



BOORTMALT SUSTAINABILITY REPORT

2021



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ABOUT THIS REPORT

The Boortmalt Sustainability Report covers our sustainability commitment, actions, ambition and performance for our 2020-2021 financial year which ends on June 30th 2021.

This report tells our story, one we are very proud of, and allows us to transparently report on our progress year-on-year. In addition to our sustainability policies and our website, this report helps showcase Boortmalt's sustainability efforts and how sustainable development has been adopted by our people, in our malting plants and throughout our processes. This report has been prepared in accordance with the GRI-reference claim.

Boortmalt's sustainability reporting is guided by our commitment to the Sustainable Development Goals (SDGs), and the Science Based Target Initiative where we commit to stay below 1.5°.



A WORD FROM OUR CEO



“

At Boortmalt sustainable development is more than a duty, it is a passion. We are determined to make a difference and committed to being the Masters of Sustainable Malt.

”

Dear readers,

At Boortmalt, we see no valid reason to pollute the air we breathe and waste the water we drink. Consequently, we were quick to commit to reducing our carbon and water footprints.

Later on, scientific evidence (numerous IPCC reports) confirmed the impact of human activity on the climate and depicted some disturbing future scenarios.

Our Masters of Malt are responsible people. They are very supportive of the content of the reports and understand how important it is to accelerate our efforts. We can be proud.

During summer 2021, we witnessed numerous shocking climate-related events in Belgium, the USA and Canada, to name but a few. These events impact our operations, but most sadly, they affect many people's lives.

This report is a testimony to our engagement for 2030. It sets out some of the concrete actions being taken on the ground, which are making the difference.

As an organisation, Boortmalt takes a long-term view and we build sustainable performance year on year. Sustainability is at the core of our business strategy. Our values Strive – Care – Explore – Inspire are the enablers.

I hope you find our report interesting!

Yvan Schaepman
Boortmalt CEO



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.

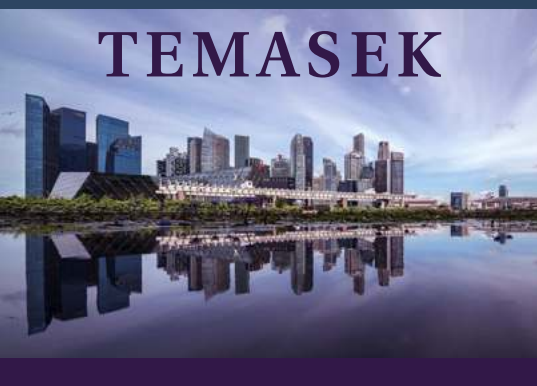
Axereal collects and sells grain as well as oilseed both domestically and internationally. A percentage of the grain is processed through its industrial plants into flour, malt and animal feed.

“ 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 Axéreal 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. Each step towards more sustainable production and processes is an additional step to serve the expectations of our customers, and refine consumers. ”

Paul-Yves L'Anthoën, Axereal CEO



Temasek is a global investment company headquartered in Singapore.

Temasek's portfolio value is about 230 billion US Dollars. It spans a broad spectrum of industries: financial services; telecommunications, media & technology; consumer & real estate; transportation & industrials; life sciences & agribusiness; as well as energy & resources.

“ 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 of supporting Boortmalt the world largest Malt producer at the leading edge of sustainability values in the malting industry. ”

Benoit Valentin, Senior Managing Director EMEA, Temasek



Unigrains is a reference partner for agri-food and agro-industry companies in France and abroad. An independent investor, Unigrains has been majority-owned by French grain farmers' associations since it was created on their initiative nearly 60 years ago.

“ 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. ”

Didier Bosc, Director of Strategy

BOORTMALT TODAY

Boortmalt is the world leader in malt industry with production capacity of 3 million tonnes. Boortmalt's expertise is widely acknowledged by brewers and distillers who rely on our supply of top-quality barley malt for the world class beers and whiskeys they produce.

1st

Global maltster

3MT

Production capacity

5

Continents

27

Malting plants

Agriculture

Our ability to influence every link in our supply chain, from seed to malt, is an essential element in our uncompromising focus on quality and has proven to be a distinct competitive advantage. Our network of growers around the world produces some of the best quality malting barley and always adheres to the highest environmental and food safety standards.



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 work with barley breeders to help continuously develop and perfect new varieties to further improve the quality of malting barley and agronomic sustainability and resilience.

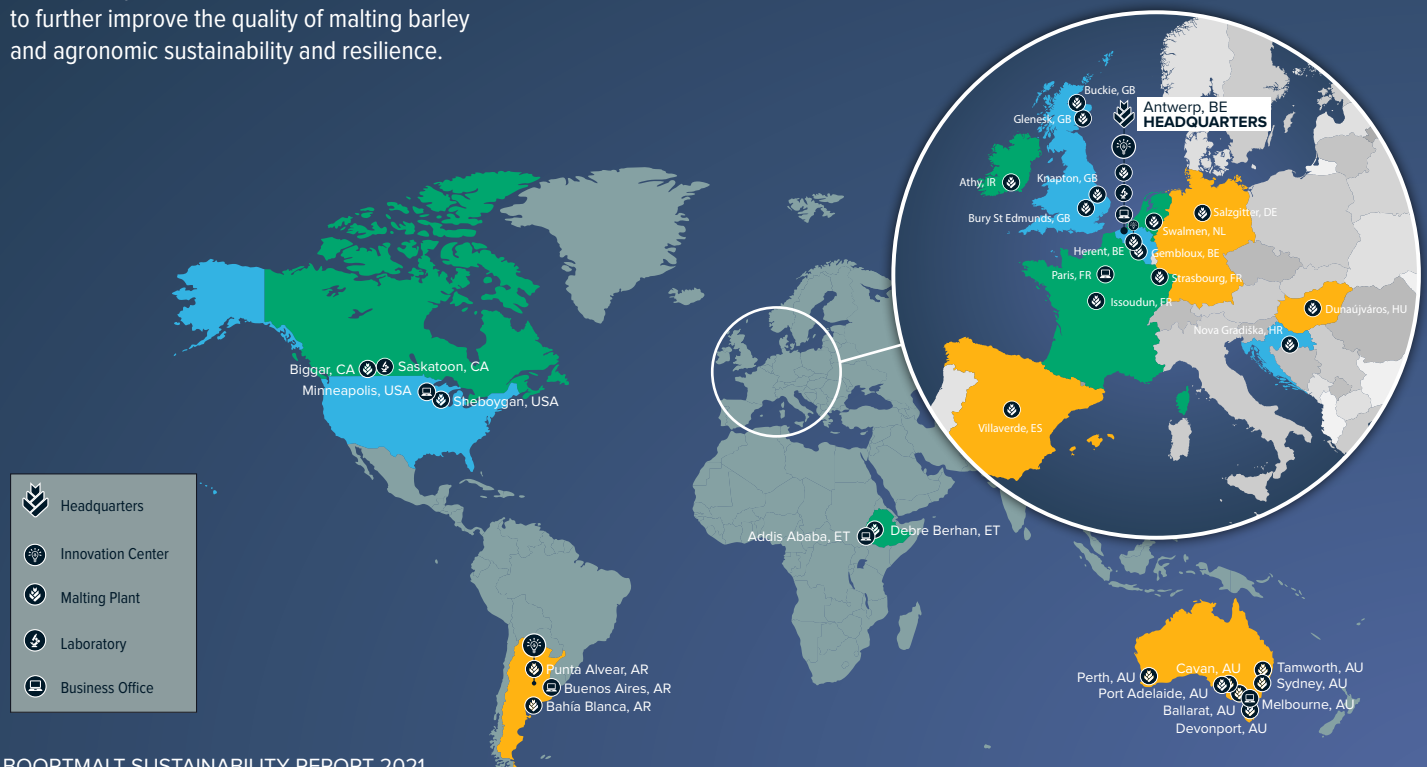
Malt quality

Malt is not a commodity, it is a food ingredient that must be carefully crafted. The selection of barley, the recipe, the water, the heat, nothing should be left to chance.



The quality of the malt depends on the expertise of the maltster who knows how to manage the natural germination process and ensure optimal conditions to meet the specifications expected.

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 detailed analyses.





Customers

Because we know that all of our customers are focused on reducing their environmental footprint and consuming more responsibly, we strive to lead their sustainability ambition for the industry and let them know they are in expert hands.

Distillers

Our distiller customers deeply care about their consumers and are committed to generating warmth and happiness all around. Their spirits are the result of centuries of expertise and knowhow, so they do not expect anything less from their malt supplier. They partner with Boortmalt because we challenge ourselves every day to provide authentic distilling malt customised to achieve the highest distillery performance. In our malt they recognise their roots and identity.

Brewers

Our brewer customers, whether large-scale global players or mid-sized local champions, always expect the best product and service quality. Each brewer has different needs, recipes, and ambitions. We care about what they are and what they do which is why we do whatever it takes to support them in achieving their goals.

Food Sector

The food manufacturers we provide with adjuncts, flours, and other products are all driven by the need for very functional ingredients, with the highest level of quality and supply consistency, and all in a mission to disrupt the ever-changing food industry. They continuously rely on Boortmalt as we help them think out of the box and be pioneers in their industry.

Innovation

Boortmalt has the ambition of becoming Masters of Innovation in the malting industry.

Our Innovation Centers in Belgium and Argentina are a unique proposition in the malting world, covering all aspects from barley to malt, beer and malt extract.

Through our Innovation Centers we support different avenues of innovation, from collaborations with universities, startups and research centers, to develop projects with different players via European programmes.

We also encourage internal innovation by supporting and promoting ideas from everyone throughout the organisation. For that purpose, we have developed a digital application: BeOpen.



OUR FAMILY OF LOCAL MALTHOUSES

MALT OFFER DEDICATED TO CRAFT BREWERS



The craft brewers and distillers we work with are passionate about what they do and the enjoyment they share among their communities. They are all deeply anchored in their local lands and very much driven by their own values. They chose to partner with our family of local malthouses around the world because we genuinely care about their long-term success and growth. Our dedicated teams strive to support them and explore new territories every day. Our daily collaboration is a source of inspiration for the whole industry.

OUR STRATEGY

We have positioned ourselves as the world leader in malt production not because it was our goal, but because of our drive to become the best at what we do and our vision of being Masters of Malt. Our stakeholders support our belief that sustainability comes from within. Many Boortmalt employees are brewers themselves by education or passion and therefore fully understand our products and what we stand for. Our mission is to contribute to the enjoyment of communities by passionately making natural malts. We aim to be the best by excelling and becoming an inspiring leader in our seven key strategic dimensions.

7 STRATEGIC DIMENSIONS

MASTERS OF FINANCIAL PERFORMANCE

Our company's performance reflects the efforts taken by our employees to become the best at what we do. We understand that growth can only be achieved by running our business in a sustainable way.

MASTERS OF SUSTAINABILITY

Our sustainability commitment is not only driven by customers but is integrated within our DNA, simply because it is the right thing to do. We make sustainability tangible and have already achieved a lot but know that we still have a long way to go to reach our goals.

MASTERS OF DEVELOPMENT

Continuous development is a key focus within our strategy and is driven by always challenging ourselves and encouraging and embracing pioneering ideas.

MASTERS OF INNOVATION

We follow a mindset where craftsmanship and innovation intensify each other. Our innovations and best practices are shared with others in the industry, reflecting our ambition to become an inspiring leader.



MASTERS OF OPERATIONAL EXCELLENCE

Our company culture empowers and motivates employees to not only produce high-quality malting barley but to also achieve long-term sustainable growth. We do so by focusing on adding value throughout our value chain, from farmer to brewer, to end consumer.

MASTERS OF WELLBEING

Our employees are our most important assets. Their energy, creativity, and expertise contribute towards building a more competitive and sustainable malting business and their wellbeing is one of our top priorities. We welcome diversity by recognizing that all individuals from a wide range of backgrounds and experience can contribute towards achieving our objectives.

MASTERS OF COMMERCIAL SOLUTIONS

Being the best within a global competitive market means that we need to stay connected and engaged with our customers. Through active communication and collaboration with our customers we ensure we always keep up with changing needs. Our recent use of blockchain technology, for example, has addressed the increasing need for transparency and traceability throughout our supply chain.

Boortmalt Highlights 2020-2021



January 2020

Building the new company

After the Cargill Malt acquisition, all the teams were focused on creating a new company, meeting the new colleagues and preparing the new culture and synergies.



March 2020

Covid-19 crisis

Boortmalt was affected by the pandemic, impacting sales volumes and challenging the resilience of our global supply chain. Despite this complex situation, we strived to keep the business running whilst maintaining our commitment to caring for our people.



September 2020

Boortmalt receives double B on the CDP report

Boortmalt has been reporting to CDP (formerly known as the Carbon Disclosure Project) for both Climate and Water since 2014. We continue to improve our rating as our different programmes mature. In 2021 we received a score of B for both Climate and Water and aim to continue improving this in future.

June 2020

Athy extension and rebuild fully operational

The Athy extension with the new innovative malting plant is ready to work.



January 2021

Ethiopian malting plant fully operational

In 2018 we started the construction of our first malting plant in Africa. In January 2021, we were pleased to announce that our Ethiopian malting plant was fully operational. Located in the Debre Berhan industrial park, the malthouse will offer 60,000 tonnes capacity, supplied through local farmers. A big step forward in Boortmalt's history!

November 2020

First anniversary of Cargill Malt acquisition

In November, we celebrated the first anniversary of the Cargill Malt acquisition.



March 2021

Buckie extension

Boortmalt start the works to expand its malting facility in Buckie, on the Morayshire coast. The expansion will support the growing demand for malt in whisky distilling and brewing. The site will see production capacity increased by 50% to approximately 90,000 MT per year. The expansion is scheduled for commissioning by the end of 2021.

July 2021

Reopening of Cavan malting plant

The Cavan malting plant is one of seven Australian malthouses acquired in November 2019. The plant infrastructure and control systems are being upgraded with a focus on quality improvements, sustainability initiatives, and efficient production to support the growing demand for brewing and distilling malts in the Asia-Pacific region and beyond.



