



BarthHaas®



HAAS



HPA



CULTIVATING THE FUTURE



FOCUS ON WHAT REALLY MATTERS



GLOBAL
Sustainability Report
2020/21

CONTENT

- 1. INTRODUCTION Page 3
- 2. COMPANY PROFILE Page 4
- 3. SUSTAINABILITY STRATEGY AND MANAGEMENT Page 8
- 4. PROSPERITY OF OUR VALUE CHAIN Page 16
- 5. ENVIRONMENTAL RESOURCE MANAGEMENT Page 26
- 6. PEOPLE AND SOCIETY Page 42
- ABOUT THIS REPORT Page 48



Tim Lord

Stephan Barth, Alex Barth & Regine Barth

DEAR FRIENDS AND BUSINESS PARTNERS OF OUR COMPANY,

If there is anything this year has taught us, it is that our planet and humanity are as resilient as they are fragile. From natural disasters to the COVID-19 pandemic, and political unrest. It has been remarkable to see how our communities have pushed through tragedy to rebuild and recover from extraordinary circumstances. Moving forward, it is even more evident how important it is for us to not take our natural resources and overall stability of our communities for granted by underestimating the unexpected. It is vital that our businesses and societies learn from our past follies to prepare for all future challenges related to climate change, as well as stand up for human rights, equality and producing our products consciously.

As a part of a family-run company that has operated over multiple centuries, we have learned how to adapt in difficult times and adjust our business practices in accordance with risks the future may pose, especially when working with our growers and managing our own farms.

Our growers are located all over the world, where environmental or agricultural hurdles may differ and therefore so do our approaches to overcome them. In the past few years, we have engaged in regenerative agricultural trials in Germany to improve soil health, conducted farm energy

assessments in Tasmania, and utilized precision farming tools in the USA to reduce our dependencies on chemical farming inputs. We are trying to find local solutions for growers and even helping them move into the digital age with our new Grower's App, where they can quickly access their data and chat with our purchasing department and agronomists.

In addition to these measures, we also collaborate along our supply chain with our customers by participating in the Carbon Disclosure Project (CDP) and are now a signatory of the UN Global Compact and will continue to show our support for the sustainable development goals through our company conduct and future initiatives. We have also successfully completed greenhouse gas assessments for all companies and have set goals for emissions reductions across the board.

We are proud to present the first global report in the group's history which gives you, our stakeholders, an overview of the highlights and accomplishments from our companies the past three years. More importantly, it outlines how we are moving forward to not only do the minimum required of us, but go above and beyond as environmental stewards in our communities.



This report is a comprehensive collection of information from all members of the BarthHaas Group. Here is a guide to help you identify each company throughout the report.





2.
**COMPANY
PROFILE**

WORLDWIDE

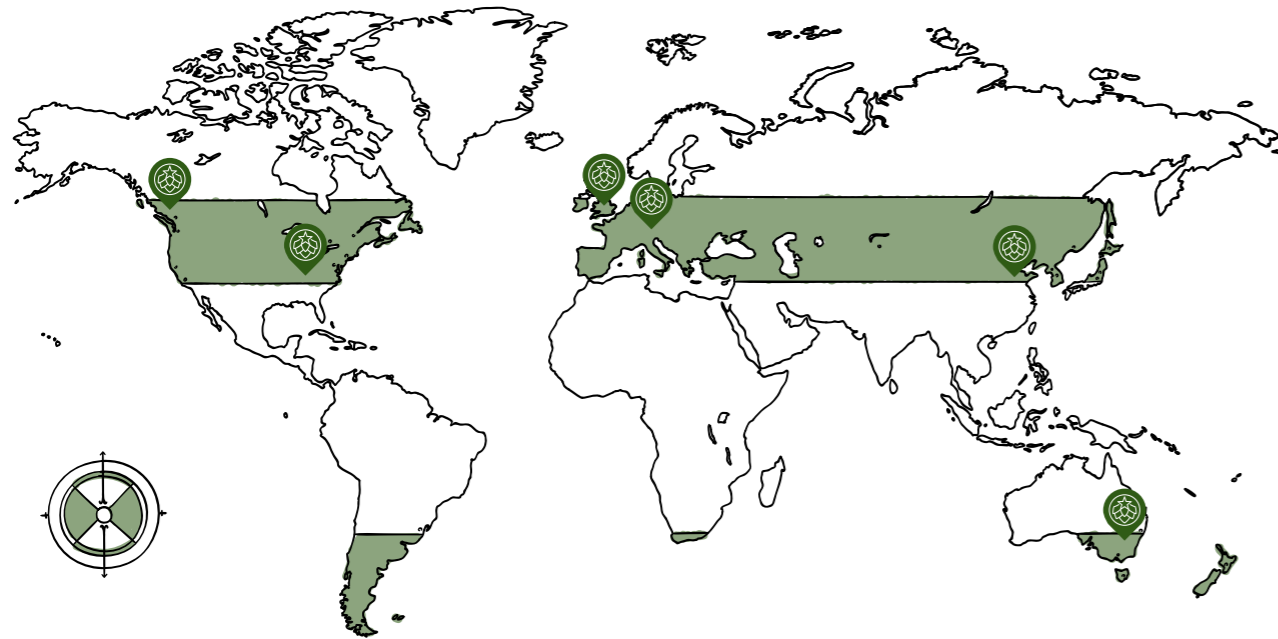
We are passionate about our trade and our people who have made our companies what they are today. Our story is one of passion, which is still very much alive. It forms the foundation upon which we, together with you, our customers, growers, employees, and partners can overcome challenges of the future.



IDENTITY & OVERVIEW

Wherever hops grow, you'll find BarthHaas. Our flourishing family-run businesses form a powerful and innovative network for the finest hops.

We have partners all over the globe and work together to provide our customers with the highest-quality products in an ethical and environmentally responsible manner.



JOHN I. HAAS, INC.
5185 MacArthur Blvd.
N.W. Suite 300
Washington, DC 20016

www.johnihaas.com



HOP PRODUCTS AUSTRALIA
446 Elizabeth St
North Hobart
AU - Tasmania 7000

www.hops.com.au



BARTHHAAS UK LTD.
Hop Pocket Lane
Paddock Wood, Kent
UK - TN12 6DQ

www.barthhaas.com



BARTHHAAS GMBH & CO. KG
Freiligrathstraße 7-9
DE - 90482 Nürnberg

www.barthhaas.com



STAKEHOLDERS


Our stakeholders play a key role in the long-term economic success of our company. The most important stakeholders for us are our employees, our hop suppliers and our brewery customers. Additionally, our partner associations, the authorities and the scientific community can also justly be considered stakeholders.

- Customers
- Banks (Lenders)
- Insurance Providers
- Management
- Owners
- Investors
- Board of Directors
- Suppliers
- Local Service Providers
- Hop Growers
- Employees
- Hop Industry Institutions
- Distribution partners
- Farms



- ALL
- HPA
- JIH

- Research Institutes
- The Arts
- Public & Media
- Citizens' Initiatives
- Future generations
- Neighbours
- Municipal Administration



3.

SUSTAINABILITY STRATEGY AND MANAGEMENT



PLAN & MONITOR

As a family-run group we embrace our responsibility to grow hops and sustainably run our business so we can continue to provide top-quality products and services for our customers. We prioritize the environment by incorporating sustainability values into every aspect of our business. To create meaningful change, everything we do will come under scrutiny to ensure it fits with the cleaner, greener future we are working towards.



*people,
planet,
prosperity*



MESSAGE FROM THE BARTHHAAS SUSTAINABILITY MANAGERS

The BarthHaas global sustainability team has been busy the few years since the last reports from BarthHaas Germany and John I. Haas were published, and we are thrilled to be able to share with you the highlights topics around sustainable agriculture, energy efficiency projects, innovation and partnerships, cooperation with our growers and our involvement with our local communities. We have increased communication and collaboration amongst our teams to share ideas, improve visibility around certain initiatives, and combine knowledge resources to push innovation.

Our colleagues at HPA have put together their first sustainability report this year and along with John I. Haas and BarthHaas Europe, have compiled a complete greenhouse gas emission inventory for the first time. Now knowing where we stand, we can create a plan to move forward. The BarthHaas Europe goal of a 30% reduction of Scope 1 and 2 emissions by 2030 is our most ambitious step yet to taking responsibility for our environmental impact and it is our promise to you that we are taking real action against climate change.

As members of a long-standing family company, our relationship with our growers and the health of our farms is of great priority to us. We believe it is our responsibility to support our farms and hop suppliers in producing hops more efficiently to ensure a secure supply for our customers, even in the face of increasing climate change-related challenges.

We are striving to make systematic changes that will align not only with our core mission as a company but also with the UN Global Compact and the movement for more sustainable production along our entire value chain.

On behalf of our global sustainability team, a thank you to our readers for tuning in and engaging with us on these very important topics. A big thank you as well to all of our employees who have helped put this report together!

Dr. Reinhold Kugel, Laxmi Pandit, Dr. Simon Whittock

OUR TEAM
Hand in hand for sustainability



DR. REINHOLD KUGEL
BarthHaas



LAXMI PANDIT
JIH



DR. SIMON WHITTOCK
HPA

- Dr. Elisabeth Wiesen**
QM Deputy and Brewing Solutions
- Carrie Logan**
Global Sustainability Coordinator
- David Blanchard**
Health, Safety and Environment Officer

- Amy Johnson**
VP, Manufacturing and Quality
- Corrie Van Oostrum**
Associate Marketing Manager
- Marissa Porter**
Agronomist

- George Webster**
Lab Coordinator

OUR APPROACH

For us, sustainability means realizing our economic performance under conditions of environmental and social compatibility. We are convinced that sustainable management leads to a long-term increase in the value of our companies. Instead of growth at any price, we strive for sustainable, qualitative growth that is mindful of future generations to come.

We want to offer "added value" to our stakeholders. In doing so, we focus on quality, innovation and advice. We strive to offer high-quality products at fair prices.

