

# BOØRTMALT SUSTAINABILITY REPORT



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mt = Metric Ton



The greatest threat to our planet is the belief that someone else will save it.



Robert Swan OBE Polar explorer and sustainability advocate

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# **ABOUT THIS REPORT**

The Boortmalt Sustainability Report covers our sustainability commitments, actions and ambitions, and our progress, for the financial year 2023-2024 which ended on 30 June 2024.

This annual report shows how sustainable development is being adopted by our people in our malting plants as well as with our partners throughout the upstream and downstream processes.

The more we learn about how to deliver malt sustainably, the more we realise we are on a steep learning curve with a long way still to go and not a lot of time left. This report is therefore also intended to encourage you to reflect on your approach to sustainability and motivate you to reach out if you think that together we can make a bigger difference.

Boortmalt's sustainability reporting is guided by our commitment to the Sustainable Development Goals, and the Science Based Targets initiative through which we have pledged to do our bit to keep warming below 1.5°C. This report has been prepared in accordance with the GRI-referenced claim.



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DRIVING AMBITIOUS CORPORATE CLIMATE ACTION



# **A WORD FROM OUR CEO**

### Dear Readers,

First and foremost, thank you for your interest in our journey. At Boortmalt, we are committed to sustainability and to making progress.

Since our last report, Lynette Chung has joined us as Chief Sustainability Officer, an ExCom position, bringing significant sustainability knowledge from large, complex, listed companies. She and her team drive the sustainability strategies and reporting obligations at Boortmalt worldwide – among other things. Another division working on sustainability is led by Giovanni Vercammen, our Chief Energy & Technologies Officer



(another ExCom position). He and his team are rolling out our decarbonisation projects (scopes 1 and 2) in the group's malting plants to reduce  $CO_2$  emissions year-on-year in line with our sustainability strategy. A third division, led by Peter Nallen, our Chief Operations and Agriculture Officer (again an ExCom position), is driving the implementation of regenerative agriculture worldwide with the support of our partner Soil Capital.

We're progressing well, but we nevertheless continue to search for ways to accelerate our positive impact and exceed As you know, at Boortmalt we started working on scopes 1 and 2 in 2011, well before the 2015 Paris Agreement and the creation of SBTi. We steer detailed decarbonisation roadmaps with identified technologies for each malting plant. We've developed a patent for heat pumps, to improve their coefficient of performance (COP). We know what we need to do, and we do it. We also know that pursuing our efforts through our energy roadmaps to reduce our energy consumption per metric ton of malt produced remains the key to cutting our  $CO_2$  emissions. Currently, our challenges are two-fold: firstly, some customers' acceptance of a modest supplement for decarbonisation within the price of low-carbon malt to compensate for the additional cost of renewable energies and secondly, securing financing for decarbonisation projects – given the speed of our ambitions, we can't finance 100% of them on our own. We are permanently focused on these two challenges and on finding solutions to ensure we don't drop the pace of our decarbonisation.

As regards scope 3 (which relates to the  $CO_2$  emissions of our suppliers and, in part, our customers), our partnership with

Soil Capital has started well. Its initial focus is on regenerative agriculture in Europe, but it will soon be going global. For this scope, our roadmaps to 2030 will see us remove 300,000 metric tons of CO<sub>2</sub>, a massive task that should not be underestimated. I am convinced that partnering, cooperating, and considering regenerative agriculture as a market where we don't compete against one another, will help accelerate the pace. To this end, I am still hopeful that beyond what already exists, our work with Paul Polman to create a European consortium around cooperatives and their primary customers (including brewers) could help remove obstacles. Another key success factor is securing an agreement

to derisk the growers taking steps towards regenerative agriculture through financial compensation, the cost of which will actually be marginal within the price paid by consumers for finished products. There is still a long way to go to secure these alignments.

We can be very proud of our improvements in the safety arena. We recorded eight (minor) accidents in 23-24, which is still too many, but we are improving year on year. To take us to our zeroaccident target, we each need to adopt safety as a personal commitment – a level of maturity that we should all be aiming to reach.

Turning to water, we have detailed roadmaps to cut our consumption per metric ton of malt produced to 2m<sup>3</sup> by 2030. This is possible thanks to a collection of technologies including reverse osmosis (RO), Optisteep and heat pumps. We have calibrated and laid down in our five-year business plan the required investments (Capex) to reach this target.

Also, we are preparing for the CSRD reporting obligation in Europe and will start capturing our data accordingly from July 2025 (to report in 2026).

Last but not least, on 19 December 2024, refinancing was successfully completed for Boortmalt (and Axereal, separately) through a sustainability-linked syndicated loan totalling  $\in$ 1.2bn.

To be continued... Enjoy reading our report!

Kind regards,

Yvan Schaepman

Hefman

# **OUR SHAREHOLDERS**



**Axereal** is a cooperative group that unites 11,000 farming members around a common vision: to enhance and sustain agricultural production which contributes to improving food supply quality. Axereal collects and sells grain as well as oilseed both domestically and internationally. A percentage of the grain is processed through its industrial plants into flour, malt and animal feed.

The malt business of our cooperative group, led by Boortmalt, sets an example in terms of sustainable development. It fits perfectly with the values of our cooperative group, anchored in a long-term trajectory, and co-constructed with the farmer members. This culture of proximity and collective spirit is a strength that we put at the service of our customers.

### Jean-François Loiseau, Axereal President

Boortmalt, like the entire Axereal group, is fully committed to the agricultural and food transition. We aim to increase our profitability by structuring our activities, from the field to the customers now moving towards regenerative agriculture. Each step towards more sustainable production and processes is an additional step to serve the expectations of our customers, and ultimately consumers.

Paul-Yves L'Anthoën, Axereal CEO

# TEMASEK

**Temasek** is a global investment company headquartered in Singapore. Temasek's portfolio value is about €265 billion. It spans a broad spectrum of industries: financial services; telecommunications, media & technology; consumer & real estate; transportation & industrials; life sciences & agribusiness.

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Temasek is a generational investor. We invest today with tomorrow in mind which implies that sustainability is at the core of our mandate. We are proud to have supported Boortmalt over the years, one of the world's largest malt producers, operating at the leading edge of sustainable values in the malting industry.

Benoît Valentin, Deputy Head EMEA, Global Head of Private Equity Fund Investments and Impact Investing, Temasek



**Unigrains,** an independent investor majority-owned by French grain farmers' associations since its creation 60 years ago, is a reference partner for agri-food and agro-industry companies in France and abroad. Unigrains is committed to supporting the responsible approach of each partner company, in particular by sharing best practices and identifying a network of experts.

Unigrains fully supports Boortmalt in its pursuit of ambitious CSR objectives that serve to structure a sustainable and long-term vision. Serving on the Board of Directors, we intend to accompany these important and demanding initiatives and be a driving force for continuing to transform ambitions into concrete actions.

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Belgium





1967

Gemplour









Canada







2024

The Detherlands



Croatia



Treland

1847



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Boortmalt was built on the legacy of its elders and the determination of its people



The UK

Australia

Argentina















Spain







Sthiopia



### DISTILLERS

Our distillers' spirits are the result of centuries of expertise and knowhow. We ensure we provide them with authentic distilling malts customised to achieve optimum distillery performance and preserve the roots and identity of their products.



### BREWERS

Our brewer customers, whether largescale global players or midsized local champions, always expect the very best products and service quality from us. Each brewer has different needs, recipes and ambitions, and that is why Boortmalt cares.



### **FOOD SECTOR**

Food manufacturers are interested in using our malt in supplements, flours and other malt-derived products, as it is a highly functional ingredient offering consistent quality and availability. Working hand in hand with our food sector customers, we aim to promote malt's potential in innovative food products and use it as a game-changer to disrupt this constantly evolving sector.

### **CUSTOMERS**

### AGRICULTURE

Our ability to optimise each step of Boortmalt's supply chain, from seed to malt, is a key competitive advantage as it enables us to reach our quality standards. Our worldwide network of growers produces some of the best-quality malting barley by following the highest environmental and food safety regulations.

We work closely with them to employ state-of-the-art technologies such as satellite monitoring and precision farming techniques to optimise seeding rate, fertiliser application and crop protection. We also collaborate with barley breeders to continuously develop new varieties of malting barley, and perfect existing ones by improving their agronomic sustainability and resilience.

## MALT QUALITY

Malt is a food ingredient that must be carefully crafted, from the barley selection stage through to the recipe, water and use of heat.

A high-quality malt results from the expertise of a skilled maltster who knows how to manage the natural germination process and ensure optimal conditions to meet the expected requirements.

> From the field to the customer, we analyse samples to make sure we deliver high-quality malt at all times. Our laboratory network is constantly striving to offer new services and ever more accurate analyses.

## OUR FAMILY OF LOCAL MALT HOUSES











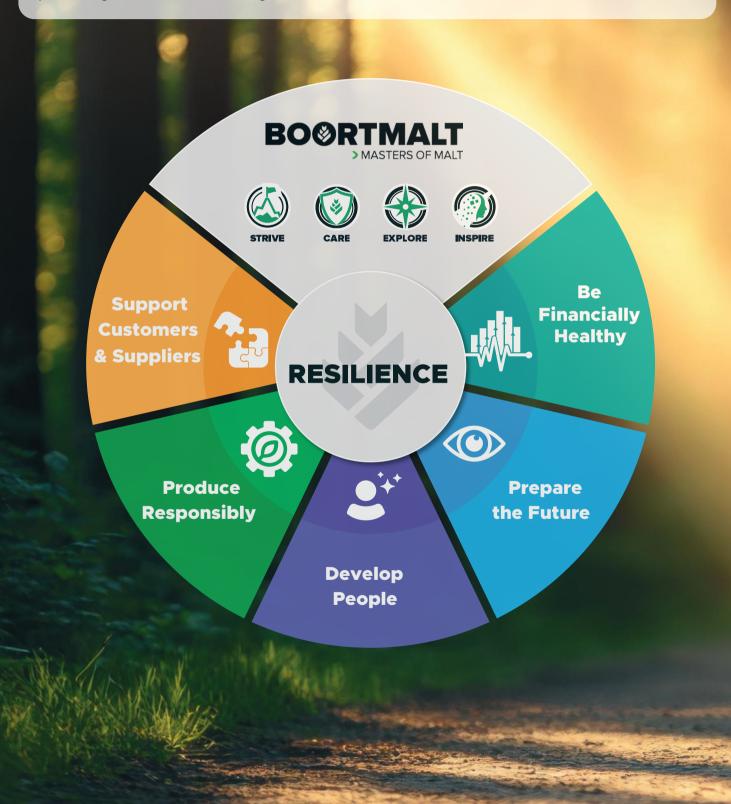




We partner with craft brewers and distillers who share the same passion for malt, beer and whisky. Our local malthouses each have their own unique character and product offering, tailoring malts to the needs and flavours of local brewers and distillers. By providing the ingredients to create unique brews we strive to be a part of your long-term success and growth. Consistent quality, innovation, passion and close collaboration are at the heart of what we do and our family of local malthouses is there to support your passion for craft beer and whisky!

# **OUR STRATEGY**

Our strategy is built on five dimensions that guide our actions and decisions, ensuring sustainable growth, resilience and value creation. These principles drive our commitment to high quality malts, preserving resources and focusing on innovation.



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# **SUPPORT CUSTOMERS & SUPPLIERS**

Build strong, collaborative relationships with customers and suppliers by providing exceptional malts, innovative solutions and mutual growth opportunities in a sustainable way.

# **PRODUCE RESPONSIBLY**

Commit to sustainable and ethical production practices that prioritise environmental stewardship, quality and compliance with global standards. Continue to be an inspiring pioneer in sustainability.

# **DEVELOP PEOPLE**

Invest in employees' growth and well-being through training, career development and a culture that fosters inclusion, innovation and teamwork. Drive impact through purpose-driven individuals.

# PREPARE THE FUTURE

Embrace innovation and forward-thinking initiatives to adapt to market trends, leverage emerging technologies and ensure long-term competitiveness.

# **BE FINANCIALLY HEALTHY**

Maintain robust financial practices to secure profitability, manage risks and support sustainable growth for the benefit of stakeholders.

# BOØRTMALT HIGHLIGHTS 2023-2024

### February 2024

### February 2024

November 2023

### November 2023



## GLENESK 50<sup>™</sup> ANNIVERSARY

Boortmalt teams & executives celebrated the 50th anniversary of the Glenesk plant, in Scotland.

The event was an opportunity to look back at the site's history.

Plant Manager Malcolm Pirie and CEO Yvan Schaepman congratulated the local team on their performance and results, and gave tribute to their resilience.

They also honoured particular employees for their years of service at Boortmalt.

### BRAUBEVIALE

From 28 to 30 November 2023, Boortmalt exhibited at BrauBeviale in Nuremberg, the premier capital goods exhibition for the beverage industry.

During this event, our teams met passionate experts from across the spectrum of brewing and related industries.

All visitors were invited to attend our talks, chat with our teams and discover our full line-up of craft and speciality malts. They also had the opportunity to taste "malt shake" and "malt cream".

At the show, our teams introduced the *Atlantis Malt Series* and distributed the first samples of maltbased snacks produced by Boortmalt.

## HEATLOOP INAUGURATION

We hosted the official inauguration of the Antwerp North Heat Network at the Boortmalt Antwerp site in Belgium.

After a year under development, this heat loop is now operational, capturing residual heat from the Indaver incineration facility and re-using it in the malting process at our Antwerp plant nearby. It will save 30,000 t CO<sub>2</sub> emissions per year.

Various stakeholders involved in the project, Belgian politicians and partners attended the celebration.

This unique decarbonisation project takes us a step closer to our Horizon Net-Zero Carbon goal.

### and the second s

HARVARD

### BOORTMALT AT HARVARD

A team of executives from Boortmalt was honoured to be invited to Boston, USA, to showcase the Boortmalt's way of working and answer questions from Harvard Business School (HBS) students on their campus.

The highlight of the event was a case study on Boortmalt, written by HBS professors.

Our thanks go to HBS for their interest and invitation, and to all the colleagues who have actively participated in shaping our story.

### September 2024

April 2024

April 2024

### OPERATIONAL LAUNCH OF ATHY HEAT PUMP

This heat pump, located on our site in Athy, is one of the largest in the industry. It has reduced the malting plant's carbon footprint by 70%, saving the equivalent of the yearly gas consumption of 5,500 families.

Waste heat from our malting process is captured and sent to a circular heat pump system. Powered by green electricity, this system takes waste heat and uses it to produce higher temperature heat, which is fed back into the process.

We have patented this highly efficient solution, which was designed in-house and enables us to produce decarbonised malt at our malting plant in Athy.

## CRAFT BREWERS CONFERENCE 2024

CRAFT BREWER

Our teams had the pleasure of meeting many of our customers and partners at the Craft Brewers Conference 2024 in Las Vegas.

Our craft brand Prairie Malt unveiled its official new branding during the event. Also, our Commercial and Innovation teams gave keynotes on malt and innovations in malt.

Thank you to everyone who visited our booth. We had an absolute blast!

# MALTING COURSE 2024

June 2024

This year, we hosted industry professionals from brewing, distilling and, for the first time, the food sector for an entire week of visits, handson activities and talks.

The programme covered all topics around malt, its applications, specialities and prospects. Speakers shared their expertise across a range of themes, including raw barley, the malting process, whisky, the barley market, craft beers, malt innovation and sustainability.

The participants showed genuine dynamism and investment throughout the programme.

Once again, we would like to thank them for choosing our Malting Course. We hope they enjoyed it as much as we did!

## BOORTMALT 100<sup>™</sup> ANNIVERSARY CELEBRATION

We celebrated our 100th anniversary in the iconic Handelsbeurs venue in Antwerp. The 400 guests included diplomatic figures, partners, customers, and current and retired employees.

The event looked back over various events in our company's history, through a theatre play, a musical performance and speeches from Axereal chairman Jean-Francois Loiseau and Boortmalt CEO Yvan Schaepman. They ranged from the story of Charles Hubert Thirionnet, the initial founder of "Malterie de Boortmeerbeek", the company that became Boortmalt, the growth of the company across five continents and how our values have evolved over time.

We are very grateful to all our guests for joining us to commemorate 100 years of striving, caring, exploring and inspiring.

BOORTMALT SUSTAINABILITY REPORT 2024 (13)

# **KEY FIGURES**







COLLEAGUES PROMOTED WITHIN THE COMPANY

之

# 16

COLLEAGUES EMBRACED NEW HORIZONS BY RELOCATING TO DIFFERENT COUNTRIES FOR WORK







411 IMPACTFUL INITIATIVES TO SUPPORT OUR COMMUNITIES

X

## 21% reduction in scope 1&2 emissions COMPARED WITH THE PREVIOUS YEAR

4 (CO2

# 1 st

SUCCESSFUL EXPLORATION INTO MARINE PROTEIN USING MALTING CO-PRODUCTS

# 65%

RENEWABLE SOURCES POWERED OUR TOTAL ELECTRICITY PROCUREMENT



# 36%

OF OUR BARLEY PROCURED UNDER THE SAI OR EQUIVALENT SCHEMES



O.O.3% ORGANIC WASTE TO LANDFILL

> PLANTS IMPLEMENTED OPTISTEEP WATER SAVING TECHNOLOGY

178k mt

VALORISED

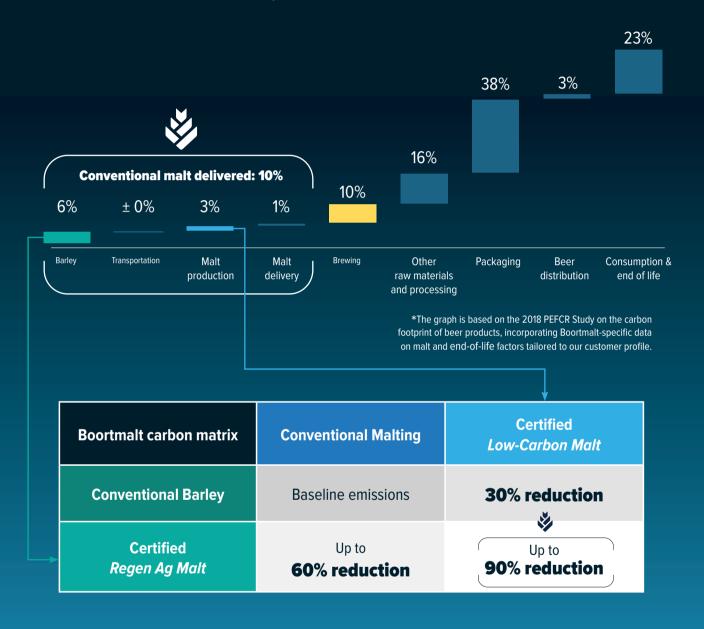
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# MALT IT BETTER



# **LET'S DECARBONISE TOGETHER!**

Total emissions related to beer production in %\*





# SUSTAINABILITY AT BOORTMALT

At Boortmalt, sustainability is not just a commitment; it is a core belief that shapes who we are and what we do. It is both the right thing to do and an absolute necessity for the future. In my first few months at Boortmalt, I have been deeply impressed by the company's unwavering and steadfast approach to sustainability.

Guided by science-based climate targets and ambitious sustainability goals, we are determined to drive meaningful progress – because we know that while these goals are not easy to achieve, they are absolutely possible. Boortmalt's optimistic, ambitious and pragmatic spirit drives its ability to innovate and tackle challenges head-on, positioning us to achieve our sustainability goals while staying resilient and adaptable.

Collaboration is another key strength. Farmers, cooperatives, neighbours, customers, supply chain partners, finance and other partners in our ecosystem are all integral to our journey. Through these partnerships, we reduce our own environmental impact and can, for example, offer solutions such as malt with a lower carbon footprint, helping our

customers and partners meet their own sustainability goals. This creates shared value and strengthens our collective impact. For both us and society as a whole to deliver on our sustainability objectives, systemic change is essential. To achieve it, we will need to work together.

This report highlights the progress we've made so far and the stories behind our achievements. Looking ahead, we know there is still much to do, and we are committed to accelerating our efforts. We intend to align our reporting with the EU CSRD standards in the coming years while continuing to share the human stories that bring our sustainability journey to life.

Enjoy reading this report, share your ideas and suggestions, challenge us on what we are doing, and above all, join us on our sustainability journey.



Lynette Chung Chief Sustainability Officer

# **4 CORE OBJECTIVES**



# **HEALTH & SAFETY**



We believe that TOGETHER we can make Boortmalt one of the safest places to work. That is why we promote an open and proactive Health & Safety culture with the full involvement of our people and stakeholders. This is reinforced through strong and visible leadership and by striving to achieve and maintain our group safety target of zero harm.