June 2021

First beer produced and packaged in Innovation Center, Antwerp

A collaborative creation between Boortmalt Innovation and Yakima Chief Hops showcasing research-based innovations in malted barley and hops.

OUR CULTURE & CORE VALUES

Alignment between corporate values and culture is a prerequisite for the success of our mission. We therefore invest time and resources to involve all layers of the company in the definition and implementation of our corporate culture.

1100

Masters of Malt

30

different nationalities

4

Corporate values

1

Passion for Malt



Our values inform our thoughts, words and actions and help us grow, develop, and create a sustainable future. Every Boortmalt employee, every Master of Malt, is involved in making decisions every day. These decisions reflect our values and beliefs and are always directed towards our specific purpose, which is clear: every day we want to do better than yesterday while preserving tomorrow.

Cultural journey with organisational change

Lack of cultural compatibility is one of the main reasons for acquisition failures. We therefore prioritised developing a new culture after the acquisition of Cargill in 2019. We started by conducting a gap analysis in collaboration with an external specialist agency to identify both the differences and similarities between Boortmalt's and Cargill's corporate cultures by using the results of an anonymous company-wide questionnaire. Based on the visibility of differences and overlaps between the existing and desired culture, we defined our new vision, mission, and strategy, and created awareness of our new values using booklets and posters.

Developing a new culture is a never-ending exercise. We always include all teams in the creation of our new values and organise workshops with positive opinion leaders from all layers of the organisation. To fully embed our new values, mission and vision within the company, we are also adapting to various regional requirements and maintain an open communication line with all teams and departments. We have called this our "Green Arrows".

STRIVE

We commit to continuously challenging ourselves for our customers and team members by taking ownership of everything we do and contributing to global success. We all work as a team and know that true teamwork produces better results. We look for excellence in everything we do to deliver the highest value to the Company and partners. We have a pro-active approach and encourage all to take initiative for the Company's best interests.

We strive to achieve results to become the best in our industry. Our focus is not just on financial success. Our prime objective is excellence across all 7 pillars of our strategic pyramid. Striving is about achieving our goals through innovation and sustainability.



A virtual plane travelled around the globe. When a site was nominated, they had to create a short video which embodied our values and made them concrete. The team then nominated the next site to which the plane flew.





CARE

We care for our colleagues, our communities, our earth, our partners, and our customers. We believe that diversity makes us stronger. We encourage trust, empathy and treat one another with respect. We are always available, show empathy to others, and treat our team, colleagues, customers, and all business partners with respect. We build and maintain good relationships with people in different locations and encourage people to work together within and across regions.

The path to our objectives must be a caring one. This means caring for good work-life balance, caring for our colleagues, our communities, our customers, our suppliers, and our planet. Long-term performance objectives are therefore key, especially in our industry. The farmers we rely on have a natural strong long-term vision, a way of thinking which we strongly adhere to.



INSPIRE

We deliver long-term sustainable performance through innovation and digitisation and are proud to have become praised Masters of Malt through building long-term relationships with our customers internally and externally. We think and plan ahead in anticipation of future business needs and implement digital solutions to enhance working process effectiveness. We continuously look for the most sustainable solutions.

Our employees are driven by a common purpose and are inspired by working for a company with strong values. We motivate our employees by having the right work-life balance and a continuous focus on the positive impact we want to make and the goals we want to achieve. By doing so we create commitment to our causes and a willingness to go the extra mile. Employees who are inspired, inspire others, not only within Boortmalt but also the people in their communities. We are passionate about what we do.



EXPLORE

The way we encourage out-of-the-box thinking and embrace pioneering ideas is a continuous source of motivation. We like challenging the status quo and are always open to new ideas, even when things are working well, to develop our full potential. We encourage all employees to suggest new solutions and ways of working through regular brainstorming activities. Therefore, we see change as an opportunity to learn.

Exploring is the fun part of our organisation. We want our business to be fun, interesting, and fulfilling and our employees to go home every day feeling enriched. This means putting emphasis on continuous innovation and not being shy to reinvent the wheel. Because why not? The current wheel is not perfect. There is free space at Boortmalt to innovate, try, and fail, and stupid questions do not exist. This freedom creates a climate of trust and confidence. Our people are our family, and we want them to feel part of this family.



SUSTAINABILITY AT BOORTMALT

The four key areas that form the foundation of Boortmalt's sustainability strategy are Water Conservation, Sustainable Farming, Health & Safety, and Energy Efficiency & Emissions Reduction. The other material issues have been captured in five supporting areas of Waste Reduction, Traceability & Transparency, Community Engagement, Business Ethics & Supplier Code of Conduct, and Diversity, Inclusion & Equality.

17

UN SDGs

4

Core Objectives

5

Supporting Objectives

+250

Projects

As you are reading this document, I assume sustainability matters to you and that you, like us, **care about our future**.

We are part of the ecosystem of planet earth and we depend on the natural resources it provides every day. In the case of Boortmalt, on the barley we take in, the water that allows it to germinate, the energy to dry it and the people that run this process to turn the barley into malt. **Because of this dependence on nature, we were quick to become aware of and commit to our responsibility to drive this process in a sustainable way.**

All components are connected and so is our sustainability approach. We know that Boortmalt is only as strong as the people who drive it. So, their health and safety, their opportunities to grow and thrive, and their wellbeing are the foundation of our programme. As such, we ensure that the passion we have for the malt we make flourishes and with it the drive to do so in a sustainable manner.

Nobody can deny it, we live in an era of change and challenges, of bold choices that need to be made to keep global warming under control. So before looking at others, we start with what we can do within our operations: **reducing our energy and water consumption and looking for alternative energy sources** so that one day soon we will get our carbon footprint down to zero. But we don't plan to stop there, our ambition extends to the source of our product: the barley. We engage in programmes to help drive **sustainable practices** that increase biodiversity and allow for the **sequestration of carbon in the soil**.

“We aim to be Masters of Malt in a way that ensures our children and grandchildren will be able to enjoy their beer or whiskey in a world that is in balance.”

We are at a tipping point and we strongly believe that **regenerative farming practices** will help turn global warming around. And yes, it requires investments, change management, and time, but there are great farmers who have already made that choice and who are proving that this approach can be very profitable. We see it as our responsibility to facilitate the sharing of these best practices between the farmers -as they understand each other best- to help drive and promote regenerative techniques.

It is not only the farmers but also our customers and the communities in which we work who are part of our journey. We love to engage, **share ideas**, and work on initiatives together that build on the things that are going well and to bring about the change where it is needed, transparently and ethically.

There is a classic saying: **“the future is in our hands”**, it is indeed and how we act is our choice. We have a responsibility to act decisively and take the right steps towards building an organisation that is resilient and ready for the future, a future that we look forward to.

Inge de Winne

Chief Sustainability & Supply Chain Officer



Our commitment to the UNGC Sustainable Development Goals

At Boortmalt sustainable development is a passion. Through the scale of our operations, values, and ambitions we are in a unique position to actively support and care for our people, our stakeholders, our local communities, and our partners. Therefore, embracing the Sustainable Development Goals came as a natural guiding framework for our strategy.

We support the United Nations in their goals for a sustainable future and collaborate with all our stakeholders to achieve the 2030 agenda together. We have selected goals based on the relevance they have to the company and where we have the biggest potential to contribute for each of our core and supporting initiatives.



More information about the 17 UN SDGs and their associated global targets is available at the United Nations Development Programme. Sustainable Development Goals: sdgs.un.org/goals.

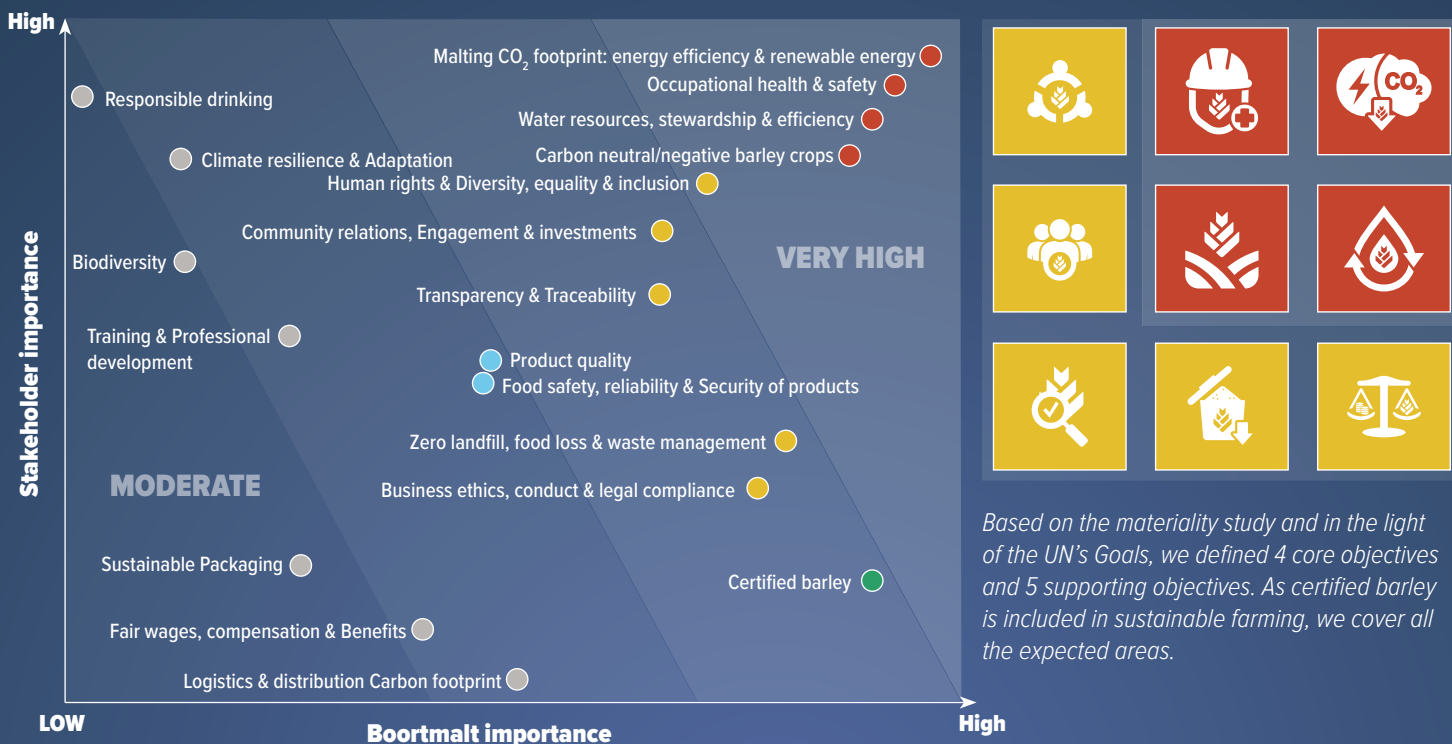
Our Material Issues

Making malt is based on the natural process of germination. For this we need barley or wheat, water, heat, fresh air, and malting expertise. Meeting the growing needs for raw materials in an environmentally friendly way while maximising social value and maintaining good financial performance is therefore a balancing exercise. We recognise that providing our products to more people in a world where natural resources are already constrained will be a growing challenge. Boortmalt has a key role to play in connecting our global food systems to protect the planet.

To identify the most important environmental, social and governance impacts that our company has we conducted research on our industry, customers, NGOs and competitors to establish a preliminary

list of material issues. To broaden our approach the materiality list was combined with the guidelines for sustainable food & the model enterprise policy for responsible agricultural supply chains. As a final step, a materiality survey was completed to identify our most important issues. We then revisited the materiality assessments done by both Boortmalt and Cargill Malt in 2018*, combined the identified issues and integrated the latest customer and industry input to establish our current sustainability strategy.

We continue to follow the different global guidelines and movements on sustainability as well as the trends and needs of our customers to make sure that our priorities remain aligned.



*Our latest materiality assessment was completed in 2018, as such the outcome of the formal materiality analysis does not reflect the major events of 2020-2021, like the Covid-19 pandemic.

SUSTAINABILITY GOALS

4 CORE OBJECTIVES



SUSTAINABLE FARMING



We promote the continuous improvement of farming methodologies through local sourcing programmes which prioritise practices that are environmentally sound and beneficial to local communities.



ENERGY USE & EMISSIONS REDUCTION



We have the ambition to meet the goals of the Paris agreement by reducing our carbon footprint through investing in alternative energy, improving our energy-efficiency, sourcing renewable energy, and working with our providers and farmers to achieve our final aim: carbon neutral malting barley.



HEALTH & SAFETY



We promote an open and proactive health and safety culture with the full involvement of our people and stakeholders, and strong, visible leadership. In doing so, we are proud to have become one of the safest places to work.



WATER CONSERVATION



We continuously raise awareness on water conservation and focus on all possible ways to optimise the efficient use of water and where possible, the re-use of treated wastewater. In a world where water scarcity is a reality, we see it as our responsibility to have the most water efficient malting processes in place.



5 SUPPORTING OBJECTIVES



COMMUNITY ENGAGEMENT

We recognise the important role local communities play and 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.



TRACEABILITY & TRANSPARENCY

We believe it is key to provide a fully reliable, transparent, and traceable view of the road our malt travels from the barley on the field to the malt at the brewer or distiller so that end consumers can make informed decisions about the beer or whiskey they drink.



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.



EQUALITY, INCLUSION & DIVERSITY

We strive for an inclusive and diverse workplace where employees always feel energised, respected and valued, and where their skills, knowledge and creativity are nurtured and drive our ambition to be the Masters of Malt.



WASTE REDUCTION (FOOD)

We are working towards a target of zero landfill by continuously optimising our yield and that of our farmers and finding alternative uses for our by-products, thereby contributing to the overall UN aim of halving food waste globally by 2030. We also aim to reduce the waste from our packaging by using only fully recyclable and recycled bags & liners in collaboration with our customers.