All of our companies are supported by the communities in which they exist. We do our best to give back and act responsibly and respectfully towards them to ensure long-term success. This includes taking environmental aspects into account in all areas along our supply chain. Our primary goal is to reduce our ecological footprint wherever possible in everything we do.

As the world's leading hop marketer, we see our task from a sustainability perspective as taking responsibility

along the entire value chain: from the cultivation of the hops, through their further processing and storage, to their worldwide distribution to our customers.

The continuous improvement of our processes and structures while reducing resource consumption and environmental impact is the central motive of our sustainability efforts. Since its existence, The BarthHaas Group has repeatedly succeeded in making recognized contributions to the further development of both the hop and brewing industries through product and process improvements along the entire value chain.

Our strategy is based on long-standing sustainability principles - taking care of people, our planet, and our ability to stay prosperous in the future.

PEOPLE

Our business could not exist without our employees and the society we operate in. Therefore, fair treatment of our employees, promotion of good health and wellness, as well as supporting our local communities are all key components of our sustainability strategy.

PLANET

We only have one planet, with limited resources. Given our products come directly from the land we live on, we strive to reduce our impact on the planet and use our natural resources responsibly.

PROSPERITY

To be sustainable we must be profitable. We have survived over 225 years in the hop trading business and want to maintain this momentum through risk management and proper governance.

WE ARE PROUD SUPPORTERS OF THE SUSTAINABLE DEVELOPMENT GOALS



PARTNERSHIPS & MEMBERSHIPS

Partnerships are essential for our society to overcome the greatest challenges we face globally. When organizations come together, resources and strengths are shared and can achieve far more than any one organization alone.

We value our partnerships across the globe and look forward to working together, aligning strategies, and collaborating to create a better world for current and future generations.

UN GLOBAL COMPACT



The BarthHaas Group became a proud signatory to the UN Global Compact in 2020. As a signatory we pledge to act responsibly as a company in the global fight against inequality, climate change, and extreme poverty. Many of these issues take global solidarity to overcome, and with our contribution to the UNGC we commit to operating as sustainable as possible for the greater good. A number of Sustainable Development Goals (SDGs) have been addressed through our recent practices included in this report.

WE SUPPORT



SEDEX AND ECOVADIS



BarthHaas became a member of SEDEX and EcoVadis to give our customers security through maximum transparency in matters of corporate social responsibility, and to increase visibility around our supply chain.

Sedex Member



SUSTAINABLE AGRICULTURE INITIATIVE



John I. Haas, Inc. is a member of the Sustainable Agriculture Initiative (SAI) platform which supports the development of sustainable agriculture practices. We have adopted their Farm Sustainability Assessment for our farm operations. Sixty-four percent of our farmers participate in this process. Recognizing the importance of verifying that suppliers who are meeting our sustainability standards, we developed a program for rating suppliers based on their impact on society and human rights performance. Through our participation in the SAI, we display our support for sustainable production in our industry. SAI is the primary international standard for measuring and reporting on value chain initiatives in the food & beverage value chain. Forty-eight percent of the BarthHaas contract partners in Germany are participating in the SAI-based program "Nachhaltigkeit im deutschen Hopfenbau".



LOCAL MEMBERSHIPS

In addition to the UNGC, our companies support local initiatives pushing for positive environmental and social initiatives.

Umweltpakt Bayern

Australian Sustainable Agriculture Initiative

GLOBAL G.A.P.



HAAS® Yakima Golding Farm, owned by John I. Haas, Inc. is certified by Global G.A.P. Global G.A.P. is a set of standards for Good Agricultural Practices (G. A. P.), which promotes safe and sustainable agriculture worldwide.



MATERIALITY

Our stakeholders, as previously described in this report, play a key role in the long-term success of our companies. We have used these long-established relationships, characterized by intensive exchange of experiences, to identify those sustainability areas that are material to our business and other activities. While most of the major materiality topics are equally important globally, each of our companies still have different areas on which they focus, based on geographic location, processes, and governance.

We have assessed the areas identified as material in terms of their relevance, from the point of view of the stakeholders and of BarthHaas. The following materiality matrix provides an overview of these areas and the topics for this report were selected on this basis.

MATERIALITY MATRIX



IMPACT ON BARTHHAAS GROUP COMPANIES

Regional

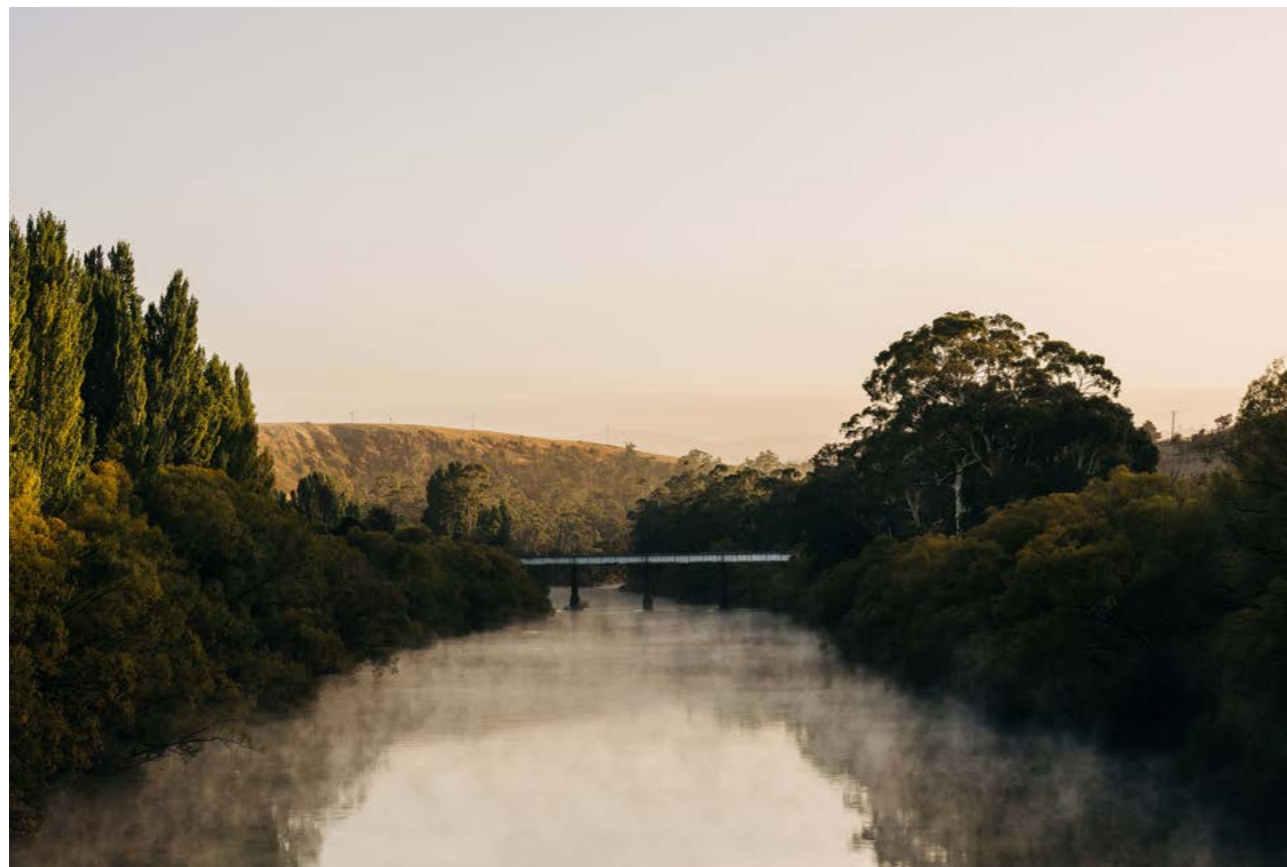
Global

Key Activity Areas

POTENTIAL RISKS & RELATED ACTIVITIES

We have a multidisciplinary approach to risk management designed to identify and assess different threats that could challenge the business. Our management teams, along with other key personnel oversee the day-to-day execution of our risk management strategy, continually developing steps to mitigate or manage new issues as they arise. The risk management strategy focuses on operational,

financial, regulatory, litigation, cybersecurity, information security, tax, credit and liquidity risk. Sustainability risks, such as water availability, natural disasters, and other climate related risks are formally incorporated into this process. Our Board members receive regular reports on these issues and are actively involved in improving our risk management strategy.



THE COVID-19 PANDEMIC

During this unprecedented time, essential workers have been the heart of our community and company. Without their sacrifices, the pandemic would have been unimaginably worse. We understand the responsibility and challenges that come with being considered an essential business. Keeping our customers and employees safe has been and continues to be our number one priority. To do so we have implemented and executed policies and procedures to heighten our employees' safety, prevent the potential virus spread in our company as well as in our community, and maintain our dedication to providing hops and hop products to our customers.

COVID-19 MITIGATION ACTIVITIES

The early exchange with our colleagues in the companies of the BarthHaas Group worldwide enabled us to identify the risks comparatively early, and to announce the first preventative measures to be taken in March 2020.

Protecting employees & their families

Maintaining our supply performance capability

DATA PROTECTION AND IT SECURITY

All areas of our company are dependent on functioning IT systems and correct data. The protection of this information and data against loss and unauthorized access is therefore not only the task of IT, but of each individual employee of BarthHaas. In addition to our internal data, one of our main concerns is the security of the data entrusted to us by our hop suppliers and customers.

We comply with the legal requirements of the respective countries (EU, AUS, USA) protection law and are audited by an external data protection officer. In addition, all necessary protection measures are implemented promptly and new employees are trained on these initiatives through online training. Mobile working, especially this year, has become a matter of great importance for us; rules of conduct for mobile working have been agreed upon.



4.
PROSPERITY OF OUR
**VALUE
CHAIN**



COLLABORATE & INNOVATE

Our multigenerational relationships with our growers allow us to deliver the highest quality hops and hop products to our customers. From developing new varieties, through cultivation, processing, and worldwide distribution, our processes add value to every stage of our supply chain, ensuring our customers' satisfaction. We are committed to being a leader in the development of hops by producing sustainable products and implementing processes throughout our supply chain.