## SUSTAINABLE FARMING



We promote continuous improvement in farming methods via local sourcing programmes prioritising practices that are environmentally sound and beneficial to local communities.



## **ENERGY EFFICIENCY & EMISSIONS REDUCTION**

Eng



### At Boortmalt, we have a proven track record in improving our energy efficiency and integrating the most cost-effective sustainability technologies in our malting plants.



## WATER CONSERVATION



With water scarcity intensifying across the world, we strive to make our malting process as water-efficient as possible. We work to raise awareness of water conservation, with a focus on optimising our water usage and harnessing technology to boost re-use.





# **5 SUPPORTING OBJECTIVES**

Based on United Nations SDG framework





# 

We believe that our business and the communities in which we operate should be well connected. We are convinced that strong and sustainable communities are the basis of our future and that we, through partnerships and sponsorships, can make a difference together.





EQUALITY, INCLUSION & DIVERSITY

Our 1250+ employees are at the core of our organisation and we consider them as our most important strength. Every day, with unwavering dedication, they contribute to Boortmalt's vision of becoming Masters of Malt.





## الع BUSINESS ETHICS & CODE OF CONDUCT

We commit to conducting business in an ethical manner. We all stand by our Business Ethics Manual, which is an extended version of the Axereal Code of Conduct, and expect the same behaviour from our business partners.







We are continuously optimising our yield and finding alternative uses for our coproducts, thereby contributing to the overall UN goal of halving food waste globally by 2030. In addition, we also aim to reduce waste by using only fully recyclable and recycled packaging materials.





ERSPONDED CONSUMPTION AND PRODUCTION



# SUSTAINABILITY G@ALS

# CØRE Objectives



**HEALTH & SAFETY** 



## **SUSTAINABLE FARMING**



# BOØRTMALT SUSTAINABILITY GØALS



# **ENERGY EFFICIENCY** & EMISSIONS REDUCTION



# WATER CONSERVATION



# HEALTH & SAFETY

We believe that TOGETHER we can make Boortmalt one of the safest places to work. That is why we promote an open and proactive Health & Safety culture with the full involvement of our people and stakeholders. This is reinforced through strong and visible leadership and by striving to achieve and maintain our group safety target of zero harm.

Percentage of sites injury-free Target 68% 77% 100% BASELINE **MANAGET BY 2030** People FY 23-24 injured STATUS

## Approach

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Safe working is an integral part of how we plan, organise and undertake our business activities and operations. We use our "Together" approach to strive for our target of zero harm, tackling safety "The Boortmalt Way", by combining engagement, innovative ideas and the Boortmalt spirit to eliminate hazards and reduce risks. To us, safety is everyone's business – we're all "Masters of Safety" – and we champion the belief that we can make zero accidents a reality.

Safety actions and projects are vital building blocks of the Together approach, but they alone will not take us to our zero-harm goal. That is why the approach is built on three pillars: firstly, implementing safety actions, including training and education; secondly, generating engagement among our people; and thirdly, providing recognition. When we spark engagement in safety projects and provide recognition to the people involved, we set in motion a virtuous spiral: the more our people's efforts are recognised, the more engaged they become, encouraging them to sustain and accentuate their efforts, moving us ever closer to zero harm.

We can make zero accidents a reality.

Mauricio Corsi Deputy COO Europe & Group SHE Manager



# Focus on upcoming actions

2024-2026

Over the coming years, we will carry on implementing our TOGETHER approach to move us towards our goal of zero harm. To ensure that our efforts are sustainable, we will focus on the leading KPIs, such as percentage compliance with standards, number of training hours, percentage of people involved in safety activities and Yokoten (sharing best practice). It is important for us to ensure that our business units take ownership, so that they can build and cement a strong and consistent safety culture. We will continue to hold monthly Group SHE meetings to monitor our performance and progress.

By sharing our ideas, we will ensure that all our people are fully engaged in safety. We will continue implementing safety actions, generating engagement and providing recognition to keep safety top of everyone's mind, at all times, and make sure that we all "take it personally". Whenever we can, we will include our families in our initiatives, to bring home the potential impact of an accident and the importance of caring for one another. We firmly believe that our strong safety culture will enable us to confine accidents to the history books.

# **1** IMPLEMENTING SAFETY ACTIONS



Safety actions, including training and education, are the foundations on which our safety approach is built.



We run a host of actions on our sites to improve safety, with training and education key among them. We also implement initiatives and put in place procedures to ensure we operate safely in all circumstances and that no one comes to harm at Boortmalt.



## Training and education

At Boortmalt, we provide our people with all the training they need to do their jobs safely, often going far beyond minimum legal requirements. Their knowledge helps us progress towards our goal of zero harm.

For several years now, we have been engaged in a drive to train all our staff in first aid, after a staff member used the skills he had learned during a course to save a life while travelling into work. We believe that it's vital for everyone to know how to help in an emergency situation, both at work and outside work. By training all our staff in first aid rather than just a select few, we are serving our communities. All our sites run first aid training on a regular basis.

In addition to first aid training, we are also working to equip all our locations with defibrillators (AEDs). These relatively inexpensive machines drastically improve the chances of survival when someone experiences sudden cardiac arrest. The most recent site to be equipped with a defibrillator was the office in Buenos Aires.

We provide our staff with training on a host of other topics too, selected to match local requirements. For example, at the end of the fiscal year, staff in Buenos Aires attended sessions on road safety, accidents during a worker's commute, fire risks and the use of fire extinguishers.

Should an accident occur at one of our plants every second counts, so it is vital that we have well-trained rescue teams ready to spring into action and deal with the situation until the emergency services arrive. At our Biggar site in Canada, rescue team members spend many hours each year training for emergencies that could potentially arise, such as performing a rope rescue from the top of a grain bin, or in the depths of a confined space. This training includes the use of VR (virtual reality), in particular for communications.

As a global company, our staff and operations span a wide variety of different cultures. As well as the topics tackled, our local teams tailor the methods used to train staff to meet cultural norms in each location. In the UK for example, external certifications are held in high regard. Teams in the country detected a gap in formal safety training for staff in supervisory roles and in particular those who are required to issue permits to work. They identified the Managing Safely certification from the Institute of Occupational Safety and Health as a course that would plug this skill gap. Over the past three years, numerous people across our sites in the UK and Ireland have undertaken this qualification. During FY24, six people across the region successfully completed the course and a further two are close to finishing. The NEBOSH (National Examination Board in Occupational Safety and Health) General Certificate is a world-renowned entry level benchmark qualification for those working in formal health and safety roles. Boortmalt will be running a group course leading





to this qualification to boost the skills of our supervisors and managers.

Outside the strict safety sphere, Boortmalt has also offered training in environmental management. The Institute of Environmental Management and Assessment (IEMA) Foundation Certificate in Environmental Management was run as a five-day course for 10 staff from across the UK and Ireland to equip them to support our legal and moral obligations to protect the environment, manage our operating permits and ensure we work within our ISO 14004: 2015 certification. Once the five days of classroom-based learning were complete, each delegate took an online assessment.

Statistics can also underline the importance of training. A deep dive into the UK's safety data by the region's safety manager revealed that in many cases, the people involved in incidents had either not completed their e-learning safety training or had completed it late.

As a result of this observation, the team decided that e-learning completion should become a regional safety indicator. With support from management, performance across all of the sites improved, and recordable injury rates have subsequently fallen compared to the baseline.

# Contractor safety management approaches

External research (e.g. by the US Occupational Safety and Health Administration) demonstrates that contractors and seasonal and temporary workers are more likely to be injured while working than a business's permanent staff. Our own statistical analysis shows that this holds true for Boortmalt sites.

There are two reasons why contractors may be more at risk: firstly, they are less familiar with our sites and procedures than Boortmalt staff, and secondly, as we call on them for specialist skills, their work often exposes them to particular hazards (work at height, hot work, etc.). As a result, several of our regions have put in place safety management systems to ensure that contractors are properly trained and safe at our plants.

Boortmalt Ethiopia is in the process of creating a general contractor management procedure. It will detail the SHE information to be taken into account during the contractor selection process, including proof of specific competencies such as a forklift operator licence. It will also cover the general and specific permits required to work on our site, arrangements for supervising contractors, the induction process and daily inspections of contractor operations to be carried out by Boortmalt staff.

Boortmalt Australia uses an external software system to streamline its contractor management and access control process. All contractor documentation and inductions are managed through this system.

In advance of their work on site, the contractor submits a request to partner with Boortmalt. They then upload all the required documents – certificates, licences, insurance cover, etc. – for us to verify. The contractor's staff can then complete the site induction and competency assessment, which we have uploaded to the system, in advance of their arrival.

When the contractor arrives at our plant, they register in the system. It prints a label with the person's name and photograph, and sends a text message to the Boortmalt contact to let them know their visitor is in reception.

The contractor and Boortmalt contact can then get straight down to discussing the job in the knowledge that all the paperwork and the generic induction process have been taken care of in advance. This system also eliminates the need for a physical visitors' book, thereby safeguarding sensitive data and saving paper, makes visitors visually identifiable thanks to their label, provides an audit trail, gives contractors a more professional image of Boortmalt and increases flexibility because the contractor induction completed is valid for all Boortmalt Australia sites.

In the future, there is potential to expand this system to cover contractor work permits and broaden it to encompass employee safety inductions.





### Safety is a daily commitment. We are Masters of Safety!

Nicolas Pecqueux SHE Manager France & Sp

# GENERATING ENGAGEMENT



We make safety an integral part of our company culture by engaging all our people.



When people are truly engaged in safety, they prioritise it in everything they do. Through this, they safeguard themselves, their colleagues and everyone else who works on or visits our sites. That's why we've designated engagement as a pillar of the Together approach.

As well as running our own campaigns to generate engagement, we also take part in national and international initiatives.

## Risk Hunter Campaign

The Boortmalt Risk Hunter Campaign is one of the ways that we work to generate engagement in safety. It aims to encourage the development of a safety culture in our plants under which safety is understood to be a priority for all of us, together, and not just the responsibility of the safety department. We want everyone to adopt our zero-harm goal as their own, by not just spotting risks but actually being part of the solution.

The Risk Hunter Campaign is a global initiative, but each site is free to organise it in the way that works best for them. In some areas, it runs year-round, whereas in others it's a short-term event. Here are some examples of risk hunting activities around the world.

On Friday 23 February, our Punta Alvear site rounded off its Risk Hunter season with a recognition event for the best risk hunters of the first half of FY24. The event was opened by Peter Nallen (Group COO) and Mauricio Corsi (Deputy COO Europe & Group SHE Manager), attending virtually, and Pablo Grassini (Plant Manager), attending in person. The five winners and their families were invited to share a delicious breakfast. They were then presented with their certificates and prizes before the whole group toured different sectors of the plant guided by our area supervisors. The event was an excellent opportunity to thank the staff involved for their efforts to ensure we can all return home safe and sound every day. The families enjoyed touring the plant and seeing the emphasis we place on keeping their loved one safe, and the children in particular will remember their morning for many years to come!



At our Bahía Blanca plant, the Risk Hunter campaign ran throughout the fiscal year, and prizes were awarded on a regular basis to staff who performed particularly strongly. This is an effective way to ensure constant commitment among staff to maintaining a safe workplace, spotting safety issues and addressing them.

In APAC, risk hunting is implemented in an original way, known as the Safety Accident Prevention Effort, or Safety APE. It is founded in the belief that all accidents are preventable. The team has created a QR code through which anyone - staff member, contractor, driver or site visitor alike - can guickly and easily report a safety issue straight from their smartphone. The reports are sent automatically to the plant management and safety teams. This is a good way to pick up low-level safety issues which, if left unresolved, could lead to a major incident or injury. An additional aim is to increase the number of operational staff reporting issues. (Previously, the vast majority of issues were reported by the same small group of people.) This scheme started as a pilot in January 2024, and has been running across the APAC region since May.





# World Day for Safety and Health at Work

At Boortmalt, we mark World Day for Safety and Health at Work on 28 April each year. This day is a UN initiative to promote the prevention of occupational accidents and diseases globally.

This year, our sites in the UK and Ireland celebrated the day with interactive discussions during daily meetings. Workers were asked two very simple questions:

### 1. Why do you choose to work safely?

### 2. What makes you take risks?

The results of the first question demonstrated that the Boortmalt "Care" value is deeply embedded on our sites. The points raised in response to the second will be a focus for the teams as they strive towards a zero-harm workplace.

In 2019, staff at our Buckie site planted a purple flowering shrub to mark World Day for Safety and Health at Work. Each year, they watch it grow bigger and brighter, just like the site's safety culture.

Several sites elsewhere in the world involved workers' families in their events. There are two benefits to inviting children along: firstly, it highlights the importance of all our staff going home safe and sound to their families and friends at the end of their shifts and secondly, it's a great way of getting the next generation thinking about the importance of safety!

## Australian Safe Work Month

We are also involved in regional safety initiatives in different parts of the world. In October, Boortmalt Australia celebrated Safe Work Month, organised by Safe Work Australia. This is a major event in the country, and information and guidelines are provided to help businesses to organise activities.

The "morning tea" is a strong Australian tradition whereby workers gather for a mid-morning break and chat over sweet snacks and a drink. Safe Work Month has harnessed this tradition by promoting "SafeTeas" – safety-themed morning teas! Safe Work Australia sends out a list of discussion points to keep the conversation flowing, but sites and workers are free to discuss any aspect of safety that they feel is relevant. Our sites in Australia supported this initiative strongly and a large number of staff attended a SafeTea.









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# There is always a safe way to do a job.

Martin José Arozamena Operations Manager France & Spain

# Working to develop our safety culture

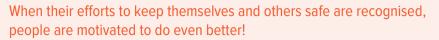
The ultimate aim of all our engagementgenerating initiatives is of course to strengthen and develop our safety culture. But some regions have been tackling this through more direct avenues. For example, in Australia a Safety Culture Assessment has been developed. It consists of a safety questionnaire to be completed by both managers and operators, by department, to discover the safety cultures of the different groups. The information gathered will be used to define what needs to be done to progress towards an interdependent culture where all staff see safety as their own responsibility and something they can optimise together. This assessment has been piloted on our Sydney site and we plan to roll it out more widely.

One of the initiatives to be put in place is appointing a safety mentor from the shop floor to champion safety, on a fortnightly rota, rather than this aspect being led by management. The mentor will act as a safety rep, delivering the Stop 5 risk campaign, reminding staff of the zero-harm goal and being involved with any other safety activity that is running. Another initiative to be rolled out across the region is one-to-one chats between staff and managers on the theme of safety.

Through these and many other strategies, we aim to foster across all our sites the interdependent and proactive safety culture that will take us to our zero-harm goal.



# **PROVIDING RECOGNITION**







Not only is praise and public recognition for safety successes fun and motivating for all our teams, but it helps to embed safety deep within our company culture too! Firstly, it gives people an extra reason to eliminate hazards and minimise risks as they go about their work, and secondly, it keeps safety top of mind for everyone.

## Boortmalt Global Safety Award

The Boortmalt Global Safety Award was organised to provide recognition for the efforts and achievements of sites in the safety sphere. The judging panel consisted of Boortmalt CEO Yvan Schaepman and the Executive Committee.

A messaging campaign was used to publicise this first edition of the competition. Eleven plants entered, and three finalists were shortlisted: the Punta Alvear (Argentina), Perth (Australia) and Villaverde (Spain) plants.

The shortlisted sites were invited to attend a grand final, during which they had 10 minutes to present virtually to the judging panel a pitch explaining their plant's safety initiatives and culture and why they were worthy of the award. The plants based their pitches around the four Boortmalt values of Strive, Care, Explore and Inspire, and used videos of staff to demonstrate engagement in the plant's safety culture. All the plants featured not only staff but also their families in their presentations. This was very effective in making the safety message concrete, in terms of how an accident could impact employees and their loved ones. Punta Alvear showed both staff and their families reiterating the message "Zero is possible. We are Masters of Safety," while Villaverde displayed pictures of their safety-themed family day. The Perth plant's presentation highlighted how their safety culture has been built up over numerous years and runs through everything that happens on the site, empowering staff and offering a safe space for open communication.

The main theme of all the entries was the importance of working together and looking after one another so that we can return all our employees to their loved ones safe and sound at the end of their workday.

The entries for the Global Safety Award are judged every year by the ExCom.



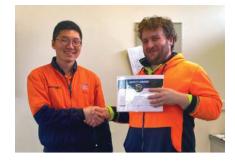


## Safety Recognition Awards

Safety recognition award schemes help the business progress towards a culture of engagement in safety where staff work together to keep one another safe. Awards are presented to sites and individuals for performance that goes above and beyond what is required.

For example, six workers at the Sydney plant received an award for demonstrating hazard recognition during a weekend breakdown. They determined that a task could not be completed safely with just two people and additional support needed to be called in. Another worker won an award for recognising the need to update the wastewater treatment plant hazard identification and risk assessments and starting to do what was required without waiting to be asked.

To maximise recognition and ensure that everyone is aware of the importance of being part of the safety journey to zero harm, award winners are also celebrated with a post on internal social media and announced at townhall meetings.









The second you step into our gates, you're going to be a part of our safety culture, whether you like it or not! Nothing is as important as safety.

Mitchell Beazer Plant Manager, Perth





# SUSTAINABLE FARMING

We promote continuous improvement in farming methods via local sourcing programmes, prioritising practices that are environmentally sound and beneficial to local communities.

 Barley volume assessed through carbon emission measurement tool with the aim of reducing the footprint

 5%
 8%
 67%

 BASELINE
 FY 23-24 STATUS
 TARGET BY 2030

## Approach

As the barley from which our malt is made accounts for 65% of its cradle-to-gate emissions, sustainable farming is a vital focus of our efforts to achieve CO neutrality, and in doing so, to fulfil our SBTi scope 3 commitments. We promote regenerative agriculture, an approach to farming that nurtures the soil, saves water and supports biodiversity. It is part of the solution on two levels: it reduces carbon emissions to help limit global warming and it helps farmers to adapt to the changing climate, securing the long-term future of their livelihoods. When farmers change their practices and transition to regenerative approaches, they incur costs and they take risks. We make it our business to ensure that they are appropriately rewarded for this by securing premiums from our customers for sustainable malts.

We work towards our sustainable farming objective in three ways:

- through our engagement with farmers and cooperatives,

- by promoting programmes and products that increase awareness and encourage adoption of regenerative farming,

- through farming initiatives to collect and analyse data and secure regenerative farming certifications.

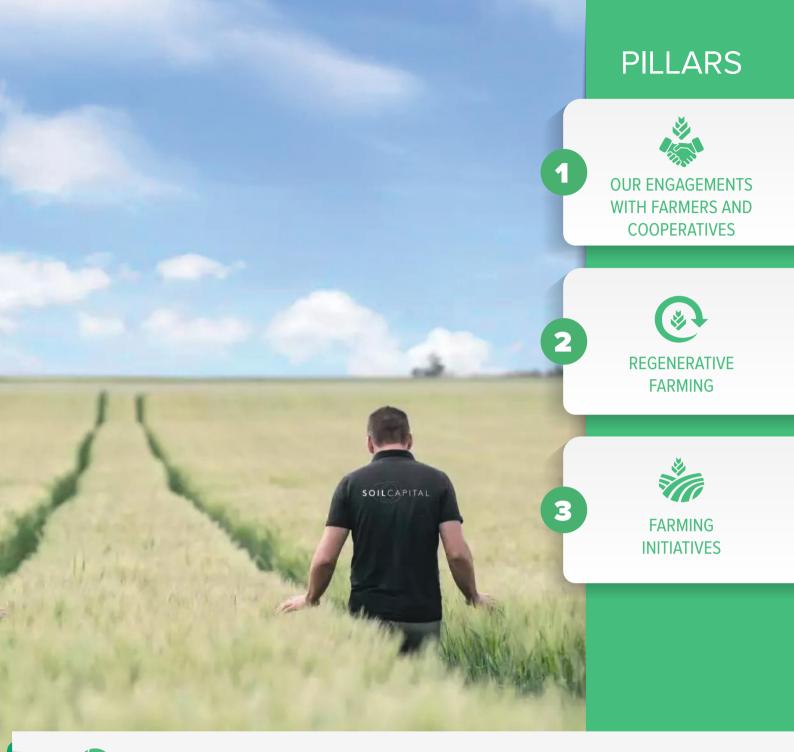


BOORTMALT



Combining regeneratively grown barley with innovations at our malting plants such as the Antwerp Heat Loop will enable us to deliver carbon-free malt to our customers.

John Scanlan Group Barley Procurement & Risk Manager





2024-2026

# Focus on upcoming actions

Over the next three years, we will continue to develop and optimise our strategies to promote sustainable farming among our suppliers in order to fulfil our SBTi scope 3 commitments and achieve carbon neutrality.