CORE OBJECTIVES



**SUSTAINABLE
FARMING**

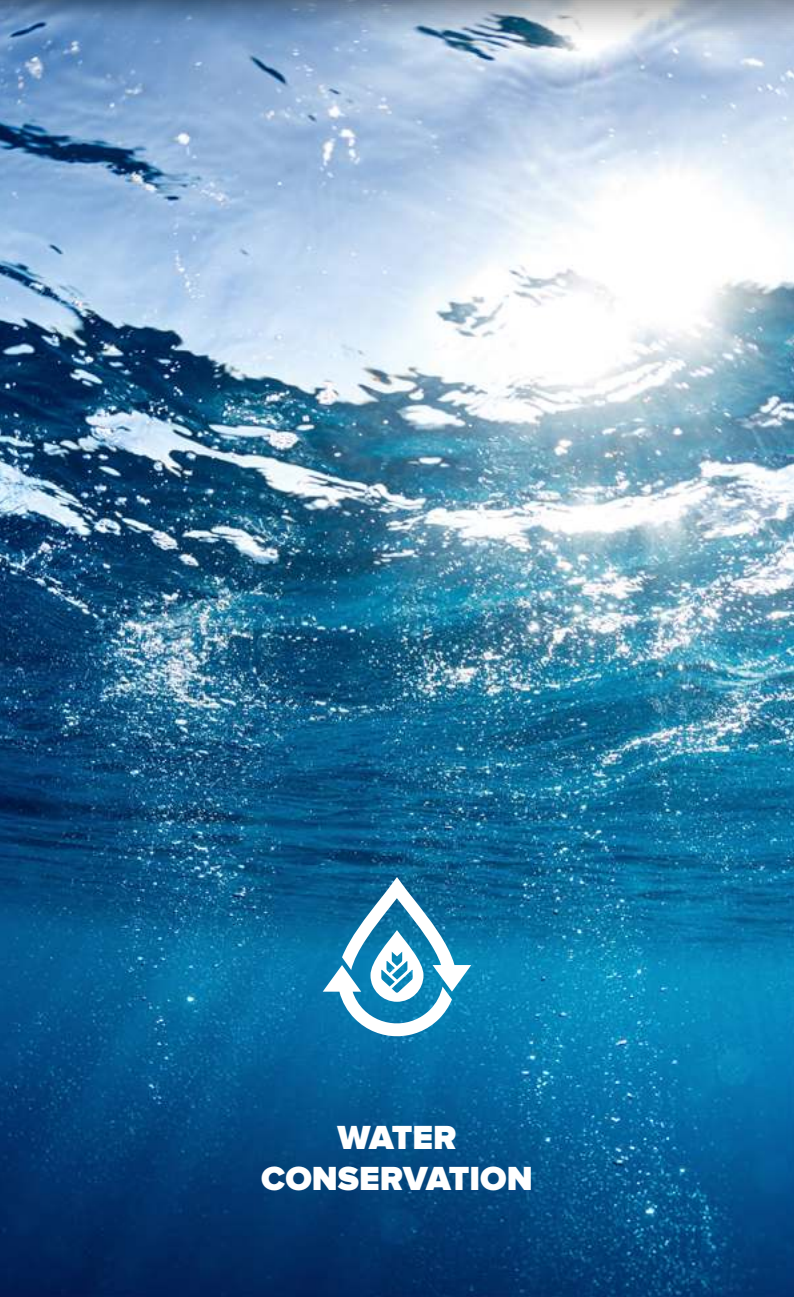


**ENERGY USE
& EMISSIONS REDUCTION**

BOORTMALT SUSTAINABILITY GOALS



**HEALTH
& SAFETY**



**WATER
CONSERVATION**



SUSTAINABLE FARMING

We promote the continuous improvement of farming methodologies through local sourcing programmes which prioritise practices that are environmentally sound and beneficial to local communities.

BY 2030

>95%

of sourced malting barley tonnage is SAI or equivalent certified in Europe
>50% in the other regions

>50%

of barley base captured through Cool Farm Tool with the aim to reduce the footprint

>25%

of sourced malting barley produced using one or more regenerative practices

Approach

As the global leader in malt production, we are strongly aware of our responsibility to help innovate and improve the farming practices of our barley growers. This responsibility stems not only from our excellent track record of supplying some of the best quality malting barley to our brewing partners, but also from our strong commitment to improving the livelihoods and wellbeing of our growers and their communities and to reducing the environmental footprint of our supply chain.

We understand that sustainability is a constant learning process and that any changes, however small, need careful consideration of feasibility and impact on our growers. By working closely with our barley supply chain partners, we have ensured that our ambitions are completely aligned and that there is clear motivation to improve the sustainability of farming practices wherever possible.

Regenerative Farming

To achieve Boortmalt's 2030 sustainable farming vision and targets, Boortmalt supports local sourcing programmes that promote the continuous improvement of regenerative farming practices and methodologies. Over the years, traditional agriculture techniques have served their purpose, but over time we have realised that these techniques make our soils vulnerable in the long term. Furthermore, agriculture contributes significantly to global CO₂ emissions with the mismanagement of soils being a large contributor to this. Regenerative agriculture can therefore lead to crops extracting more carbon from the air, strengthening the vitality of soils, and reducing overall CO₂ emissions.

Boortmalt is an unequivocal supporter of its farmer partners and recognises the uniqueness of the agroecological and socioeconomic conditions throughout its global operating regions. Regenerative farming practices supported by Boortmalt reflect the understanding of this regional uniqueness, but we also maintain strict standards.

“

As a maltster, we must play an active role in reducing the environmental footprint from the field to the delivery of the malt to the brewer.



”

Rodrigo Vilches, Group Agricultural Manager

For example, farming practices will only be considered regenerative if they maintain or improve quality, productivity, and sustainability within the respective region. Bearing these considerations in mind, Boortmalt Regenerative agriculture practices follow the basic framework shown below:



Ploughing and tilling

In applicable regions Boortmalt encourages growers to reduce tillage practices and drill their barley crop directly. The goal of this regenerative practice is to slow down the carbon cycle in the soil and increase the build-up of organic content, thereby sequestering carbon and reducing the overall footprint of the grown barley.



Cover cropping

We promote the use of cover crops where possible to reduce water and wind erosion of soil, water runoff, and pesticide and herbicide usage.



Fertiliser use

We work to improve nutrient stewardship across all regions while maintaining or improving productivity and quality using the nutrient stewardship theory of right source, right rate, right time, and right place.



Crop rotations

We encourage farmers in all regions to grow legumes in crop rotations where markets exist to sell legumes at a fair price and where they are climatically suited to grow.



Solving global agriculture challenges

SAI, together with Red Tractor, a world-leading food chain assurance scheme, are at the forefront of improving farming practices and principles. The SAI platform has created a forum to measure sustainability within agricultural supply chains through their Farm Sustainability Assessment (FSA) audit. There is a long list of schemes which are either “silver” or “gold” standard equivalent to the SAI Farm Sustainability Assessment scheme, all of which provide excellent assessments.

We have been using the FSA -or equivalent- tools for several years, mainly in our sourcing areas in Argentina, France, the UK, and Ireland, so that we can measure and track progress and encourage continuous improvement. This process and supporting data brought together into one platform allows for comparative assessments on topics such as Biodiversity, Soil Management, Crop Protection, and Agro-chemicals between farms and regions. Going forward, our ambition is to increase the use of these assessments so that all our growers gain the insight needed to switch to regenerative farming practices.



Belgomalt Pure Local

In line with our goal to improve farming practices and support local farmers, we developed a local supply chain in Belgium based on regenerative farming practices. In the Belgian regions of Gembloux and Tielt we have united a group of farmers who have committed to applying regenerative farming techniques.

Through the use of cover crops, for example, more CO₂ is extracted from the air and the soil is protected by a natural cover, resulting in a more nutrient-rich soil and the need for less fertiliser. In addition, since 97% of the barley malted in Belgium is imported, our aim is to support these local farmers through our Pure Local initiative so that the local beer market has access to 100% Belgian-grown barley malt.

We are very proud to have malted 300 tonnes of barley through this initiative and offer this Pilsen malt to local brewers who believe in the strength of a short supply chain and in caring for our soils.



CultivUp and Axereal partnership

One of our big aims at Boortmalt is to not only improve the sustainability of our supply chain but to also improve transparency for all stakeholders, especially our customers. CultivUp is a sustainable agriculture channel created by our mother company, Axereal. The project was started in 2017 with around 1,700 farmers with the aim of meeting customer expectations regarding responsible sourcing.

Since 2020, CultivUp is the minimum requirement for farmers to integrate an agriculture channel with sustainability specifications and now includes over 4,000 farmers. It is an audited process certified at level 2 of HVE (High Environmental Value) from the French Ministry of Agriculture since 2020 and it is also part of SAI certification, contributing to Boortmalt’s 2030 objectives to source at least 95% of our barley from SAI or equivalent certified farms in Europe.

AgBalance

Launched in 2011, AgBalance is an easy-to-use digital tool that provides users with a holistic view on the sustainability criteria of their farm operations based on their specific needs and goals. AgBalance uses data from the farm's current operation and compares them to a benchmark of other farms in the region to show where the farmer can improve to reach environmental goals while improving efficiency and productivity on the farm.

With the SAI FSA module now integrated into AgBalance, the tool will help Irish barley growers supplying Boortmalt to verify their farm operations more quickly and easily. The FSA module in AgBalance enables farmers to instantly see which level of FSA performance they are reaching and helps them achieve a better understanding of how to manage sustainability on their farms.



New barley varieties in Ethiopia

At present, a significant portion of Boortmalt's malting barley in Ethiopia is sourced from the Southern regions which are a considerable distance from our malting plant in Debre Berhan. To address this, we are currently working with local farmers to grow barley in areas closer to the plant. In addition to the challenge of the lack of experience in growing malting barley amongst the farmers, the malting barley varieties available to Boortmalt at present are not perfectly suited to the agroecology of these developing areas.

Hence, in collaboration with research institutes and our variety experts in Europe, Boortmalt has developed a programme to find the most suitable varieties to deliver the required quality for the maltings and increase productivity for the farmers. We are currently investigating a few promising varieties in our field evaluation programme. By continuous trialling, farmer training and experience sharing, and through a strategic five-year plan, we will be able to source most of our malting barley requirements from the zones located closer geographically to the malting plant, and thereby empower local communities to benefit from our presence in the region.

Reduced pesticide use

Reducing chemical inputs and nutrient losses is an emblematic objective of the EU Green Deal with proposed targets to reduce fertiliser use by 20% and pesticide use by 50% by 2030 compared to 2020. Boortmalt is contributing to the Low Input Managed Agriculture (LIMA) project which considers that changes are possible if actors all along the value chains share a common ambition.

To achieve this, LIMA focuses on strategies which combine on-farm low-input systems with organisational innovations such as insurances and certifications. The co-design and implementation of strategies are coordinated by downstream actors, such as in processing and retail, while exchange spaces are created with citizens and consumers. Innovations for precision agriculture, biocontrol, biofertilisation, plant varieties, and machinery are made available from within and outside the consortium. As part of the consortium of 20 external actors, of which Axereal is also a member, Boortmalt will guide and participate in the Irish ISS (Implementation of Sustainable Systems) to ensure the most relevant measures are put in place for demonstration. We will help co-ordinate and participate in the wider dissemination of the project and help with the adoption of the technologies to the wider farmer base. We will also monitor the results all the way through the brewing process, from malting through to customer needs around sustainability of malted grains.



Cool Farm Tool



The Cool Farm Tool, developed by the Cool Farm Alliance, is an online greenhouse gas, water, and biodiversity calculator for farmers. We are currently using it to measure the carbon footprint and sequestration of the barley farms from which we source and to show how management decisions can impact these metrics – insight that our customers truly care about. The Cool Farm Tool isn't just a calculator, it stimulates thinking about management by showing hotspots and helping to develop action plans.

Since each farm and field responds differently, the tool allows farmers to find out how their fields respond to the management options of interest. With an interactive interface designed to be simple to use but scientifically robust in the complex arena of carbon accounting, the tool encourages, motivates, and rewards good agricultural practice. The Cool Farm Tool has been tested and adopted by a range of multinational companies who are working with their suppliers to measure, manage, and reduce greenhouse gas emissions.

Although some finetuning is required from region to region, the carbon emission results can be compared throughout the Global Boortmalt footprint to allow us to build a picture of the status of our CO₂ emissions and determine the effects of the best practices being employed across all our regions. Our ambition is to increase the coverage of the use of the tool to at least 50% of all relevant growing areas from which we source by 2030.



“ In a world of climate uncertainty, accurate crop intelligence will be a key driver of sustainable malting barley production.

Tom Bryan, Barley Quality Manager, Europe ”

PUMA Argentina

Working with digitalised field data provides huge opportunities to improve the agronomy and production of the malting barley supply chain. Since 2019, in cooperation with a local start-up, the team in Argentina have worked on building and developing a platform named PUMA. Within this platform, close to 30,000 hectares of barley are digitised per year, representing more than 30% of the Punta Alvear malting plant sourcing area. Using satellite images and machine learning allows us to estimate, one month before harvest, the volumes we expect to receive.



Crop Intelligence

Over the last decades, we have witnessed first-hand how climate change has resulted in significant risks and challenges to the agricultural sector. Subsequently, we have actively looked for ways to play our role in mitigating these risks as well as adapting to them to improve resilience throughout our supply chain.

In line with this ambition, we engaged with an external partner in 2019 to launch a pilot project to test the use of satellite imagery as a crop intelligence tool. By using advanced NDVI and EVI remote sensing technology and linking it to meteorological data, the monitoring platforms provide weekly crop development reports, up to date precipitation and temperature trends, and extrapolation crop modelling which can identify yield and potential quality issues at harvest. The pilot project took place in Ireland due to the closely integrated supply chain that we operate there, and the first results were very positive.

Using the findings from this initial pilot, we are now working closely with our partner to develop these tools further by continuing with year 2 of the pilot project. By comparing actual harvested yields of barley from the pilot project fields to the recorded NDVI values, the eventual goal is to develop a future barley yield prediction model. Additionally, we are also developing a digital dashboard that will monitor valuable information and host an early warning system which will provide alerts about any potential risks or threats to the malting barley crops in the ground. The goal of these tools is to improve the yields and quality of the barley grown by our farmers, and in turn reduce water-use and minimise food waste. Doing so will not only protect their livelihoods and benefit their respective communities, it will also increase our supply chain's resilience to climate change.