OUR SUPPLY CHAIN

From garden to glass



1. GROWERS & FARMS

Our growers supply us with the best hops so you can make the best beers.

2. PURCHASING

Our purchasers are there to support growers with industry knowledge and advice.

3. PROCESSING

Cold storage, rapid processing, modern equipment and well-founded expertise guarantee the best quality.

4. SALES

With drive, diligence, flexibility and good communication our salesteams stand by our customers.

5. CUSTOMERS

To be the value proposition leader in the industry, we offer our customers the best price/performance ratio. This is about much more than just delivering first-class hops.

6. THINK TANK

With our competent consultancy at the BarthHaas Campus, the JIH Innovation Center, multiple research breweries and the HOPS ACADEMY, we offer our customers a large platform to realize their ideas and stay up to date on all things hops.

PURCHASING PHILOSOPHY

BarthHaas EU



Our purchasing philosophy is based on building trust, partnerships, and a long-term approach to working with our growers. We consciously invest in building a strong relationship with our key suppliers. We aspire to be a long-term partner for them rather than a short-term buyer. After all, only long-term cooperation allows us to set common goals for both sides and to achieve them together. This is not only about individual advantages for both parties, but above all about sustainability and the joint further development of the industry.

We make sure we understand the grower's potential and evaluate supply conditions, while also building strong relationships with them. We have developed the **BarthHaas Grower Learning System** to take a systematic approach to this process of getting to know our growers. Instruments such as the grower advisory board, the HOPS ACADEMY and the supplier loyalty measures are designed to generate benefits and increase competencies.

John I. Haas



As a leading supplier of hops and hop products, we recognize our social and environmental impact. Our purchasing philosophy is to continue maintaining low environmental impacts and provide a more sustainable method of sourcing by the use of sustainable procurement. The success of sustainable procurement is attributable through the following three strategies:

-  **Building Strong Foundations**
 Our relationships go back generations. This foundation of mutual trust and respect allows us to supply our customers with the best and highest-quality hops. Grower's focus on food safety and quality products and reliability is the key component to our success.
-  **Sourcing From Responsible Local Suppliers**
 We purchase from local growers and vendors that meet our quality standards. Over ninety percent of our hop products are sourced from farms located in the Pacific Northwest, and roughly eighty percent of our supply comes from Washington State growers.
-  **Hop Purchase Master Agreement**
 We utilize a Hop Purchase Master Agreement (HPMA) with our growers, ensuring we receive the highest-quality hops from our vendors. The agreement defines expectations regarding environmental compliance, pesticide guidelines, and all local state and federal laws.

GROWER PORTAL 2.0 AND GROWER APP

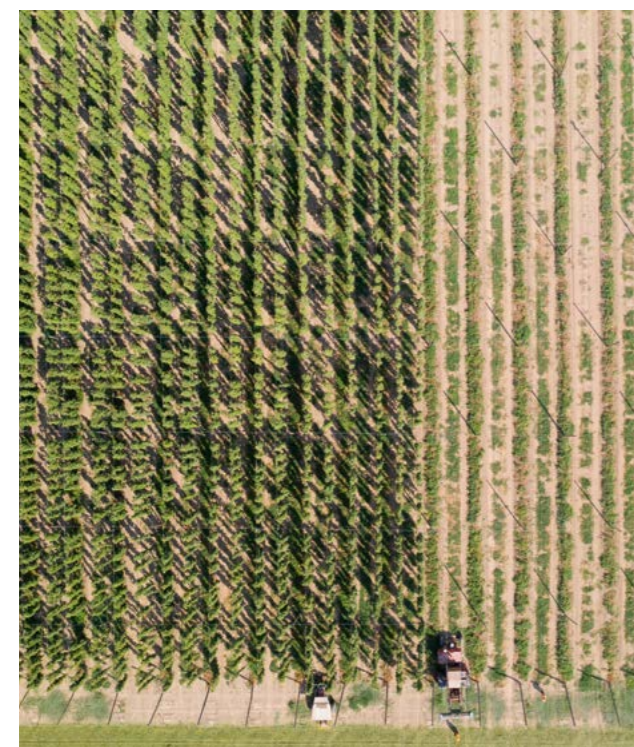


Our new BarthHaas Grower Portal has taken a huge step forward in development and has been redesigned from the ground up.

The advantages of the new grower portal at a glance:

- Improved digital collaboration
- Simplified workflows and processes
- Close collaboration with the BarthHaas team
- Access to the most important information and data at all times

The new BarthHaas grower portal can be accessed at pflanzeportal.barthhaas.de and will be continuously expanded and improved moving into the future. The grower portal is not only available as a web application for PC, but also as a smartphone app. For Android and iOS devices, the "PflanzerApp" is available for free download in the respective app stores. The app includes the same functions as the grower's portal on a desktop, which means that everyone always has their profile and the most important information and contacts relating to the hop business in their pocket, whether in the hop fields or in the comfort of their home office.



Technical and Financial Support for Farmers



We are committed to responsible sourcing, evident by our efforts to improve the quality of life in farming communities. By providing the technical and financial support needed, we increase the resiliency of these communities. We provide agronomy, marketing, and other technical services to strengthen their business practice and product quality. We also produce and provide the growers with high quality plant material (e.g., propagated plants) that are free of disease, are varietally pure, and will result in higher yield and product quality, which results in higher crop revenues for our contract growers. Similarly, HAAS has a proud history of providing financial assistance to our farmers, when needed. For instance, we have provided financial support to help them with new hop fields, expanding their picking facilities, and when they have encountered cash flow difficulties and needed some financial help. We review each request on a case-by-base basis and a resolution is made depending on the project and the grower's stability.

PRODUCT PORTFOLIO



With the most extensive product portfolio in the industry and with highly efficient, quality-oriented processing facilities in all the main growing regions, BarthHaas is a reliable

partner for its customers and makes an important contribution to their security of supply and economic success.

CLASSIC PRODUCTS			AROMA & FLAVOR PRODUCTS			BITTERING PRODUCTS		BREWING AIDS
Raw Hops	Pellets	Extracts	Advanced Flavor	Hop Flavor Evolution	Hop Flavor Revolution	Classic Bittering	Advanced Bittering	HopAid®
Bales	Pellets Type 90	CO ₂ Hop Extract	Aromahop® OE	Inspiring Blends	INCOGNITO®	Isomerized Pellets	Isohop®	Antifoam
Vacuum Packs	Pellets Type 45	Oil reduced Extract	PHA® Classics	BBC Pure Hop Pellet®	SPECTRUM	Isomerized Kettle Extract (IKE)	Redihop®	
		Oil enriched Extract	PHA® Varietals	LUPOMAX®		FLEX®	Hexahop® 95	
			PHA® Topnotes				Hexahop Gold®	
			Natural Additions				Tetrahop Gold®	

INNOVATION

INNOVATIVE PRODUCTS



For consistent and reliable brewing performance brew after brew, we have developed four new products that focus on true-to-type aroma!

SPECTRUM

www.barthhaas.com/spectrum



LUPOMAX

www.barthhaas.com/lupomax



INCOGNITO™

www.barthhaas.com/incognito



FLEX®

www.barthhaas.com/flex



HOPGUARD® II AND HOP GUARD 3



HopGuard® II and HopGuard®3 are BetaTec's innovations. It is a natural hop compound highly effective in defeating Varroa mite (VARROA DESTRUCTOR). HopGuard® II and HopGuard®3 are scientifically-proven natural Varroa control creations that provide the beekeeper with a natural, safe, and easy to use alternative to traditional harsh chemicals.

The Greenhouse

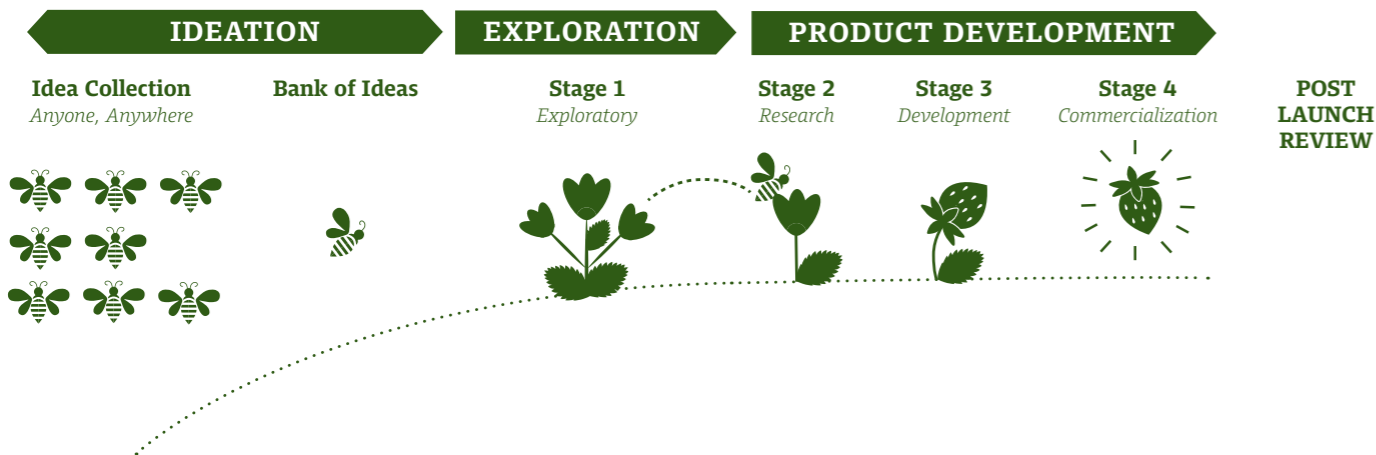
Innovation as a driver for sustainability

The core mission of the Greenhouse is to accelerate innovation by coordinating our resources on a global level. The Greenhouse is a joint venture between us, BarthHaas in Europe, and John I. Haas in the USA. Greenhouse members meet on a regular basis to discuss innovation and product development. This includes how we can create products and processes that incorporate our sustainability principles.