Our partnership with Soil Capital will make a significant contribution to this. It is already in action through initiatives in various countries and is set to expand over the coming years. Going forward, Soil Capital will also assist us in creating a definition of sustainable farming for use across the industry.

We are more confident now than ever in our ability to catalyse the development of regenerative farming over the next three years. The message and the support we offer are being received very positively, and we look forward to watching regenerative approaches snowball as farmer engagement grows, consumer interest in sustainable products accelerates further and research into techniques comes to fruition. We will continue to scale up the volumes of barley that we source under Sustainable Agriculture Initiative (SAI) and equivalent certifications and to collect data as a basis for measurement and improvement.

At the same time, we will continue to drive customer interest in low-or zero-carbon malt. This will ensure a long-term market for our products, protect our planet and support the future sustainability of the thousands of farming families that supply us with barley.

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# OUR ENGAGEMENTS WITH FARMERS AND COOPERATIVES



Our SBTi scope 3 commitments and how we're moving towards them



## How we are fulfilling our SBTi FLAG commitment

Scope 3 emissions are indirect emissions that occur within a company's value chain. By definition therefore, the company doesn't have direct control over them. At Boortmalt, a significant proportion of our scope 3 emissions are generated in growing the barley we source, and we have made an SBTi FLAG (Forest, Land and Agriculture) commitment in respect of these. As we ourselves are not barley growers, our role is to support the change process being undertaken by farmers by working with the cooperatives and organisations through which they supply their barley to us, and to offer them a market for their sustainably produced products.

Reducing emissions generated by agriculture is both a significant challenge and an enormous opportunity. The challenge stems from the long production cycles in farming, and the weight of tradition and history, which mean things change slowly. Fertilisers account for around half of the emissions generated by farming, so they are obviously a particular focus for farmers and their cooperatives and organisations, working with fertiliser manufacturers.

At the same time, this is an exciting area with huge potential. According to estimates, the forest, land and agriculture sector accounts for almost a quarter of global greenhouse gas emissions, meaning that cutting carbon in this sphere will have a significant impact. We are involved in numerous initiatives to measure, report and verify the emissions generated in growing barley, to provide a benchmark against which to gauge improvements. In addition, technology is available to help farmers operate more sustainably, with robots, digital tools, GPS mapping of fields and much more.

We are committed to supporting our suppliers through our involvement in the initiatives and trial programmes that are paving the way for the future of barley farming. We offer support both by playing a direct role in many of these schemes, and through our involvement on a commercial level. We are the link between farmers ready to make changes and produce in more responsible ways, and brewing and distilling customers We are committed to reducing our FLAG (Forest, Land and Agriculture) GHG emissions by 30.3% by 2030\*

We will actively engage with our farmers and supplier base to enable the transition to regenerative agriculture practices, which helps to reduce carbon emissions and puts carbon directly back into the soil.

The barley we use is grown in a wide range of locations across the world, on very different types of farms, so there is no "one size fits all" solution and we're partnering with growers in a wide variety of initiatives to identify and implement the best ways forward.

looking to source sustainably produced malt to make products for planet-conscious consumers. We ensure that the farmers receive the income premiums they need to compensate them for the time, effort and risk involved in changing the way they operate. Ultimately of course, they will be rewarded with more fertile soil, more resistant crops and more resilient businesses. In providing this support for our partners as they work to grow barley more sustainably, we are delivering on our SBTi commitments and living out our company values of Strive, Care, Explore and Inspire.



DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

## Our barley roadmap

We worked with sustainability consultants South Pole to set specific targets for our SBTi FLAG scope 3 commitments, in the form of a barley roadmap. The consultants looked at different scenarios across the world, in close collaboration with our barley teams. The roadmap they produced identified potential initiatives and quantified where each would take us in terms of emissions reductions. We then used it to pinpoint the initiatives to be put in place in the different countries to achieve our ambition. This process has taken us from the theoretical possibilities available to the practical steps through which we will fulfil our commitments.



## Soil Capital Partnership

We have kicked off a company-wide partnership with Soil Capital, an agronomy firm with international reach. Founded in 2013, Soil Capital is a B Corp company aiming firstly to support farmers in the transition to regenerative, profitable farming models and reward them for the ecosystem services they provide, and secondly to help companies capture new value opportunities and build regenerative and resilient supply chains.

We chose Soil Capital as a partner thanks to our experience of working with them on projects such as Malt Neutre, in France, and for their global footprint. Their role is to help our suppliers across our five regions with everything from strategic advice on how regenerative agriculture practices can be implemented and rewarded, to boots-on-the-ground support with the transition to regenerative farming. Boortmalt CEO Yvan Schaepman said: "At Boortmalt, we believe that evolving together towards regenerative agriculture is a strong lever to cultivate sustainable produce such as malting barley. However, the task is huge, complex, and involves various degrees of adaptations for our suppliers. With that idea in mind, we have entered into this partnership with Soil Capital to support that pace of adaptation and make a difference."

The partnership, which will last seven years, has the following objectives:

- reduce the footprint of the barley sourced by Boortmalt by 200,000 metric tons of CO\_equivalent, through regenerative farming and other changes

- source a growing proportion of Boortmalt's barley from regenerative farming

- strengthen the resilience of the barley supply chain to meet the challenges of climate change



We are impressed by Boortmalt's thoughtful and decisive strategy to reduce scope 3 emissions by working hand-inhand with their suppliers.
 Chuck de Liedekerke CEO of Soil Capital

The work also includes a strategic dimension, through which we aim to develop a definition of sustainable farming for use across the industry, backed by a grid of 22 criteria to be met. This has already been piloted as part of the Cargill SustainConnect project. It will also have a regulatory angle, because Soil Capital has the expertise to help us keep abreast of fast-changing regulations.

Under the partnership, Soil Capital work closely with suppliers. They offer agronomy support tailored to the grower's specific region and situation, recognising that there is no simple "one size fits all" solution. The project strengthen the resilience of our supply chain to meet the challenges of climate change while fulfilling consumer demand for sustainable products. It benefit farmers in two ways, both supporting their efforts to limit climate change by guaranteeing them a fair return on the initiatives they take to operate more sustainably, and increasing the resilience of their farms to the effects of the changing climate and thereby protecting their livelihoods.

The next stage of the project is to carry out a supplier mapping exercise to find out which suppliers are the most advanced and the most interested, and to ascertain the time-frame within which changes can be made. The initial focus is on our biggest markets – France, Ireland and the UK – because achievements here move us quickly towards our goals.

The Soil Capital partnership has already contributed to various projects, and you can find many of them featured in this report.

## Partnership with Agriculture and Food Development Authority in Ireland

Teagasc is Ireland's national Agriculture and Food Development Authority. It provides integrated research, advisory and training services to the agriculture and food industry and to rural communities.

We are in the process of developing a strategic partnership with Teagasc to enhance climate-positive practices on crop farms and in doing so achieve our sustainability targets. This initiative will focus on implementing scientifically proven practices tailored to the Irish agricultural context. Michael Hennessy, the Head of Teagasc's Crop Knowledge Transfer Department said, "Successfully communicating and integrating these changes will require a sustained commitment from Boortmalt, our partners and Teagasc over the coming years."





Together, we are dedicated to fostering a more sustainable future for the agricultural sector.

Michael Hennessy Head of Teagasc's Crop Knowledge Transfer Department



# MALT IT BETTER

# Certified Regen Ag Malt

To meet our own scope 3 ambitions and help you meet yours, we aim to engage 2/3 of the barley farms we work with in regen ag practices. They will significantly reduce carbon emissions, positively impact the natural environment and improve the barley crop itself, so we all benefit.

To help us achieve our goal, we've created a solution to bring you Soil Capital certified malted barley, called Regen Ag Malt. This is based on a mass balance principle, where certified and non-certified barley are physically mixed within the supply chain.

When you buy *Regen Ag Malt*, you invest in the resilience of your supply chain by reducing greenhouse gases, increasing biodiversity, improving water management, creating healthier soils and boosting crop yields.

Simply by choosing our *Regen Ag Malt*, you'll be able over time to eliminate up to 100% of the carbon emissions generated by barley farming, which represent 60% of the emissions attached to your malt supply.





Sequestration

Infiltration

**2** REGENERATIVE FARMING



What regenerative farming is and how we're helping bring regeneratively farmed products to the market.



### Why regenerative farming?

Regenerative farming, also known as regenerative agriculture or "regen ag", has become a major focus across the agriculture and food industry in recent years. Essentially, it's an approach that aims to "regenerate" the soil to protect the health of the land and the long-term future of farms. Across the world, we're involved in programmes to establish regenerative farming approaches and bring regeneratively farmed products to the market.

Regenerative (or "regen") farming has become a major sustainability focus, not just at Boortmalt but also for policymakers, environmental activists and the farming industry at large. It's a philosophy that aims to "regenerate" the soil: nurturing and restoring it, so that it will continue to be capable of producing high-quality, nutrientdense food in the future.

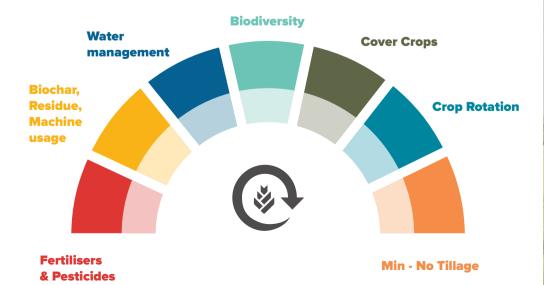
There is no definitive definition of regenerative farming, but it differs from conventional approaches in three main areas. Firstly, soil management: "minimum tillage" systems are used to ensure that as much carbon as possible remains sequestered in the ground, and cover crops are planted to keep living roots in fields year-round. Secondly, fertilisers. Not only are regenerative farmers very selective about the fertilisers they choose (certain low-carbon formulations claim a 70% lower footprint), they also reduce the total quantities they apply and adapt their application methods. And thirdly, emissions, which are reduced by cutting fuel consumption by electrifying, adapting pesticide usage and tailoring logistics.

This approach to farming has a host of benefits for the environment, as it

sequesters more carbon in the soil, minimises the need for irrigation by making the ground more absorbent and leaves important micro-organisms undisturbed. In addition, it promotes biodiversity and prevents erosion.

Farmers benefit too: with fewer chemical inputs to purchase, their costs are lower. This boosts profitability. At Boortmalt, we

work to create markets for sustainably produced malts. With many consumers prepared to pay a premium for climatesmart products, these initiatives unlock additional value and we ensure a fair share is passed back through the value chain to the farmer. When farmers operate sustainably, they secure the long-term future of their livelihoods, both by physically improving the land they farm and by accessing market segments with a more promising future.



#### Belgomalt Pure Local

The Belgomalt Pure Local team is a community of farmers, maltsters and agronomists committed to bringing brewing barley back to Belgian soil in a sustainable way, to meet demand from brewers for local, sustainably produced malt and ensure everyone involved receives their fair share of the value generated.

The farmers working within this initiative follow a set of regenerative farming specifications. In crop year 2023, they sequestered an average of 20kg of C0<sub>2</sub> for every metric ton of barley grown. This represents a 107% reduction in carbon emissions, achieved entirely thanks to regenerative agriculture. (Under conventional agriculture approaches, rather than sequestering carbon, growing a metric ton of barley generates around 290kg of CO<sub>2</sub>.)

In crop year 2024, the team sowed 800 hectares to barley, offering a potential harvest of 4,000 metric tons. The plan is to grow that figure to 7,500 metric tons in 2025 and up to 20,000 metric tons by 2027. To achieve this, the team will need to work to attract significant numbers of growers who are interested in moving to a regenerative agriculture approach. Demand from brewer customers remains high, and marketing materials are being developed for them to use to communicate the initiative to their own customers, beer drinkers, to highlight how the beer in their glass is supporting the environment.

Work is also under way on a blockchain that will enable the consumer to scan a QR code to find out more about the beer they're drinking. With it, not only will they be able to track the beer back through the brewery, the malting house and the cooperative to the farmer, they will also be able to access figures on the amount of CO<sub>2</sub> generated (or sequestered!) during the production process. This will help them understand even better what's special about the beer they've bought and why they should support it.

By coupling the new heat loop at our Antwerp malting plant with sustainably grown barley that actually sequesters CO<sub>2</sub>, we are moving towards being able to offer our customers zero carbon malts on which to base their own claims.

Another very important aspect of Belgomalt Pure Local is the sense of community cultivated between the growers, maltsters and agronomists, as highlighted by the traditional annual barbecue. On 27 June 2024, everyone joined together on a Pure Local farm in Belgium on a beautiful sunny day to celebrate another highly successful year and enjoy live music, delicious food – and of course cold beer! The event was also an opportunity to present the Farmer of the Year award to the day's host Etienne Allard in recognition of his outstanding achievements in regenerative farming.





We spoke to Etienne Allard about his involvement in Belgomalt Pure Local.

#### Q: What made you want to become part of Belgomalt Pure Local?

**EA:** It had become clear to us that crop protection products were having a negative impact on our soil, and we were looking for a crop that did not require large quantities of intrants. Barley fitted the bill perfectly.

We had been moving towards regenerative farming approaches for ten or fifteen years, so we were very interested to hear about this opportunity to generate value in recognition of these. We also wanted to diversify without making any major investments, and barley allowed us to do that.

#### Q: What's special about this way of working?

**EA**: Belgomalt Pure Local offers us the chance to work jointly with a food processing company. That's quite rare, although I'm glad to say that similar schemes are starting to be developed for other crops. It's also an opportunity to work in a team.

In farming, life is never linear. We've been working under this system for three years now, and I'm grateful that the businesses have shown that they're there to support us in the more difficult years. It's great to work as part of a community – you're never alone. We have a WhatsApp group and if someone posts a question, they'll always have several answers within a couple of minutes. It's a great source of support. This is a new way of working and I hope it will act as a springboard to change practices in other crops.

## Malt Neutre programme in France

The Malt Neutre programme in France is going from strength to strength. This programme, run by Axereal in collaboration with Soil Capital, encourages farmers to grow carbon-neutral barley by implementing regenerative agriculture principles. Through it, Boortmalt intends to secure a supply of low-carbon barley to meet future customer demand. It is important to work on schemes such as this ahead of time, because the nature of farming means that change happens gradually.

Farmers involved in the programme are encouraged to make changes in three main areas: adding cover crops, reducing tillage and transitioning to organic fertilisers. They use Cool Farm Tool to collect data about the way they farm, and on the basis of this are classified as achieving level 1, 2 or 3, where level 3 farms are those that have implemented the greatest number of regenerative practices. In return for their investment in the transition to regenerative farming, they receive a premium for every metric ton of barley they produce, with level 3 farms receiving the maximum amount. Soil Capital supports the Boortmalt barley procurement team to ensure that the barley collected contributes to our SBTi commitments, and helps us to keep pace with the rapidly changing requirements.

For the 2023 harvest, some fifty farmers took part in this programme, producing 10,000 metric tons of barley. The scheme was very popular, and for the 2024 harvest over 100 farmers took part, producing 20,000 metric tons. We intend to continue to grow the programme in future years.

#### **Roots Revival**

In response to demand from brewer customers, Boortmalt UK is developing Roots Revival, a new sustainable malt product, under an agreement with grain merchant Cefetra and backed by our global agronomy partner, Soil Capital.

The product will be launched at an event in November 2024, and will be supplied from January 2025. It will focus on introducing regenerative farming methods such as minimum till, cover cropping, organic fertilisers and livestock on farms in order to bring brewers a low-carbon malt that will help them to meet their scope 3 emissions reduction targets. The Roots Revival name has been chosen to highlight both the benefits of regenerative agriculture for the plant's physical roots in the soil, and Boortmalt UK's investment in the country's agricultural roots. A community of growers will be established, and at a launch event to be held on a farm, brewers will be able to learn more about the investments made by farmers transitioning to regenerative approaches.







#### **Reducing emissions from fertilisers**

Fertilisers are a natural focus for sustainable agriculture projects, because they account for around half of farming's emissions. These emissions are generated both during the manufacturing process and when the fertilisers are applied. There are therefore two angles that can be used to cut emissions: diminishing the volume of fertilisers used, through regenerative approaches, and choosing low-carbon products and applying them more accurately thanks to precision agriculture technology. Here more than ever, there is no single best solution, which is why we team up with suppliers to run projects in different parts of the world.

#### Green malt in Spain

Boortmalt is involved alongside suppliers Saz Anchuelo and Ceryder in a project initiated by brewer Heineken and sustainable fertiliser manufacturer Fertiberia to reduce the emissions from cultivating barley. The project uses Fertiberia's Impact Zero product, the world's first fertiliser produced on a commercial scale from green hydrogen. This product generates no carbon emissions at all during manufacture.

The first sowings have demonstrated a 62% reduction in the carbon footprint per metric ton of barley and increased yield for the farmer. In the future, in addition to the lower carbon footprint per ton of barley, Fertiberia aims to combine its Impact Zero range with agriculture 4.0 (smart farming) to boost yields by using digital technology to offer additional benefits for farmers. The project will help Heineken to progress towards its target of achieving net zero by 2040.

#### Nitrogen inhibitor pilot project

A pilot project is underway to reduce emissions from fertilisers within one of Boortmalt Argentina's sourcing channels.

The team is working with a strategic barley supplier to investigate the use of nitrogen inhibitors in liquid fertilisers. A nitrogen inhibitor extends the time the fertiliser remains in the soil, improving nitrogen use efficiency and reducing environmental emissions by limiting leaching and cutting emissions of nitrous oxide, a potent greenhouse gas produced during nitrification.



## 4R Nutrient Stewardship in Canada

We continue our involvement with the 4R Nutrient Stewardship approach in Canada, which was created by industry body Fertilizer Canada to help farmers understand the need to optimise their use of fertilisers to reduce environmental impacts without compromising food production.

Under the approach, agronomists explain to farmers how best to use fertilisers to replace the nutrients that are taken up from the soil when they grow crops. The 4Rs of the approach are: Right source – matching the fertiliser to the crop's needs, Right rate – applying the appropriate quantity, Right time – making sure the nutrients are available when the crop needs them and Right place – keeping the nutrients where the crop can use them. Under the programme, farmers carry out soil tests and map fields so that they apply exactly the right type and quantity of fertiliser to the individual pockets of land and keep a journal of what fertiliser is applied and where



## Low-carbon fertiliser programme in Argentina

Last year, Boortmalt Argentina joined forces with Yara, a fertiliser manufacturer, through the Boortmalt Decarbonization Program, to decarbonise barley by using low-carbon fertilisers. After three years of pilots, this programme has demonstrated that the use of certain nutrient management plans can reduce fertiliser-related CO emissions by up to 20% and boost grower profitability by optimising nutrient usage. Emissions reductions are achieved thanks to both the nutrient management plans and the progress that Yara has made in their fertiliser manufacturing processes. The programme was officially launched at an event near Buenos Aires in May 2024 with a presentation aimed at producers and distributors.

Under the partnership, Boortmalt has created a model that allows farmers to buy fertiliser and pay for it with barley, boosting the use of Yara's fertilisers on their crops, while Yara provides growers with the necessary recommendations to implement the nutrient plans effectively. At the end of the process, the companies will work together to measure the carbon footprint of crops using Plataforma Puma, a CO calculation tool. Through this innovative model, which is unique in Argentina, we seek together with Yara both to optimise barley production in the country and to set a precedent for sustainable agriculture practices that can be replicated elsewhere.

The target volume for the launch year is 15,000 metric tons of decarbonised barley. The team plans to continue to grow this figure, to a maximum of 100,000 metric tons (around 20% of Boortmalt Latin America's total supply requirement).







#### Planting nectar sources in Spain

In Spain, we are supporting a different type of regenerative farming initiative. Boortmalt Spain is part of a cooperative based in the country's Aragón region including a local farming services company, a seed firm, a brewer, the FITA (Foundation for food transfer and innovation) and a local bee-keeping association. Boortmalt believes that farming communities like this one have a key role to play in the transition to regenerative agriculture.

The cooperative aims to launch initiatives which help improve the competitiveness and viability of farming operations and boost their economic, social and environmental sustainability.



It is working to reduce herbicide use, protect the soil and capture carbon by planting nectar sources around crops on a permanent basis. This will help increase the population of pollinators such as bees, improve soil structure and keep the main types of pests under control. The project will give unused land a role to play in the ecosystem. In addition, it is an excellent opportunity for beekeepers and farmers to work together.

## Development of local malting barley varieties in Ethiopia

Boortmalt Ethiopia is working alongside other maltsters to develop new diseaseresistant, high-yield barley varieties specifically suited to conditions in the country. A breeding programme at the Holeta Research Centre has resulted in one new variety being officially released. The Boortmalt agronomy team is now trialling this variety in various locations to evaluate its performance in comparison to commonly grown barleys.