ENERGY USE & EMISSIONS REDUCTION

Protecting our environment requires all of us to take action when it comes to greenhouse gas emissions. We have the ambition to meet the goals of the Paris agreement by reducing our carbon footprint through investing in alternative energy, reducing our need for energy, sourcing renewable energy, and working with our providers and farmers to get to carbon neutral malting barley.

BY 2030

-50%

Reduction of carbon emissions per metric tonne produced by 2030

-42%

Is our SBTi 1.5°C target to reduce our absolute emissions by 2030

100%

of our electricity procured will be from renewable sources by 2030

Approach

Energy consumption and carbon emissions are topics that Boortmalt has taken seriously for quite some time. We are industry leaders in this respect, consistently placed in the top three in industry energy-efficiency benchmarking studies. We were the first international malting group to achieve ISO50001 certification for our energy management system on a group level before expanding to other regions outside of Europe, and we are continuously looking for ways to roll this out to all our 27 malting facilities.



We are an energy-intensive company and use a large amount of heat and electricity to make malt, especially in the drying process. In our ten-year plans, we outline all possible initiatives to save energy and use alternative sources like solar thermal, biomass or heat recovery, and we are taking a leap of faith by including hydrogen. In addition, we have three-year road maps with concrete projects and investment plans complemented with a strong commitment to procure renewable energy. Boortmalt has always been a pioneer in applying new energy-saving technologies to the malting business



Joris Van Valckenborgh,
Group Energy Manager



Within our own operations, we have a long history of proactive energy management and have always been open to trying new and innovative technologies and processes to improve efficiency and reduce our carbon footprint. Yet, it is also clear to us that our responsibility extends beyond our own operations. We therefore monitor the scope 3 emissions throughout our value chain, from farm to brewhouse or distiller, with the aim of working with our partners to reduce emissions wherever possible and help each other to achieve the goals of the Paris agreement.

Emissions within our operations

Energy consumption throughout the malting processes accounts for roughly 13% of the total carbon footprint of the end product, with the rest originating upstream and downstream in our value chain.

The malting process requires heat and power throughout the steeping, germination, and kilning processes. Of these energy inputs, 82% is provided by natural gas and 18% by electricity.

To meet our scope 1 and 2 reduction targets we are taking a four-pronged approach:



• Reduce our dependence on natural gas by using more sustainable forms of heating such as waste heat, solar thermal or biogas, or by electrifying our plants to produce heat from electricity. We also keep up to date with the progress on hydrogen as a fuel source and ensure we procure combined heat and power plants today which are “hydrogen-proof” for the future.



• Increase energy-efficiency by trying new technologies and approaches within all our processes and facilities, by recuperating heat losses with chemical or traditional heat pumps and innovative heat exchangers.



• Shift to procuring and generating 100% renewable electricity, with solar PV and wind energy where possible, through on-site or off-site PPA agreements.



• Reduce and optimise energy consumption through continuous improvement and good housekeeping practices.



We are currently procuring 100% green electricity for the whole of the UK & Ireland, France, Netherlands & Croatia. In addition, we have started generating our own renewable electricity and have solar panels installed at our Antwerp and Sydney plants, resulting in a total of 26% of our current electricity consumption coming from renewable sources.

In the coming years we will focus on ramping this up to 50% by 2025 and 100% by 2030 by actively exploring PPA arrangements in other regions and engaging in joint projects with some of our key customers. Additionally, we are also shifting towards generating heat on site through renewable energy sources such as solar thermal and biomass.



To ensure we remain accountable, we have committed to the Science-Based Target initiative (SBTi) and will set targets that align with the requirements of the Paris agreement. We will take the actions required to help limit global warming to 1.5°C by reducing our absolute scope 1 and 2 emissions by 42% from a FY 2021 baseline by FY 2031. To achieve this, we will need to account for additional emissions due to growth so we have set an internal intensity target of a 50% reduction of scope 1 and 2 emissions per MT of malt produced. We plan to have our targets validated by the SBTi within the next year.

Energy Mix

Current energy consumption 1.905.104 MWh

Sustainable energy

Projects implemented and in the pipeline now generating **4%** of total energy needs



Solarwall
Air heater



Heat Loop



Windmill



Geothermal
heat



Solar
Photovoltaic



Solar
Thermal



Hydrogen



Biomass plant
(heat)



Biogas

Today's Energy mix

16%

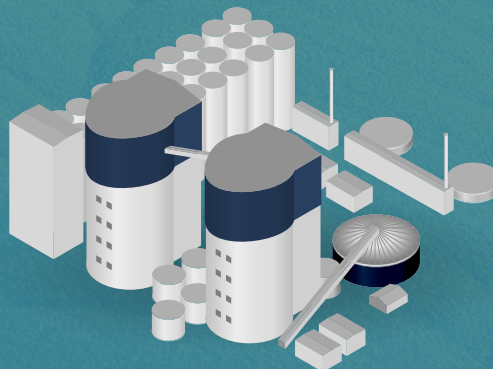


Electricity

84%



Heat



Energy reduced

-2%

from last fiscal year



Heat exchange



Energy
as a service



Glass tube heat
exchanger

CO₂ reduced

-3%



LED
light



Cogeneration



Heatpump

New Athy 40kt Bulher Malting facility



Alternative advanced techniques for which active engineering studies are ongoing, are the use of chemical and/or electrical heatpumps, which recover a large part of the waste heat emitted in the kilning process and uplift that heat for reuse in the process.

Solar Carpark - Antwerp, Belgium

In 2020 Boortmalt joined forces with solar power developer Menapy to build a solar carport on our site in the Port of Antwerp. The 900 kWp solar park was commissioned in mid-2021 and has sixty charging stations where visitors and employees can charge their electric vehicles. The carport will be able to produce enough electricity for 15,000km of driving annually for the cars it charges. Any excess electricity generated is used by our malting plant, ensuring no solar power goes to waste. This project is an excellent example of how our thinking and efforts extend beyond our malting processes and how we take advantage of innovative emissions reduction opportunities wherever possible.



Antwerp Solar carpark
Generating 9000 kWp,
60 charging stations

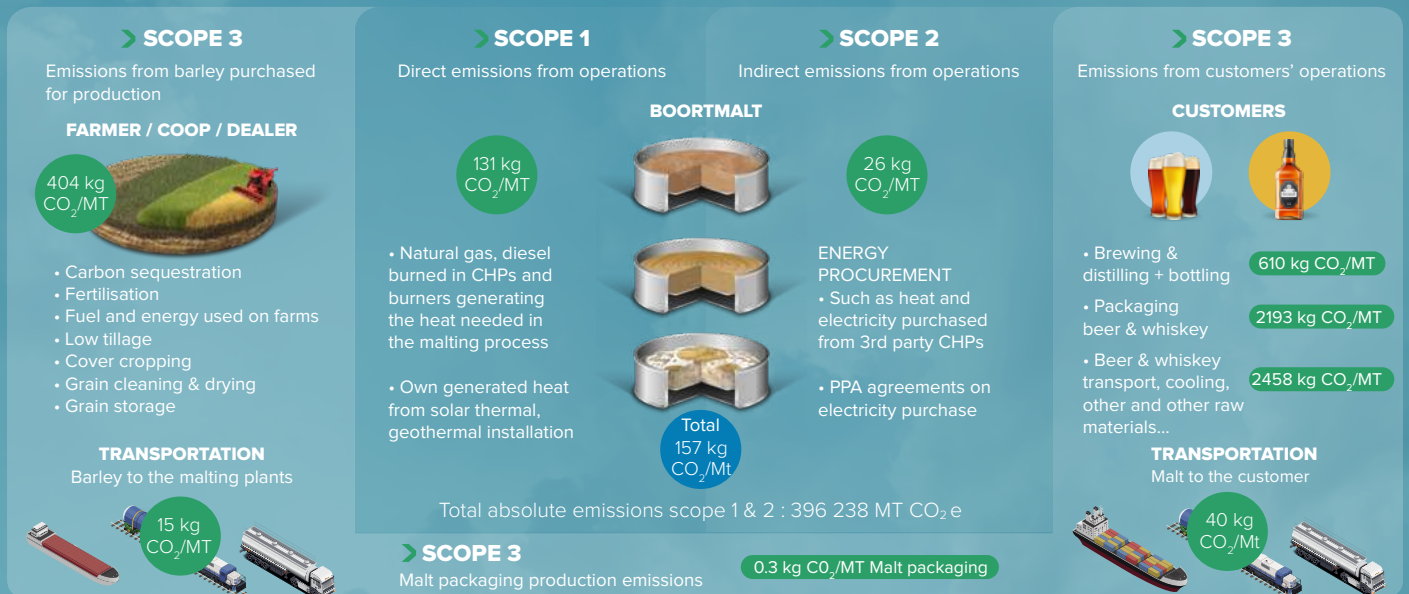
Athy, Ireland

Our malting facility in Athy, Ireland, underwent a large transformation in 2020 with the opening of a new 40kt malting facility. This expansion included several industry leading energy-efficiency improvements, making it one of our better performing sites from a CO₂ emissions perspective. Additionally, the team is currently also working on digitising the Athy plant to better predict programmes for steeping, germination and kilning to further improve the quality and efficiency of the site.

Heatloop

At some of our facilities, we are currently working some large projects to make our energy supply greener. Heatloops for example make use of the excess heat that is emitted from nearby waste treatment plants and can thereby reduce our reliance on natural gas. Heatloops could provide of up to 70% of a malting plant's heat needs, hence contributing hugely to the reduction of CO₂ emissions.

End-to-end CO₂ footprint





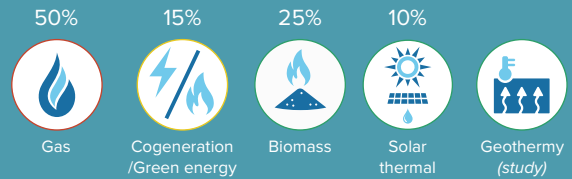
Issoudun Malthouse

1st French solar thermal power plant supplying an industrial site

Our malting plant in Issoudun, France, makes use of a mix of technologies to reduce the emissions from generating the heat required for drying barley, with 50% of the heat coming from sustainable sources such as biomass and heat recovery from co-generation.

In 2019 we installed a new solar thermal power plant, the largest industrial solar plant in Europe and at the time the 3rd largest in the world, to further reduce our reliance on natural gas. With 15,000m² of solar thermal panels we are able to generate 8.7GWh of sustainable heat a year with this plant, representing roughly 10% of the site's needs, and thereby reducing our footprint by 2,200 tonnes of CO₂ annually.

➤ Issoudun Malting plant current energy mix



Ireland & Scotland

The barley supply chain is a complex one as harvested barley, originating from different growers, must be dried within 72 hours of harvesting to maintain the desired quality characteristics. This often requires a complex model of farm delivery which includes intermediate transport, thereby resulting in significant emissions from transport. To address this, we have invested in several initiatives that reduce the amount of transport required and make use of lower-carbon transport alternatives. In Ireland, for example, we have completely eliminated intermediate transport by switching to a farm direct model and reduced the volume of malting barley transported by tractor and trailer by 50%.

The distilling industry largely located in the world-renowned Speyside also offers a unique opportunity for truly sustainable haulage across the supply chain. The concentration of barley growers, maltings, and distilleries has the potential to accommodate a bespoke haulage network fuelled by the power of the industry's by-products. In partnership with our customers in Ireland we have therefore started delivering malt by trucks that run on Compressed Natural Gas (CNG). The CNG trucks are fuelled by biogas which is entirely generated from local distillery spent grains and reduces the CO₂ footprint of the malt delivery process to almost zero. Similar projects are under way throughout our global supply chains.

Australia

In Australia a regular and consistent supply chain programme created the exciting opportunity to look for initiatives to optimise delivery efficiencies. By understanding the customer's unique discharge facility and by working closely with the freight supplier on a longer-term commitment, we were able to invest in a custom trailer and increase the trailer equipment size. This resulted in a 20% reduction in truck movements through a busy metropolitan region, resulting in reduced fuel emissions while also increasing safety and reducing congestion at each location.

Transportation

Given the approximately 6 million tonnes of barley and malt that is moved in and out of Boortmalt every year, it is vital for us to carefully consider our transportation footprint. The key is to keep the distance as short as possible by optimising the allocation of barley to a site and malt to a customer, and to use lower-emission modes of transport wherever possible. By partnering with our customers and suppliers, we make use of intermodal transport by using a combination of barge, rail, and truck. We use bulk transport instead of packed containers wherever possible and look for opportunities to use more sustainable forms of energy to fuel transportation.



HEALTH & SAFETY

We promote an open and proactive health and safety culture with the full involvement of our people and stakeholders, and strong, visible leadership. In doing so, we are proud to have become one of the safest places to work.

BY 2030

100%

Operating sites
accident-free

0

People injured

Approach - TOGETHER, Masters of Safety

Since people are our greatest asset, we are proud to promote and prioritise employee safety through our "TOGETHER, Masters of Safety" programme. Our goal is to develop a proactive Health & Safety culture that engages employees and other stakeholders. Safety awareness and safe behaviour are the norm in everything we do, and we think positively about our own safety and that of our colleagues and visitors so that we can achieve our ultimate objective of zero harm.

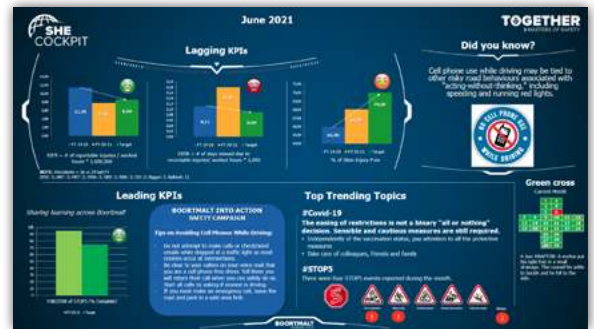
The strength of our safety programme lies in the combination of a solid compliance framework and the involvement of all Boortmalt employees. The compliance framework includes relevant organisational matters such as policies, standards, KPIs, targets, and reporting.