This is reflected in the Greenhouse Mission:

- We boldly embrace all ideas and opportunities.
- We facilitate innovation through efficient collaboration.
- We drive rapid development of profitable products and processes.
- We serve global, culturally diverse and vibrant communities.
- We inspire and transform our industry.
- We create.



PARTNERS IN INNOVATION



- American Society of Brewing Chemists
- Universities & Research Institutes
- Independent Brewers Association
- Institute of Brewers and Distillers
- US Hop Industry Plant Protection Committee
- Master Brewing Association of the Americas
- Yakima Valley Hops
- Australian Research Council Linkage Project

Global

BarthHaas EU

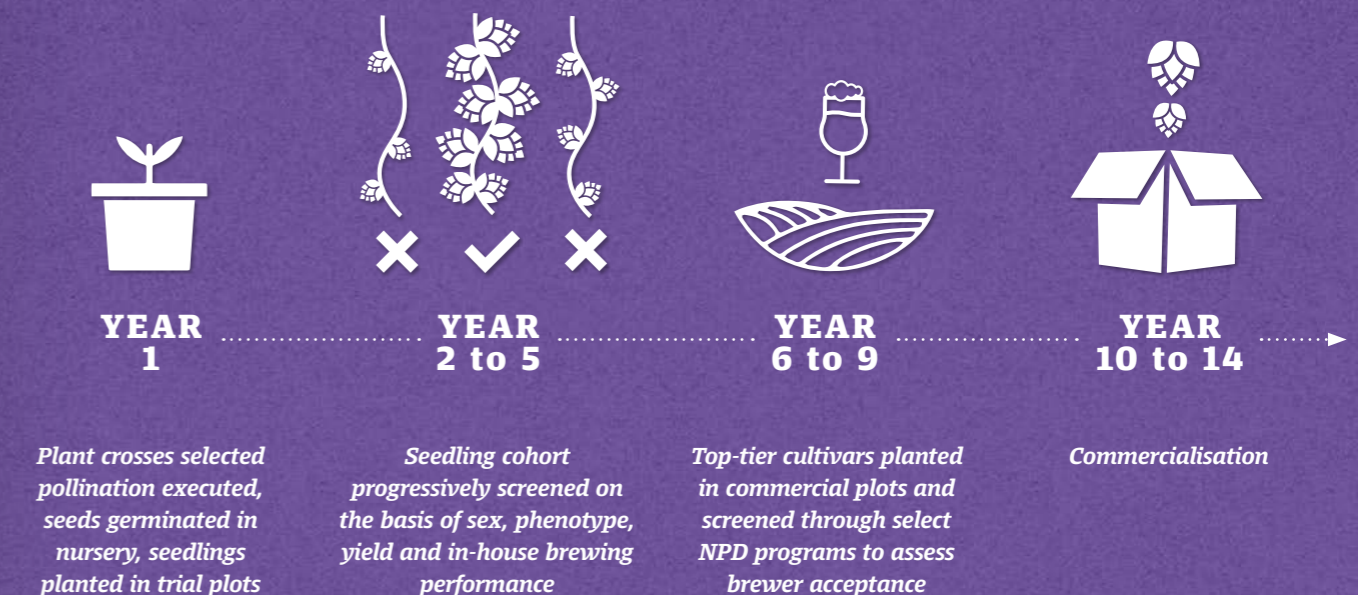
JIH

HPA

HPA HOP BREEDING PROGRAM

Our hop breeding program began way back in the 1950s when we were all about growing bittering hops. Our team has since used their expertise to breed desirable traits, to bring a number of hugely successful proprietary hops to brewers - Eclipse®, Ella™, Enigma®, Galaxy®, Topaz™ and Vic Secret™. Our breeding program prioritizes the production of consistently high yield in the development of new varieties over several years in order to maximize the efficiency of what is a relatively small farming area.

This process ensures we only present commercially viable cultivars to market, whose inputs do not undermine profitability or supply over time. Furthermore, pursuing high yield varieties reduces the amount of emissions produced per hectare. Similarly, maintaining a diverse cohort of genetic material provides us with the opportunity to offer brewers choice and diversity in the context of changing consumer tastes and industry trends.



QUALITY MANAGEMENT & PRODUCT SAFETY

SAFETY FIRST – THAT’S OUR GUARANTEE

Here at the BarthHaas Group, we like you brewers to concentrate on what you do best – creating first-class beers. To achieve this aim, our approach to quality assurance is uniquely comprehensive. We work with our growers to ensure that the hops and hop products you receive from us are of the highest quality. From the plant to the finished hop product we can guarantee complete traceability and quality. In order to improve our products and services in the long term, our processes are regularly reviewed.

All the hops we purchase are combined into blending samples according to precisely defined parameters and 100 % analyzed for possible pesticide residues. Only after we receive the analysis results, are the hops then released for processing or marketing. As an international acting group with facilities/sites in the USA, Australia and Europe we have established a Global Quality Group with regular meetings, to be able to act upon quality requirements from our customers.

- Early Warning System
- Plant Protection Calendar
- Pesticide Record
- Complete Traceability



- HACCP Concept
- ISO 9001 Standards
- ISO 22000/FSSC 22000 Standards
- Quality Certificates

- Residue Analysis
- Comprehensive Screening
- 100 % Test Guarantee

CERTIFICATES

Our company-wide management systems were established to ensure our compliance with applicable regulatory requirements and to help us develop systems that enhance the performance of our companies.

We recognize that continual improvement is essential to the satisfaction of our customers, staff, and community, and the future prosperity of our organization. We demonstrate our responsibility through:

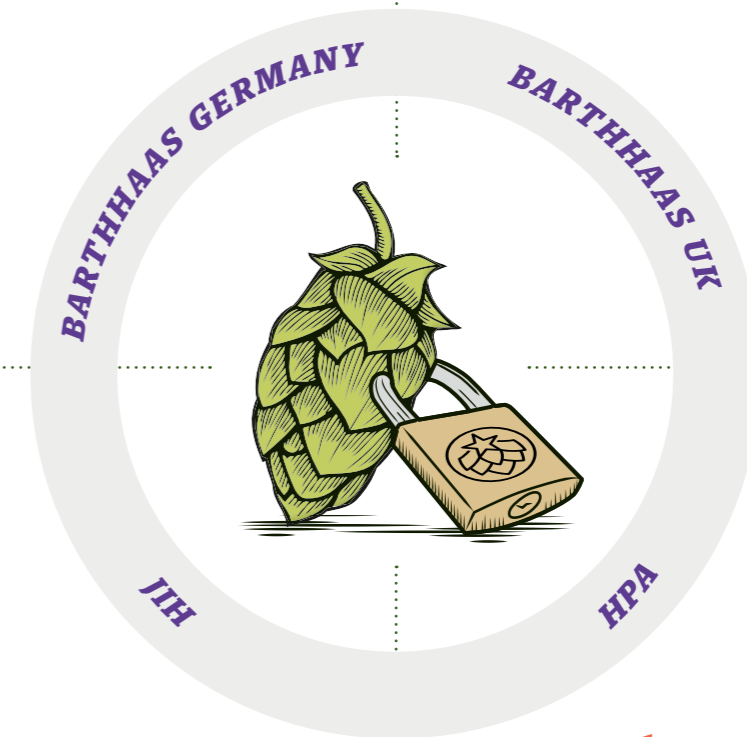
- ISO 9001
- ISO 22000
- ISO 14001
- Kosher
- Organic
- Hopfenring Sustainability

www.barthhaas.com/en/downloads/zertifikate-datenblaetter



- ISO 9001
- ISO 22000
- ISO 14001
- Kosher
- Halal
- Non-GMO

www.barthhaas.com/en/downloads/zertifikate-datenblaetter



- ISO 9001
- FSSC 22000
- ISO 14001
- Kosher
- Halal

www.barthhaas.com/en/downloads/zertifikate-datenblaetter



- ISO 9001
- Kosher
- Non-GMO

www.hops.com.au/certifications





5.
**ENVIRONMENTAL
RESOURCE
MANAGEMENT**



CARE & PROTECT

Concerns over climate change and the overall health of our environment have reached a tipping point. We depend heavily on natural resources to grow our hops and create our hop products and believe we have a responsibility to use these resources as efficiently and respectfully as possible.



OUR FARMS

For us to set resource management goals, we first had to gather a reliable inventory of energy and material use data. Hence, this year we put a large emphasis on tracking our emissions from fossil fuel processes and calculating our carbon footprint, while at the same time also assessing other important environmental indicators, like water usage and waste production. In addition to increasing our awareness of resource and energy use, we have also had some large energy saving projects and investments come to fruition in 2020 which **will decrease our environmental footprint long-term and set us on the path to achieving our goals.**

JOHN I. HAAS FARMS



Yakima Golding Farm - Yakima, Washington

At *Yakima Golding Farm*, the long-term sustainability of our production system drives our day-to-day decision-making. We have been growing hops on this ground for over 100 years and will continue doing so long into the future. It is critical that we conserve our soil and water resources so that the land can provide for future generations.

It starts with choosing high-yielding varieties that are bred right here on the farm, adapted to our unique micro-climate. These varieties require reduced inputs and have high resistance to pests and disease. With over 10 soil types, we manage each uniquely, ensuring that each field is well balanced to maximize the quality of our hops. By growing cover crops and practicing reduced tillage, we protect our soil from erosion while increasing soil health. Our employees return year after year and are happy to be a part of the Haas family. Sustainability is crafted in the tiny details, and the team here at Yakima Golding Farm works together each day to ensure that we are continuously improving.



Our global hop supply comes from a mix of purchased and self-grown hops. John I. Haas grows over 700 acres of hops in the USA, while HPA cultivates over 600 hectares in Victoria, Australia and Tasmania.