The new variety, known as Berhane, appears particularly promising in North Shewa, where our Debre Birhan plant is located, and other waterlogged areas. It is resistant to diseases, reducing the need for crop protection products, exhibits good tillering (shooting), which boosts soil coverage and grows tall, meaning that it provides ample straw for farmers' cattle.

The Berhane trials will be showcased to malting barley farmers during field day events. The development of this new barley variety will enable farmers to operate in a more sustainable way and enhance their productivity and resilience to environmental challenges.









## Farmer education and training in Ethiopia

The agronomy team at our Debre Birhan plant in Ethiopia works with our farmers, helping them enhance their knowledge and skills so they can farm more sustainably. The team organises a comprehensive crop management training programme and a specific session focusing on best practices for land preparation.

Many of the topics covered in the training programme are designed to show the farmers how they can operate more sustainably, with advice on weed management techniques, including hand weeding, awareness of leaf diseases and the application of top dressings and fungicides, together with guidance on selecting less hazardous fungicide products. The training is conducted in the field, so farmers can tackle farming tasks while sharing experiences and learning from one another.

The team also offers a specific session on land preparation to combat waterlogging, one of the main challenges faced by farmers in North Shewa, Amhara, where our Debre Birhan plant is located. The agronomists encourage the farmers to construct raised beds. This is a traditional approach to improving drainage and enhancing soil aeration to support healthier crop growth and increase resistance to diseases without the need for chemical inputs.



**3** FARMING INITIATIVES



How regenerative farming is measured and reported



### SAI platform and our aims for SAI and equivalent certified barley

Data measurement and certification are essential to evaluating and reporting the impact of regenerative farming. They enable us to communicate the results of the changes made in the field in a recognised and trusted format, so that customers and consumers can understand what has been achieved and farmers can be rewarded for the time, effort and risk involved in adapting the way they operate

#### The Sustainable Agriculture Initiative (SAI) Platform

The SAI Platform is a non-profit membership organisation working to advance sustainable agriculture practices across the world through cooperation. Boortmalt has been a SAI Platform member for several years, and our parent company, Axereal, has recently also joined. The SAI's Farm Sustainability Assessment (FSA) toolset, a measure of farm sustainability, operates in more than 60 countries around the world and is recognised as a reference against which other standards are benchmarked.

SAI and equivalent certifications are trusted industry-wide, by producers and customers

alike. Three levels of certification are awarded – bronze, silver and gold. Our customers are increasingly keen to source malt certified to SAI standards. This can be achieved either directly, or through equivalence with numerous country-specific standards. These include the Irish Grain Assurance Scheme (IGAS) certification in Ireland, Red Tractor in the UK, ISCC



worldwide and many others. The level of certification of the grain we buy varies according to the country and the precise standard concerned, but there is increasing interest from customers and from farmers themselves in gold certification.

We have set targets for the proportion of SAIcertified barley and malt among our products. By 2030, we are aiming for this proportion to reach 95% in Europe, and 50% in other countries. We are working with our partners across the world to achieve this.

#### Scaling SAI volume in Latin America

Some of our customers in Latin America require the malt we deliver to them to be certified sustainable. Demand for certified products is growing, with global brewers in particular ramping up their internal targets for sustainable product volumes and new customers interested in sourcing sustainable barley.

We meet this demand by buying a percentage of our barley from farmers operating to SAI standards. To be awarded the certification, farms undergo third-party audits looking at the management of soil, water and biodiversity, and at farming practices. It is our responsibility to ensure that our customers pay an appropriate premium for malt made from SAI-certified barley, because it is this that makes growing it viable for farmers and enables us to drive farmer engagement. The structure and conditions of the Argentinian farming industry make financial incentives the primary motivator for change. Our focus is therefore on ensuring the customer understands the value of the certified product and how to communicate it to their own customers, and on seeing that a fair proportion of the value added by the certification is paid to farmers.

We aim to grow the volume of SAI-certified barley we source to between 100,000 and 120,000 metric tons in crop year 2025.

#### ISCC-certified barley in Canada

In Canada, we are working with International Sustainability and Carbon Certification (ISCC), a certification body offering SAI-equivalent certification, to source sustainable barley. ISCC is used by Viterra, one of our biggest suppliers in Canada, making it a logical choice for Boortmalt.



We are signing a contract with ISCC, and will work directly with farmers to ensure they comply with the ISCC sustainability standards. ISCC will use a survey structure to interview farmers, carry out audits and then issue SAI-equivalent certificates. Farmers holding these certificates will be paid a premium for their barley. The audit process will also enable them to identify areas where they can become more sustainable. By gaining certification, farmers will make their businesses more resilient in the future, as demand for sustainable products is set to grow to represent the lion's share of the market and offer the highest returns.

#### Working with customers to develop sustainable barley sourcing in Scotland

#### BMGG and The Glenlivet

We are involved in ongoing work with Banff and Moray Grain Group (BMGG), a group of quality and provenance-focused grain growers, to source more sustainable barley at our Buckie maltings where it is malted and supplied exclusively to The Glenlivet distillery. With a full suite of carbon data collected and baselines established for all farmers, work on analysing the data is now underway.

As we move into the second year of the product goals, we are supporting farmers with the help of our global sustainability partner Soil Capital. From their side, The Glenlivet is keen to see a move from SAI Silver to SAI Gold in crop year 2025, and the feasibility of this is currently being assessed. Concrete actions taken this year include additional carbon audits, soil sampling and measures to boost safety during the harvest.

#### Highland Grain and Glenmorangie

We are also involved in a project with Highland Grain, a malting barley cooperative with a sustainability focus, and the Glenmorangie distillery, which also has strong sustainability ambitions. The project aims to bring an environmentally conscious offering to the market. Sustainability is a particular focus for whisky producers because the product's long production-to-market lead time makes anticipating future consumer trends particularly important.





## Carbon-reduced barley supply agreement with Cefetra

In response to customer demand for sustainable barley, we have entered into a new carbon-reduced malting barley supply agreement with Cefetra Ecosystem Services. This is an initiative set up by grain supplier Cefetra to bring farmers keen to secure financial returns on sustainable farming practices into contact with customers looking to source sustainably grown grain.

Malting barley supplied under this threeyear sourcing agreement will be produced by UK and Irish farmers under the Cefetra Ecosystem Services Farming Programme. This programme offers financial rewards to the producers of cereals that deliver positive outcomes for sustainability, water conservation and biodiversity. This in turn supports the adoption by UK and Irish farmers of regenerative farming practices, with a particular focus on improving soil properties and achieving stable yields.

An annual volume of 20,000 metric tons of barley will be supplied, offering a 50% carbon reduction compared to a 2021-22 baseline. Over the life of the agreement, we will eliminate more than 10,000 metric tons of CO equivalent from our barley supply chain, making a significant stride towards our scope 3 SBTi goals. The carbon emission reductions achieved on the farms will be measured by Soil Capital, Boortmalt's global agronomy partner.

## Cargill SustainConnect in Australia

The specific conditions faced by farmers in Australia mean that some sustainable practices, such as zero-till and strategies to minimise water consumption, have been in place for some time. Australian farms are large, and the industry's model is more transactional than in other regions such as Europe, where cooperatives predominate. Boortmalt Australia buys barley through Cargill, which acts as an agent.

To increase the sustainability of the barley we source in Australia and help us meet our SBTi commitments, we have committed to Cargill's SustainConnect programme, covering an area of New South Wales which supplies our Minto plant. Cargill SustainConnect is Australia's only commercial scheme focusing on practical carbon-reduction initiatives in the grain-growing industry. An analysis by our agronomy partners Soil Capital confirmed that it meets SBTi requirements and is a good fit for Boortmalt.

We were attracted to this programme because it is very farmer-focused. On

joining, farmers provide three years of historical data and one year of production data. Cargill's scientific partners analyse this data to quantify the farmers' baseline carbon emissions and suggest interventions through which they could cut them without reducing production yields. The farmer then selects one intervention to implement. Once they have put it in place, they receive an area-based payment, which acts as a financial incentive to encourage them to adopt sustainable practices.

The barley covered by the programme was planted in April-June 2024, for harvesting in November or December. The results for this first year will be quantified in early 2025. There are plans to expand and evolve the scheme in the future.

## Measuring baseline carbon footprint data

At Boortmalt, we are committed to measuring the carbon footprint of all the barley we purchase. We use the information to calculate our scope 3 emissions, and as a baseline for measuring improvements.

We are involved in a wide range of data measurement initiatives using different tools in the various countries in which we operate. In Latin America, for example, we monitor the carbon footprint of around 100,000 metric tons of barley annually using local MRV (measurement, reporting and verification) tools. This is in addition to the barley monitored under Boortmalt Argentina's SAI Platform project.

The information we gather helps us to identify decarbonisation opportunities

for our suppliers. This work is particularly important in this region, because the structure of the agricultural sector, with no subsidies, low levels of insurance and land mainly rented on a short-term basis, plus the fact that some sustainable practices (such as no-till) are already widespread, means we have to be highly astute to spot opportunities for farmers to improve even further.

In Canada, we are involved in a carbon emissions research project with the Canadian Malting Barley Technical Centre (CMBTC), an independent non-profit research facility. This four-year project will cover the entire product cycle from barley growing through to brewing. It will be led by a researcher from the University of British Columbia and mainly involve growers working under contracts with Boortmalt. It will establish a peerreviewed baseline for carbon emissions from farms in Western Canada. The data will be reported by soil zone and will serve as a basis from which to devise ways of improving sustainability.



## **ENERGY EFFICIENCY** & EMISSIONS REDUCTION

At Boortmalt, we have a proven track record in improving our energy efficiency and integrating the most effective sustainable technologies in our malting plants.

		FY 22-23	FY 23-24	% reduction
(	Scope 1 and 2 GHG emissions (in kt $\rm CO_2e$ )	411	326	21%
	% Renewable electricity (Procured)		65%	



#### Approach

We are working to build on our success in improving energy efficiency and cutting emissions with pioneering projects in a number of areas. As the first generation to feel the impact of climate change, and probably the last to be able to do something about it, we are acutely aware of our responsibility to make a difference.

We have an ambitious road map to achieve our SBTi commitment for scopes 1 and 2 and cut our carbon emissions by 42% by 2030. Our approach is based on three pillars, the first of which is integrated decarbonisation solutions. These are major technological innovations that we are harnessing within our own operations to cut our emissions. As malting is a heat-intensive process, our focus is on finding more sustainable sources of heat, but we are also investigating the different technologies and solutions available to our plants around the world for other forms of energy.

Our second pillar is evaluating and re-thinking processes to reduce energy consumption. By being constantly on the look-out for better ways of operating, we can make incremental improvements to our processes while maintaining our high standards of quality. Combined together, these improvements can achieve significant energy savings and emissions reductions.

Our third pillar is sourcing green electricity via power purchase agreements (PPAs). This is when we enter into a long-term agreement to purchase electricity from sustainable sources. We also use some renewable energy certificates.



HEAT PUMPS to electrify the heat demand at our malting sites.



HEAT LOOPS to turn waste heat from other businesses into useful heat for us.



SOLAR THERMAL to harness the energy from the sun.



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05-

OTHER DECARBONISATION SOLUTIONS





2024-2026

#### Focus on upcoming actions

Over the coming years, we will continue to work to improve our energy efficiency and harness technologies to supply low-carbon power and heat to our malting plants. We will progress the projects and opportunities outlined in this section, including the e-boiler at Debre Birhan in Ethiopia, the solar thermal power plant at Villaverde in Spain, the new, larger biomass boiler at Issoudun in France, the geothermal project in Perth and a potential heat loop in Adelaide, both in Australia. We will also continue to roll out our patented container heat pump solution, initially in Europe and the UK, and then globally.

In addition to these projects, we are also examining a host of other opportunities offered by the local contexts on our different sites. These include installing wind turbines at Biggar in Canada, Antwerp in Belgium and possibly in Scotland. Alternatively, research may indicate that the Scottish location would be better suited as a site for ground-mounted solar panels. We are also carrying out feasibility studies for a heat loop project in Argentina.

In Hungary, which is of course famous for its hot springs, we are investigating opportunities to use geothermal power on our Dunaújváros site. This project is currently at the feasibility study stage. It fits very well with the national strategy to double geothermal output recently published by the Hungarian government. There is also potential to harness geothermal energy at our Bahía Blanca site in Argentina. In terms of additional ideas and technologies, we are currently looking into Thermal Energy Storage, biochar and Battery Energy Storage Systems.

Alongside all these projects, our operations and continuous improvement teams work constantly, with the help of the robust energy roadmaps described in this section, to make incremental improvements to processes on all our sites to enhance energy efficiency and reduce emissions.

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### 1 EVALUATING AND RETHINKING PROCESSES TO REDUCE OUR ENERGY CONSUMPTION



Continual improvement is a powerful lever for change



The staff at our plants are constantly analysing our processes to identify ways to improve. When we make changes, we are careful to ensure that the quality of our product is not affected and that we involve our customers whenever it is relevant to do so. Over time and across our entire geographical scope, all these incremental changes taken together can significantly reduce energy consumption and emissions.

#### Capitalising on energy road maps

An energy road map, a powerful tool for selecting and progressing both continuous improvement and capital expenditure energy reduction projects, is specific to each plant. It contains a list of all the known potential heat, electricity and water savings and CO emissions reduction projects for that plant, together with a waterfall chart showing consumption/ emissions figures over a horizon that stretches both back and forward for three to five years. The backward-looking figures provide context on historical trends. The forward-looking ones give a unique view of future consumption, taking into account the cumulative effects of all the different projects planned for the plant. This helps the plant to keep on top of all potential initiatives (often fifty or more) and decide which should be prioritised. If, on closer examination, a decision is taken not to move forward with a project, it is not deleted from the list. It is put on hold, as changing circumstances, parameters and targets may lead it to be considered a viable opportunity in the future.

We are working, in the Asia-Pacific region in particular, to capitalise on the information held in these road maps. They

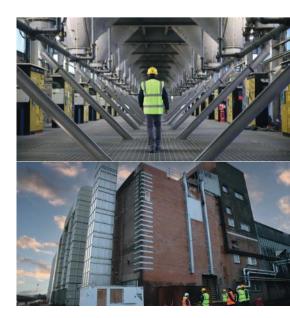
have been updated and corrected, and will continue to be reviewed regularly, to reflect the constant progress made on projects. The information they provide feeds into the budgeting process and the five-year capital plan and is an excellent trigger for sharing ideas to ensure that best practices are replicated across the business.

## Glenesk energy efficiency project delivers results

Last year, we carried out a project at our Glenesk plant to boost the energy efficiency of the malting process. The project involved upgrades to the water and air systems.

On the water side, the original heavy-fueloil fired steam boilers were replaced with a new gas boiler dimensioned to the needs of our process, operating in a closed-circuit heating loop. This is more fuel-efficient. By adding a tank to the system, which acts as a buffer to store heat in the same way that a battery stores power, we have been able to uncouple the boiler from process demand so that it can always run at optimal efficiency. On the air side, we re-arranged the ducting and installed a new management system for the kilns. Adjustments to the kilning phases and timings have enabled the management system to recover as much heat as possible and cut the energy consumption.

This project has reduced the amount of energy used to produce a metric ton of malt by 30%. It has also enabled us to remove a heavy-fuel-oil burner and decrease our gas consumption, cutting our carbon emissions even further.





## Energy efficiency projects in Latin America

Boortmalt teams in Latin America are working on two energy efficiency projects to reduce the amount of energy required to make malt.

One is an IT project to produce a system that will manage malting recipes dynamically, in real time. A malting recipe includes all the parameters that have to be determined when making malt, such as kilning temperature and process time. These parameters depend on a wide variety of factors, right down to the weather conditions at the time the process is running. By optimising them, the amount of electricity and gas used to power the kiln can be minimised. This has a huge potential impact on our plants' energy consumption, because kilns consume 100% of the heat and 50% of the gas used in the malting process. Currently, malting recipes are automated, using data built up over many years. They are optimised to give the cycle time that minimises resource consumption, based on a set of assumptions that are true when the process begins. However, the parameters can shift very rapidly.

The aim of this project is to develop an IT tool capable of optimising the recipes throughout the process in response to the changing parameters, so that the electricity, gas and water consumption are minimised. The system is currently being developed in-house on a single-deck kiln at our Punta Alvear site. It will subsequently be replicated for the doubledeck kiln at our Bahía Blanca site, which will require another set of algorithms. Once these two sites have been covered, the system will be suitable for use with the different technologies in place across Boortmalt.

### 2 INTEGRATED DECARBONISATION **SOLUTIONS** harnessing technology to cut carbon emissions



Around the world, we are using a range of innovative, pioneering technologies to help us reduce our carbon emissions. Heat is our major focus because malting is a heat-intensive process. It is here that our efforts will have the biggest effect and move us the most quickly towards our goals. We are also investigating or making use of various other opportunities available locally at our different sites around the world to harness renewable energy sources such as solar, geothermal, hydropower and



## Bear Loops

How does a heat loop work?

A heat loop is a system that captures waste heat (also known as fatal heat) from one process to use as an energy source for another. As malting is a heat-intensive process, this technology is of great interest to us at Boortmalt and we are involved in two heat loop projects. The first, in Antwerp port, captures the heat from a hazardous waste incineration facility and transports it 12km to our maltings. This system is up and running. The second is a potential project at Port Adelaide to source waste heat from a hydrogen production facility.

#### Antwerp heat loop update

#### Official inauguration

The Antwerp Heat Loop was launched on 29 February 2024 at a ceremony attended by numerous VIPs and representatives from all the partners involved in the project. After a panel discussion, Bart De Wever, the Mayor of Antwerp, pressed the ceremonial red button, officially switching on the system to convert waste heat from the Indaver plant into an energy source for Boortmalt and for local people.

The Antwerp team hosted tours of the malting plant to show attendees how the heat that is being harnessed is used in the malting process. There was even an opportunity to go right into the kilns to see how hot they feel! In addition, we held a special celebration to thank the plant staff who worked so hard to make the project happen.

It was a proud day for Boortmalt as a whole. This colossal project, which has been in the pipeline for many years, is now up and running, demonstrating our commitment to the planet. It represents a big step towards our goal to reach carbon neutrality by 2035. The Antwerp staff, many of whom live in the area, were especially proud to have contributed to bringing this prominent local system into being. They have helped harness an excellent opportunity to cut carbon, do the right thing by their local community and offer their families and neighbours a more sustainable future.



#### Project update

The Antwerp heat loop started running in November 2023 and has proved itself to be impressively stable. Since it was switched on, staff at the plant have been working hard to fine-tune the system and adapt the processes to accommodate the kind of heat that it supplies. A process support manager has been appointed to focus on optimising the system and maximising the environmental benefits it offers by taking the plant's fuel consumption as low as possible. As this is a new venture for both parties, Boortmalt and Indaver meet quarterly to discuss progress and share feedback. We expect the heat loop to deliver performance improvements yearon-year, and to achieve full automation in the near future.





People at the plant are very proud of the heat loop. It's a demonstration of how we're doing the right thing by the planet and by our families, many of whom live nearby.





#### Adelaide heat loop

Boortmalt is involved in a project in Adelaide, Australia, which aims to capture waste heat from a renewable hydrogen production facility via a hot water loop. The heat, which will be generated as a byproduct of hydrogen production (by electrolysis of water), will be at the appropriate temperature for the kilning process at our nearby Cavan malting plant. This project is currently at the technical feasibility study stage, looking at capture and transport. Legal, commercial and certification feasibility are also being examined.

## SOLAR

#### Harnessing solar energy

Solar energy is a renewable source of power, and some of our sites are very well placed to harness it. We are looking closely at the opportunities available around the world. Here are some of the projects that are in place or in the pipeline.

## Rooftop solar photovoltaic installations in Australia

Boortmalt Australia commissioned a study into the suitability of the roof structures of our plants for the installation of solar photovoltaic (PV) panels to convert the sun's rays into electricity.

The study concluded that our Devonport plant was suitable. The roof of the plant was fitted with a 100 kilowatt peak system with an estimated annual yield of 111 MWh capable of saving 66 metric tCO e. The system was commissioned in late 2023 and is running well.

