs in several continents
- Training initiatives for upper secondary school students from industrial programmes in nearby municipalities
- Internships through the Tekniskprånget initiative
- Employment of summer workers, dissertation project opportunities for students

People in figures

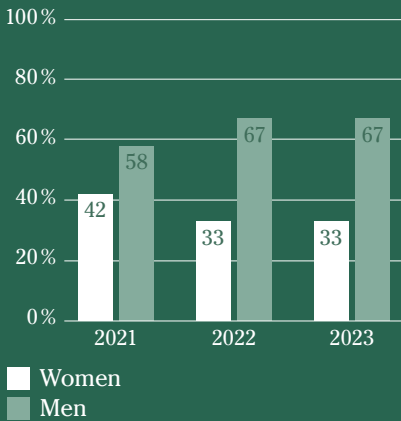
2 231

working in the Väderstad Group
as of 30-09-2023 (2022: 2,040)

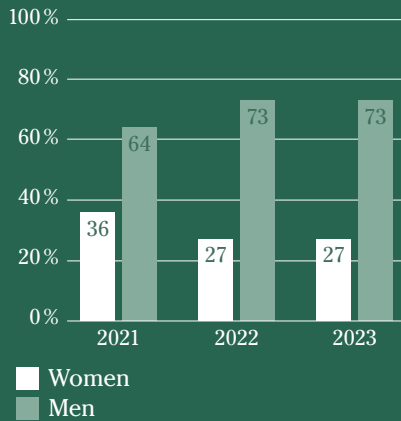
7,76 years

7 years and 277 days Average length of employment
(VAB+VCAB)

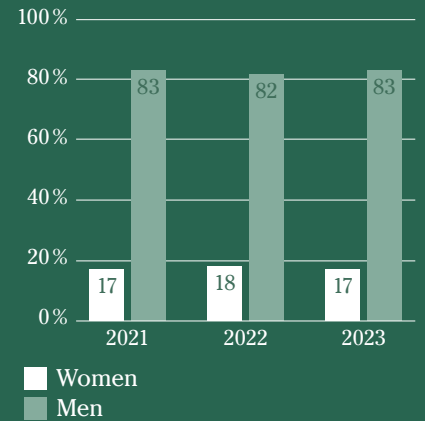
**Gender distribution
Board of Directors**



**Gender distribution
Group management**



**Gender distribution
Employees**



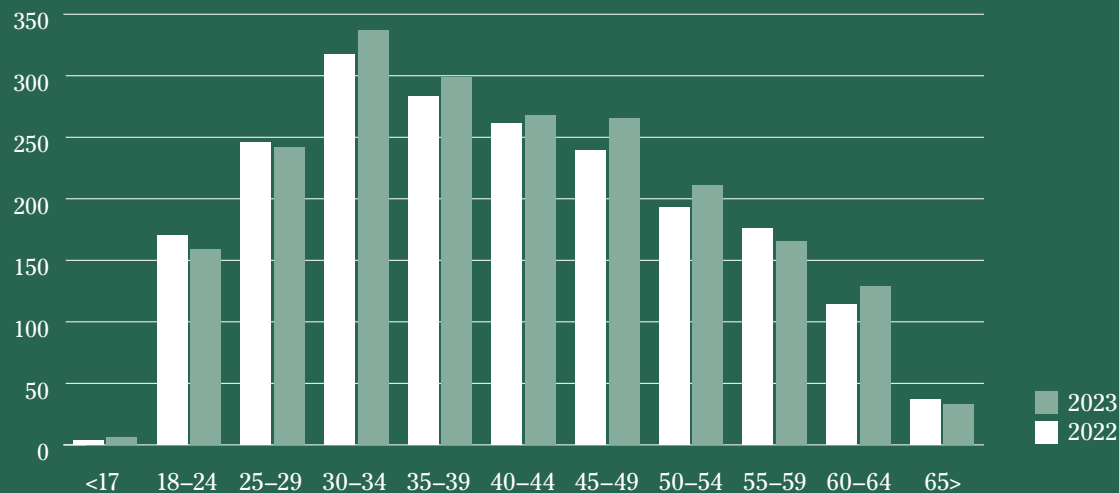
97%



Just over 97% of total employees
are full-time employees

Age distribution

Quantity



Manufacturing stoves for Ukraine builds teamwork

In September 2022, Morgan Collin, a designer at Väderstad, was off work with the flu when a news story caught his attention. It was a report about Ukrainians making field stoves in preparation for the winter. An idea occurred to Morgan – this was something Väderstad could do. He had a sketch ready by the following day, and a month later 150 stoves were en route from Väderstad to the war in Ukraine. A year on, over 2,000 stoves have been manufactured by Väderstad’s staff.

When Morgan returned to work after the flu, he spoke to the management, who promptly approved the initiative.