The involvement of our employees ensures that we move from a reactive to proactive approach and that we develop intrinsic motivation to work as safely as possible. This ensures that our employees become active safety ambassadors and that safety is an integral part of everyone's daily activities.

We have created the necessary conditions to achieve our goal of an interconnected safety culture. It starts with visible top-down management commitment that sees safety as a core business value that cannot be compromised by other business interests such as cost, schedule, and quality.

Managers lead by example and are actively involved in all safety-related activities. They proactively discuss safety in every meeting and attend specific consultations, participate in safety training sessions, wear appropriate personal protective equipment, discuss unsafe situations, and more. This is also the foundation on which employee engagement is built. We encourage employee participation in safety programmes and enforce compliance with performance standards to stimulate motivation. Positive safety behaviour and performance from our employees are recognised, initiatives are supported, and suggestions for improvements are always encouraged. In this way, we work every day to further increase the involvement of our employees.



“ Although we improved significantly this year, we need to continue working hard. We are on the right track and together we can achieve our goal of Zero Harm. ”

Mauricio Corsi, Group Safety Manager

Europe: Ireland

The Athy team has been committed to implementing a proactive approach to safety on site which includes prioritising people's behaviour to safety, investing in the appropriate safety equipment, and following a maintenance management programme. The site culture we preach is built around sharing accountability and not just assigning responsibility to the site management team. As safety is the first agenda topic in our meetings, all employees are actively encouraged to openly discuss their views and concerns related to safety in the malting plant. This all-inclusive transformation has resulted in more than 1,295 days without any lost time accidents during which time on site a number of major construction projects were also being completed.



1,295 days
without a lost time injury



1,937 days
without a lost time injury

North America

For the last 23 years, a comprehensive safety programme has been implemented at our Sheboygan plant, resulting in a record 1,937 days without a lost time injury and 636 days without incident, of which we are extremely proud. Extreme weather conditions, ranging from -50°C to +50°C at some sites, require very agile and local safety protocols throughout the continent. As tornados are a great risk in Wisconsin in spring, our Sheboygan site even performs a yearly Tornado training drill. The local Sheboygan Fire Department also uses the plant for their tornado and confined space trainings.



In Ethiopia we built a plant without any severe accidents

We recently started operations in Ethiopia after succeeding in building our new plant without any severe accidents. We achieved this by making sure to have a safety manager present on site from day one of construction who is currently still running health and safety operations in the plant. All global health and safety measures were included in the risk-assessment pre-construction, while also considering local issues.



2,436 days
without a lost time injury

Latin America

We are proud of our impeccable safety records in Latin America with our Bahía Blanca site achieving 1,563 days without any lost time accidents and our site in Punta Alvear achieving 2,436 days without lost time accidents. This has been done by following a clear protocol with systematic risk analyses in the field, cross-regional internal audits, and an annual training programme. Furthermore, we perform monthly plant inspections with integrated reporting, and our safety committee makes sure we promote a best practice recognition system within all our sites.

Asia-Pacific Preventive Safety

Our adjusted approach in the APAC region focuses heavily on preventive safety, improving the hazard awareness practices of our people. This involves reporting any event, condition, or behaviour that staff have recognised as having potential to cause harm to people, the environment, or our equipment. These items are then reviewed and integrated into the Health & Safety strategy with monthly action planning. By providing the tools and supporting the changes through partnership and coaching, we are seeing a very positive development of hazard awareness in our people. Quantitatively, the results speak for themselves, with 1,044 days without a lost time accident at our Port Adelaide site.



1,044 days
without a lost time injury



WATER CONSERVATION

We continuously raise awareness on water conservation and focus on all possible ways to optimise the efficient use of water and where possible, the re-use of treated wastewater. In a world where water scarcity is a reality, we see it as our responsibility to have the most water-efficient malting process in place.

BY 2030

-30%

Reduction in water consumption

<2m³

target water consumption per MT of malt produced

Approach

The malting process requires water during the steeping and germinating phases for which clean and potable water is essential. We consider water as an increasingly scarce commodity and therefore take our responsibility to improve our water conservation efforts very seriously. At all our facilities we foster a sense of innovation and encourage our employees to push the boundaries, which has paid off as we regularly place in the top quartile in the industry in terms of water efficiency, with four of our plants placed in the top eight globally most recently.

Circular Water Use in Punta Alvear

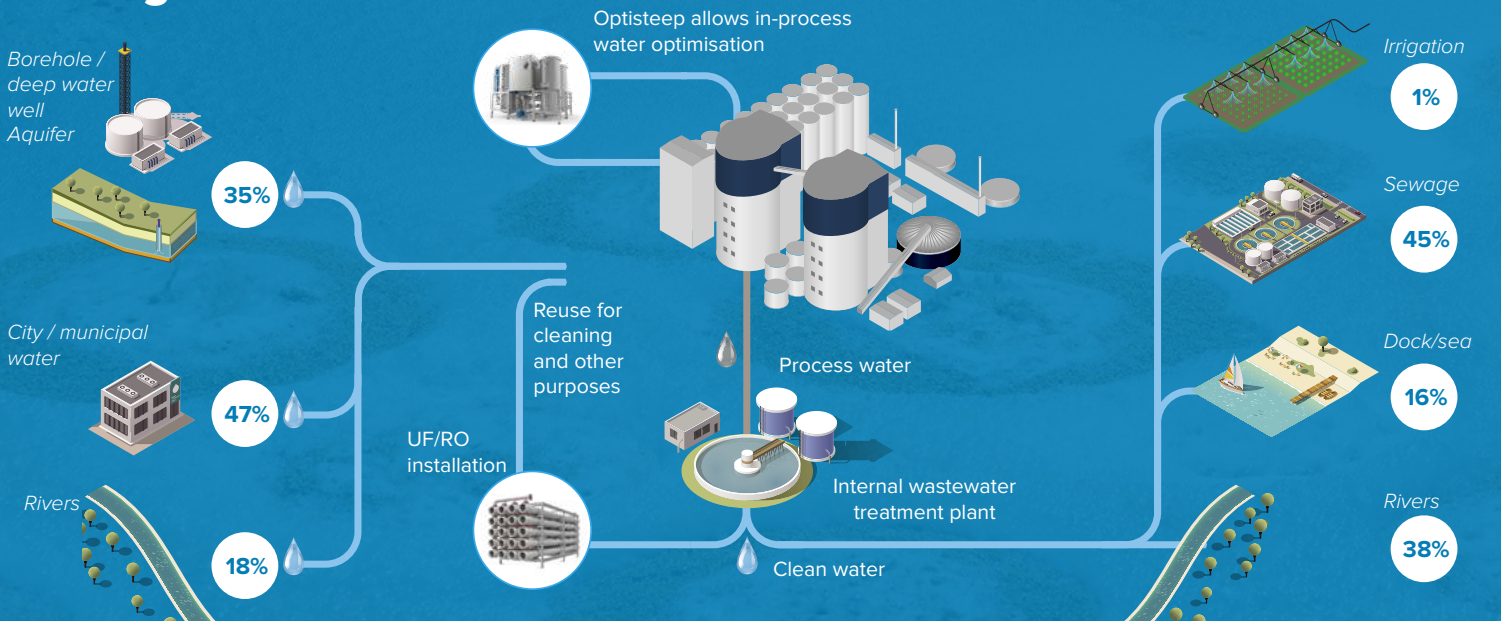
We are continuously looking for sustainable sources of water and ways to use water more responsibly. Even when there is no financial incentive to reduce consumption, we do so because it reduces our impact on the planet. Our malting plant in Argentina makes use of the water from the Parana River, the second longest river in South America. We carefully treat this water before using it throughout the plant, from the steeping and germination processes to the chilled water plant. After use, we treat the water again using an eight-step process to ensure the water is of sufficient quality to be returned to the river. In doing so, we create a circular model of water-use that has minimal impact on the environment.



Our water conservation strategy

- 1** Sustainable sourcing of water
- 2** Efficient water-use in our malting processes
- 3** Re-use of wastewater wherever possible
- 4** Adequate treatment of wastewater
- 5** Sustainable use of our sludge
- 6** Collaboration with farmers and breeding organisations to look for barley varieties that require less water to germinate
- 7** Work with local communities and NGOs in water-scarce areas to integrate wastewater back into the ecosystem

Malting water flow





Water Risk

The effects of climate change are increasingly putting pressure on water resources in areas around the world. This results in water stress which is defined as the ratio of demand by human society and availability, an indicator of competition for water resources. Due to our reliance on water, we conducted a risk assessment for all our malting sites using the Aqueduct platform developed by the World Resource Institute.

This assessment revealed that seven of our sites are already experiencing high levels of water stress, with three experiencing extremely high levels of water stress, and that this would increase to ten sites by 2030.

Given that we use water from deep wells in many of our sites, these findings are used to shape our water risk and reduction strategy as we prioritise these specific locations through the deployment of water reduction projects. The OptistEEP system, for example, is scheduled to be implemented in three of the sites that are in water-scarce areas.

As a reaction to water scarcity and stress we are also actively looking for initiatives to help restore underground water reserves and aquifers. Collecting and keeping rainwater on site, for example, allows for slow re-infiltration into the subsoil. Some sites at Boortmalt have already implemented such measures, and it will be part of our future sustainability road maps to further promote such initiatives.

Water Efficiency in Athy



Our malting plant in Athy, Ireland, has been transformed in the last 24 months and includes a new steep house that is now in full production with the inclusion of a new “OptistEEP” system. This system, developed in collaboration with the University of Berlin, increases the speed of moisture intake and improves the enzymatic modification of the barley kernel. In doing so, only a single wet steep process is needed while maintaining or even improving overall malt quality and yield. This results in a groundwater consumption reduction of 40% in the steeping process. Furthermore, the site has installed a water recycling system into which treated wastewater is diverted. This water is used for all on-site cleaning and reduces water consumption by approximately 250m³ per week. Additionally, Athy is voluntarily contributing to rainwater buffering in the region to alleviate seasonal water stress. The rainwater harvesting and infiltration pond captures approximately 500m³ of rainwater, allowing it to infiltrate the soil and regenerate groundwater reserves.

Spray Steeping in Dunaújváros

In the malting plant in Hungary, we have implemented a new steeping programme which combines traditional methods with new principles. From our experience we have realised that it is not necessary to completely immerse the barley in water to ensure germination, it is sufficient to just keep the surface of the grains moist. The traditional method of complete immersion uses significantly more water; however, it also removes water-soluble dirt. We have therefore stuck to the traditional method for the first steep and simply spray the batch for the second wet phase using washing nozzles installed on the ceiling of the tanks. The savings in water consumption are significant, around 0.5m³ per tonne of malt, without impacting final malt quality. We have used this method since January 2020 and saved over 48,000m³ of water throughout the year.



“

Water is a finite resource and at Boortmalt we are proud and inspired of the efforts our Masters of Malt make every day, in every way, to explore new ways to minimise our water usage.”



Peter Nallen, Chief Operations & Agriculture Officer

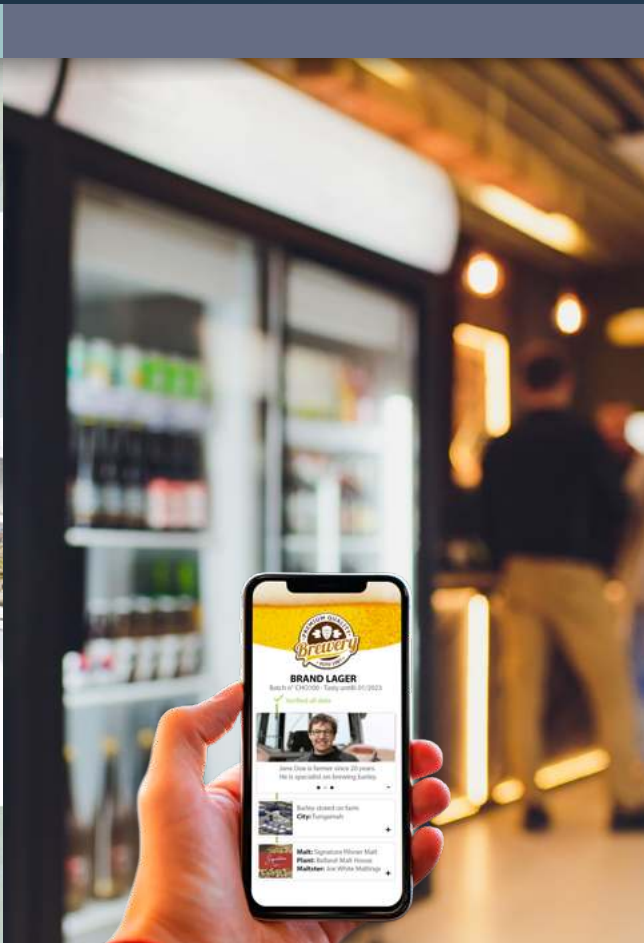
Water Treatment in Australia

Water is becoming an increasingly scarce resource in Australia, especially in Western Australia where Perth is one of the driest cities on the continent. For this reason, we aim to use water as responsibly as we can so that we do our part to not only preserve this scarce commodity, but also improve our resilience as the impacts of climate change are increasingly being felt.

At our malting plants in Sydney and Perth we use multistage filtration and reverse osmosis technology to treat all wastewater so that it can partially be recycled back into the process and also reused for cleaning and other purposes. Reverse osmosis uses super fine filters to remove all contaminants and is widely regarded as an essential technology to improve the climate resilience of our water supplies in the future. Along with strict quality monitoring, both internally and externally, we have been able to reduce our dependence on the local water network significantly and plan to roll this out to other malting plants in future where possible.



SUPPORTING OBJECTIVES



COMMUNITY ENGAGEMENT



TRACEABILITY & TRANSPARENCY



BUSINESS ETHICS &

BOORTMALT SUSTAINABILITY GOALS



CODE OF CONDUCT



EQUALITY, INCLUSION & DIVERSITY



WASTE REDUCTION (FOOD)



COMMUNITY ENGAGEMENT

We recognise the important role local communities play and 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.