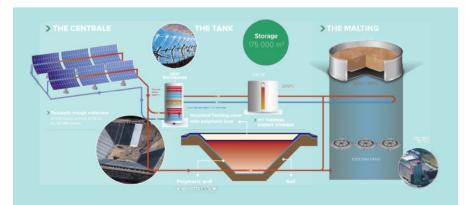




## Concentrated solar thermal power in Spain

A project is under way to build a concentrated solar thermal power plant to generate heat at our Villaverde site in Spain. The project will use curved solar mirrors or collectors set on land near the plant to capture the radiation from the sun to produce 20 megawatts of power. The sun's rays will be reflected into each collector to concentrate the energy, heating a liquid. This liquid will then pass through a heat exchanger where it will heat water to 95°C. The water will be pumped to the plant to provide heat. The heat will be collected in a large storage pool to allow the system to operate at night and when the sun is not shining.

This major project, set to be commissioned in FY27, will take us ever closer to carbon neutrality.

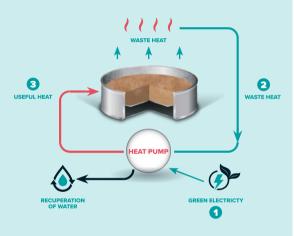




#### How does a heat pump work?

A heat pump extracts heat from a source – ambient air, water or even geothermal energy – intensifies it using a compressor and transfers it back to where it is needed. The system works thanks to the laws of thermodynamics: when the pressure of a gas increases, its temperature also increases.

Our patented low-temperature heat pump technology uses this principle to harness our own waste heat from exhaust air and reuse it in the malting process. This is an ideal solution for Boortmalt because, in industrial terms, the temperatures required by our process are low (a maximum of 85°C) and can therefore be supplied by a heat pump.





#### Our patented heat pump solution

We have now installed our first patented container heat pump solution at our Athy site in Ireland. It was commissioned in April 2023. This innovative solution, engineered by Boortmalt, is cost-effective and quick to implement, with a lead time of just six to eight months. This is the first large-scale heat pump to be put into operation in the malting industry.

The solution is working very well: the engineered performance has been amply confirmed, with a total heat supply to the plant in excess of 70% and a heat pump COP (Coefficient of Performance) of more than 4, indicating that it is very efficient. The Boortmalt-designed software that manages the system optimises heat valorisation, heat production and heat consumption to achieve maximum efficiency.

We are very grateful to our equipment suppliers, contractors and the project manager for the part they have played in the success of this project. In selecting our construction and maintenance partners, we specifically chose companies capable of working with Boortmalt around the world. This gives us one key point of contact for each aspect of the system, and eliminates the complexity and costs that would be generated if every solution was different. Standardisation maximises efficiency and therefore minimises expense, making project viability more readily achievable and favouring decarbonisation.



#### The next steps

Now that our expectations of this solution have been confirmed in practice, we are ready to capitalise on its success. We will be taking advantage of its standardised, modular design to roll it out to other locations. The next heat pump has already been ordered for a site in the UK, and detailed engineering studies are under way for several others. We hope to roll the solution out to seven sites over the next three to four years to accelerate our decarbonisation journey.

At Boortmalt, 70% of plant decarbonisation will be achieved thanks to heat pumps.



Gianni Vanneste Group Energy Optimisation Manager





## OTHER DECARBONISATION SOLUTIONS

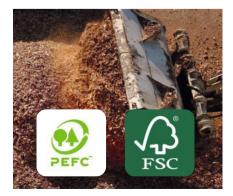
Our sites are spread around the world, each with its own unique location, local context, situation and needs. What works well on one site will not necessarily be an option for another. We are committed to capitalising on the different decarbonisation opportunities available at our plants.

#### A new biomass boiler for Issoudun, France

A biomass boiler generates heat by burning renewable, organic material rather than fossil fuels. Sustainable biomass, which is biomass that would otherwise decompose naturally and be wasted, can be a very valuable source of fuel if it is available locally.

The second, and larger, biomass boiler now in the detailed engineering and planning stage for our Issoudun site in France will be fuelled by woodchip from forest clean-ups. This type of biomass is strictly controlled under the French "Code Forestier" and conforms to the EU's Renewable Energy (RED II) directive.

For the new boiler, we will work with a service provider ("heat as a service") that guarantees that the majority of the woodchip delivered as fuel will come from within 50km, and that none of it will be transported more than 100km using conventional haulage. Going forward, we will work with the contractor to secure a commitment to gradually moving over to electric delivery trucks.



#### Geothermal energy in Perth, Australia

Certain Boortmalt plants lie on geothermal basins – areas where thermal energy can be extracted from the earth's core. This is a brand-new energy source for Boortmalt and, where it is available, offers excellent potential for decarbonising heat.

In designing this type of project, we will seek to create a closed-loop system, taking water up from the ground hot and sending it down again cold. One Boortmalt plant with potential for this type of project is Perth, Australia.

We have commissioned a partner to conduct a pre-feasibility study for a geothermal solution to decarbonise heat at the plant and learned that the geothermal source meets the basic requirements for this type of project.

The second pre-feasibility phase, looking at aspects such as above-ground integration and financial viability, appears promising. If we are able to bring this project to fruition, it will be one of the first applications of geothermal energy in Australia.



#### E-boiler installation in Debre Birhan, Ethiopia

The plant at Debre Birhan was originally fitted with a heavy-fuel-oil boiler. In an effort to reduce scope 1 and 2 emissions by electrifying heat, a project is underway to replace it with a 10MW e-boiler (a boiler powered by electricity instead of fuel oil).

This is a particularly sustainable choice in Ethiopia, because the electricity supplied by the country's national grid is produced from renewable sources (96% from hydropower and 4% from wind turbines).

This project is currently in the preparation stages.



## Electric truck cuts logistics carbon footprint

Boortmalt has long been interested in the idea of an electric truck to reduce carbon emissions. Our Bury St Edmunds site joined forces with one of our hauliers, Bartrums, Volvo's truck R&D department and brewer Greene King to launch the project. Involving a customer was important because the truck also helps them meet their own sustainability commitments.

The Volvo FH truck, sporting its highly visible Boortmalt livery, was the first electrically powered articulated bulk tipper on the road in the UK. It is charged via the plant's gas-powered Combined Heat and Power plant and has a range of 200 to 250 miles (320-400km). This is perfect for local rounds such as delivering malt to the Greene King brewery and collecting barley from local suppliers and stores. Because the truck is so clean and quiet, it's particularly well received in the historic centre of Bury St Edmunds where our customer's brewery is located.

We estimate that this solution will cut the carbon footprint of our UK malt logistics by 75% and so help us meet our SBTi scope 3 commitments. The trial is being closely followed by all the parties involved, to see what the truck is capable of and how its range can be extended and running costs minimised. Optimisations will help make further electric trucks viable in the future, for example at other Boortmalt sites with a local customer base.

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It's a real demonstration of our commitment to sustainability and our people and the planet.

Charles Tozer Country Manager, UK & Ireland



## **3** SOURCING GREEN ELECTRICITY

We are committed to sourcing 100% green energy for our sites by 2030





#### Athy PPA

Boortmalt has signed a long-term PPA (Power Purchase Agreement) for the offtake of solar power for our Athy site in Ireland. This is a significant step towards fulfilling our commitment to secure 100% green electricity for our sites by 2030.

We were approached by a local farmer, whose family has been supplying barley to our plant for two generations, with a plan to place 13,000 solar panels on his land. As this project represents an excellent opportunity for Boortmalt, we agreed to take all of the electricity that will be produced for a period of 15 years. It may be a surprise to hear that Ireland is a good location for photovoltaic farms, but in fact the country, and in particular the east where our Athy plant is located, receives levels of solar irradiance on a par with those seen in Germany, Belgium, the Netherlands and the UK. In addition, the country as a whole enjoys around 16 to 18 hours of daylight every day in summer. The panels will produce sufficient electricity to power the heat pump that has been newly installed on the site to provide heat for the malting process, as part of our efforts to electrify the production of heat.

The fields in which the panels are installed will continue to be used as farmland. The panels have been set on raised frames, so that sheep can continue to graze around them and even shelter under them. Thanks to this project, we will soon be able to offer our customers malt that is made with both locally sourced barley and locally sourced electricity, enabling them to meet growing demand from their own customers for sustainable local products. We are working to decarbonise the production of heat for the malting process on our sites, and to achieve this we are cutting our use of fossil fuels. This will cause our electricity consumption to rise over the coming years, and we are therefore diversifying our sources of green electricity to be able to cope with the increased demand.

Wherever it is possible from a physical and regulatory point of view, we are committed to generating renewable electricity on our sites. As this is not feasible in all instances, we are also seeking to enter into **Power Purchase Agreements** with nearby solar or wind parks. Through these, we can source green electricity while supporting investment in renewable energy. In addition, we use bundled green electricity contracts and buy Energy Attribute Certificates (EACs).

## MALT IT BETTER

Certified Low-Carbon Malt

#### The Boortmalt Carbon Bank

We're making measured and verified carbon emission savings on our sites by introducing clean energy technologies. Every saving we make is entered into our virtual Carbon Bank.

#### External Auditor Certification

The Carbon Bank represents our total production of decarbonised malt, which we call *Low-Carbon Malt*. When you purchase our *Low-Carbon Malt*, you receive carbon credits from the Bank – certified by an external auditor under a regional mass balance principle – so you can reach your scope 3 carbon emission targets.

#### Virtuous Circle

More importantly, when you buy *Low-Carbon Malt*, we reinvest the revenues in further carbon emission reduction projects, enabling us all to reach our global decarbonisation vision at pace.



## WATER CONSERVATION

With our climate changing and water scarcity intensifying across the world, we strive to make our malting process as water-efficient as possible. We work hard, every day, to raise awareness of water conservation, with a focus on optimising our water usage and harnessing new technologies to boost water re-use.

Water consumption per metric ton of malt

 $2.9m^{3}$ 

BASELINE

FY 23-24 STATUS

 $2.8m^{3}$ 

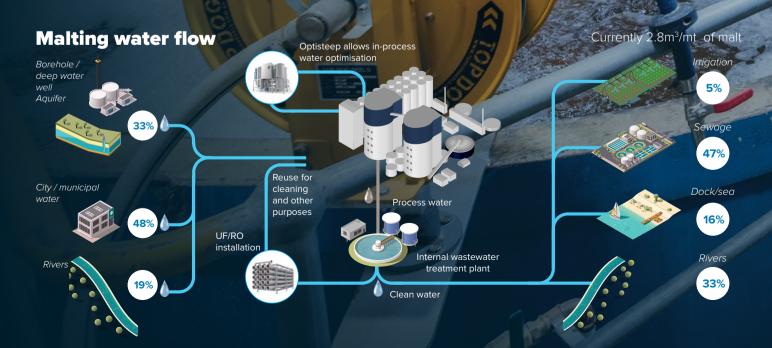
30% eduction in wate consumption

BY 2030

#### Approach

Water is a key natural resource within the malting process. Steeping, when the barley grains are soaked to trigger the conditions for germination, is an important phase of the process, where a significant amount of water is needed. That is why we are alway looking for new solutions that help us to cut our water consumption without compromising our product quality.

Our approach to water conservation is based on four pillars. The first is our work to "close the loop", by reusing as much water as possible. The second is Optisteep, a technology which significantly cuts down the amount of water required in the steeping phase. It is now in place at many of our sites, and we are continuing to fine-tune the system to optimise the water savings even further. The third pillar of our strategy is the search for alternative sources of water, to reduce our demand for water of potable quality and increase our water resilience. The final pillar is harnessing each and every opportunity to save water within our business.







#### Focus on upcoming actions

Over the coming years, we will continue to fine-tune our Optisteep installations and upgrade older systems, to harness the full potential of this technology and maximise its power to reduce our water consumption.

As our patented heat pump solutions are rolled out to more Boortmalt sites, they will be fitted with condensate recovery systems. This will generate additional synergies between energy efficiency and emissions reduction and water conservation, making the projects doubly beneficial.

We will also continue to explore the use of reverse osmosis systems, where regulations allow, to move us further towards our goal of closing the water loop. In addition, we will examine the opportunities offered by changes to legislation, such as the recent decree in France permitting the reuse of treated wastewater under certain conditions.

## CLOSE THE LOOP

Recycling and reusing water



discharge of the waste. Because the waste

improves the electrical consumption of the

system compared to traditional RO, where

the waste is discharged after passing

In comparison to traditional systems,

the waste stream produced by CCRO is

smaller in volume but more concentrated.

This is an advantage in terms of treating

it, not only because there is less of it but

also because chemical treatments work

more efficiently on concentrated waste.

So the volume of chemicals required for

the post-treatment process is lower both

through the system once.

stream is recycled, energy conservation

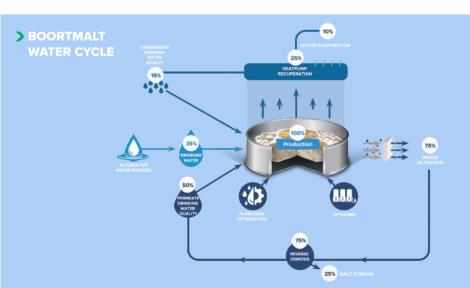
The "Close the Loop" part of our strategy refers to our efforts to cut our water intake by recycling and reusing water from our process, without affecting the quality of our malt.

This is one of the ways in which we reduce our demand for water of potable quality.



in absolute terms and in proportion to the amount of wastewater treated. Overall, the system produces better results from less chemicals.

Water at the Antwerp plant comes from the same city mains that serve local households and businesses. This new technology has the potential to cut the volume of drinking water we draw from these mains by 50%, from 1.2 million cubic metres to 600,000 cubic metres per year. This is the equivalent of the annual consumption of over 8,000 households.



#### Closed Circuit Reverse Osmosis at Antwerp plant

Our project to install a Closed Circuit Reverse Osmosis system to upgrade the wastewater treatment process at our Antwerp plant is progressing well. The system is operational since january 2025.

This system was selected from a wide range of possibilities as the best option for treating the malting plant's wastewater for reuse because, compared to other systems, it produces a waste stream that can be purified more efficiently and with less chemicals.

Reverse osmosis (RO) is a technology for purifying water. The feed water is forced through a semipermeable membrane, separating the pure water (permeate) from the impurities, which flow out as a waste stream (concentrate). This waste stream is then treated before being discharged. Closed Circuit Reverse Osmosis (CCRO) is a patented concept in which the concentrate from the reverse osmosis process is recycled within the system and blended with the feed water again. This blending continues until the concentration in the recycled waste stream hits a threshold value which triggers the

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A major technology that is helping us sustain reduced water consumption



We are continuing our global project to introduce Optisteep systems in our plants, and to upgrade and fine-tune the systems already in place to optimise the water savings they offer. Integrating the technology into the configuration and processes at each individual plant is an important part of this project.



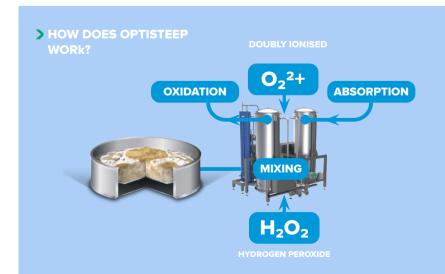
Boortmalt introduced Optisteep in malting after partnering with Water IQ in 2018. This key technology is used to cut the water consumption of our malting process, purifing steeping water so that it can be reused rather than being treated as waste.

Optisteep was fitted at our Bury St Edmunds plant several years ago. The system there has recently been upgraded to the best available technology and to enable it to reach its full potential. Simultaneously, the malting process and the recipes used have been tweaked to work in harmony with it. This has required a culture change management programme at the plant and therefore took a certain amount of time. Thanks to the work and investments undertaken, and the unwavering commitment of the local team, the system is now performing well and delivering significant water savings. The local team has fully embraced this new improved approach to malting, and now views Optisteep as a crucial plant system which is integral to producing malt of the highest quality.

Our first Optisteep installation in North America is at our Biggar plant, in Canada.

This installation is unusual in that it covers the entire facility, and not just one malthouse. It represents a major investment for Boortmalt, and aims to cut water consumption across the plant by 40%. Our teams are currently working to fine-tune the system and adapt parameters and approaches across the rest of the process, and in particular the germination stage, to achieve optimal results.

We continue to work to harness the full benefits of Optisteep. As all our plants are different, there is no one-size-fitsall approach and the efforts required to optimise water savings in each location are significant. Installing the technology requires us to adapt the traditional malting process, which implies both a certain amount of fine-tuning and a shift in culture on the plant floor. Optisteep is, in the words of Boortmalt CEO Yvan Schaepman, "the largest and most impactful innovation regarding water savings in the malting industry today". We will continue to finetune the systems already in place at our plants to maximise their effectiveness, and to install this innovative solution in further locations.



## **3** ALTERNATIVE WATER SOURCES



Harnessing substitute sources of water



We are committed to finding alternative sources of water for two reasons. Firstly, like our initiatives to reuse water, it helps us to reduce the amount of water of potable quality we draw from either municipal mains or wells and therefore avoid putting strain on systems that supply local people. Secondly, by diversifying our sources of water, we increase the security of supply to our own plants.

#### Using wastewater to keep our Ethiopian site green

Our Debre Birhan malting plant in Ethiopia draws its water from two wells. Currently, this water source is used across the entire facility, including for the upkeep of the landscaped areas of the site, which are planted with grasses, flowers and trees. A project is currently underway to reuse wastewater for this purpose, saving 18 to 25m<sup>3</sup> of well water per day. The new system is expected to be commissioned in the FY25 financial year.

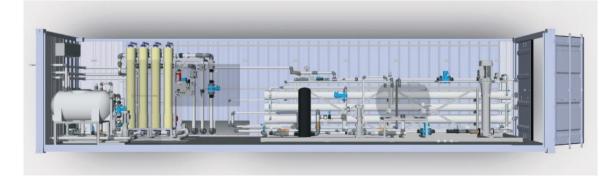
## Guaranteeing a resilient water supply at Bahía Blanca

Our Bahía Blanca malting plant currently draws its process water from a deep well. This water can be used directly, because it is of potable quality. However, wells do not necessarily last forever, and due to the age of this one we are actively investigating alternative water sources.

A project is underway to fit a reverse osmosis system that would enable the plant to draw brackish water from another nearby well, treat it to bring it to the required standard, and use it in the malting process. The system will include pre-treatment and reverse osmosis stages to purify the water, and a pipe network and pumps to transport it to the existing water storage tanks.

The layout of the system has been finalised, the engineering design for the pipe network and pumps is in progress and the reverse osmosis plant has been ordered. The project is expected to be completed early in 2025.

This system, once in place, will stand as a back-up for the existing water source, rather than a replacement. It is not intended to be used unless the current well fails.



Piped water is a scarce resource in Bahía Blanca, especially in summer. Our plant draws its water from a borehole 800m below the ground, and we are committed to intensifying our efforts to ensure we use it as efficiently as possible.

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Adrian Alvarez Plant Manager, Bahía Blanca



## IN-PROCESS OPTIMISATION







#### We constantly look for opportunities to improve the way we work and cut our water consumption. We believe in sharing feedback and best practice, and exploring new ideas. The individual improvements made through in-process optimisation are sometimes modest, but added together they make a significant difference. After all, in the words of Julia Carney's poem, "Little drops of water make the mighty ocean"!

#### Pooling ideas to save water

As our malting plants have proved, sharing ideas is an excellent way to make improvements. Boortmalt has plants around the world and they are all different, with their own individual systems, equipment, customer requirements and weather conditions. There are no one-size-fitsall solutions in malting! Despite this, by sharing information between clusters of sites, our production teams are able to spot opportunities that are working well for one site and could be replicated on others.

Our plant in Strasbourg, France, recently put in place two successful watersaving projects thanks to information from colleagues on other sites. The first concerned the site's cooling unit, which is used to cool systems across the plant and consumes a significant amount of water, especially during the summer. Previously, it was set to activate at an ambient temperature of 18°C. Thanks to a discussion with the production manager of our Villaverde plant in Spain, where the weather is significantly warmer, the Strasbourg plant trialled setting the unit to kick in only at 22°C. This trial was a great success: it saved significant amounts of water and also electricity, with no adverse

effects on either the malting process or malt quality. Thanks to this change of approach, the cooling unit's water consumption over the summer months was cut by around 50% in 2023 compared to the previous year.

In the second project, production staff at Strasbourg optimised the site's steeping process by exchanging parameters with the teams at our Antwerp plant, where the barley, plant set-up and target malt specifications are similar. By trialling changes based on the steeping programmes at Antwerp, the production teams at Strasbourg were able to move from two immersions to one immersion, or one immersion and a shower steep, without any adverse effect on quality. This is achieving water savings of up to 250m<sup>3</sup> for every batch of malt produced.

The technical teams at our plants will continue to work together in the future. Circulating ideas and innovations across the company so that all sites can benefit helps us to progress more quickly towards our sustainability goals!



#### Herent trickling filter

The trickling filter, a part of the wastewater treatment system at our Herent plant, is due for renewal. But rather than replacing like with like, we will be upgrading the system by putting in the best available technology.