“Getting the management’s speedy approval was, of course, crucial. Before we started, they just wanted to check that our employees in Ukraine agreed that it was a great initiative. They did. After that we needed to ask some of our suppliers to donate materials and our colleagues to donate some of their free time. That also proved easy,” says Morgan.

After speaking to three suppliers, Morgan had collected enough materials for 150 stoves. That same day, he completed the drawings and ordered a prototype. It all happened very quickly.

“I’ll never forget that day. They promised that if I sent the drawings before breakfast, they’d deliver the parts the same day. The next day I welded the parts together

and tested the stove right here in our yard. It worked very well,” Morgan recalls.

From drawings to welcome deliveries

Then the stoves went into production. For a few evenings in the autumn, the Väderstad factory welded, assembled and packed the field stoves. Then they were shipped to our subsidiary in Ukraine. While Morgan and his “Planters” team at R&D were busy welding the stoves, Väderstad’s Ukrainian employees worked intensively, headed by Marketing Manager Olga Vaskevich. They contacted charities and arranged for the stoves to be distributed to people in need. In a very short time, all the stoves had been allocated. The stoves serve both as a heat source and for cooking, and staying warm and cooking are both crucial to survival.

“We are so grateful to our Swedish colleagues, the management and the Väderstad family for their support to the Ukrainian people,” says Olga.

“My whole ‘Planters’ team found it important to make a concrete contribution. And it was also nice to spend some evenings working together and eating pizza courtesy of the company.

“Soon people from the company’s other departments started joining in and helping, and we all felt we could do more,” Morgan remembers.

” My whole ‘Planters’ team found it important to make a concrete contribution.

Morgan Collin, designer at Väderstad



About the initiative

- Around 2,000 stoves have been manufactured at Väderstad
- About 1,000 additional stoves manufactured by other companies have been dispatched from Väderstad
- 200 employees have worked in the evening free of charge
- 1,500 hours have been spent on welding
- Two pallets of medical bandages have been delivered
- A total of about 10,000 stoves have been made in Sweden based on Väderstad's drawing
- Just over 120 power units have been refurbished and dispatched
- A large number of suppliers and partners made the project possible



Media coverage fuelled commitment

The management and family were keen to continue as long as material continued to be donated and employees were happy to work in their free time. Morgan started calling more suppliers and business partners. By year-end, material had been collected for a further 850 stoves. Meanwhile, the media had heard about the initiative at Väderstad and Morgan's phone was constantly ringing.

"When numerous articles and features appeared in the media, the calls started piling in. Large companies, family businesses, associations, schools and private individuals alike were eager to offer assistance to war-torn Ukraine. For this reason, we decided to share our design drawings around. To date, about 10,000 stoves have been made from our drawings all over Sweden," says Morgan.

Due to the enormous amount of interest, Morgan has spent many hours on the project, both at work and in his free time. But he's quick to point out that it has been a team effort.

"The first 150 stoves were made by me and my small design team. But since then, about 200 employees have worked on the project free of charge, while my design colleagues Nils-Åke Skoglund and Jörgen Fransson and I have shared the task of coordinating the evening work."

More than stoves

In addition to the material donated to the project, several suppliers have donated money. These funds have mainly been used to buy complete sets of materials as well as chimneys. But there was still some money left over. So Morgan contacted our colleague Olga in Ukraine and asked what other supplies they needed. The answer was "Blood stoppers and first aid bandages. They're lifesavers".

"I contacted another supplier who sells medical products. They offered to supply the products at cost price and to donate the same amount as we purchased. A few weeks later we dispatched two pallets of bandages," Morgan says.

Parallel to the stove production project, farmers, other private individuals and companies have been donating electric power units to Ukraine. As Russia continues to bomb electricity grids and infrastructure, there is an enormous need for backup power. During the year, over 100 power units of various sizes have been refurbished and dispatched from Väderstad. Our Ukrainian subsidiary has helped enormously with this as well, by ensuring that all the documentation is correct and that the power units are sent where they're needed the most. One of the largest power units was connected to a hospital in a city with about 200,000 inhabitants, while others have been sent to schools and military units.

Moral mettle

In the year since Morgan first had his idea, he and his colleagues have spent about 25 evenings and 1,500 welding hours for the initiative. This year, Väderstad has manufactured 2,000 stoves and delivered nearly 3,000. The project is on track to continue, and material for almost 1,000 more stoves has been secured. Morgan is grateful and proud, but also feels worried.

"I have enormous respect for the time, money and commitment contributed by everyone concerned. Väderstad has taken enormous responsibility and I am very proud to have an employer like this. The company has really proved its moral mettle.

But of course business comes first and strong finances are a prerequisite for us to be able to continue helping," he says.

Morgan and his colleagues have had a lot of feedback in the form of photos and videos from people who have received assistance.

"What concerns me now is that we need to find the strength to continue sending all the support we can. We have to persevere," he concludes.