Each of the cultivation areas have their own respective challenges to overcome in response to climate change. Our agronomists have been working hard with foresight to address current and potential risks to our farms and growers.

The following is an overview of our farms and some of their most successful initiatives they have undertaken recently.



Yakima Golding Farm is a Global G.A.P. certified farm committed to growing quality hops while simultaneously incorporating all social, environmental, and economical aspects of sustainable farming. By operating our own farm, we can research and improve farming practices, develop, grow and test new environmentally friendly commercial varieties, and provide the latest knowledge to other growers, contributing to a resilient and efficient hop industry. Our improvements to the farm are attributable to our understanding of the importance of researching sustainable practices. Due to our constant growing research, we have continued to make improvements in various ways, such as converting from diesel to propane at all our drying facilities, committing to using only drip irrigation on all existing and new hop acreage, and practicing integrated pest management principles to protect the environment and remain good stewards of the land.

HPA FARMS



In Tasmania and Victoria, Australia we have three farms - **Bushy Park Estates, Rostrevor Hop Gardens and Buffalo River Valley**, where we have been growing hops for more than 150 years. Together we grow 90 % of Australia's hops, which is roughly 1 % of the hops grown around the world. We take pride in breeding new varieties adapted to the Australian landscape and ensuring that the best cultivars end up in the brewers' hands. Just recently, we harvested the first commercial crop at our newest farm, Buffalo River Valley, which will bring us to almost 900 hectares capable of producing more than 2,400 metric tonnes of hops by 2024. Such longevity in these areas is testament to our commitment to sustainable business practices that begin at the paddock and throughout the entirety of our supply chain.

Bushy Park Estates, Tasmania

William Shoobridge successfully brought hops from England to Australia in 1822. It was his son, Ebenezer, who established Bushy Park Estates back in 1867. The original farmhouse and oast house built by his family are still standing today. Located just 55 km from Hobart, bordered by the Styx and Derwent Rivers, Bushy Park Estates is spread over 255 hectares capable of producing more than 600 metric tonnes of hops a year.

Rostrevor Hop Gardens, Victoria

Rostrevor Hop Gardens' history dates all the way back to the Victorian Gold Rush. William Panlook was one of 40,000 Chinese who emigrated to Australia in search of a fortune, but he didn't find it until he planted hops in the 1890s. The farmhouse he lived in with his family still stands today, serving as a reminder of his lasting impact now that it has become our farm office. Located 300 km from Melbourne, bordered by the Ovens River, Rostrevor Hop Gardens is spread over 300 hectares capable of producing more than 700 metric tonnes of hops a year.

Buffalo River Valley, Victoria

Our newest farm stretches alongside the Buffalo River, right around the corner from Rostrevor Hop Gardens. Upon completion, this farm will generate around 800 Mt of hops per year. We use the same on-farm practices across all of our farms in Victoria to ensure the quality of our hops is consistent across the the two farms.



SUSTAINABLE AGRICULTURE INITIATIVES

Not only does running a farm take a lot of energy, but the effects of cultivation on the soil, the surrounding biome, and the community can be significant. Our agronomists and farm managers want to ensure the longevity of our land and implement many sustainable agricultural practices to ensure our healthy soils and abundant yields.

DISEASE AND PEST MANAGEMENT



All of our farms utilize an Integrated Pest Management (IPM) system to monitor the levels of crop pests and disease during the growing season. It also helps us establish thresholds and rotates the use of chemicals to keep pests from building resistances.

Many of our suppliers need to take measures to reduce the intensity of disease and pests to remain cost-effective. To reduce the agrichemical load on our future hop supplies, we continue to breed new and flavorful varieties that are disease and pest-resistant. Our breeding activities are dedicated to developing disease and pest-resistant hop varieties with strong commercial qualities.

COVER CROPPING AND REGENERATIVE AGRICULTURE



Hops are grown from perennial stock and live for almost twenty years. Every year, at the time of harvest, all vines are removed from the field, essentially stripping organic matter from the land during the cropping cycle. Cover crops are used to increase water retention capacity, decrease soil erosion, fix nitrogen, and control pests and weeds. We have also been assessing alternative species to use as ground cover and add diversity to the cropping system.

PRECISION AGRICULTURE IN YAKIMA



In 2020, we refined our agronomy practices to maximize our land's health and hop growing performance. Our site-specific fertilizer applications are based on the particular soil nutrient content and hop yield potential needs for that particular location. The development of site-specific plans enables us to administer fertilizer specific to the site's needs, rather than applying the same amount or kind of fertilizer across the entirety of the farm. This environmentally friendly and cost-effective method allows us to minimize fertilizer loss, reduce pest intensity, and promote plant health and yield potential.



FARM BIOSECURITY AT HPA



Biosecurity plays a critical role in the Aussie hop industry. It keeps our farms free from the world's most damaging pests and diseases. Managing biosecurity is the shared responsibility of our team and every visitor to our farms, as people can unintentionally carry pests, diseases and weeds.

In Victoria, Rostrevor Hop Gardens and Buffalo River Valley are protected by legislation that is focussed on preventing any biosecurity emergencies that could affect Victoria and even Australia.

In Tasmania, Bushy Park Estates is protected by the island's natural barrier from the mainland and overseas, as well as some of the strictest biosecurity legislation in the world.

Click here to read more about the measures we take to ensure our farms stay secure from foreign pests and diseases.

www.hops.com.au/farm-biosecurity



FARM PROJECTS JIH

Double drip tube

Determine if there are yield and/or water saving benefits from using double drip lines as opposed to the current set-up of a single drip line on each hop row.

Compost Application

Transition to using local composted manure as a fertilizer in place of synthetic phosphorus and potassium sources to increase soil organic matter and reduce synthetic inputs.

Reducing Tillage

Conduct an in-depth review of our tillage practices with management to determine what is entirely necessary and where tillage can be reduced.



FARM PROJECTS HPA

AGRICULTURAL ENERGY ASSESSMENTS

In 2019 we partnered with an environmental consultancy firm, Pitt & Sherry, to perform on-farm energy assessments. These were undertaken for as part of the Australia's Agricultural Energy Investment Plan (AEIP). The AEIP supports farmers in first identifying and then implementing energy efficiency opportunities, with the aim of building greater energy resilience in the agricultural sector.

Two investigations were undertaken; one focused on the assessment of Victorian farm energy consumption of electricity, LPG, & diesel; and the second, a pre-feasibility study for switching from LPG to a less carbon intensive fuel for the purpose of kiln drying green hops.

For more information about the results of this energy assessment, check out the HPA report here:

www.hops.com.au/2021-crop-report



Kiln Heat Recovery

Irrigation Upgrades

Replacing LPG with renewable fuel sources in Tasmania

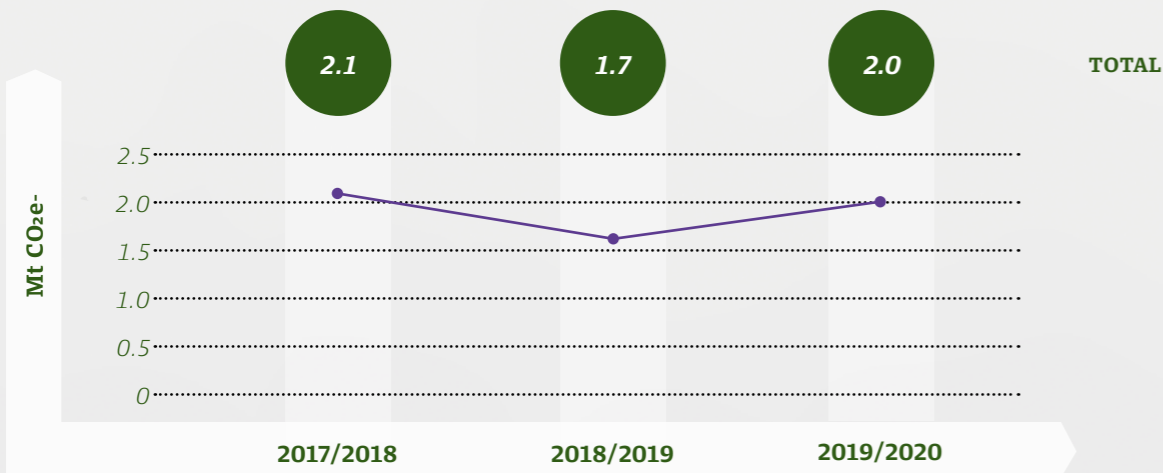
AGRICULTURAL EMISSIONS

Agricultural emissions account for a significant portion of our Scope 1 emissions at our farms in the U.S. and Australia. Each of our cultivations areas have opportunities

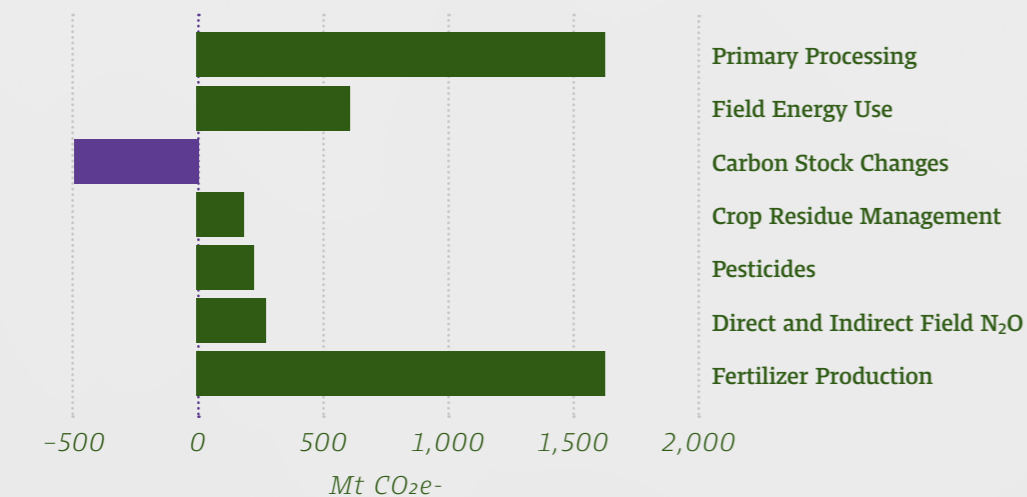
for improvement and projects which will improve our carbon footprint and reduce our dependence on artificial fertilizers, fossil fuels and pesticides over time.