100%

of our sites engaged in at least 1 project by 2030

Approach

Our engagement with local communities is a direct reflection of our corporate values. We believe it to be an essential element of our business operations and as such it is included within our Boortmalt Business Ethics Manual.

Our first aim is to ensure that the energy, water, and other resources that our facilities require are sourced and consumed in a sustainable way and in harmony with local conditions and circumstances. We therefore collaborate with local communities to safeguard, we do not impose ourselves negatively upon our surroundings, but rather operate in a way that benefits all stakeholders. Our second aim is to partner with local projects that are in line with our values and sustainability targets and show our commitment to the broader communities in which we operate.

Boortmalt has always been engaged with local communities and we have strengthened our commitment by making a fixed budget available to each location to support voluntary work and donations. From next year onwards we will start monitoring the number of community engagement projects as we aim to have at least one project per Boortmalt location that supports our social commitment. We do not take a one-size-fits-all approach when it comes to community engagement and always carefully consider the local context.



Women's Shelter in Sheboygan

Some of the items we all use daily and take for granted are missing essentials for the women seeking refuge in the local Sheboygan Women's Shelter. To raise awareness, the local Boortmalt team has discussed the issues of the women's shelter during daily pass down meetings. The goal was to collect as many of these essential items as possible to donate to the shelter. In 2020 two large boxes of basic non-perishable items and toiletries were collected and the team have made this initiative a bi-yearly one to continue the support for the local community.



Meals On Wheels in Sheboygan and Biggar

Close to our Sheboygan plant in the USA is a 'Meals on Wheels' food pantry which several of our employees support. The initiative consists of 200-300 volunteers who build lunch boxes, serve lunch to people without access to sufficient nutrition, and plant fruit trees, the produce from which goes to those who cannot afford to buy fresh fruit. We have also donated financially to this local Meals on Wheels initiative when we were unable to physically support.

In Biggar we volunteer to Meals on Wheels through meal delivery. Under the Heartland Regional Health Board, we provide meals to those unable to cook their own hot meals, and through volunteering campaigns we help provide meal delivery.

Reforestation in Argentina

Through Boortmalt's recycling partner in Argentina, Siclo Rural, we contribute to reforestation in Patagonia. For all the plastic silo bags that are used for the storage of barley after harvest, Siclo Rural contributes to a local NGO that plants indigenous trees in deforested areas of Patagonia.

Volunteer Fire Fighters in Biggar

At our plant in Biggar, Canada, four employees are proud members of the local volunteer fire department. To support them, Boortmalt pays a maximum number of hours per month for the volunteer services that they provide. Through this contribution we are promoting safety both within the community and within the company.



Adopted Highway in Sheboygan

Through the US 'Adopt a Highway' initiative, our Boortmalt team in Sheboygan has taken responsibility for keeping the area around a closely located highway trash-free. Volunteers devote one day every month to picking up all the litter that has entered 'our highway'. On good/bad days we collect up to three garbage bags in a few hours. This is our way of showing we respect nature by minimising waste in the surroundings of our locations, which we are proud of once clean.



Fundraiser in Athy

Each year Boortmalt staff and contractors in Ireland participate in fundraising and family fun days to raise money for local charities in the Athy area. Each Boortmalt financial year, all staff are invited to nominate a charity of their choice and employees vote for their charity of choice for the year. A charity cannot be nominated a second time to ensure that as many charities as possible are supported in the local area over the years. A fundraiser event and family fun day are arranged and all employees are

encouraged to raise as much money as possible. The event differs from year to year, from a sponsored cycle of 40km to walks along the riverbank, and all employees and their families are encouraged to come along and participate in the event. To date five different charities have been supported as part of our fundraising efforts and over €25k has been raised to support the following charities: The Irish Cancer Society, The Jack & Jill Foundation, The Embrace Farm, The Irish Hospice Foundation, and The Autism Assistance Dogs Ireland.



BEES IN IRELAND



FUNDRAISER IN IRELAND

Bees In Athy

As we work closely with the agricultural community of barley growers in the region of Athy, Ireland, we use this position to promote the Bee Safe Application. This app brings beekeepers and farmers together and allows for communication about the timing and location of pesticide application. This enables beekeepers to protect their bees and the local biospheres from the side effects of agricultural activities.

The app, used countrywide, requires farmers and beekeepers to register on the Bee Safe app and geo-locate their farms and hives. Farmers can then notify beekeepers within a 5km radius of their fields to allow the beekeeper time to close their hives and keep the bees restricted for a safe period. Likewise, the beekeeper can notify the farmer when the hive is closed and it is safe to apply the pesticide. Correct operation of such an application has significant benefits for the biodiversity of the cereal production area as bees are a main contributor to the pollination of a wide range of plants and not just plants of agricultural significance.

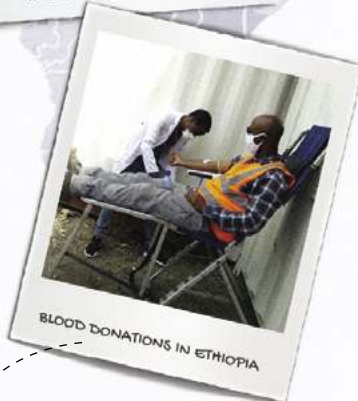
Blood Donations in Ethiopia

In Ethiopia donating blood is not a strong cultural norm as local society believes it to be harmful to the donor. Due to this misconception, there is a big shortage of blood in the country. We are therefore working with the Ethiopian blood bank, specifically the Debre Berhan branch, to create awareness and do what we can to reduce the shortage of blood by

organising blood donation campaigns inside the Boortmalt plant. Over the past two years we have organised four rounds of blood donation campaigns with a total of 92 employees who volunteered. The blood that has been donated is enough to potentially save 276 lives. We believe we are making a difference in changing the stigma that surrounds blood donation and we plan to organise more campaigns in the future.



DISINFECTION GEL DONATION IN BELGIUM AND ETHIOPIA



BLOOD DONATIONS IN ETHIOPIA

Disinfection Gel Donation in Belgium and Ethiopia

The Covid-19 pandemic presented us with challenges but also opportunities to contribute to mitigation efforts. At our Boortmalt plants in Ethiopia and Belgium we produced and distributed our own hand sanitiser gels. In Ethiopia we initiated a collaboration with the Debre Berhan city administration and donated 500 litres of disinfectant gel. In Antwerp, Belgium, the new microbrewery was converted into a hand sanitiser production facility, where we produced and bottled 500 litres of hand sanitiser for our group employees and their families.



FALCONS IN FRANCE

Falcons in Strasbourg

In June 2012 a birdwatcher and member of a local bird protection organisation (LPO) observed falcon populations at our Strasbourg site. He observed that our production site was a highly attractive location for young falcons due to our 40m high building with flat roof which functions as a falcon landing strip. The area also provided plenty of food and quiet nesting locations. Based on advice from the LPO, we put measures in place to maintain the falcons' favour and the roof of our Strasbourg production site has become one of the most fertile non-natural falcon breeding grounds in France, with at least one new chick per year.



BUSHFIRE

BUSHFIRE FIGHTS IN AUSTRALIA

Bushfire recovery support in Australia

Our team in Port Adelaide arranged a Morning Tea for a Cause to raise funds and aid the recovery from the recent bushfires on Kangaroo Island in South Australia. Kangaroo Island is a pristine farming community that relies heavily on tourism, so this fire was particularly devastating, not only destroying two thirds of the island's natural habitat but also disrupting the peak tourism period. A raffle was arranged and the money raised was matched by the site's social club and all donated to the Kangaroo Island Relief and Recovery Bushfire Fund.

TRACEABILITY & TRANSPARENCY

We believe it is key to provide a fully reliable, transparent, and traceable view of the road our malt travels from the barley on the field to the malt at the brewer or distiller so that end consumers can make informed decisions about the beer or whiskey they want to drink.

BY 2030

50%
farmers engaged in
dedicated value chain
with sustainable practices

100%
traceability

Approach

As the global leader in malt production, we are strongly aware of our responsibility to continuously innovate and strengthen collaborations in our value chain. With our traceability and transparency solutions we aim to provide detailed insight to end consumers and unlock extra value throughout our supply chain. By using technology, we are able to let stakeholders know where the grain comes from, how it is produced, and by whom. For certain customers and specific crops, we provide different types of information including the origin of the grown barley, whether it was produced in an organic way, the carbon footprint, and shed light on the good working conditions of our farmers.



End-to-end traceability to meet food safety requirements is available today when needed through our current systems and those of our suppliers, as this is a legal requirement. Blockchain technology in this area is not mature yet but we have pilot projects and are looking to further develop this. In the meantime, we already use other technologies and platforms to provide end-to-end traceability for customers who want to provide visibility to the consumer.

Our Solutions

We currently have two solutions:

1 Traceability and transparency from farmer to the distiller or brewer.



2 Traceability and transparency from farmer to the end consumer, in cooperation with the customer.



Jehanne d'Arc

Jehanne d'Arc is one of our brands that has incorporated traceability and transparency into its DNA. It is a high-quality malt which has prioritised the origin of raw materials and special services. For this we are working closely with motivated French farmers and cooperatives that have representable barley storage capacity and can conduct perfect separation of batches from harvest to malt bagging. The barley is produced in a variety of regions from the Centre of France to Champagne Ardennes and Picardie. We also shortened the supply chain by bringing together the farmer and the brewer, resulting in stability and homogeneity of the quality of the malt offered to the brewers.



Prairie Malt

Boortmalt's Canadian malthouse, Prairie Malt, has developed a specific variety of malt grown by a group of local farmers in Canada. The cooperation between Prairie Malt, The University of Saskatchewan and one of our clients, has led to a specific new beer brand. This specific variety of malt has the special feature of being LOX-less, meaning it contains a reduction in lipids, resulting in enhanced and prolonged product freshness and foam stability. The Prairie Malt team selected the highest quality barley from our valued barley farmers and developed this PlatinumStar malt for one of our long-term clients.



Pure Local

Our Belgomalt Pure Local brand has developed an integrated supply chain connecting farmers to brewers. The Pure Local team is a group of motivated Belgian farmers, maltsters, and agronomists who want to bring brewing barley back to Belgian soils. With a passion for nature, cereals, and regenerative farming practices, they grow high quality barley in the most environmentally friendly manner possible in the regions of Gembloux and Tielt.

We united this group of barley farmers who take the best possible measures to meet the quality standards of the brewers and who have signed a book of specifications that transforms their farms from conventional to fully regenerative in a period of a few years. To track this transition, we capture the information on the techniques used and measure the carbon footprint of these farms. The aim is to sequester as much carbon as possible so that the crops of Pure Local barley can eventually become carbon negative. In return for these efforts our farmers are rewarded with a fair and stable price per tonne of barley.



France & Belgium

We ran a pilot project using Blockchain technology with one of our clients in Belgium using French barley. Additional value was given to the end consumer who, through scanning the QR code on the packaging, was provided with inspirational stories about the product's life cycle as it travelled through the brewer, us the maltster, all the way up to the farmer and his crop. End consumers also got insights into the family's history, the farm's location, and how the farm has grown over the past years. Three of our valuable farmers were selected as specific client brand ambassadors and received additional promotion towards our clients and end consumers.



“Our digital and local solutions are aimed at re-connecting farmers with consumers, offering a transparent value chain well placed for a rewarding low carbon future.”

*Koenraad Dumont,
Chief Commercial & Innovation Officer*

Ireland

In Ireland we have started a project with an established whiskey distiller to develop a fully traceable supply chain. The barley grower and the fields are carefully selected to grow local barley for the distiller at the beginning of the season. At harvest time the barley is collected from the specific growers and delivered to a local mill where the barley is dried into individual bays, after which each bay is screened and delivered to our malting site. The barley is malted separately and stored in a designated silo area before delivery to the distillery. All the agronomic information from the field is recorded throughout a pioneering digital logistical system, Farmflo, which keeps track of where a farmer's crop is harvested, stored, malted, and distilled, allowing for full traceability of the crop. This leads to the production of whiskeys that explore Irish terroir one farm at a time.



BUSINESS ETHICS

& Supplier 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.

BY 2030

100%

of our employees following our business ethics

100%

of contracts include our code of conduct

Approach

Boortmalt stands for good corporate behaviour which is integrated into our corporate values. When engaging with our colleagues, third parties, customers, and suppliers, we use our five principles of ethical business behaviour: Trust & Integrity, Accountability, Compliance, Dignity & Respect, Openness & Honesty. This helps us protect and further enhance our good reputation and those of our stakeholders.

Our company's values and ethical practices are promoted across all our sites, and we expect our employees and others acting on behalf of Boortmalt to embody our principles at all times. Business integrity to us means not only adhering to all applicable laws and regulations in the countries in which we operate, but also adhering to our own high standards. We are proud that our values and measures have led to zero non-compliance incidences since the Cargill acquisition, and we are continuously striving to keep up this performance.



Human rights

Our respect for human rights embodies the principles of the United Nations Universal Declaration of Human Rights and the conventions of the International Labour Organisation. We are registered with the Supplier Ethical Data Exchange (SEDEX) and comply with the requirements set out in the Modern Slavery Act of 2015. Our ethical working practices ensure we:

- 1** Recognise and respect the freedom of individuals without distinction of any kind including race, gender, language, religion, political or other opinion, national or social origin, property, birth, or other status, and respect the right of our employees to form and join trade unions.
- 2** Provide our employees with a safe and healthy working environment and ensure no children are employed under the legal working age.
- 3** Employ people under fair terms that comply with legal requirements for working hours.
- 4** Remunerate our employees fairly, based on the work carried out and ensure pay exceeds legal minimum requirements.
- 5** Conduct our business in an ethical manner, upholding and respecting business and customer confidentiality, whilst outlawing fraud, bribery and use of insider information.
- 6** Have zero tolerance on non-ethical behaviour in conflict with the requirements stated in our Business Ethics Manual.