Human rights

Väderstad is a global company with customers and employees in a large number of countries. We support and respect internationally declared human rights.

We actively work to ensure that our employees, partners and customers are treated fairly, equally and with respect. This work promotes the development of both employees and the company as a whole. Väderstad is committed to conducting ethical business in compliance with applicable laws. We are convinced that this is the right way to conduct our operations and earn the long-term trust of our customers, partners and society at large. Our Code of Conduct clearly sets out how we at Väderstad do business and ensures that we respect human rights. During the year we carried out workshops on our Code of Conduct in large parts of the organisation, with the aim of increasing knowledge about it and how it applies to each individual role. This work will continue over the coming years.

“Those of our employees who work closely with customers in different countries find themselves in situations almost daily where they can and should, follow our Code of Conduct. The Code of Conduct contributes to security and clarity when building relationships with our customers and partners. We have also had time and opportunity to discuss these issues amongst ourselves. As a result, we have identified areas where we need to be extra vigilant as managers and leaders, and have also educated our employees about how to act and what is expected of them in various situations. I feel that our Code of Conduct, along with our culture and the guidelines in The Väderstad Way, provides clarity and understanding of our Swedish corporate culture and the rules we need to follow,” says Mattias Hovnert, Senior VP Sales & Marketing.

During the year, we also produced a code of conduct for our suppliers and partners, based on our Code of Conduct. Now we will implement this code of conduct in our contracts and work out a method for monitoring compliance with it.

We have procedures for dealing with suspected cases of workplace bullying and discrimination. They describe how to proceed in such cases and what action the company should take.

Our employees and external stakeholders can report any violations of our Code of Conduct and other policies, including human rights violations, in cases where the Company or any of its representatives are believed to be involved. Complaints can be reported through internal and publicly available whistleblowing channels as described in our Code of Conduct, including Väderstad's whistleblower function.

We are not aware of, nor do we have any indications or concerns about, having been exposed to or involved in, or indirectly participated in, any human rights violations.



Planet

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Reduced environmental impact and a sustainable product life cycle

About the focus area and our goals

Väderstad has its roots in agriculture and the soil, and protecting our environment has been a matter of course to us for more than 60 years, long before we had even heard of climate change and the 2030 Agenda. Over the years, our machines have minimised the number of passes needed, thereby contributing to reducing fossil fuel emissions. Producing food for the world's growing population in a way that helps increase carbon uptake in soil is an increasingly important aspect when we develop our machines.

Population growth and demand for food are increasing while access to arable land is shrinking. The world's farmers therefore have a huge responsibility to produce more nutritious food as efficiently and sustainably as possible. Väderstad's machines are used exclusively in the agricultural sector, where we aim to drive positive environmental impact through innovation. While doing this, we need to reduce our negative environmental impact throughout our machines' life cycle. The environmental aspects that we focus on are energy, waste, transports and chemicals.

The Väderstad Group has adopted a long-term target of net zero greenhouse gas emissions by 2045 that is in line with Sweden's commitment to the Paris Agreement.

During the year, we aimed to reduce our greenhouse gas emissions (scope 1 and 2 according to the GHG Protocol) by 5% compared to FY21. We did not achieve this target. This was largely due to an increase in electricity and gas consumption for VCA and VUS because their operations were expanded, as well as increased internal transport throughout the company, which is not surprising considering the fact that in FY21 our operations were still running at a modified pace due to Covid-19. In addition to the overall KPI, we monitor various energy efficiency metrics, such as energy consumption per manufactured machine and hours of operation. We also have various metrics for waste and chemicals for our operations in Sweden.

How we work

We have divided the life cycle of our machines into five parts. The sustainability aspect that regards promoting environmental improvement measures in agriculture is described in greater detail in section 4, Use. We focus on the other sustainability aspect throughout the entire life cycle.

In our Environmental Collaboration team, representatives from all Väderstad's production units share information and experiences, develop best practices within the Group and work together as One Team for Global Growth. We identify similar challenges for our production sites and work together to systemise our work processes. At the end of the year, an environmental engineer started to work at VCA.

Sustainability aspects

Promote agri-environmental measures

Streamline use of materials, minimise emissions that are harmful to plants and animals and prevent the generation of waste



In addition to our general business policy, we have the following policies in place regarding the area of Planet:

- Travel policy
- Company car policy
- Project policy

The life cycle of our machines

1. Raw materials/input supplies

We impose high demands on our suppliers, and our material choices are based on careful selection processes and tests. For example, we use Swedish tempered quality steel with a long service life for which SSAB is our main supplier.

We work actively to minimise chemical substances in our products that are harmful from both an environmental and a health perspective. We aim to minimise substances included in the REACH Candidate List and the Water Framework Directive list, and products containing phase-out substances or risk reduction substances according to the Swedish Chemicals Agency's PRIO guide. We do this by ensuring that no new such substances are introduced and by replacing existing substances. We report substances contained in our products to the ECHA SCIP Database.