JIH Agricultural Emissions Intensity

CO₂e- Emissions per Mt Hops



JIH Agricultural Emissions 2019/2020

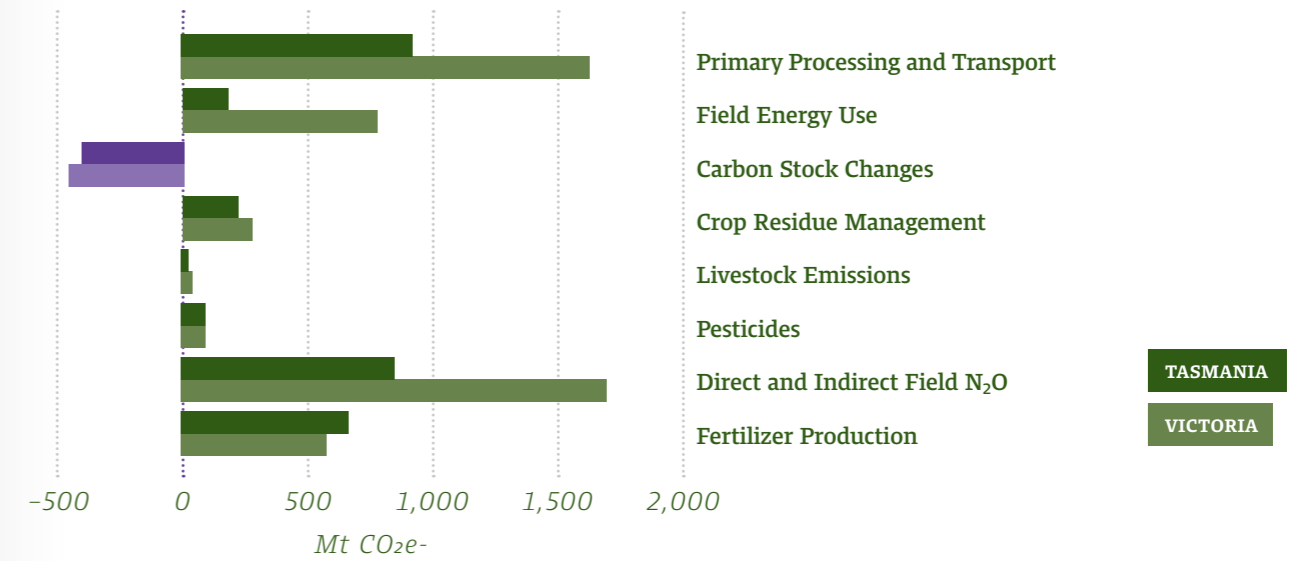


JIH AGRICULTURAL EMISSIONS

At our farms in Yakima, agricultural emissions make up over 40% of our total Scope 1 emissions, leading to an emissions intensity of around 2.0 Mt CO₂e- per Mt hops in 2020. Recently, we have adopted more sustainable fertilizer practices through using composted manure, which over time will increase the fertility of our soils while decreasing reliance on chemical fertilizers. By adding compost, along

with planting cover crops and reducing tillage, we are promoting microbial activity in the soil and building organic matter. Over time, we expect to see a measurable increase in soil carbon. The sequestering of carbon through these practices will offset other agricultural emissions through increased carbon stock exchanges.

HPA Agricultural Emissions 2019/2020



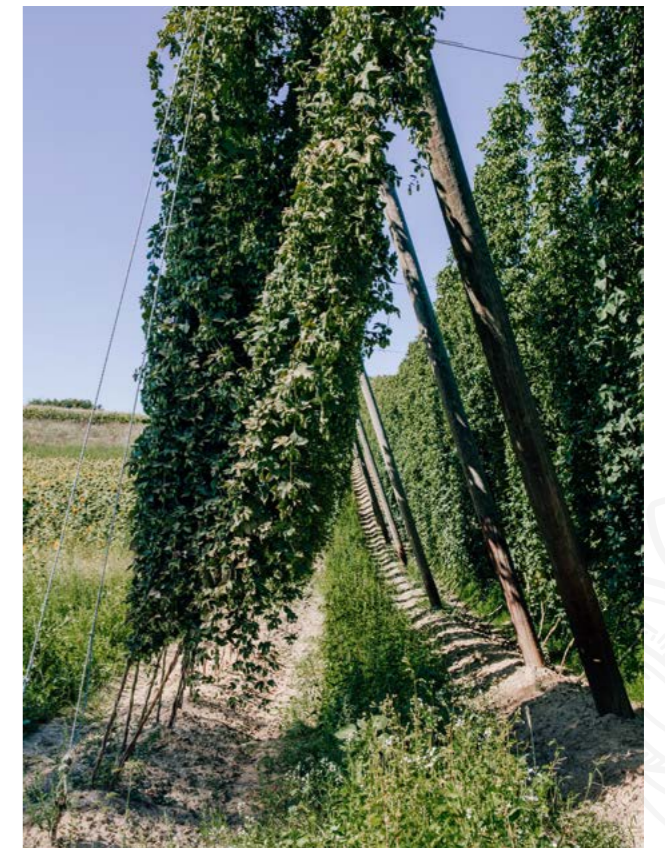
HPA AGRICULTURAL EMISSIONS

At present, our farm operations result in an output of, roughly **4.0 Mt CO₂ per Mt raw hops**. We are currently investigating projects that reduce inputs that contribute to climate change.

This represents the most challenging aspect of production for us, in simultaneously meeting the demands of our customers while reducing the emissions output of our farms.

Agricultural Emissions Intensity 2019/2020

In HPA many new fields have been cultivated where the yields are still quite low. This leads to an increase in agricultural emissions intensity per Mt of raw hops. The agricultural emissions for JIH are approximate, but may also change in the next reporting period with more complete data.



GREENHOUSE GAS EMISSIONS

INTRODUCTION

We adopted the Greenhouse Gas Protocol (GHG) methodology for collecting and reporting our emissions, which is the current global standard for emissions accounting and reporting. The GHG process highlights transparency, accuracy, and consistency throughout the reporting of emissions across all scopes.

Our primary key performance indicator (KPI) is metric tons CO₂ equivalent (Mt CO₂e-) per Mt raw hops. Emissions collection was conducted in cooperation with our production sites, energy suppliers, growers and other members along our supply chain. Emission factors for fossil fuels were taken from numerous sources which can be found in the respective regional reports.

MEASURING & COMPARING GHG EMISSIONS



SCOPE 1

- Stationary combustion from processing facilities
- Office heating and cooling
- Process emissions
- Mobile emissions
- Fugitive emissions



SCOPE 2

- Purchased electricity for our production sites and offices



SCOPE 3

- Purchased goods and services
- Employee commuting
- Business travel

GREENHOUSE GAS EMISSIONS

SCOPE 1 AND 2

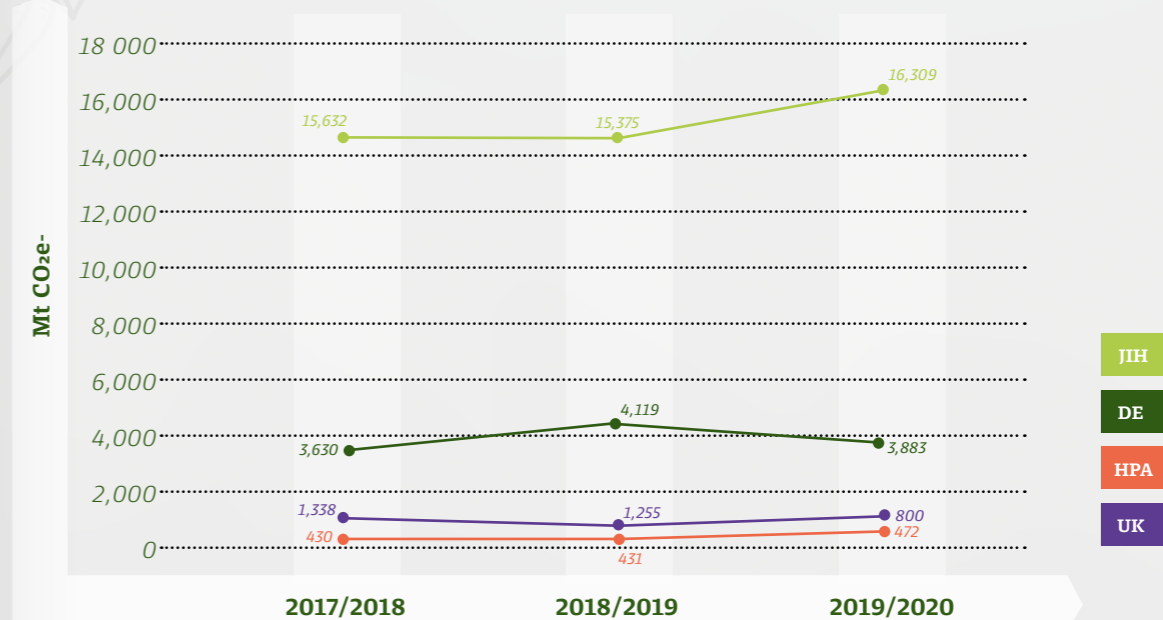
SCOPE 1 EMISSIONS are greenhouse gas emissions that come directly from creating our hop products. This includes stationary combustion and mobile combustion sources, in addition to fugitive emissions from refrigerants and purchased gases.

SCOPE 2 EMISSIONS are indirect emissions that come from generation of electricity we use in our offices and facilities. We have calculated the emissions from both our BH Germany processing plants and those in the UK. The emissions results are reported separately below.