We aim to make the wastewater treatment plant resilient with regard to any stricter discharge limits that may be announced in the future. In parallel, we are looking to ready the site for future water reduction projects such as the one in place in Antwerp.



## New humidification nozzles save water at Debre Birhan

At our Debre Birhan plant in Ethiopia, we have replaced the original humidification nozzles with an alternative nozzle design that has a 75% lower flow rate. This project has resulted in an average saving of 0.8m<sup>3</sup> of water per metric ton of malt, without any adverse effect on malt quality.



#### Buckie steep tank radars

Previously, the steep tanks at our Buckie plant were filled for a defined period of time, rather than to a specific capacity. This made the fill level inconsistent, and meant that sometimes more water was consumed by the process than was actually required.

Spotting an opportunity to save water, we trialled a radar sensor system on one tank. The trial was successful, and the technology was fitted to the site's remaining nine tanks between July and September 2023. The system was commissioned in late 2023 and early 2024. It has cut the amount of water used per metric ton of malt produced by almost 10%, resulting in a projected annual saving of 23,400m<sup>3</sup> of water.

In addition, the constant fill level means that the process can be managed more easily and more accurately, making it simpler for site staff to guarantee a consistent level of quality. This technology is now being rolled out to other plants.



#### Shower steeps save water

Certain Boortmalt malting plants have introduced shower steeps to save water.

In one such project in Croatia, three rows of shower rings have been installed in the ceiling of the steep house and connected to the existing high-pressure pump. They are used during the steeping phase to spray the grain with water rather than submerging it.

The exact showering time required depends on various parameters, but generally the grain is sprayed twice, for one hour each time, consuming a total of around 60m<sup>3</sup> of water. This is a colossal saving compared to the 350m<sup>3</sup> of water that are typically required to submerge the grain completely.



#### Here's a sneak peek at some of the projects we have in the pipeline to reduce our water consumption.

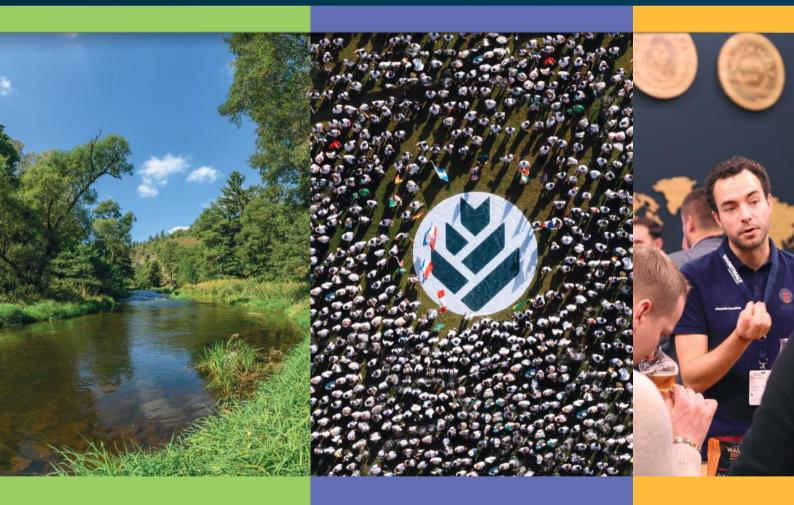
#### Waste water treatment plant upgrade

We are planning to upgrade the wastewater treatment plant on our Perth site to increase capacity and recover more water. This will result in a significant water saving per metric ton of malt produced.

#### Steeping water reuse

A project is under way at our Punta Alvear plant to investigate how water consumption can be reduced by repurposing steeping water without any adverse effects. Trials undertaken in the pilot plant have been successful, and the project has now moved into the analysis and verification phase. New piping engineering has been completed for the trials.

# SUPPØRTING OBJECTIVES





**COMMUNITY ENGAGEMENT** 



**EQUALITY, INCLUSION & DIVERSITY** 



**BUSINESS ETHICS &** 

## BOØRTMALT SUSTAINABILITY GØALS





**CODE OF CONDUCT** 



#### **WASTE REDUCTION**



**TRACEABILITY & TRANSPARENCY** 

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## COMMUNITY ENGAGEMENT

We believe that our business and the communities in which we operate should be well connected. We are convinced that strong and sustainable communities are the basis of our future and that we, through partnerships and sponsorships, can make a difference together.



#### Approach

Our engagement with local communities reflects Boortmalt's corporate values and is highlighted in our Business Ethics Manual.

Our first objective is to ensure that the water, energy and other resources our facilities need are sourced and consumed sustainably, in a manner that protects the local conditions and circumstances. Our second objective is to partner with local projects that fit our values and sustainability targets to show our commitment to broader communities. Boortmalt allocates budgets for local engagement projects and adapts to the context rather than using one-size fits all approaches.

### PILLARS





## **1** SAFEGUARD THE LOCAL ENVIRONMENT



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At our sites around the world, we work to ensure that our facilities do not adversely affect the local area through the way they use resources. In many instances, they have a positive impact.



## FLOW OF THE RIVER LARK

The River Lark flows through the historic market town of Bury St Edmunds, where our malting plant is located. The river is a chalk stream, a rare type of watercourse found principally in England. Only around 250 exist in the world. They are fed mainly by spring water from chalk aquifers under the ground rather than by rainwater, and provide a rare habitat for wildlife, supporting high levels of biodiversity.

Chalk streams generally are under threat from overabstraction (more water being extracted than can naturally be replaced) and pollution. The River Lark has a reduced flow due to various impediments, sediment and physical barriers. Restoring the flow of the river would boost biodiversity and enhance the local environment.

Our Bury St Edmunds site team is engaged alongside other industrial businesses, the environment agency, farmers and local people in a community project to improve the river's flow. We are working with a steering committee to develop a five-year plan to mitigate the effects of abstraction, population growth and erratic weather patterns on the chalk stream. Within Boortmalt specifically, we have already deployed the Optisteep system to cut our water consumption and therefore reduce our impact on the local aquifer.

#### ENHANCING THE LOCAL ENVIRONMENT IN ETHIOPIA

At our Debre Birhan site in Ethiopia, our employees have contributed to a country-wide reforestation initiative by planting trees around their workplace. An enthusiastic group of team members planted over 700 seedlings, mainly of indigenous species of tree. They will transform our site into a reservoir of biodiversity in the local area, as well as providing shade, cooling the atmosphere, preventing soil erosion and having a positive impact on climate change by sequestering carbon.

The Debre Birhan site also provides a supply of drinking water to 300 village households living nearby, so that local people can actively benefit from the plant's infrastructure. This is an excellent example of how our sites tailor their actions to local needs.

The plant draws water from two wells. It is collected, filtered and then stored in a tank, known as the treated water tank, to be used both for the malting process and to supply to local people. In addition, Boortmalt has sited a separate 5,000-litre tank in the community. It is filled from the plant's treated water tank, so that local people can collect clean water rather than relying on the river water.

In total, the local community consumes 357 cubic metres of water per month, or almost 12 cubic metres per day. The supply is available for three hours a day, seven days a week.



## PARTNER WITH LOCAL PROJECTS

THAT FIT OUR VALUES TO SHOW OUR COMMITMENT TO COMMUNITIES

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We support the local communities around our offices and plants in a wide range of different ways, from assisting local charities and participating in sports events to organising family days.

### SUPPORTING THE COMMUNITY DISASTER RELIEF EFFORT IN BAHÍA BLANCA

In late December, Bahía Blanca, Argentina, was hit by severe storms that caused widespread devastation, including major flooding, damage to infrastructure, and significant harm to both private property and community facilities. The disaster response involved contributions from several multinational companies totalling over 9,000 million Argentine pesos. These funds were essential for repairing and reconstructing the damaged areas and helping affected communities, including local organisations and families in need.

Boortmalt supported the relief effort in two ways. Firstly, we gave financial assistance to Club Libertad in Villa Rosas, one of the hardest-hit neighbourhoods. Secondly, we provided resources to employees whose homes had been damaged, for example to repair perimeter fences and remove fallen trees. With many local residents left without access to drinking water for over ten days, we supplied daily water deliveries to ensure essential needs were met.

In August, the city council hosted a dinner to honour businesses that had contributed to the relief effort. Club Libertad publicly acknowledged Boortmalt and thanked the company for its support during this difficult time, highlighting the collective spirit and resilience demonstrated in response to the storm.



Our team in Croatia organises an annual Farmers Day in cooperation with our barley supplier, Axereal Croatia. The aim of the day is to build a community of farmers who are committed to growing barley, and to keep them updated on the latest news and innovations. It offers an opportunity for farmers from across the country to meet and socialise, and to put questions to experts from Boortmalt and Axereal.

Each year, 500 to 600 farmers are invited to the event. It is held in a large marguee at the Boortmalt plant, which is located next to the Axereal site and so offers easy access to the barley test plots. The day includes visits to the barley fields, where participants learn about the latest innovations and best practices in barley growing, a tour of the malting tower and an introduction to the malting process, and lunch with time for socialising. Staff teams are on hand to offer advice on the challenges malting barley farmers face, for example with calibration, protein levels, etc., and to offer solutions. They make the farmers aware of all the latest varieties, fertilisers, crop protection products and techniques on the market, as well as promoting regenerative farming practices such as cover crops. Major agricultural companies also attend, to present their latest innovations.



#### INVOLVEMENT IN LOCAL SPORTING EVENTS

Staff from our sites all over the world show their support for local sporting events by entering Boortmalt teams. This is an excellent way for us to demonstrate our company values - in particular Strive and Inspire - and do our bit to ensure the ongoing success of these events which bring local communities together and help both us and the other participants to stay fit, both physically and mentally.

In Belgium, a substantial group of Boortmalt employees from Antwerp and Herent took part in the 25km Great Breweries Walk. The weather was kind and the group thoroughly enjoyed the event - as well as the opportunity to sample the beer, of course!

In November 2023, a big team of staff from Boortmalt Ethiopia's agriculture, plant and admin teams entered the Great Ethiopian Run. This huge event, with 45,000 participants, takes place in the historic streets of Addis Ababa. Despite the high altitude, the team took our Strive value to heart and pushed through to the end of the 10km race. They were proud to support the event's vision, which is "to make running a lifestyle for everyone". In Australia, a Boortmalt team entered the Melbourne Marathon, calling themselves the "Joe White Malt-athoners" and sporting branded t-shirts!

In September 2023, our parent company, Axereal, organised the "Haka Cup", a group rugby tournament entered by 17 teams made up of group employees and cooperative member farmers. Four Boortmalt teams competed, travelling from as far away as Spain, Australia and Argentina to take part. At the end of the day, the local Boortmalt team from Issoudun lifted the trophy!

We supported the Pink Walk challenge organised by breast cancer charity Pink Ribbon once again this year. Over 80 Boortmalt staff took part in the event, which is held twice a year, in May and October. They made a special effort to walk further than they usually would, and in doing so raised money for breast cancer charities, increased awareness and lowered their own cancer risk.



#### COMMUNITY EVENTS IN CANADA

It is important to us to be involved in community and charity events held in the areas around our sites, both to support the events and to raise our profile. In Biggar, Canada, our team actively participated in the town's Summer and Christmas displays in the community park, and organised a Boortmalt float for Biggar's annual parade in June. Our staff's families thoroughly enjoyed decorating the float!



#### WORLD OF WORK PROGRAMME AT ATHY COMMUNITY COLLEGE

For the second year running, our Athy site partnered the World of Work programme for second-year students at Athy Community College in FY24. This year, 24 students were involved in the scheme, which aims to offer them insight into employment, stress the value of completing their education and help them develop new skills, especially the soft skills that are so highly valued in the workplace.

Activities included classroom sessions and a tour of the Boortmalt site, and Athy Community College achieved the Green Schools Flag as a result of the programme.

The students found the activities fun, and said they had increased their understanding of sustainability and taught them more about working life. Staff were proud to present their workplace and glad to have the opportunity to make a difference in the young people's lives. Both the school and the organisers, Business in the Community Ireland, thanked the Boortmalt team for their dedication and support.

#### CHARITY FOOTBALL TOURNAMENT IN AID OF SPORT DANS LA VILLE

Sport dans la Ville is a French charity that aims to use sport to promote equal opportunities for young people from disadvantaged neighbourhoods. It works in partnership with VIE, run by Business France, a programme that organises internships abroad for young people.

Sport dans la Ville held the first Belgian edition of its Charity Football Tournament on Sunday 15 October 2023 at the prestigious Royal Sporting Club Anderlecht Football Academy in the Brussels region. Around a dozen teams from a host of well-known organisations and businesses played against teams of young people supported by the charity. The atmosphere was friendly and everyone enjoyed the day. By entering, Boortmalt contributed to a fund that will help young people who couldn't otherwise afford to do so to continue their education and prepare for a better future.



## SUPPORTING

Our sites around the world support a range of local ventures. Next to our Swalmen plant in the Netherlands stands a historic family house. This listed building was home to the plant's original owner and his family, and also held the plant offices. It is still part of the site today. Boortmalt Swalmen has an agreement with the local history and environment society, under which they are invited to use the house free of charge. It serves as a meeting venue and holds a varied collection of artefacts from the town and surrounding area. Several times a year, the society opens the house to the public, inviting people to view the collections and learn more about Swalmen through the ages.

Also at Swalmen, in FY24 we sponsored SJWAAMPOP for a third time. This local pop/rock festival is held in Swalmen town centre over two days every August, and has a policy of supporting local and regional acts. Our sponsorship helps keep the festival free to enter so that everyone in the local community can enjoy it.



## MADRID

#### FUTURE MASTERS OF MALT AT VILLAVERDE

ESCYM is a prestigious brewing and malting school located near our Villaverde plant. It operates in conjunction with a local university and is structured as a foundation, offering paid training to companies in order to fund free tuition for individual learners. Boortmalt has been supporting the school for many years, in a number of ways. Our staff teach on courses, sharing their industry experience with students, we donate small quantities of malt for teaching purposes and we invite students to Villaverde to see how a real malting plant operates.

Recently, an ESCYM graduate applied to us to undertake a three-month training period after graduation so that she could put her learning into practice. During the placement, she will be paid a living allowance, financed by the school with a contribution from Boortmalt. As well as opening doors for the student and strengthening our links with ESCYM, this arrangement could potentially help us recruit a motivated and highly skilled staff member to work in Spain or elsewhere in the world. If the placement is a success, we will seek to repeat the arrangement in the future.

In the same vein, we have recently signed an agreement with University Carlos III of Madrid under which we will offer internships in technical roles to students. The next step is to recruit the interns through the university and welcome them to the Villaverde plant.

Through these initiatives, Villaverde is helping to shape the next generation of Masters of Malt!



The Netherland

#### SUPPORTING LOCAL CHARITIES AND GROUPS

Our sites around the world are committed to acting as good corporate citizens by supporting local charities and groups through a whole range of sponsorship initiatives and donations.

Many are involved in local food drives, and in Canada, Prairie Malt employees contributed to six Christmas hampers that were distributed to families in need within their community, in a collaborative effort with local schools. The hampers included toys and all the ingredients for a full turkey dinner. Each year in Argentina, Boortmalt staff make 15 to 20 Christmas boxes for volunteer firefighters.

Mothers for Mothers is a Belgian non-profit that has been working to support the poorest in society since 1992. Volunteers distribute equipment and food to struggling families several times a week. Boortmalt employees in Belgium donated a van-load of children's clothes, toys and baby equipment to the charity as a way of giving back to the community.

In Ethiopia, we have an ongoing partnership with a local Youth Union scheme, which offers young people the opportunity to gain experience and generate an income by running a small business. We sell our co-products to five Youth Unions (with a total of 150 members) at a heavy discount so that they can maximise the profit they make.

Amateur sport is another cause that Boortmalt supports enthusiastically. Prairie Malt (Canada) donated the snacks for the Minor Hockey Days event, for all teams to enjoy. Our Buckie plant accepted a request to sponsor the local women's football club, Buckie Ladies Football Development, which has teams spanning six different age groups from under 8s to adults. The senior team have won Scotland's Highlands and Islands league and cup double for the last two consecutive seasons. Our plant already had strong family links with the club, and we therefore understand just how hard they have to work to raise the money they need to keep the teams going. Our support will be marked by a sponsorship board at the Gordon Park ground. In an initiative benefitting both amateur sport and the community as a whole, Boortmalt Swalmen donated an AED (automated external defibrillator) to the Dutch Heart Foundation. It has been installed at the DES football ground in Swalmen, replacing a previous device that was no longer reliable. Every weekend, several hundred people gather at DES for football games and other events, making it an important location for an AED. The device was installed in a publicly accessible place so that it is on hand for use by anyone in the community that needs it, and referenced in an application so that first responders can locate it quickly in an emergency. The device was presented to representatives of the Dutch Heart Foundation and DES by the Swalmen plant manager at a handover ceremony held at the plant in December 2023. Having experienced an incident a few years ago when an AED was used, the football club was particularly grateful for Boortmalt's donation.

Colleagues in several regions demonstrate our Care value by donating something even more precious than money or equipment: a pouch of their own blood! In Australia, one of our staff members has volunteered as a Lifeblood Australia Champion, and as such plays a role in encouraging his colleagues to donate blood to save lives. In Ethiopia, Boortmalt team members took part in two blood donation drives held at the Addis Ababa office and at our Debre Birhan site. Each donation can be split into three components and can therefore save up to three lives.

Aside from these initiatives, our sites support a wide range of other groups and charities, for example by donating first aid equipment to a Rainbow unit (junior Girl Guides aged 5-7), collecting empty cans and bottles for a local school's fundraising drive, donating to the Biggar Town Revitalisation project and helping to fund an amateur production of "Bugsy Malone".



### SUPPORT FOR SCHOOLS IN ARGENTINA

We continue to support La Noche Solidaria, the annual fundraising event organised by Colegio Las Lomas Oral in Buenos Aires Province, Argentina, a school for children who are deaf or have hearing loss. This event, now in its 24th edition, is held at the Tattersall Hall at San Isidro Racetrack in Buenos Aires.

Money raised contributes to the school's scholarship fund, helping ensure that financial limitations do not prevent any child who could benefit from its auditory-oral education from attending.

Under a separate initiative, in February 2024 a donation of 36 school kits was made for children in Alvear attending primary school (ages 6 to 12).

**KU LEUVEN** 



In Belgium, Boortmalt maintains close links with local higher education colleges and universities such as KU Leuven. Our staff regularly give presentations to students on company culture and a range of other topics, and we also ran an event where students were invited to visit a plant and observe how the whole supply chain works, from end to end.

These events benefit the students by offering realworld examples to back up their classroom learning and opportunities to speak to staff in small groups to find out what their jobs entail day to day. We believe that they benefit Boortmalt just as much: they raise the profile of malting as an industry and Boortmalt as a company, which boosts recruitment, and they also help us to understand the new generation better. The world is changing and keeping up is vital - these students are the staff we will need to recruit and retain in the future.

#### BROUWERSHUIS PROJECT WITH ANTWERP CITY COUNCIL

The Brouwershuis is a historic building in the centre of Antwerp. Built in the 16th century, it originally provided the water supply for all the local breweries, using horsepowered pumps. Having decided to renovate the building, Antwerp City Council was looking for a private partner to help open the site to the public, because although it is unique, it is so small that it could never be commercially viable as a museum.

Antwer

Boortmalt will revive the Brouwershuis Antwerpen nonprofit to open the building (the historic part and the more modern extension) as an education centre showcasing the city's rich brewing heritage. There will be three areas: firstly, a micro-malting plant and micro-brewery to help people understand how our industry's processes work and see them close up, secondly a meeting room for gatherings, training, lectures and more, and thirdly a small tap room for use for private events such as tasting sessions.

We will donate the equipment for the micro-malting plant and brewery, and the furniture for the entire project. This is an excellent opportunity for us to give back to the local community, because the education centre will benefit the people of Antwerp and beyond. It will also make a fabulous meeting venue in central Antwerp, and we will enjoy using it!

Currently, the renovation of the historic building is under way, and an application for UNESCO World Heritage status is being prepared. The plans for the education centre are being drawn, with opening scheduled for 2026. Boortmalt has signed a formal commitment with the city authorities to manage the concession.







### FAMILY DAYS AROUND THE WORLD

Many of our plants around the world hold family days, when staff members' families are offered the opportunity to come onto the sites, build the community and see what working for Boortmalt is all about. The following are just a few of the events that were held during the year.

Our Biggar plant in Canada held their family day at the end of June. There was a fantastic bouncy castle, face painting and a cute petting zoo for the children, and of course a barbecue for everyone to share. There were even prizes to be won, including an Atari system and a Blackstone grill with Boortmalt-branded utensils. The sun shone, and everyone involved had lots of fun.