2. Production

Our greatest direct environmental impact occurs in our production facilities. Overall, the Väderstad Group's operations ran normally, with no major disruptions or events of environmental importance occurring during the year.

Väderstad AB (VAB) is the largest unit in the Group. Väderstad's operations require a licence in accordance with the Swedish Environmental Code. This licence is restricted by the use of volatile organic solvents. During the past year, our use of such substances was within the permitted limits by a good margin. Other conditions are deemed to have been met during the year. The County Administrative Board of Östergötland conducted supervision during the year in the capacity of supervisory authority.

Life cycle of Väderstad machines

1. Raw materials
2. Production
3. Distribution
4. Use
5. Final disposal



To enable us to continue developing our operations in the future, we will apply for extended authorisation. Preparations for the application took place throughout the year. As part of this work, we investigated the environmental impact of any contaminants in the ground, stormwater run-off, noise and dust. The results will be presented in the application.

Väderstad Components AB (VCAB) conducts activities that are notifiable in accordance with the Swedish Environmental Code and there is a notice regarding the existence of precautionary measures. The decisions include precautionary measures regarding noise, chemical and waste management, and an annual inspection of the operations. These measures are deemed to have been fulfilled by the company during the year. The painting process is powder-based. Annual inspection visits are carried out by the Västervik Environment and Construction Office.

Väderstad Industries Inc. (VCA) operates within the rules set out in The Saskatchewan Environmental Code without exception. The painting process is powder-based, which means that no solvents or thinning is needed.

Väderstad Inc. (VUS) operates within the rules set out in the North Dakota Department of Environmental Quality and Clear water act. The operations release emissions to water. The painting process is powder-based here too.

We primarily focus on environmental improvements in the areas of energy and climate, chemicals and waste.

3. Distribution

Väderstad continuously works to optimise transport and delivery processes to minimise environmental impact. Transports between VCAB and VAB are carried out by an environmentally certified, fossil-free transport company, and we fill each consignment as full as possible. At VAB and VCA, fixed route vehicles are used for inbound deliveries of materials from suppliers.

The routes and frequency of these vehicles are continuously reviewed in order to minimise transport in line with changing flows from different suppliers. We also coordinate deliveries from distantly located suppliers with factories located nearby. This is done in close collaboration with the transport companies that we use. Most of our fixed route transports in Sweden are also carried out by environmentally certified or fossil-free transport companies.

4. Use

Our work on machine development is based on various types of challenges that we want our machines to help manage. These challenges include the environmental challenges faced by the agricultural sector. We have 60 years of knowledge and experience. During these years, our machines have promoted environmental improvement in the agricultural sector in various ways.

Väderstad is at the forefront and is a driving force when it comes to innovations that greatly reduce soil tillage and that can perform several operations in a single pass, with a lower draught requirement per working metre to reduce diesel consumption, among other things. In the short term, the farmer saves time and money, but the long-term benefits are clearly greater than that. With reduced soil cultivation (ultra-shallow tillage), the risk of soil erosion is reduced while the sequestration of carbon in the soil increases. The more biomass there is in the soil, the more carbon is sequestered. Carbon sequestration in agricultural soil and preventing the loss of sequestered carbon are important aspects of climate impact reduction. Through precision drilling, our customers can reduce the number of seed they use while improving their harvest. This helps to conserve resources and reduces the climate footprint of agriculture. Our new product group, inter-row cultivators, can help farmers reduce their use of chemical pesticides.

We carry out many tests of our machines in order to verify their contribution to environmental improvement measures in agriculture; also see pages 50–51.

We continuously educate our customers on how best to use our machines, including from a resource perspective to enable low fuel consumption and optimal soil tillage and drilling. For each machine delivery, the user receives an overview of the machine, its functions, and its optimum settings to best optimise use of the machine at the lowest consumption of resources and cost. Through our website, we also provide both agrarians and technical information that helps farmers to optimise their usage and their machine settings. This is partly achieved through our QuickStart guides which give the farmer advice on machine settings and operation. We also arrange practical training in the field, on site in different markets.

Intensive discussions are currently under way on how future agriculture should be conducted from a sustainability perspective.

Examples of issues discussed include the role agriculture plays in promoting carbon sequestration in soil, preventing soil erosion and adapting agriculture to a changing climate. Väderstad follows and participates in these discussions and, through new innovations, wants to meet future needs for sustainable agriculture.

5. Final disposal

Making machines with a long service life and minimal maintenance is a hallmark of Väderstad. When manufacturing wear parts for our machines, we use an optimised hardening process to increase their service life. We provide spare parts for all models previously produced, which contributes to our machines' long service life and high resale value.