Below is a comparison on emissions across the entire group, not including agricultural emissions for the respective companies that grow hops as part of their operations. The agricultural emissions were separated from emissions created from processing and business operations to allow for comparison between the companies and a more detailed analysis of non-agricultural emissions.

As seen, emissions from John I. Haas in the U.S. are significantly higher than the other companies. This can mostly be contributed to the higher emission factor for electricity purchased (Scope 2). To see a more detailed analysis and explanation of our greenhouse gas emissions, follow the links to each regional report.

Scope 1 & Scope 2 Emissions



SCOPE 1 & 2 EMISSIONS INTENSITY

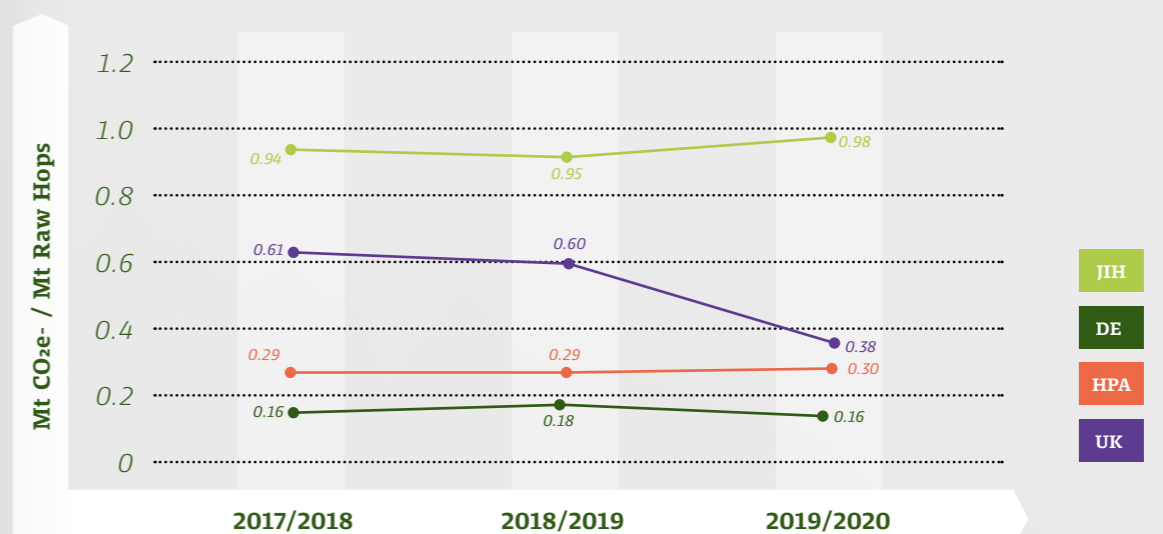
The emissions intensity refers to the Mt CO₂e- needed to process 1 Mt of raw hops. These are estimates based on our best available data, however, due to the fact that our different processing plants manufacture a wide range of products and can not be directly compared, the emissions intensity numbers still need to be refined to best reflect emissions intensity for each company. As seen below, the emissions intensity was relatively consistent over the last three

years, except for BarthHaas UK. The decrease in emissions intensity can be attributed to the decreasing emission factor for purchased electricity (Scope 2) in the region from increasing shares of renewable energies in the energy mix. There has also been a significant change in the production mix, leading to decreased fossil fuel consumption. More details can be found in the BarthHaas Europe report

www.barthhaas.com/sustainability_report_2021



Scope 1 & Scope 2 Emission Intensity



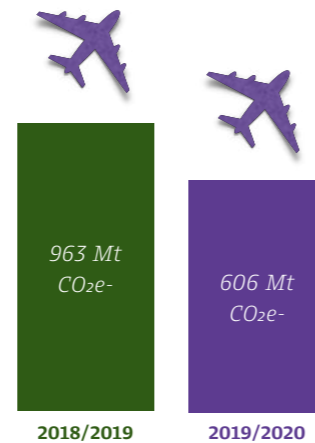
SCOPE 3

SCOPE 3 EMISSIONS include all other emissions along the value chain, from production of raw materials to emissions from use of final product and related wastes after use.

Scope 3 emissions usually account for the majority of a company's total emissions, including ours. Collecting all emissions along the value chain is very time intensive and requires collaboration amongst suppliers and customers. We have put great efforts this year into gathering emissions data from our suppliers through surveys and internal audits.

BarthHaas Business Travel

One of the most obvious consequences from the COVID-19 pandemic was the immediate stop put to business travel, especially flying. After researching our emissions from flying, we found a very large, over **37%, DECREASE IN EMISSIONS FROM REDUCED BUSINESS TRAVEL**. After seeing the positive impact reducing our business travel can have environmentally, we aim to keep unnecessary business travel to a minimum even after travel restrictions are lifted.



While we are on our way to creating a comprehensive data-base of our suppliers- the journey is not yet complete.

In 2021 we plan to not only complete our scope 3 emissions inventory for all of our companies, but also engage with our suppliers to encourage responsible production and business practices. We believe it is our responsibility to hold one another accountable in order to encourage systematic change for the betterment of our planet and our communities.

CARBON & ENERGY

EXTRACTION PLANT RELOCATION AND RENOVATIONS

This year, a new extraction plant three years in the making was finally put into action. The extraction plant was built next to the pelletization plant, moved from its original location in St. Johann. Benefits of this new extraction plant include:

- Elimination of transport emissions (with a total of approx. 16,950 km), saving over 9.4 tons of CO₂
- Installation of a combined heat and power plant for optimized energy supply for pelleting and extraction plants
- Heat recovery from the deep-freeze systems for raw hop drying and building heating
- Increase in energy efficiency through state-of-the-art extraction technology



The finished extract can be stored in more than 20 tanks of differing sizes

HOP OIL EXTRACTION PLANT

In 2019, BarthHaasUK made a major investment in a hop oil extraction plant to replace inefficient, and increasingly unsafe, 40-year old equipment. The principle of the extraction process, using carbon dioxide as the solvent, remains the same, but **THE NEW PLANT RECYCLES 90% OF THE CARBON DIOXIDE** it uses and is more controllable so that the process yields an oil rich extract which is more useful for further processing.

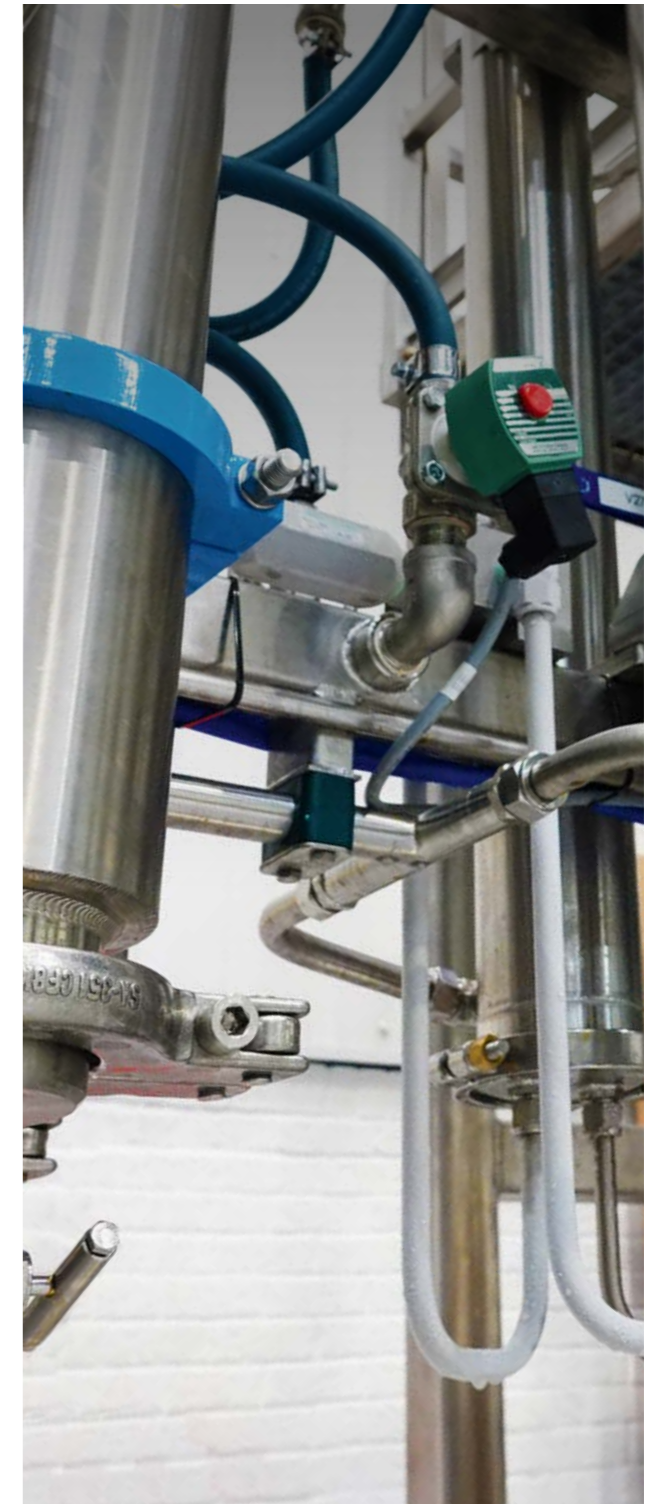
This eliminates some downstream processes that were needed to "clean-up" extract from the old plant.

- Saving 250 Mt CO₂e- per year
- Reducing risks of asphyxiation and fires
- Decreasing dust, noise exposure, and risk of falls from tall heights
- Improved ventilation
- Reducing energy needs for downstream processes

REPLACING REFRIGERANTS

Many refrigerants have high global warming potentials (GWPs) and can be detrimental to the climate and our ozone layer. All of our companies have put forth efforts to transition to less harmful refrigerant options.