The Bury St Edmunds team welcomed family members to their site Fun Day on 8 June. The team offered tours - both in person and via Virtual Reality. Attendees enjoyed a bouncy castle, giant Jenga®, face painting and plenty of ice cream! Fun activities at the Glenesk (Scotland) family day in August included sumo suits and a bouncy castle, while Boortmalt Croatia had t-shirts printed to mark their event. Families at Strasbourg braved blistering 35°C heat to tour the plant, enjoy a barbecue and sample some beer. A special mention goes to the team at our Sydney plant, who hosted their very first family day this year.

To be even more inclusive, our Villaverde site in Madrid opened their Family Day up to encompass not just families but also friends, because not all staff have family local to Madrid. The aim of the day (in addition to having fun!) was to help attendees to understand Boortmalt's work culture a little better, with a strong focus on safety. The two main activities were a site tour and fire extinguisher training, organised with the help of the plant's long-standing supplier. Between activities, the groups could enjoy snacks and cold drinks, and play games including cornhole, Mölkky® and table football - the latter was a particular hit! To round off the day, everyone came together for a delicious barbecue cooked up by some familiar faces from around our site.

The Melbourne and Ballarat teams and their families enjoyed a day out together in May and stepped back in time to the 1850s Gold Rush at Sovereign Hill Open Air Museum. They sat down to a delicious lunch, watched a magic show, hopped on a horse and carriage ride, went underground to see the gold, and some eager brave souls panned for nuggets in the rather chilly creek! A great day was had by all.















# BUSINESS ETHICS

### & CODE OF CONDUCT

We commit to conducting business in an ethical manner. We all stand by our Business Ethics Manual, which is an extended version of the Axereal Code of Conduct, and expect the same behaviour from our business partners.







100% ontracts including our Code of Conduct

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### Approach

Boortmalt stands for good ethical behaviour, and this is integrated into our corporate values. When engaging with our colleagues, third parties, customers and suppliers, we apply our five principles of ethical business conduct: Trust & Integrity, Accountability, Compliance, Dignity & Respect and Openness & Honesty. This helps us protect and enhance our own and our stakeholders' good reputations. We expect our employees and anyone acting on behalf of Boortmalt to embody these principles, always.

At Boortmalt, we set an example and believe that our business ethics and sustainability programmes must be taken beyond the bounds of our own organisation. As such, our Supplier Code of Conduct is closely aligned with our values and our environmental standards and targets. We expect our business partners to be equally motivated to meet these standards and to drive sustainable business practices. We see it as our shared responsibility to do business in an ethical and sustainable manner.

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### GOOD ETHICAL BEHAVIOURS INTEGRATED INTO CORPORATE VALUES



The behaviours that we expect of our employees are clearly set out in our manuals, and reinforced by training. We take an agile approach to these questions, ensuring that we keep up to date as society evolves and new practices take shape.

# Ethics manual and compliance training

The Boortmalt Business Ethics Manual sets out the company's expectations of its employees as regards doing business

ethically. It covers topics such as bribery and improper advantages, conflicts of interest and business integrity. All employees receive a copy of this manual and are required to comply with it as a condition of their employment.



Certain employees' job roles mean they are particularly exposed to compliance risks. They receive dedicated training online in three one-hour modules via Boost, our internal training platform. The first module covers fraud and preventing corruption. The second focuses on competition law and anti-competitive practices, and the third deals with the European General Data Protection Regulation, or GDPR.



# Training on social media use and phishing

### Social media training

Social media is a very powerful tool, but it has the potential to put both the staff using it and the business at risk. During the year, we have worked hard to raise awareness among our employees of the risks of social media and how to guard against them. We have developed a policy and produced a training session, accessible via our Boost learning platform.

The material aims to help staff understand how to decide whether being present on social media is right for them. It then goes on to set a framework for what is and isn't permitted when using social media, on both professional and personal accounts. Beyond the standard recommendations about checking spelling and grammar before posting and making sure people shown in pictures have given their permission, it also covers some less obvious points. For example, we need to have control of what is posted by the business online, and therefore we can't allow staff to create accounts with names such as "My life at Boortmalt by

Humphrey". Also, if staff are attending an event in a professional capacity, they need to ensure that the relevant



official social media channels have been given the opportunity to post about the event before doing so themselves.

At present, social media training is optional. Given the number of people active on these platforms and the potential risks, it may become mandatory in the future.

### Phishing training

The IT teams have also worked hard this year to raise staff awareness of phishing scams and how to spot them, to reduce the risk of the business falling victim to a scam. Staff are reminded, for example, to look out for fake or spoofed sender addresses, to be aware of language that creates a

to m n

sense of urgency, and to be suspicious of messages that contain multiple spelling and grammar errors.

Simulations carried out have

demonstrated that the training is effective. Over the year, there has been a downward trend in the quantity of users falling into the traps set in test emails, and increasing numbers have followed the correct procedure to report phishing emails.

### Supplier Code of Conduct update

The Boortmalt Supplier Code of Conduct sets out for our suppliers the behaviours and minimum standards that we expect of them. It is one of the ways in which we seek to lead the way and foster more ethical approaches to doing business, right around the world.

This winter, a project was undertaken to update the code to bring it into line with the latest international standards, such as the UN Guiding Principles on Business & Human Rights, the UN Declaration of Human Rights and the ILO Declaration of Fundamental Principles and Rights at Work.

In particular, we updated the sections on Human Rights & Labour Standards, Inclusion & Diversity and Approach to Sustainable Business.

# & DIVERSITY

Our 1,250 Masters of Malt are at the core of our organisation and we consider them as our most important strength. Every day, with unwavering dedication, they contribute to Boortmalt's goal of doing better than yesterday while preserving tomorrow.

#### FY 23-24 STATUS

ExCom: 36% Top management positions: 19% 81% Internal promotions: 38

BOORTMALT SUSTAINABILITY REPO

FEMALE MAI F 64%

inequality in opportunities in all our regions

inequality in pay in all our regions

### Approach

We recognise the enormous value of diversity and are committed to forming and supporting d teams. We embrace all employees, regardless of their cultural background, religion, exp sexual orientation, gender identity or gender expression.

Through our equality initiatives and our own internal talent development programme, we g everyone the opportunity to grow and develop in an equal manner within the company.

Inclusion means integrating each and every Master of Malt into the workplace, allowing their differences to exist in a mutually beneficial way. We are a global company spanning more than 40 cultures and we encourage everyone to use the ideas and creativity sparked by this vibrant diversity achieve our business goals.



PILLARS

**PROMOTE DIVERSITY** AND FREEDOM FROM DISCRIMINATION



MAKE SURE PEOPLE CAN GROW AND DEVELOP IN AN EQUAL MANNER WITHIN THE COMPANY



**INTEGRATE EACH** EMPLOYEE IN THE WORKPLACE, ALLOWING FOR DIFFERENCES

# PROMOTE DIVERSITY AND FREEDOM FROM DISCRIMINATION



We firmly believe that diversity within our teams makes us stronger. Valuing diversity is important for staff wellbeing and it benefits the business too. We do not tolerate discrimination in any form.

# Boosting employment diversity through sponsorship licences

We believe that having a diverse, multicultural workforce is an asset to our business. In some countries however, immigration rules make it challenging to boost cultural diversity by bringing in staff from abroad, even on internships. On top of this, because malting is a niche industry, we often struggle to recruit people with the experience we need in-country, especially in professions such as engineering where there are skills shortages.

Our HR teams in two countries, the UK and Australia, have recently gone through the complex and time-consuming process of registering with their respective authorities to be able to sponsor employee visas.



Boortmalt in the UK frequently receives applications from overseas, but up to now has been prevented by visa regulations from pursuing them, even for unpaid internships. The company has now secured a sponsorship licence and obtained two Certificates of Sponsorship to assign to new workers from abroad. There are strict monitoring and reporting obligations to fulfil to ensure the certificates remain valid.

In Australia, before sponsoring a worker, businesses are required to carry out a labour market test to show that they have been unable to recruit someone within the country for the role they are trying to fill. In malting, this is frequently the case.

The HR teams in both countries are looking forward to bringing in new staff to make their workplaces more diverse and richer, and to offering global mobility opportunities to existing Boortmalt employees in other countries. The resulting cultural diversity will make us more attractive to younger workers, many of whom see it as an important consideration when selecting an employer.



#### Recruiting in North Africa

We also run a separate cross-border initiative to recruit people from North Africa with the knowledge and expertise that we need, as a response to skills shortages in the regions in which we operate. Through this scheme, we enhance the diversity of our workforce, demonstrate the Boortmalt "Care" value and, thanks to the motivation and loyalty of the employees recruited, boost staff retention.

#### Belgian TV show

Belgian broadcaster VRT made a children's TV programme about the different careers available in Antwerp Port and featured malting among them. Thanks to the Antwerp North Heat Loop, the programme had a strong sustainability focus. The Antwerp plant's production supervisor Sofie Provoost was chosen to appear in the programme. As a recent graduate and a woman working in a production environment, she was highly relatable for the young viewers and an excellent ambassador for the career diversity malting offers.

We spoke to Sofie and her colleague Pauline Foubert about their reasons for choosing a production career. They explained that their roles are interesting and varied, as they work partly on the production floor and partly in the office. Although the plant is a male-dominated environment, the general culture of respect at Boortmalt means they haven't been treated any differently to their colleagues.

Sofie and Pauline feel it's important to create awareness of production roles among young graduates, especially women. The sector offers exciting careers with plenty of opportunities to learn and progress, and a very equal workplace. For Boortmalt, attracting more young graduates, regardless of gender, will widen the pool of applicants and increase diversity, bringing new, talented people with different backgrounds, experiences and ideas into the company to foster creativity and innovation.



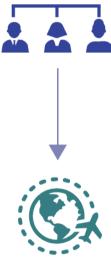
### 2 MAKE SURE PEOPLE CAN GROW AND DEVELOP IN AN EQUAL MANNER WITHIN THE COMPANY



We offer all our staff equal opportunities to progress in their careers, regardless of who they are or where in the world they are based. An important part of this is ensuring that our pay structures are fair.

#### Internal promotion

At Boortmalt, we believe in growing and developing our talented staff. Over the last year, we have awarded 38 internal promotions. Some of these involved international relocations. We identified certain staff as being ready for promotion through the Talent Program, and mapped out a path for others during succession planning exercises. In some cases, the person was ready to move straight into a new role.



In others, we helped them to prepare with training or additional experience.

Internal promotions demonstrate our commitment to fair and equitable opportunities for staff in various ways. Firstly, they show that we recognise and reward performance and effort, highlighting our loyalty as an employer and boosting morale. Secondly, they underline our commitment to training and development and show the effectiveness of the initiatives we have put in place, such as our Talent Program.

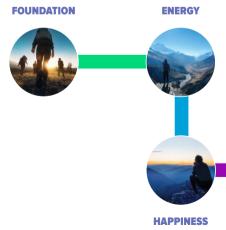
We have also written an international mobility policy, setting out the support that people can expect, for themselves and their families, when they relocate internationally on behalf of the company. Numerous staff members and their families have moved to new locations under this policy.



# Increasing pay to offset inflation

As part of our commitment to pay equity, we grant inflation-based pay increases to all our staff, irrespective of performance and of whether this is a legal requirement in the country in which they work. In general, these increases are annual. In countries where inflation is particularly high, we increase pay more frequently (even monthly in some instances), to ensure that staff's incomes keep pace with the costs they face.

Inflation-based increases are applied across the board to all staff, completely independently of performance-related pay awards. At Boortmalt we believe that as everyone is affected by inflation, everyone should have an equal right to pay increases to offset it.



### Talent Program update

Our Talent Program was launched two years ago to help talented people within our company become the best versions of themselves. It demonstrates how we promote equality in the way we develop our staff, because it includes colleagues from all our regions spanning a wide range of backgrounds and job roles, as well as different religions and genders.

So far, 70 people are involved in the programme. The first wave of participants has completed the initial cycle, and a second wave is now progressing through it.

The programme involves both universal skills (also known as soft skills) and job skills (hard skills). The universal skills programme, focusing on aspirations, energy and resilience is common to all the participants, whereas the job skills element is tailored to individual needs. Rather than starting with a "set menu" of training courses, we look individually at each person's current role as well as their future career aspirations and pinpoint any knowledge gaps. We then seek out the precise training opportunity that will help them perform more effectively. In some cases, we have placed staff on short courses at top universities, showing our commitment to offering the very best training available.





**RESILIENCE** 



### Pay equity at Boortmalt

We as a company are committed to ensuring that all our staff are paid fairly and equitably for the work they do. In particular, we have gone the extra mile to identify and iron out any discrepancies caused by our organisation's rapid growth, which has brought various companies into our fold. In addition, as a global employer, we are conscious of the need to deal with the varying speeds at which legislation changes in the countries where we operate.

Pay transparency is another important focus of ours, and we have taken a stride forward in this area this year. Having become aware that not all our staff understand the full scope of the pay and benefits they receive, we launched the Reward Booklets project. These online booklets bring together all the information our employees need about their pay and benefits. They cover everything from fundamental topics such as how to read your wage slip and what insurance the company provides to discount schemes, company cars and bike leasing agreements. The booklets have been created for most of the countries where we have staff, in the languages spoken by our teams.

We are proud of this initial achievement and look forward to continuing to progress in this area in the future.



# Pay Equity Act implementation confirms value of Boortmalt approach

The Canadian Pay Equity Act has introduced a pay equity regime for federally regulated workplaces in Canada. Because Boortmalt is a grain business, our Canadian operations are federally regulated and therefore covered by the Act. It requires employers to take a proactive approach to ensuring that workplace compensation practices are free from gender-based discrimination and that employees receive equal pay for doing work of equal value.

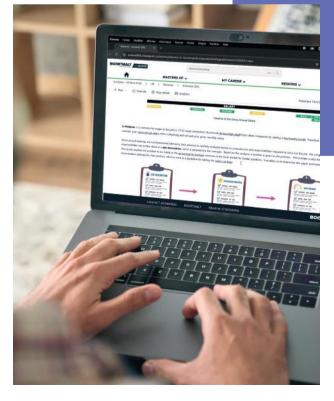
The Act required us to carry out a study and produce a plan. The process was highly prescriptive. We formed an employeebased committee of unionised and nonunionised staff, together with an employer representative, and opted to use a tool produced by the Canadian Human Rights Commission to carry out the study. This provided external validation.

Information was collected about the

different job roles performed by our employees, and in particular whether these roles are predominantly male, female or mixed, both within Boortmalt today, across the labour market as a whole and also historically. Using information provided by Boortmalt head office as a starting point, the committee was then required to define a value for each job role, based on factors including the level of responsibility, the working conditions and the education and training required for the job. Points were allocated for each factor to give a total value, meaning that jobs right across the business could be compared, regardless of how different they were.

The committee then cross-referenced staff remuneration and job value, to ensure that everyone was being paid fairly. The results were very encouraging, in that only one adjustment was required. This demonstrated that our current grading system and efforts to ensure equity are effective.

The whole process was a great success. The confirmation that our pay structure is fair was positive for morale, and approaching the requirement via an employee-based committee rather than calling in external consultants was well received. Fulfilling this legal obligation was an opportunity for us to demonstrate that we do business ethically. Going forward, we will of course undertake the regular updates to our plan required by the Act.



#### Remuneration benchmarking process in Ethiopia

In April 2024, a significant benchmarking initiative was undertaken by our HR teams in Ethiopia to ensure that our staff are receiving equitable remuneration for the work they do. The process involved collecting full information about compensation packages within the organisation, covering salaries, benefits and other forms of compensation, and comparing it to industry standards and market rates to identify any gaps or discrepancies. Any necessary adjustments were then made to the packages, to ensure that our employees are being compensated fairly and competitively. Going forward, we will use the information collected during the benchmarking process as a basis for future compensation studies and budget planning.

### 3 INTEGRATE EACH EMPLOYEE IN THE WORKPLACE, ALLOWING FOR DIFFERENCES



We want all our staff to feel at home at Boortmalt. We strive for this by celebrating our differences and organising wellbeing initiatives.

### Celebrating cultural diversity in APAC

Boortmalt Australia operates a programme of events to celebrate diversity within the workforce. It is put together by a team of employees who meet monthly to plan and organise inclusion, engagement and CSR activities.

This year, the company has celebrated Chinese New Year, Diwali and International Women's Day. In addition, the Sydney plant organised an international cuisine lunch to showcase the wide diversity of cultures and backgrounds on their site. Team members enjoyed a delicious lunch and sampled food from Australia, Bangladesh, El Salvador, Germany, India, Ireland, Italy, Nepal, Palestine, the Philippines, Poland, Samoa, Serbia and Vietnam. Events such as these help all our employees to feel valued within our teams and offer us all opportunities to learn more about our workmates and their backgrounds.





# New Equality, Inclusion and Diversity training materials

The Boortmalt HR team has recently added a new Equality, Inclusion and Diversity (EID) section to the group's e-learning platform. It is highlighted in a carousel, to increase visibility and prompt engagement.

There are three courses in the section. The first, developed by a training provider, is a general programme to help staff build their inclusion and diversity skills by making simple changes day to day. There are opportunities to take part in polls and exercises, and the chat function is open to all the provider's member organisations, so that Boortmalt employees can engage with people from a variety of companies to broaden the scope of their learning. This course takes around an hour and three quarters to complete.

The second course, developed by the Boortmalt HR team, looks at intercultural awareness. As an international company, this is an important topic for Boortmalt. The training material aims to increase cultural awareness, to help staff better understand their colleagues so they can collaborate more effectively. Most people spend around 45 minutes on this course.

The third course, which was also developed internally, focuses on generational diversity. The Boortmalt workforce is very generationally diverse, and this material offers a guide to the unique characteristics, communication styles and work preferences of different generations. It gives staff insights that help them to foster a more inclusive and collaborative work environment. The training lasts around 35 minutes. All three courses are available to any staff member wishing to access them. In the future, they will become part of the company onboarding process. The aim of the materials is to develop curiosity about these topics and engagement in them. As such, they include fun, interactive quizzes to check knowledge, but there is no formal assessment.



#### Staff wellbeing initiatives

As well as being enjoyable in their own right, staff wellbeing initiatives are a great way of building team spirit and helping everyone to feel that they belong at Boortmalt. They give employees the opportunity to get to know each other in a relaxed atmosphere outside work.

Staff from various different Boortmalt teams in Belgium come together several times a year for a bike ride. Often, they integrate a business-related activity too, such as calling at another malting plant. There are plans to develop this initiative in the future and widen it to include more staff, for example by organising both a bike ride and a walk and ending with a joint barbecue.

The Social Committee in Biggar has expanded, with the inclusion of two new members. The committee meets on a quarterly basis. During the winter, they successfully hosted a pancake breakfast for employees.





# Team Boortmalt on the Camino de Santiago

In May 2023, a group of Boortmalt employees spent a week walking 178km of the Camino de Santiago, starting at our offices in Antwerp, Belgium, and stopping in at the headquarters of our parent company, Axereal, in France on the way.

To prepare for the challenge, the participants spent months training, completing several 20km walks as well as the Antwerp 10 Mile race. This boosted their physical and mental wellbeing before they even set off on the trek! During the trip, they walked for between seven and nine hours per day, starting at 6am, slept in some traditional hostels and ate simple, hearty pilgrim fayre.

Along the route, they crossed the Pyrenees, battled headwinds in Asturias and visited two of our customer breweries – taking the opportunity to sample their products of course! In total, 24 Axereal staff members took part in the challenge and thanks to their superlative teamwork, the entire group reached the end point at the Cathedral of Santiago de Compostela in northern Spain.

The whole experience was a fantastic way to build team spirit and demonstrate the Boortmalt values of Strive, Care, Inspire and Explore!

### Inclusivity and team spirit at Le Rélai Axereal

In May 2024, our Masters of Malt took part in a relay race organised by Axereal, our parent company. Participants had the opportunity to meet Paralympic athletes including basketball champion Ryadh Sallem and tennis player Aurélie Berlu (an Axereal employee who was selected to carry the Olympic flame). They also learned about wheelchair rugby and fencing. The event showcased Axereal's commitment to improving its facilities for people with disabilities and raising awareness of inclusivity.







The Camino was a tough physical challenge, but the scenery was amazing and the bonds we forged between us made it all worthwhile. The group connected on a much deeper level than we would if we were simply working together. We've already held a reunion!"

Laure Thiallier Commercial Process & System Developer



### The Whisky Mountain Bike Challenge

The Whisky Mountain Bike Challenge evolved out of the Pauls Malt tradition of taking customers on hillwalking days in the Scottish Highlands, close to our Buckie plant. After a break of several years, the challenge was revived in June 2024. A group of 12 Boortmalt customers and staff from various locations, including Antwerp and Spain, set out from The Glenlivet Distillery. They cycled a challenging 47 miles off-road on a route that passed through six local distilleries, enjoying lunch at Glenfiddich and ended the day at Glen Moray.