Our environmental focus areas



Energy and climate

The Väderstad Group is affected by the European rules on energy mapping in large companies and VAB and VCAB therefore carry out an energy audit at least every four years that generates action proposals on how we can further reduce our energy consumption and increase our energy efficiency. The most recent audit was carried out in 2021. The energy consumed in our operations is used, for example, for painting, lighting, heating, ventilation and compressed air.

During the year we continued working on calculating scope 1 and 2. We also developed a process for our systematic energy management, which is based on our long-term target of achieving net zero emissions. We have established local cross-functional working groups for energy management in our Swedish operations, and we work continuously to identify and prioritise various measures. Some of these measures are easy to implement immediately, while others require major investment. In the next few years we will focus our energy management on streamlining energy consumption, and will monitor the results using an overall KPI for the whole organisation.

At VAB and VCAB we purchase 100% renewable electricity, which represents approximately 75% of the Väderstad Group's total energy consumption. We do not yet have the same opportunity to do this for our other production facilities and sales premises, but this is an aspect we will monitor closely going forward. At VCAB, we use waste heat from compressed air compressors to heat certain premises.

We conduct digital meetings as much as possible, both to reduce our employees' travel time and our environmental impact from travel. In Sweden and Canada, we have offices in nearby large cities to enable more people to reduce their daily travel distance.

Waste

We are continuously streamlining our processes and manufacturing methods to optimise our use of raw materials and minimise waste from production. At VAB, we placed particular focus during the year on reducing the amount of steel scrap from our component manufacturing. This work goes hand in hand with our quality management. We have made it easier to separate waste correctly at the factory. At both VCAB and VAB, we have reviewed and optimised the way in which we store our waste. This will make it easier both for the people where the waste is generated and those who transport the waste internally. VCA has increased its number of suppliers who are connected to the system for using recyclable transport packaging instead of disposable materials.

Chemicals

During the year, we changed the chemical management system in our operations in Sweden. This gives us better conditions for working systematically with, for example, substitution. This initiative also meant that everyone had to review which products they really needed, which enabled us to reduce the number of products. We also replaced some products that contain unwanted substances.

Measures regarding energy and climate

More fossil-free electricity

One of our sales companies, in Lithuania, installed solar panels on our buildings during the year. This will reduce our greenhouse gas emissions as natural gas is replaced with fossil-free electricity. More sales companies are preparing for similar measures over the coming years.

Measure more to know more

At VAB and VCAB, we measure electricity consumption in more partial currents in our operations.

“Under the IndX initiative (see more information on page 48), we tested a supplier’s system for measuring partial currents in Överum. This was an important step in our systematic energy management,” says Dan Somlin, Managing Director VCAB. “I look forward to taking this energy initiative to the next level. We will produce documentation to support decisions regarding more energy-efficient machinery when making future investments, and will also be able to gain better control over power output in production, leading to energy savings.”

Leak detection

VCABs and VAB both use a lot of compressed air, and regular checking for leaks is important to maintain good energy efficiency. At VCAB, we have invested in new equipment and regularly inspect our compressed air lines, thus avoiding waste.

Waste separation introduced in our offices

At VAB, we have introduced waste separation in our offices and dining areas. We have done this in our new Factory Centre.

“Correct waste separation means that hazardous substances can be disposed of safely. Separating different materials also makes it possible for most of the waste to be recycled so it can be made into new products,” says Per Cervin, Shared Services Engineer. “We save energy and natural resources by using materials multiple times.”

Securing electricity supply

We have expanded the power capacity to VAB to enable electricity to be supplied once the factory is extended. Last winter, many people in Sweden experienced disruptions in energy supply. For this reason, we have updated our plans for managing power outages and prepared procedures for planned downtime.

Collaborating for a more energy-efficient supply chain

Along with some of its suppliers, Väderstad took part in a project run by Energikontoret Östergötland. The project, which was completed during the year, focused on increasing knowledge about energy efficiency in all the participating companies.

“By exchanging experiences, we explored various approaches to improving energy efficiency. Among other things, we discussed what systems are required and shared ideas about a variety of measures that really work,” says Per Nilsson, Manager Shared Services. “The project also enabled us to engage in dialogue with some of our suppliers about how we can reduce greenhouse gas emissions throughout our supply chain.”

Optimising our transports

During the year, we created the conditions needed to increase consolidated shipments of finished products from VAB to customers.

“This will enable us to reduce our greenhouse gas emissions,” says Elin Iseskog, Director Sustainability.

“It will also reduce the amount of heavy transport through the community of Väderstad, which is positive from a traffic safety perspective.”

LED lighting

We have continued to replace the lighting at VAB and VCA with LED bulbs, which will reduce electricity consumption. VCAB already has 100% LED lighting in their production.



Optimised agriculture – efficient and sustainable

Maximising yield while building soil health is a prerequisite for sustainable food production with a growing population. No one knows their soil better than farmers themselves, and many already apply the principle of cultivating the soil as little as possible.