Accurate Reporting & Accounting

We comply with internal accounting and reporting guidelines and external financial and non-financial reporting standards and ensure that the information we provide to our stakeholders, such as investors, shareholders, as well as auditors, regulators, and government agencies, is true and transparent.

Corruption & Bribery

To protect the integrity of Boortmalt and its employees, there are strict rules regarding the giving or accepting of gifts, including forms of entertainment. Among other things, we have put limits in place on the value of gifts/invitations and made it obligatory to report any that exceed this limit to prevent employees from getting into situations of bribery, fraud, or conflicts of interest. Corrupt business conduct, such as bribery, embezzlement, fraud, theft, and the provision of improper benefits is not acceptable within our organisation.

Competition law

Boortmalt adheres to competition laws which are designed to protect fair competition in our industry. These laws prohibit business behaviour which can prevent, restrict, or distort competition through, for example, price fixing or the allocation of markets or customers. Boortmalt respects the Competition Law Compliance Policy drawn up and published by Axereal, our holding company.



“ Each and every one of our employees has a responsibility to foster and protect Boortmalt’s reputation. We aim to build a culture of mutual trust through our values, a compliant mindset and a zero tolerance to become Masters of compliance.

Marie-Laure Bolentin,
Chief Integration Management Officer

Zero tolerance and whistleblowing

We have a zero-tolerance policy on non-ethical behaviour or behaviour that conflicts with the requirements of our Business Ethics Manual or our Supplier Code of Conduct. We have implemented clear communication channels where our employees can submit questions and complaints, and unethical behaviour can always be reported through our whistleblowing mechanism.

Boortmalt Supplier Code of Conduct

Our procurement policy is closely aligned with our ethical values. Respect for fundamental workers’ rights, prohibition of corruption and bribery, health and safety of workers, diversity in the supply chain, and environmental standards are the basis of our supplier code of conduct. We expect our suppliers, including their own subcontractors, to comply with our Supplier Code of Conduct.

We reserve the right to audit our suppliers and their subcontractors to ensure that the requirements set out in our Code of Conduct are adhered to. Should an audit identify levels of non-compliance, the supplier will be required to provide a detailed remedial action plan. If the supplier refuses to comply with the action plan, Boortmalt reserves the right to terminate the commercial relationship. This allows full transparency in our supply chain and actively reduces risks where possible. All contracts signed through our central procurement team include this clause, a requirement which we will now roll out to all regions.



EQUALITY, INCLUSION & DIVERSITY

We strive for an inclusive and diverse workplace where employees always feel energised, respected and valued, and where their skills, knowledge and creativity are nurtured and drive our ambition to be the Masters of Malt.

BY 2030

100%

=

Equal opportunities and equal pay in all our regions



Approach

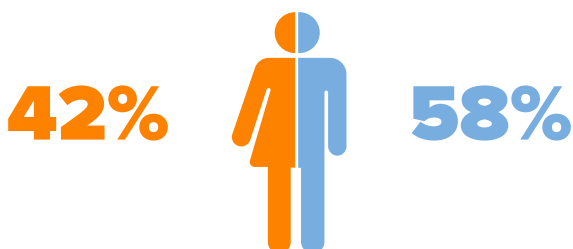
Our 1,100+ employees are at the core of our organisation and are regarded as our most important assets, contributing daily in a passionate way to realising Boortmalt's vision of becoming Masters of Malt. In support of our 'Wellbeing at Work' strategy and in line with the key elements of our materiality analysis, we developed our diversity, inclusion and equality strategy. We embrace all employees, irrespective of their cultural background, religion, experience, or sexual orientation. We believe that the diversity of all our employees is what makes us stronger as an organisation. Promoting this is not enough, however. Through our equality programmes and our support to develop internal talent we also make sure that people can grow and develop in an equal manner within our company.



“ We care to create a work environment that is cherished by our employees due to its equality, safety, appreciation, growth, and goal attainment. ”

Sofie Pels
Chief People & Communication Officer

Boortmalt Excom:



Diversity and Inclusion

We have more than 35 cultures within our organisation and we encourage our people to use this vibrant diversity in the best possible way to achieve our business goals. We strive to make our employees feel safe and at home within the organisation and promote diversity between people and teams, with the aim of learning from each other's differences and encouraging open mindedness and growth.

Equal opportunities and growth from within

Developing and retaining talent is part of our human resources policy and we strive for our employees to build a strong and lengthy relationship with Boortmalt.



Within Boortmalt, all employees deserve equal opportunities and treatment. No distinction is made on the nature and size of the employment contract and part-time and full-time employees receive the same benefits.

We put emphasis on providing a good work-life balance for our employees as it has a positive effect on health, motivation, and commitment. It is important to us that employees feel valued and are given the opportunity to keep their work and private lives in balance. Flexible working hours and facilitating parental leave arrangements help us achieve this.

Among other things, an annual 360-degree evaluation process helps prevent discriminatory treatment. If, despite all measures, someone feels unfairly treated, they can use our whistleblowing procedure to report their concerns. In line with EU regulations, anyone to whom our Business Ethics Manual and code of conduct applies can anonymously report behaviours that are deemed to be in breach with our guidelines and standards. Walking the talk is also very important to us. Our twelve-member Excom team includes five women and five different nationalities. Four of the members were recruited externally while the other eight are internal hires.



Gender Equality in Practice in Argentina

Latin America is a key strategic area to achieve gender equality, covering the long-term needs and aspirations, decision-making power, and development of women. As Argentina as a nation is seeking to break cultural barriers, empower women and end prejudice, it is important for us to play our role in helping to achieve this. Within our recruitment process, for example, female candidates are prioritised in the talent acquisition processes and senior leaders actively voice a need for female talent. This has had a significant positive impact on Boortmalt's female empowerment message. As a result, the proportion of female talent in Argentina has increased from 11% between 2017 and 2019, to 15% over the past year. Women in leadership roles, supported by internal promotions, also increased to 43%, one of whom became part of our Regional Leadership Team. Moreover, 30% of 2020 recruits were women, an increase of 15% compared to 2019.

Although the number of women in our local organisation has increased by 4% in just one year, we see this as a starting point for our Argentinian facilities. One of our goals is to have more gender diversity in the operational roles in our malting plants, positions that have traditionally been held by men. The development and implementation of policies for internal development and work-life balance will also help us to further improve the gender balance at Boortmalt.



In the process of building our new organisational culture, we gave priority to internal applications to promote earned growth trajectories. We have encouraged this by advertising all job openings internally for a period of two weeks before exploring external recruitment channels. We built a multi-stakeholder recruitment process to foster objective decision-making. For senior management positions, short-listed candidates are subject to a third-party assessment.

Our new performance appraisal process also encourages internal growth. We regularly have evaluation meetings with all employees that include bottom-up feedback loops, making it a well-rounded learning exercise. Furthermore, to ensure equal opportunity, performance reviews are not only discussed between direct line manager and direct report, but also include peer feedback. Our managers are specially trained to conduct the performance reviews in a constructive manner and the results of the performance evaluations are discussed at various levels within the organisation. We make it a priority to empower managers as leaders and provide the needed tools to succeed by means of coaching interviews, additional (external) education or training on the job.

Equality of people

We are committed to the fair and equal treatment of both women and men and strive for equal opportunities for all genders. Traditionally, the employee base of an agro-industrial organisation like Boortmalt has been predominantly male but for the past five years we have made it a priority to increase the proportion of women in our workforce to achieve a more balanced structure. By actively supporting women within the company and adapting our recruitment and selection procedures, among other actions, female representation within our workforce has increased to 23%. Furthermore, women make up 42% of Boortmalt's Executive Committee.

“

A year ago, I joined the Boortmalt LATAM team, which, due to cultural differences, consisted of men mostly. The transition for me was a super positive immersion in a different dynamic, from the way we work, to the conversations that take place with my peers. It is to be expected that each organisation and team has its own dynamic, but I believe that for all of us it was disruptive because although men and women are equal, at the same time we have unique characteristics in our way of thinking, feeling, communicating, and acting. Having been the first woman, this was evident. I asked some of my colleagues what it meant to them that there was a woman on the team, their answer was simple: it had become essential, as it generates a thoughtful perspective and different atmosphere.



*Belen Meregalli,
Regional HR Manager LATAM*

”

Equality in Remuneration

To ensure equal pay between men and women, a new remuneration policy has been implemented where functions have been divided into grades, which eliminates potential for discrimination. To develop this policy, we engaged with a third party and analysed the different functions within the organisation. This entailed looking beyond the employee's individual performance and considering what each function brings to Boortmalt as a whole. The functions were assessed across three main domains: required responsibilities, capabilities, and identity. "Identity" for example, includes sub-criteria related to required experience, education and the Boortmalt culture.

Among other things, interviews were set up with team managers and external market benchmarking was carried out regarding job responsibilities, capacities, and identity. A grade was assigned to each function, in the form of a number ranging from 1 to 22, with every grade defining a salary level. Therefore, during salary negotiations, we can distance ourselves from the individual and base remuneration solely on the corresponding salary package for that grade, thereby eliminating the risk of pay inequality.

Ethiopia: Train the trainers

Given the fact that Boortmalt built the first ever malting factory in Ethiopia, it was a challenge to find local talent with the knowledge and skills required to work in our plant. With the ongoing Covid crisis and travel restrictions, we could not send our new Ethiopian team for training to our European malting plants. We therefore decided to send a team of trainers to Ethiopia for knowledge sharing and training with the local team. This included five internal trainers from different departments and with expertise in different areas such as laboratory work, maintenance, production, and quality. We arranged a two-day training program for the trainers, to improve their teaching skills and enhance their cultural awareness, and developed a five-day induction program. This programme consisted of both theoretical courses related to the malting process and a series of team building exercises to nurture team spirit and ease communication between the trainees and the trainers.



Equal opportunity through training

Because our people are the key to achieving our business objectives, maintaining and increasing their knowledge and skills is of strategic importance. That is why Boortmalt continuously invests in training and education. The performance of each Boortmalt employee is evaluated annually and development opportunities are always considered.

Well-trained employees are more likely to progress internally to other positions or fields of expertise which motivates and encourages people to keep developing themselves. Since the acquisition of Cargill in 2019, we have created 115 new positions, of which half have been filled by internal promotions. We aim to continue focusing on internal growth and to start monitoring these figures going forward.

Boortmalt employees are free to join trade unions, with whom we maintain good relationships and are actively involved in the negotiations of collective labour conditions.



WASTE REDUCTION

We are continuously optimising our yield and that of our farmers and finding alternative uses for our by-products, thereby contributing to the overall UN aim of halving food waste globally by 2030. In addition, plastics used in packaging disrupt ecosystems and have a large pollution footprint, hence we also aim to reduce these waste flows by using only fully recyclable and recycled packaging materials.

BY 2030

0

Landfill by 2030

>50%

Packaging recycled or reused by 2030

Approach

Globally, around a third of food is wasted, and a recent Intergovernmental Panel on Climate Change (IPCC) report stated that during 2010-2016, food waste contributed to total global greenhouse gas emissions (8% to 10%). UN Sustainable Development Goal 12 aims to halve global food waste per capita at both a retail and individual consumer level, and to reduce food waste in production and supply chains by 2030.

As malt producers we revalorise the majority of our process “waste” as by-products. The organic waste flows, such as the small barley and the culms of the malt, are used as fodder for livestock, as they are rich in protein. The remaining waste flows are used as fertiliser or biomass and contribute to energy production in our own or external facilities.

In terms of waste from packaging, by transporting as much as possible in bulk trucks, ships, barges, and railcars, we use very little packaging in our product flow from farmer to customer. Where this is not possible due to the lack of facilities on the client side, the malt is packed in 25/50 kg bags, big bags or in containers with liners. These bags and liners are mainly composed of polypropylene and LDPE liners, which are already 100% recyclable.

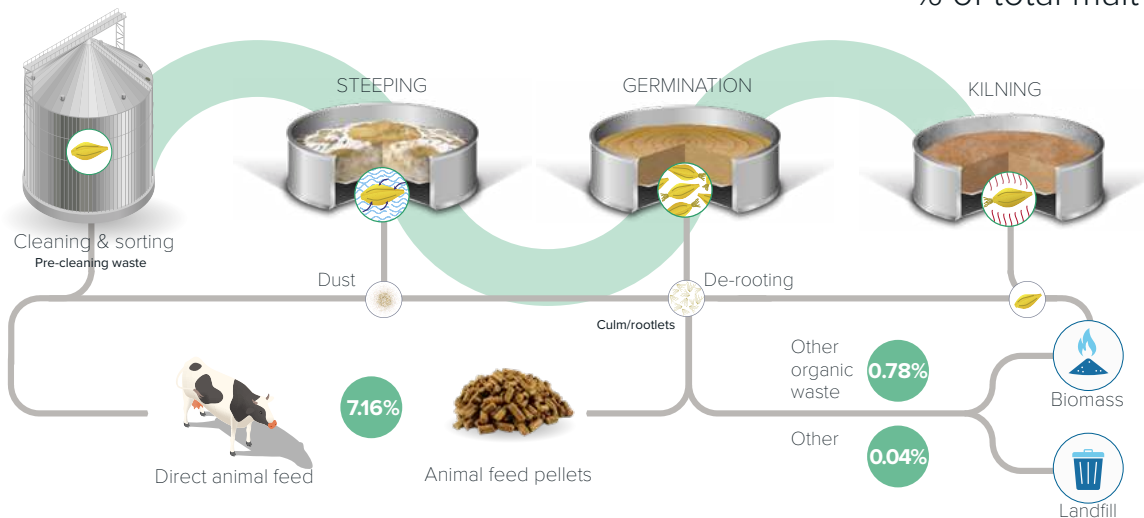
In addition to working towards our internal ambition to get to zero landfill by 2030, we will engage with clients to look for ways to reduce their packaging needs and recycle the packaging material. We will also ensure that all packaging has been at least partly made from recycled materials. In some countries we are already part of national recycling organisations, such as REPAK in Ireland, and we plan to participate in similar initiatives in all countries.