Carlos Alfonso Alvarez, who travelled from Spain to take part, described the challenge as "an incredible experience that allowed me to gain a deeper understanding of the world of whisky, with extraordinary companions and a wonderful landscape and people."









# **WASTE REDUCTION**

We are continuously optimising our efficiency and finding alternative uses for our co-products, thereby contributing to the UN Sustainable Development Goal of halving food waste globally by 2030. In addition, we aim to reduce waste by using only fully recyclable and recycled packaging materials.

SAFETY STARTS

WITH YOU

FY 23-24 STATUS

0.03% Waste to landfill 2030 OBJECTIVE

### Approach

Globally, around a third of food is wasted. The Intergovernmental Panel on Climate Change (IPCC) has stated that food waste is responsible for 8 to 10% of total global greenhouse gas emissions. At Boortmalt, we do better As malt producers, we reuse the majority of our process "waste" as co-products. Organic waste flows such as under-size barley and malt culms are rich in protein and can therefore be used in fodder for livestock. The remaining food waste is composted or used as biofuel to produce energy within our own facilities or externally. Waste of all other types is separated so that as much as possible can be recycled. Currently, our waste to landfil stands at just 0.03%. Yet we still strive to do better.

We work constantly towards our goal of achieving zero waste to landfill by 2030. We make sure all organic waste is fit for valorisation and work with service partners to improve our recycling rate. We also minimise packaging by transporting in bulk, and when packaging is needed, we use as many recyclable materials as possible.

### PILLARS



MINIMISE PACKAGING AND USE RECYCLABLE MATERIALS



MINIMISE ANY ORGANIC WASTE SENT TO LANDFILL

# MINIMISE PACKAGING AND USE RECYCLABLE MATERIALS



Although much of our malt is delivered in bulk and the quantity of packaging used is therefore minimal, it is still important for us to do everything we can to minimise the amount we use, and incorporate the highest possible proportion of recyclable materials.

# Sustainable packaging initiatives

Our teams in Australia are currently working on several different projects to reduce the environmental impact of our packaging. Firstly, they are continuing trials on single-layer laminated polypropylene bags with more recyclable content. These bags win on two fronts, because not only do they contain more recyclable materials, but moving from a double-layer to a singlelayer construction makes the process easier too.

Secondly, Joe White Maltings is supporting a programme run by distributor Bintani to implement a closed loop recycling system for bulk bags, covering the Western Australian market.

And last but not least, the teams are close to finalising an initiative to upcycle the bulk bags and 25kg bags used to deliver malt to the Australian market.





In Latin America, Uma Malta continues to work with a local company to transform its used packaging into stylish accessories. Going forward, it plans to increase the volume of packaging upcycled, and donate some of the backpacks created to local schools.



### 2 MINIMISE ANY ORGANIC WASTE SENT TO LANDFILL



In the past, co-products from the malting process would have been treated as waste. Now, we recognise their value. We make use of them in a variety of ways and are actively exploring innovative new avenues where they can be even more beneficial to society.

### **AFNOR 7ero Waste Certificate**

AENOR is Spain's leading certification body. Our Villaverde plant is in the process of applying for the organisation's Zero Waste Certificate, as a way of demonstrating our existing good practices to our customers.

To qualify for certification, the plant is required to show that 90% of waste is revalorised, that there is a continuous improvement plan in place, and that data is managed in a recognised system under the responsibility of a suitably trained staff member.

The application process takes around a year and includes both data submissions and two site audits. One of the main requirements is a waste inventory, detailing all waste collected, the breakdown of hazardous versus non-hazardous, and proof of its final destination, including the amount that goes to landfill. The certificate is valid for three years before it needs to be renewed.

The Villaverde plant started investigating this certification in January 2024, made an application in June and hopes to be certified during the first half of 2025.

### Feeding pigs sustainably thanks to malting co-products

During the malt production process, we rinse barley dust from the raw grain and cleanse our malt of culms (rootlets) and dust. We collect the dust and culms, mix them with a little water (no chemicals are involved) and press them into pellets for use by animal feed producers.

In one example, our team at Swalmen in the Netherlands have chosen to work with Feedvalid, because they share Boortmalt's vision of sustainability and future-focused food production. They are a progressive business committed to quality, to the circular economy and to reducing the carbon footprint of food. They combine Boortmalt's GMP+ quality certified pellets with similar co-products from other food processors to produce a balanced, sustainable and tasty feed for the pigs at Zonvarken ("Sun pig") farms.

The farmers of the Zonvarken cooperative take a different approach to pig farming, which dovetails perfectly with Boortmalt's vision for the future of agriculture. They believe that it is possible to maximise animal welfare while minimising carbon emissions and negative impacts on the local environment, and at the same time generate a viable income. From a single farm at the outset, the cooperative has grown to encompass five farms, two of which will come on stream towards the end of 2024, and aims eventually to reach 13.

Zonvarken farms are small in scale, housing around 50 sows and their piglets. The young animals are kept in the same optimally designed pen from birth through to slaughter, to minimise stress. They have straw for bedding and can roam outdoors whenever they please. All of their feed is made from residual and return flows from human food production. Zonvarken farmers believe relaxed pigs that get plenty of exercise produce tastier and more tender meat. They aim to raise the animals in a climate-neutral way, by using former foodstuffs as feedstock and setting green roofs and solar panels on their barns. They have already cut carbon by almost 60%. The meat produced is sold to consumers via retailers who commit to the project for the long term, among them a major Dutch supermarket chain.















# Using steeping water to grow marine protein

BoortmaltX is the corporate venture arm of Boortmalt. Its purpose is to assist start-ups working to harness innovation to boost sustainability by developing new planetfriendly food and cosmetic products based on malting ingredients. By supporting these businesses' groundbreaking ideas and experimental thinking, we aim to tap the potential of malt and malting's nutrientrich co-products.

One of the start-ups partnered by BoortmaltX is Aquanzo Ltd, based in Scotland near our Glenesk plant. It is working to farm artemia, a marine zooplankton, to produce a more sustainable feed for fish and shell-fish farming operations. The feedstock currently used by fish and shellfish farmers is made from krill harvested from the world's oceans. This is not a sustainable approach, in particular because krill swarms remove carbon from the earth's atmosphere. Aquanzo aims to use co-products from the food industry to make a feed for the artemia. This is a ground-breaking idea, and Boortmalt is the only maltster involved in the project. Last year, trials were carried out on solid malting co-products, mainly rootlets. This year, experiments are continuing on a liquid co-product: steeping water. After establishing the basic process parameters in lab-scale trials, the Aquanzo team has set up a pilot system at the Boortmalt site in Glenesk, thanks to a grant from InnovateUK. In this pilot unit, powered by solar panels to minimise its carbon footprint, Aquanzo and Boortmalt staff are working together to test different feeding regimes.

If the results achieved are as expected, the next step will be to increase the number of tanks and carry out a semi-industrial trial. If the project is successful, it will harness nutrients from what was previously viewed as a waste stream to help feed the planet in a sustainable way.









# 💐 TRACEABILITY & TRANSPARENCY

As Masters of Malt, we want to be the trusted partner providing full end-to-end insights on performance and achievements, as well as being honest about where there's room for improvement. Being a key global maltster, we have a responsibility to provide not only transparency but also traceability on our own programmes and throughout the many different collaborations across our value chains.

FY 23-24 STATUS

2030 OBJECTIVES

100%

of malt traceable in line with Food Safety Requirements 100% verified traceability & transparency on malt

### Approach

We work in a number of ways to provide traceability and transparency to our partners, customers, consumers and the wider community.

We start with ourselves. We participate in a selected set of transparency programmes and organisations that we consider relevant, respected and appropriately challenging. These programmes not only enable us to provide data, they also push us to do better and improve the way we and our partners work.

We continuously invest in the ways we capture data in order to be able to monitor and track performance in sustainable agriculture and emissions reduction. Through this information, we aim to provide detailed insight from farmers and from our own malting plants on the improvements made, and in doing so unlock value for both farmers and our customers. We are also equipped to offer complete traceability for an increasing number of products.

Finally, as a global business, we share information across our organisation in order to improve, and we ensure that our results are independently audited for full transparency.



**PILLARS** 

PARTICIPATE IN TRANSPARENCY PROGRAMMES



PARTICIPATE IN TRANSPARENCY **PROGRAMMES OR NETWORKS** SO WE AND OUR PARTNERS CAN IMPROVE



External certifications and standards demonstrate our commitments, and we are proud to participate in various traceability programmes with our customers. In addition, we are actively preparing to meet the requirements of the upcoming Corporate Sustainability Reporting Directive.

### Transparency for our own programmes

To help us achieve and demonstrate our commitments and ensure consistency across all our locations, we have chosen to align our operations with several key certifications, memberships and reporting standards.

Through our food and feed certifications, all our sites are audited annually on their traceability programmes. In addition, all sites carry out mock recalls.

#### Health & Safety ISO 45001

We are committed to providing a safe environment for all our employees, contractors

and anyone who visits our sites, and are striving to reach our target of zero harm.

ISO 45001 certification provides a framework for building and promoting a robust health and safety system.

The programme has been rolled out to seven malting plants and storage facilities.

### Energy ISO 50001

Energy use is a very important pillar of our sustainability strategy and we have therefore chosen ISO 50001 certification to give structure to our energy management programme.

The group certifications cover 25 sites in total: all our currently operating malting plants across the world, together with our head office in Antwerp. For



the most recent audit, four sites were visited out of the 25.

The certification body ensures that a physical audit is carried out on all sites periodically.

### Environment ISO 14001

We follow the ISO 14001 principles to assess and manage our impacts on the environment and to comply with all local requirements.

With a focus on optimising resource usage and reducing emissions and waste, environmental

Sedex



certification provides assurance for the practices that we have implemented.

The group certifications cover 25 sites in total, with the same approach to auditing used as for Energy (ISO 50001).



Sedex, the Supplier Ethical Data Exchange, is a collaborative platform that enables members to collect and share ethical data and identify risks in their supply chains.

Being a member of the Sedex community supports our commitment to fair labour practices, the wellbeing of our employees, business ethics and the environment.

### Food Safety ISO/FSSC 22000

We take the safety of our products very seriously, whether they are for human or animal consumption.

We have chosen to achieve ISO/FSSC 22000 certification at all our locations to ensure that we are producing safe,



high-quality malt and feed.

Twenty-five sites are now certified to ISO/FSSC 22000 with plans to extend certification to our site in Gembloux in 2025.

### **Organic Certification**

We have achieved organic certification for the malt produced at six sites, at the request of customers. This testifies that the grain is grown, malted and traded to organic standards.



### EcoVadis - Silver Medal

We are assessed by EcoVadis, a global provider of business sustainability ratings.

EcoVadis rates businesses in four different areas: the environment, ethics, labour and human rights, and sustainable procurement.



For our latest assessment in 2023, we earned the silver medal.



### The Sustainable Agriculture Initiative (SAI)

We continue to promote the guidelines of sustainable farming as documented in the SAI protocols. Our suppliers and farmers participate in local SAI or SAI-equivalent programmes, often in alignment with customer needs.

These programmes include Irish Grain Assurance Scheme (IGAS) in Ireland, Red Tractor in the UK, Scottish Quality Crops (SQC) in Scotland, Agriconfiance in France, SAI FSA in France, Argentina and Croatia, and ISCC Plus in Australia and Hungary. Our certifications this year are held at different levels – Gold or Silver – depending on the precise certification and the country concerned.



### CDP – B Score

We report annually to CDP. This year, we are recognised with a B score for our transparency and action in climate change and water security.



# Malt agreement with Adnams brewery



Our Bury St Edmunds plant supplies fully traceable malt to customer Adnams under a four-way malt agreement which has been running for over a decade.

Adnams of Southwold is a brewer with a 150-year history and a strong sustainability commitment. Under our malt agreement with them, we source barley from a local farming group, Holkham Estate. Local grain merchant Dewing Grain stores the grain on the farm.

It is then delivered to our maltings in Bury St Edmunds. There, it is segregated and malted specifically for Adnams, to their specifications, so that the entire supply chain is fully traceable and contained within a corner of East Anglia (UK). Around 2,500 metric tons of barley are processed under this arrangement each year.

### Traceable beers in Australia

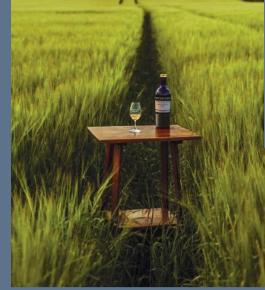
Once again this year, Joe White Maltings, our brand in Australia, has worked with Korean brewer Hite to produce a fully traceable limitededition beer under the Terra lager banner. "Single Malt from Tasmania" is brewed with malt made exclusively from Tasmanian barley and malted locally at our Devonport plant.



On the back of the can is a QR code that the customer can scan to trace the beer right back to the farm, and find out when and where the barley was harvested, the grain malted and the lager brewed. This single-source provenance and detailed information satisfies growing consumer demand for greater transparency regarding product origin.

Over in Western Australia, we supply malt to the Rocky Ridge Brewing Company via a fully traceable supply chain. The Certified Sustainable barley used is grown via regenerative practices in Western Australia's Wheatbelt region, and generates 70% fewer emissions than conventional barley. It is malted in small batches to Rocky Ridge's specifications at our Perth plant nearby and shipped to the brewery just a short distance away.





# Fully traceable Single Farm Origin malt whisky

In 2016, Mark Reynier founded Waterford Distillery, in sunny South-East Ireland. He believed that the area was capable of growing the world's best barley, and that by applying the principles of terroir and cuvée, he could turn it into very special whisky.

Boortmalt was approached at the start of the project to set up a unique malt supply chain offering total traceability. Working with some 70 farmers and a grain merchant, we created a store known as the Cathedral of Barley. It has separate bays and conveyor systems to keep each farm's barley completely segregated and traceable, with no risk of cross-contamination. The Boortmalt team also worked closely with

the growers, identifying them, recommending seed varieties and providing specialised agronomic advice depending on the soil type and location. Many of the growers farm to organic specifications, while others operate using biodynamic principles or grow resurrected forgotten heritage grains.



This unique supply chain has now

been up and running for several years. The barley is called into our Athy maltings as it is needed. It is malted in very small batches (90 metric tons) in the Boby plant – the site's smallest - once again to guarantee traceability and guard against cross-contamination. From there, it is delivered straight to Waterford Distillery where it is distilled slowly to make Single Farm Origin malt whisky. Each bottle of whisky features a QR code that customers can scan to access incredibly detailed information about their whisky. It covers everything from where the barley was grown, by whom and the exact dates of sowing, harvesting and transfer to the maltings, to the soil type, the barley variety, the names of the distillers and more.

### 2 CAPTURE AND MONITOR DATA TO UNLOCK EXTRA VALUE FOR OUR BUSINESS

Our important project under this pillar of our strategy is the Boortmalt Carbon Bank. To find out more, please see page 55.

### ClimateCamp pilot project

ClimateCamp is a collaborative sustainability platform created by a Belgian start-up. It exists to help companies exchange carbon emissions data, because they are all part of each other's value chains, and therefore need to share data to ascertain their scope 3 emissions. Our teams in Belgium are using the ClimateCamp platform in a pilot project with Belgian brewery customers. When they log into the platform, the breweries will be able to obtain tailored figures for the malt that they actually source from Boortmalt, rather than relying on averages. This will put at their fingertips the information that enables them to benefit from their decision to purchase low-carbon malt at a premium, because they will be able to record lower scope 3 emissions figures.

If this pilot project is successful, it may be extended to other regions.





### 3 SHARE INFORMATION ACROSS THE BUSINESS TO DRIVE IMPROVEMENT FOR THE COMPANY AS A WHOLE



We have brought all our data together in one place. It is now consistent and easy for all users to access.



# Harnessing data to drive improvement

Over recent years, Boortmalt has grown rapidly and consequently a range of different information management systems were in place in different parts of the company. There was a need for a harmonised approach and a centralised set of data so that everyone could access the information they needed, in a format that was useful to them, as efficiently as possible. This led to the creation of our Performance Dashboards.

The data provided by the Performance Dashboards is used by departments including finance, sustainability, energy and operations. It spans everything from budgets to energy (origin and destination), KPIs (quality, food safety, productivity, compliance and more) and environmental performance (carbon emissions, water, waste, etc.). In the future we aim to automate all the data collection.

Using the dashboards, it is easy to compare data (for example, between sites) and look at different time scales. Departments can decide to enhance their dashboards, create new ones and add in more data.

Data is fundamental to any company, in particular as a foundation for continuous improvement. As management consultant Peter Drucker said, "If you can't measure it, you can't improve it". In the future, we hope to see everyone in the company tracking and validating data in the Performance Dashboards, making comparisons and spotting trends, and above all asking "Why?". That's how we'll unleash the power of our data to drive improvement!

# **METRICS SUMMARY**

	4 CORE PROGRAMMES	FY 21-22	FY 22-23	FY 23-24	<b>OBJECTIVE 2030</b>
Health & Safety	Sites injury free 💿	76%	73%	77%	100%
	Reportable injury frequency rate (RIFR) 🗞 🕦	6.22	4.60	3.20	0
Sustainable Farming	SAI or equivalent certified Europe 🐵	<b>43</b> %	55%	<b>48</b> %	95%
	SAI or equivalent certified all other regions ${\scriptstyle \textcircled{\sc only}}$	20%	25%	<b>17</b> %	50%
	$\%$ barley volume emissions & methods captured through CFT or equivalent with the aim of reducing the footprint $\circledast$	6%	9%	8%	> <b>67</b> %
Energy use & Emissions reduction	Scopes 1 and 2 GHG emissions (in t CO <sub>2</sub> e) $\circledast$	425,235	411,224	326,471	- <b>42%</b> SBTI Target (2)
	Scope 3 FLAG GHG emissions (in t CO_2e) $\otimes$		1,053,349	863,831	<b>-30.3%</b> SBTI Target (2)
	Scope 3 Transportation Upstream + Downstream GHG emissions (in t $CO_2e$ ) $$		213,549	139,741	
	% Renewable electricity (Procured) ®			65%	
Water	Water withdrawal per metric ton of malt (in $m^3$ ) ${\scriptstyle \odot}$	3.2	3.2	3.3	
Conservation	Water consumption per metric ton of malt (in $m^3$ ) ${}^{\odot}$	2.8	2.8	2.8	<2 (-30%)
Community Engagement	Number of initiatives	44	31	41	>30, min 1 per site
Equality, Inclusion & Diversity	% women – men in ExCom	<b>42% - 58%</b>	<b>42% - 58%</b>	36% - 64%	
	% women – men in higher mgt positions	<b>16% - 84%</b>	19% - 81%	19% - 81%	Equal pay, people, promotion
	Training hours 🛞 ⑶	2,560	6,398	8,859	
	Equal opportunities: promotions from within	>15	>11	>38	
Business Ethics & Code of Conduct		<b>100 employees</b> educated on new manual	28 employees enrolled in compliance training (14 new employees enrolled)	28	100% of employees know and follow it
	Supplier Code of Conduct (global contracts) 💿	100%	100%	100%	100%
Waste Reduction: Malting	% waste to landfill $_{\odot}$	0.04%	0.05%	0.03%	0%
Traceability & Transparency	All malt traceable in line with Food Safety requirements ${\scriptstyle \otimes}$	100%	100%	100%	100%

#### Audited by KPMG, fiscal year 2023 -2024 with limited assurance level

(1) Recordable Injury Frequency Rate (RIFR) is calculated as the number of recordable injuries divided by total workforce hours, multiplied by a million. A recordable injury is a work-related injury that needs treatment beyond First Aid.

(2) SBT Target: Boortmalt has validated near-term science-based targets. For scopes 1 and 2, we are committed to reducing absolute GHG emissions by 42% by FY2030, using FY2023 as the base year. The coverage of scopes 1 and 2 emissions is 100%. For scope 3 FLAG emissions, Boortmalt commits to reducing absolute GHG emissions by 30.3% by FY2030 from a FY2023 base year. The coverage of scope 3 FLAG emissions is 74%.

(3) Training hours: Training is categorized into two types: training from the internal "Boost" platform, where hours are directly extracted and training sessions conducted by external consultants, evidenced by invoices from various regions. Only external training supported by an invoice are considered in the audited figure.

(4) Compliance training: Employees complete compliance training through our Boost online training platform, which offers a path of four courses: anti-corruption, fraud prevention, competition law and GDPR. The training plan prioritises employees with the highest level of exposure to compliance risks.

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