This may sound simple, but the same field can vary greatly in terms of soil type and other parameters, so it needs to be cultivated in a variety of ways. Now Väderstad has developed the E-Control system, which was previously used in seed drills, so that it can also be used for soil cultivation.

“The E-Control system is already well-proven for working with seeds and fertilisers and has made life easier for many farmers. Now we have made it compatible with the TopDown and Opus cultivators, which allows the same simple solution to be used to cultivate the soil with the utmost precision using GPS technology,” explains Maria Cornelius, Global Marketing Director.

The introduction of the E-Control control system on the TopDown and Opus allows these machines to use control files to automatically control the machine settings in the field. This means that prior to cultivation, the farmer can program the way individual implements – discs, tines, levellers and packers – behave in the field based on

various factors such as soil type. This allows the soil to be cultivated optimally by working at a shallower depth where possible.

“The knowledge we have today about the important role of worms and microorganisms in creating healthy soil means that there is much to be gained by cultivating the soil as much as is necessary, but no more than that. It’s simply a question of minimising disturbance in order to maintain the life in the soil,” Maria says.

Many savings to be made

Besides helping to improve soil health, the E-Control system can also contribute to savings in terms of working hours, implement wear and fuel.

– “Some machine operators today set their cultivator to the maximum working depth to be sure that the soil is sufficiently cultivated. But there is much to be gained by optimising the cultivation depth and intensity to eliminate the factors that reduce yields in the field. By using



E-Control and minimising the working depth, you can reduce energy consumption as well as wear and tear on machine parts. You can also save time by working faster,” explains Wolfram Hastolz, Director Product Management.

No one knows their soil better than farmers themselves, and this can make it difficult to hire external staff to help with the time-consuming cultivation work. With E-Control, the driver doesn’t need the same detailed knowledge of the field’s characteristics, since all the information is stored in the system.

“The map of the field with its various characteristics, which many farmers keep in their heads as reference when cultivating the area, is now input into an iPad that any operator can control from the tractor cab. This makes it easier to bring in external drivers to ease the workload during the intensive cultivation period. And precision and results are also improved,” says Wolfram.

Proceed – for optimal establishment

The new TopDown with E-Control will be exhibited at Agritechnica 2024, and has been nominated in the Farm Machine Award category for cultivators. Another Väderstad innovation that has won the Farm Machine Award two years in a row is the Proceed precision seeder, which is now ready for launch.

“While E-Control is an example of an innovation for optimising soil cultivation, the Proceed is our latest technological innovation to optimise crop establishment. Both these concepts focus on sustainability and aim to minimise soil disruption and maximise yield potential,” Maria explains.

The trial use of Proceed is now in its third year, and feedback from farmers in the ten countries where it is being tested is extremely positive, not least from a sustainability perspective.

“We have seen the cost of seeds decrease by between 20 and 40 percent, depending on the type of crop and the soil conditions. Another positive effect is a better-quality crop with higher protein content, which makes cultivation more lucrative for farmers since the price is based partly on the protein content,” says Maria.

Higher germination rate

The Proceed gives each seed optimal conditions for germination. While a conventional seed drill usually produces a germination rate of around 75 percent, up to 96 percent germination has been achieved at some of the Proceed’s test farms.

“Although the row spacing increases from 125 mm to 225 mm when the Proceed is used, the yield is higher and of better quality. This is because the Proceed gives each seed optimal conditions for germination. This reduces problems such as fungal infections and other diseases, which in turn reduces the need for pest control, while the wider row spacing makes it possible to control weeds mechanically,” Maria points out.

Each farm is unique

Factors such as soil, weather conditions, crop sequence, field structure, machinery, farm size and economy can differ greatly between farms. There is no one-size-fits-all solution or optimal farming strategy.

“Each farmer has unique conditions and expert knowledge of their own land. Väderstad focuses on giving each farmer the best tools to find their own farming strategy that maximises yield and builds the soil for future generations,” Maria concludes.



Product





Everything we do is designed to last

About the focus area and our goals

We are experts in our field, which means building machines that lay the foundation for a good, sustainable harvest. This constantly challenges us to think innovatively and find new ways to streamline and respectfully conserve both the individual farmer’s and the earth’s resources. The foundation of our innovations is simple; it is about maximising every task and each seed’s potential to promote a good harvest. In this way, we want to help to simplify work and improve yields so that the world’s farmers can provide the world’s population with food.

At a group-wide level, we work towards our long-term goals of being the best in the industry at dealing with customer complaints, and the most dependable partner when it comes to delivery reliability.

We monitor our quality management with metrics including FGC and ZH.

How we work

Väderstad’s business is based on creating optimal conditions for crop establishment and emergence. We have always had a strong product development focus, with the ambition to create ground breaking innovations for the world’s farmers. With agronomy and engineering in close collaboration, we develop highly efficient and sustainable machines and methods for tillage, drilling and precision planting.