Waste Segregation at Port Adelaide

At all our malting sites we encourage the segregation of waste so that as much as possible is recycled and minimal waste is sent to landfill or incinerated. In Port Adelaide, for example, our employees were inspired by a primary school that minimised their landfill in one month to fit inside a single 1L milk carton. By doing the same at the Boortmalt plant, the biggest impact came from the introduction of plastic recycling. There was a strong focus on the segregation and recycling of all waste streams and employees were encouraged to only send waste to landfill as a last resort. In 2018 we were able to reduce landfill waste by 92%.



Malting waste flow



% of total malt

TRANSPORTED VOLUMES





SUSTAINABILITY TARGETS

4 CORE OBJECTIVES

BASELINE
2020/21

BY
2030/31



**30%
water reduction**

per MT of malt produced through conservation and efficiency.



**50%
of barley base**

engaged in one or more sustainable farming practices.



**50%
emissions reduction**

per MT of malt produced through reduced consumption & renewable energy sources.



**“0”
injuries**

through excellent health & safety programmes.



5 SUPPORTING OBJECTIVES

100%



**No waste
to landfill**

Packaging footprint reduced by 50%.



**Full
traceability**

And where customer requires, also transparency.



**Every
plant**

to be engaged in one or more local community sustainability initiatives.



All employees

to follow our business ethics manual and our customers the Customer code of conduct.



**Equal pay &
equal opportunity**

across all sites.
Diversity and inclusion in line with UN guidelines in all sites.

4 CORE PROGRAMS		20-21	OBJECTIVE 2030
Health & Safety	Sites injury free	68%	100%
	Reportable injury frequency rate (RIFR)* ¹	7.76	0
Sustainable farming	SAI or equivalent certified Europe	35%	95%
	SAI or equivalent certified all other regions	9%	50%
	% Barley volume emissions & methods captured through CFT or equivalent with the aim to reduce the footprint	4%	> 50%
Energy use & Emissions reduction	Kg CO ₂ Emissions per Metric Ton of Malt	157 kg	-50%
	Absolute emissions Metric Ton CO ₂	396 238 MT CO₂ e	-42%
	Scope 1 / Metric Ton*	131 kg CO₂	79 kg/MT
	Scope 2 / Metric Ton*	26 kg CO₂	0 kg/MT
	Scope 3 Emissions from barley purchased / Metric Ton of malt*	404 kg CO₂	-25%
	Scope 3 logistics / Metric Ton (in-out)*	15 + 40 kg CO₂	-25%
Water conservation	Water withdrawal m ³ / Metric Tonne	3.3	No target
	Water consumption m ³ / Metric Tonne*	2.9	< 2 (-30%)

5 SUPPORTING PROGRAMS		20-21	OBJECTIVE 2030
Waste reduction: Malting	Waste going to landfill	0,04%	0
	% recyclable (14% of volume sold is packed)	99%	100%
Waste reduction: Packaging		0.3 kg CO₂/MT Malt transported	-50%
	Reduce the footprint by 50%		
Business ethics & Code of conduct	Ethics manual	New manual Launched	100% of employees know and follow the guidelines
	Supplier code of conduct (global contracts)	100%	100%
	Supplier code of conduct (local contracts)	0%	100%
Equality, inclusion & diversity	% man – woman in management	42-58	Equal Pay, people, promotion
	# of nationalities represented in the different teams	> 40	
	Equal opportunity: promotions from within		
Community engagement	# of initiatives	30	+ 30, min 1 per site.
Traceability & Transparency	AI malt traceable in line with Food Safety requirements	100%	100%
	MT traceable and transparent on the market through projects	2 projects	No target

*Audited by KPMG, fiscal year 2020-2021 - Full audit report with limited assurance level.

¹ Frequency rate include accidents with and without days lost for injury.



CERTIFICATIONS & MEMBERSHIPS

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. By evaluating our risks and opportunities, we have built a certification management system that focuses on compliance with all legal, regulatory, and business requirements. This has further been strengthened by programmes that focus on people and planet and align with our sustainability commitments. In addition, the diversity in our locations is being used to better understand the many different requirements and to share best practices and learnings.

FOOD SAFETY ISO/FSCC 22000



We take the safety of our products very seriously, whether for human or animal consumption, and have chosen to achieve ISO/FSCC 22000 certification at all our locations to ensure that we are producing safe and high-quality malt and feed. This allows us to provide our customers with the assurance and information they need for the ingredients that go into the products that they supply to consumers or animals.

FOOD QUALITY Organic Certification



Additional to food safety, we have achieved organic certification for the malt produced at seven of our plants. These sites meet the requirements of the local Origin Green or equivalent programmes which aim to enable the food industry to set and achieve measurable sustainability targets.



HEALTH & SAFETY ISO 45001



We are committed to providing a safe workplace for all our employees, contractors and anyone who visits our sites. ISO 45001 certification provides a framework, as well as legal and business requirements, to build and promote a robust health and safety system. This certification is a commitment to our teams and a statement that we care equally about internal and external people.

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 resource usage, reducing emissions and waste, environmental certification gives assurance to the practices that we have implemented.



CLIMATE CHANGE & WATER MANAGEMENT

To align our environmental efforts with external frameworks, we report annually to CDP and are proud to have achieved a B+ rating in 2020 for both climate change and water.



“ At Boortmalt, our comprehensive certification programme is essential to enable us to achieve the business objectives, sustainability goals, and maintain compliance



Julie Testi
Group Business Standards Manager

FARMING PRACTICES

SAI & Equivalentents

In every region we work closely with external partners on the certifications of farmers, often in alignment with customer needs. We are partnering with: Irish Grain Assurance Scheme (IGAS) in Ireland, Red Tractor England, Scottish Quality Crops (SQC) in Scotland, SAI for France and Argentina, and SICC for Australia.



Cool Farm Tool

We are a member of the Cool Farm Alliance and use the Cool Farm Tool to capture the activities of our farmers with the aim to get better insights in the carbon footprint of the barley we procure. This information is then shared and used for benchmarking and sharing of best practices to drive improvements across all farmers.



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. This is achieved by identifying our energy hotspots and providing a framework for our design and procurement strategies.

PEOPLE, PRACTICES & PLANET



As people & ethics are the heart of any organisation, we are not only committed to our own employees & ethics but also those of our customers and suppliers. Our membership with SEDEX supports our commitment to fair labour practices, the wellbeing of our employees, business ethics and the environment. The audits provide us with insight of what and where we can improve.

GRI STANDARDS CONTENT INDEX

Boortmalt’s reporting on sustainability and corporate social responsibility is based on the Global Reporting Initiative (GRI) Standards. In our opinion, our reporting generally corresponds to GRI’s reporting principles and the report has been prepared in accordance with the GRI Standards: Core level.

Correspondence between the GRI standards and the Sustainable Development Goals was established following the “Linking the SDGs and the GRI Standards” document.

Disclosure Number	Disclosure Name	Source
102-1	Name of the organisation	Sustainability Report p. 2
102-2	Activities, brands, products, and services	Sustainability Report p. 6, 7
102-3	Location of headquarters	Sustainability Report p. 6
102-4	Location of operations	Sustainability Report p. 6
102-5	Nature of ownership and legal form	The Boortmalt Group is a fully owned subsidiary of the agricultural and agribusiness cooperative Axereal. https://www.boortmalt.com/en
102-6	Markets served	Sustainability Report p. 6, 7
102-7	Scale of organisation	Sustainability Report p. 6, 7
102-8	Information on employees and other workers by gender, region, type of contract	Sustainability Report p. 10
102-9	Supply chain	Sustainability Report p. 6, 9
102-10	Significant changes to the organisation and its supply chain	Sustainability Report p. 9
102-11	Precaution Principle or approach	Boortmalt applies the precautionary principle
102-12	External Initiatives	Sustainability Report p. 9, 13, 28, 29 Contribution to Sustainable Development Goals (SDGs) - Contribution to SBTi - Contribution to CDP
102-13	Membership of associations	Sustainability Report p. 2, 9, 13, 17, 32, 40, 41
102-14	Statement from senior decision-maker	Sustainability Report p. 4
102-15	Key impacts, risks, and opportunities	Sustainability Report p. 12, 13
102-16	Values, standards, and norms of behaviour	Sustainability Report p. 10, 11, 32, 33
102-17	Mechanisms for advice and concerns about ethics	Sustainability Report p. 33
102-20	Executive-level responsibility for economic, environmental, and social topics	Sustainability Report p. 12
102-21	Consulting stakeholders on economic, environmental, and social topics	Sustainability Report p. 13
102-40	List of stakeholder groups	Sustainability Report p. 13
102-41	Collective bargaining agreements	Sustainability Report p. 37
102-42	Identifying and selecting stakeholders	Sustainability Report p. 13
102-43	Approach to stakeholder engagement	Sustainability Report p. 6-7, 16-19, 22, 24-31, 33, 41
102-44	Key topics and concerns raised	Sustainability Report p. 13
102-46	Defining report content and topic boundaries	Sustainability Report p. 13, 14, 15
102-47	List of material topics	Sustainability Report p. 13
102-50	Reporting period	Sustainability Report p. 2
102-51	Date of most recent report	Sustainability Report p. 2
102-52	Reporting cycle	Annual
102-53	Contact point for questions regarding the report	info@boortmalt.com
102-54	Claims of reporting in accordance with the GRI standards	Sustainability Report p. 2
102-55	GRI context index	Sustainability Report p. 44, 45
Universal standards		
103-1	Explanation of the material topic and its boundary	Sustainability Report p. 13
103-2	The management approach and its components	Sustainability Report p. 13-41
Economic standards		
203-1	Infrastructure investments and services supported	Sustainability Report p. 9, 27
203-2	Significant indirect economic impacts	Sustainability Report p. 9, 27
Environmental standards		
301-1	Materials used by weight or volume	Sustainability Report p. 6, 24
302-1	Energy consumption within the organisation	Sustainability Report p. 23
302-3	Energy intensity	Sustainability Report p. 20 - 23
302-5	Reductions in energy requirements of products and services	Sustainability Report p. 20 - 23
303-1	Interactions with water as a shared resource	Sustainability Report p. 24, 25
303-2	Management of water discharge-related impacts	Sustainability Report p. 24, 25
303-3	Water withdrawal	Sustainability Report p. 24, 25
303-4	Water discharge	Sustainability Report p. 24, 25
303-5	Water consumption	Sustainability Report p. 24, 25

GRI: Global Reporting Initiative

The GRI is an international, multi-stakeholder and independent non-profit organisation that promotes economic, environmental and social sustainability.

The GRI was established in 1997 in partnership with the United Nations' Environment Programme (UNEP). The organisation has developed Sustainability Reporting Guidelines that strive

to increase the transparency and accountability of economic, environmental, and social performance and provides all companies and organisations with a comprehensive sustainability reporting framework that is widely used around the world. Since 2016, the GRI guidelines also include references to the UN Sustainable Development Goals (SDGs).



304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Sustainability Report p. 28, 29
304-2	Significant impacts of activities, products, and services on biodiversity	Sustainability Report p. 28, 29
304-3	Habitats protected or restored	Sustainability Report p. 28, 29
305-1	Direct (Scope 1) GHG emissions	Sustainability Report p. 24, 25
305-2	Energy indirect (Scope 2) GHG emissions	Sustainability Report p. 24, 25
305-3	Other indirect (Scope 3) GHG emissions	Sustainability Report p. 24, 25
305-4	GHG emissions intensity	Sustainability Report p. 24, 25
305-5	Reduction of GHG emissions	Sustainability Report p. 24, 25
306-1	Waste generation and significant waste-related impacts	Sustainability Report p. 38
306-2	Management of significant waste-related impacts	Sustainability Report p. 38
306-3	Waste generated	Sustainability Report p. 41
306-4	Waste diverted from disposal	Sustainability Report p. 41
306-5	Waste directed to disposal	Sustainability Report p. 41
308-1	New suppliers that were screened using environmental criteria	Sustainability Report p. 17, 41
416-1	Assessment of the health and safety impacts of product and service categories	Sustainability Report p.30, 40
417-1	Requirements for product and service information and labelling	Sustainability Report p.30, 40
Social standards		
204-1	Proportion of spending on local suppliers	Sustainability Report p. 16, 17, 18, 23
205-1	Operations assessed for risks related to corruption	Sustainability Report p. 33
205-2	Communication and training about anti-corruption policies and procedures	Sustainability Report p. 32
205-3	Confirmed incidents of corruption and actions taken	Sustainability Report p. 32
401-1	New employee hires and employee turnover	Sustainability Report p. 36
403-1	Occupational health and safety management system	Sustainability Report p. 26, 27
403-2	Hazard identification, risk assessment, and incident investigation	Sustainability Report p. 26, 27
403-3	Occupational health services	Sustainability Report p. 26, 27
403-4	Worker participation, consultation, and communication on occupational health and safety	Sustainability Report p. 26, 27
403-5	Worker training on occupational health and safety	Sustainability Report p. 26, 27
403-6	Promotion of worker health	Sustainability Report p. 26, 27, 29
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Sustainability Report p. 26, 27
403-8	Workers covered by an occupational health and safety management system	Sustainability Report p. 26, 27
403-9	Work-related injuries	Sustainability Report p. 26, 27
404-2	Programs for upgrading employee skills and transition assistance programs	Sustainability Report p. 34, 35, 36
404-3	Percentage of employees receiving regular performance and career development reviews	Sustainability Report p. 34, 35
405-1	Diversity of governance bodies and employees	Sustainability Report p. 34, 35
405-2	Ratio of basic salary and remuneration of women to men	Sustainability Report p. 36
406-1	Incidents of discrimination and corrective actions taken	Sustainability Report p. 32
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Sustainability Report p. 32
408-1	Operations and suppliers at significant risk for incidents of child labor	Sustainability Report p. 32
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Sustainability Report p. 32
412-1	Operations that have been subject to human rights reviews or impact assessments	Sustainability Report p. 32
413-1	Operations with local community engagement, impact assessments, and development programs	Sustainability Report p. 28, 29
414-1	New suppliers that were screened using social criteria	Sustainability Report p. 32, 33