Developing innovative, efficient and sustainable products

Our business intelligence provides insight into which challenges our machines should help to solve. For the past two years, we have been developing products according to our product development model. We developed our product change management process during the year, and in the coming years we will introduce a global, standardised change process.

Sustainability aspects

- Develop innovative, efficient and sustainable products
- Ensure high product quality

25%

FGC, Faulty Goods Complaints Quality complaints during the warranty period
Measured as the number of complaints per 100 machines manufactured

Outcome 2023: 25% better outcome compared with FY21

7%

ZH, Zero Hectare Machine complaints before use by the customer
Measured as the number of complaints per 100 machines manufactured

Outcome 2023: 7% better outcome compared with FY21

One result of the new process is that we will have better control of stock on hand, enabling us to reduce the number of items that are scrapped.

For the past few years we have been participating in IndX, a collaboration between four of the largest global industrial sites in our local vicinity and Linköping Science Park. Together, we aim to find new innovative solutions in the areas of sustainability and connected and autonomous machines delivered by start-ups. We collaborate with various universities and colleges in areas such as resistant materials. We test our machines throughout the development cycle to ensure they have a long life. Read more about our testing activities on pages 50–51.

Ensure high product quality

Our customers have strong confidence in our machines and wear parts to last for a long time, and for this reason we offer a two-year warranty on our machines. The unique structural composition of our steel, where we obtain a perfect combination of hardness and elasticity, allows us to offer a lifetime guarantee on the parts that do the work in the soil, our wear parts.

A first-class production environment with carefully selected materials is a prerequisite for delivering the quality that is a hallmark of Väderstad.

We impose high quality requirements on our suppliers, invest in first-class production and carry out rigorous material and field tests to ensure that the products and materials' properties reach their full potential and can meet the market needs. In our Materials Technology Lab at VCAB, we perform many of the tests needed to determine the best properties of, and the least resource-intensive processes for, the materials used to manufacture Väderstad's wear parts. Our operations in Sweden are certified according to ISO9001.

An important aspect in achieving the desired quality is ensuring that our suppliers provide high quality products. We conduct ongoing, proactive improvement efforts in collaboration with a few selected suppliers. We have noted a positive trend in the number of complaints received for these operations. The work is based on a classic improvement process according to the PDCA model, where errors are analysed and categorised. After this, we work with our suppliers in cross-functional teams to achieve specific targets. Collaborating with suppliers towards a common goal has been an important success factor for Väderstad with regard to this work. Together, we have focused on problem solving and continuous improvement without compromising on safety or quality.

Product development 2023

Proceed

During the year we continued testing our new product, the Proceed. The Proceed represents a major step forward compared to previous seeding techniques. The machine can position even the smallest seed at an optimal depth with millimetre precision, which can reduce the number of seed used and improve crop yield. We can also optimise the need for soil cultivation and thus create favourable conditions for improved soil health and reduce the use of chemical pesticides and fertilisers. So far our tests have shown impressive results, including stronger seedlings and an increase in both biomass and root biomass compared to a modern seed drill. Join us on our Proceed journey here.



You can read more about the Proceed and another of this year's innovations, E-Service for TopDown and Opus, on pages 44–45.

New product family – inter-row cultivators

During the year, we acquired parts of the Danish company Thyregod A/S. This means that the Danish company's entire range of inter-row cultivators is added to our product portfolio. The inter-row cultivators are perfect for combining with our Tempo and Proceed precision seed drills. Start of sales for Väderstad branded inter-row cultivators, which we have named Extract, will be in the summer 2024. The Extract will enable our customers to increase their use of mechanical weed control, thus contributing to more sustainable agriculture.

Ultra-shallow cultivation

Our new CrossCutter Disc Aggressive, which will be launched this year, will enable ultra-shallow cultivation to be carried out even in heavy soils and tough plant residues, where it would otherwise have been difficult to access the soil.

Measures to further improve product quality

Reducing internal errors

During the year, we introduced our systematic work process for evaluating and remedying quality defects, primarily in our welding and painting operations.

“We’ve seen that it produces good results when everyone with the relevant skills and knowledge works together to identify the root cause of defects and then checks to ensure that everyone carries out the necessary changes. This raises awareness among our operators and encourages everyone to play their part in delivering even more fault-free machines,” says Fredrik Lundgren, Customer Quality Manager, VAB.

During the year, we implemented a variety of measures as a result of this work.

“For example, we have made it easier for our painting operators to submit the correct documentation when reporting deficiencies,” explains Mikael Ryttilinder, Production leader Component, VAB. “This gives us significantly better data on which to base our analyses, so we can be sure we’re focusing on the correct measures. In combination with other measures, this has enabled us at the painting department to reduce our faulty deliveries.”

Lower scrap costs

Thanks to our systematic efforts, the cost of scrapped weld material was halved during the year.

“It’s wonderful to get confirmation that our efforts are having the desired effect,” says Annika Johansson, VP QHSE. We’re cutting unnecessary monetary losses and reducing environmental impact by reducing the amount of raw material we need to purchase. Now we’re continuing this work to make further improvements.”

Stricter sustainability requirements on our suppliers

During the year, we produced a code of conduct for our suppliers. It sets out what we require of them from an environmental, social and economic perspective. The next step will be to launch the code of conduct among our suppliers and develop a process for monitoring compliance with it.

Working together to achieve our goals

At VCA, we have made many improvements to our systematic quality management processes. For example, we have implemented and improved our automated system for sharing information between our cross-functional groups.

“This will ensure that the right people get involved early in the process, enabling us to resolve any problems much sooner,” says Gurman Somal, Quality Manager, VCA.

Lashing Instructions

To reduce the number of machines damaged in transit, we produced lashing instructions during the year, which are to be followed by all VAB’s hauliers. More detailed instructions will now be produced for different machine types. To make sure the instructions are followed, random spot checks will be carried out before consignments are dispatched from our facility.

A global management system (GMS)

During the year, we rolled out a new global management system for Väderstad. As we have expanded with more production sites, we have seen an increased need for a common system for managing our processes and documents. The GMS contains descriptions of our processes, procedures and instructions, and makes it easier for us to find our routine work procedures and keep our documents and processes updated.

Testing activities – central to sustainable machines

Some 50 dedicated employees work at Väderstad's Research & Development (R&D) Test Centre. Most things are tested here. The focus is on field testing, but mechanical testing, fatigue testing, calculations, simulations and laboratory tests are also carried out.

“What makes Väderstad unique is the breadth of our testing operations, and testing has always been a priority for us. ‘Build it to last’ was a motto coined by Väderstad's founder, Rune Stark, and this approach is embedded in our DNA. We continue to live by this motto,” says Mikael Albrecht, Head of the R&D Test Centre.

Väderstad is committed to manufacturing durable machines that last for generations and withstand tough conditions.

“This attitude permeates our entire business and the way we build our machines – and I think it sets us apart in the market. Some things should simply never break, although of course certain wear parts need to be replaced. Many farmers I've met say that Väderstad's machines are the only ones that last, and this makes me very proud,” says Mikael.

Testing – a tool for improvement

Testing is a natural part of the process of producing a good design. This is why Mikael and his colleagues are involved in the innovation and development work from the outset.

“Testing is crucial throughout the entire development process, from the napkin sketch to the finished product. You could think of us as a tool for bringing about improvements in order to produce an optimal and durable design. We want the first prototype to be as spot on as possible. This also makes the development process more efficient, rather than discovering something retrospectively when the design is already locked in.

For each product developed at Väderstad, there is a responsible test project manager.

“Right from when the design teams start working on the design, we initiate the process of ensuring that the design meets requirements, help to establish what needs testing and produce a test plan to be used throughout the development process,” explains Mikael.

As part of R&D, the test centre team play a crucial role in the innovation and development process.

“During the testing, we often get new ideas that can lead to new innovations. One example is our 12-metre seed drill, Inspire. The idea for it came from employees at the test centre.”

Due to the strong emphasis on machine life and quality, all components need to be tested. “To a large extent, these tests take place in the component testing laboratory, and the same applies to parts that are not made at the factory.

Sometimes our suppliers do not have adequate testing capacity to satisfy our high standards, which require everything to be measurable. For this reason, we also test purchased components. The testing we do at the test centre is aimed at developing and improving the machine, which makes it a natural part of the design cycle and a tool for improvement,” Mikael concludes.

Collaboration leads to improved quality

During the year, work started on building up similar testing operations in the US and Canada.

“We are on a global journey and have visited our North American colleagues frequently during the year to build a close collaboration. Here in Sweden, we assist with various calculations and conduct joint development initiatives to support our entire product portfolio,” says Mikael.



Representing farmers in the machine development process

The entire testing organisation maintains an ongoing dialogue with customers. Many of our employees are from farming families or run their own farms alongside their job. Henrick Ledström is one of Väderstad's field test engineers.

"You could describe us as giving a voice to customers inside the company. We field test the machines here at Väderstad, but many field tests also take place at our test farms around the world. It's only when the machines are used in situ that we can really assess how well they work," Henrick says.

Ebba Gustafsson is a field test technician who works with Henrick.

"We work very closely with the test project manager who assigns us our projects. Our work ranges from laboratory testing of small components to field testing of whole machines in collaboration with our test farms," Ebba explains.

The logo for Väderstad, featuring the word "VÄDERSTAD" in a bold, yellow, serif font, enclosed within a black, rounded rectangular border with horizontal lines extending from the sides. The background of the entire page is a blurred, green field of young plants growing in rows.

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