At JIH, we have replaced all R22 with R-407F and R-717 in all our warehouse facilities due to its lower GWP. In Germany, the UK, and Australia we plan to have all high GWP refrigerants phased out by 2025.



BARTHHAAS NUREMBERG BUILDING RENOVATIONS



Updated Building Technology

This past year we made major updates to our central office building in Nuremberg. The renovations aimed to improve the overall energy efficiency of the building through improved climate control and lighting, while also improving the building aesthetics and working atmosphere. Through our renovations we reduced our energy consumption (and costs)!



Sustainable Building
DGNB Certificate in Silver

In our renovated building you can find:

- Complete retrofitting of the building with LED technology and motion detectors; almost 1.000 LED ceiling spots in the office area
- Photovoltaic system on the roof for own use or feed-in
- Automatic control of roller shutters to reduce heat and cold ingress
- Sound insulation hoods on the roof to reduce noise for the neighborhood
- Achievement of the Silver Standard of the Deutsche Gesellschaft für nachhaltiges Bauen (DGNB)



PELLET PLANT UPGRADES



At our Yakima pellet plant, we have ongoing environmental projects that address waste, energy efficiency and greenhouse gas emissions. Here is an overview of our most recent completed projects.

- Significant reduction in propane use through updating the ducting between compressors
- Installation of soft start controls for large motors
- Rewiring of pellet plant
- Replaced old, inefficient motors
- New cold room door
- Condenser upgrade



WATER & WASTE

With climate change, comes uncertainty around precipitation levels and security of our water supply. We have been monitoring our water usage both on our farms and in our processing plants to find opportunities to save precious liters and prepare for future crisis. As signatories of the UNGC, we are committed to further innovate and implement a strategy which will decrease our water usage and protect our fresh water sources. We also have strategies in place to reduce other wastes of all sorts - plastic, paper and chemical - can have negative effects on the environment and biodiversity.

PROCESS WATER RECYCLING



Waste reduction and responsible recycling are some of our most important strategies in promoting a sustainable agenda. From August 2015 we have started recycling processed water in our advanced products plant. As a result, we have been able to save 25% of water usage per kilo alpha acid produced.

PAPERLESS INITIATIVES



The global consumption and manufacturing of paper have detrimental impacts on the environment; therefore, we are committed to cutting down our paper consumption. Through a multitude of initiatives and digitalization of our work processes, we have been able to cut down our paper consumption drastically across the board.



THINK BEFORE YOU PRINT



DOUBLE SIDED PRINTING



REUSE!



ELECTRONIC SIGNATURES

BIG BAG PROGRAM AT HPA



HPA has developed a packaging system for bulk handling of T90 hop pellets in collaboration with Lion, a major Australian brewery. The system allows them to pack 500 kg of T90 hop pellets into a single light and oxygen barrier laminated foil placed within reusable outer packaging. The inner foil becomes the property of the brewery, while the outer packaging is returned to HPA for future use. Using this system to partner with more brewing customers who have the appropriate handling facilities has the potential to dramatically reduce the amount of cardboard and unrecyclable foils in the supply of hops.

ELIMINATION OF HEAVY METALS



We set ourselves the target of eliminating the heavy metals throughout our workplaces. Through discussions with our customers, we have phased out the lead conductance value (LCV) titration method from our laboratories. This platform was previously reserved for the determination of hop alpha acid content, but due the handling and disposal of lead acetate this method required, we sought to eliminate it entirely from laboratory operations over a one-year period (2019). Lead has long been known as a highly toxic metal that also has the potential to contaminate soils & waterways. The elimination of lead acetate has been enabled, in part, due to the uptake of sample analysis using NIR technology. 2019 also marked the year in which mercury thermometers were also phased out site wide.

OUR SUSTAINABILITY GOALS

-30 %
REDUCTION
OF SCOPE 1 & 2
GHG EMISSIONS

*at our BarthHaas Europe
production sites*



100 %
SWITCH
TO REFRIGERANTS

*with zero global warming
potential*



-20 %
REDUCTION
IN OVERALL
WATER
CONSUMPTION



40 %
INCREASE
IN WASTE
WATER
RECYCLED



300
MEGALITERS
DAM
TO SAFEGUARD
LOCAL RIVER SYSTEMS

during the growing season



ZERO
WASTE
FROM HEAVY
METALS

*by switching to NIR
analysis in our labs*





6.
**PEOPLE
AND SOCIETY**



TEAM & CULTURE

What is a company without its people? We know that our employees are the heart and soul of our business, and keeping a healthy and happy company culture and working environment is vital to our success. Our guiding values steer us in the right direction so we can create a strong team culture and better define our expectations of teamwork and collaboration. We celebrate having an international team that represents the best of the best in the hop industry! We could not be prouder of our employees and strive to provide provide them with a safe, fair and fun working environment.



EMPLOYEES

Our company's advancements rely on the achievements of our customers, employees, and communities. We attribute our company's success to the unique contribution of every member of our global team. We accomplish our goals when our employees flourish, business thrives, and the community prospers. For this reason, we continue to contribute to the health and wellbeing of our people.

395
MALE
STAFF



70/30
MALE/FEMALE
STAFF RATIO



HPA
STAFF FROM
26
COUNTRIES

BARTHHAAS EU
STAFF FROM
15
COUNTRIES

JIH
STAFF FROM
11
COUNTRIES

AGE DISTRIBUTION



	30 and under	30-50	50+
MALE	69 %	68 %	71 %
FEMALE	31 %	32 %	29 %

FLEXIBLE WORKING CONDITIONS

Remote work and flexible working hours

We understand that our employees don't always run on the same schedule and need flexible working hours, especially with the new challenges that COVID-19 has brought. Our increased focus on digitalization has made working remotely less of a hassle. We do our best to assist employees with extra IT support and home office setups when needed. Additionally, we have adopted cloud-based video conferencing tools for conferencing, collaboration, chat, and webinars, even before the pandemic started.



TRAINING AND DEVELOPMENT

We recognize the benefits of enhancing the skills and knowledge of our employees. Training and development programs strengthen our employee's skills, knowledge, and competencies while simultaneously delivering a positive impact on employee satisfaction, performance, and retention.

Average Training Hours per Employee per year



BARTHHAAS UK MENTAL HEALTH AND AWARENESS

We recognize that the mental wellbeing of employees is at least as important as their physical wellbeing, but that problems are very often hidden. Over the years, there has been stigma associated with poor mental health which has discouraged sufferers from talking about their problems. As these attitudes have begun to change, especially amongst our younger work colleagues, we have increased awareness and created opportunities for employees to talk about mental health. The significant changes to our everyday lives that we have had to make to protect ourselves and others from COVID-19 infection has increased anxiety and mental stress for many, further increasing the importance of the support we provide.



- “Connect” is a monthly company magazine addressing mental health issues and building mental health resilience.
- Monthly “Wellness Wednesday” virtual sessions have given employees an opportunity to learn more about specific mental illnesses and ask questions of our mental health first aiders.
- The company has partnered with benefits providers to give employees access to independent sources of information and free-of-charge, confidential helplines.
- We have 2 employees trained in “mental health first-aid”. They can competently assist colleagues who are in a state of poor mental health, or experiencing a mental health crisis.
- Departmental managers have attended mental health awareness training and are better equipped to identify and manage employees with mental health problems.



Donations and Sponsoring for the Fiscal Years

BarthHaas Europe 2016-2020:	366,423 EUR
JIH 2017-2020:	209,847 USD
HPA 2017-2020:	6,900 AUD

BarthHaas Grants



For us, supporting research means shaping the future. That is why the BarthHaas Group awards scholarships to young researchers who are engaged in innovative hop research. Hop research has made significant progress in recent years, but by no means all possible uses for hops are yet known. The BarthHaas Group therefore wants to promote new research approaches that deal with hops and their possible applications by offering these scholarships. We award up to 2,000 Euros each for up to six scientific papers. The decision is made by a jury consisting of the shareholders of the BarthHaas Group and the members of the Scientific Advisory Board.



Stephan J. Barth at the award ceremony for the BarthHaas Grants

20

Winners have been awarded on a variety of topics since 2016.

EMPLOYEE ENGAGEMENT

While our presence in regional communities contributes to employment opportunities, it can also enhance social capital. We are committed to maintaining a positive presence through engagement with local events, volunteer groups,

and sponsorship of local sporting clubs. We are proud to be able to contribute to the social health of the regional communities in which we operate.

HPA

- 🍃 Bushy Park Show
- 🍃 Myrtleford Festival
- 🍃 High Country Hop Festival
- 🍃 Bushy Park Fire Brigade
- 🍃 Ovens-Eurobin Fire Brigade
- 🍃 Rotary



JIH

- 🍃 Hop donation for "Resilience" Beer- California
- 🍃 Wildfire Victims
- 🍃 Central WA Hispanic
- 🍃 Junior League
- 🍃 American Hop Museum
- 🍃 Children's Village and Playground
- 🍃 Heritage University
- 🍃 Rotary Club of Yakima
- 🍃 Pink Boots Society
- 🍃 La Casa Hogar
- 🍃 Yakima Area Arboretum

BARTHHAAS EU

- 🍃 Supporting cultural events in the Hallertau region
- 🍃 Run or Dye. BarthHaas UK
- 🍃 "Zusammen Halbe"
- 🍃 Kressbronn-Toril Education Program



ABOUT THIS REPORT

REPORTING FRAMEWORK

This is the first Global Sustainability Report from BarthHaas and concerns the fiscal years from 1 August 2017 to the 31st of July, 2021. Our sustainability report has been prepared in accordance with the GRI Standards: Core option.

GRI CONTENT INDEX

Following tables show where information corresponding to reporting elements and disclosures in the GRI Sustainability Reporting Standards can be found in our report. They contain the disclosures taken from the GRI Universal and Top Specific Standards which BarthHaas consider relevant.

SOURCES

To find the sources for all the external information used in this report, please refer to the regional reports.

BARTHHAAS GMBH & CO. KG

www.barthhaas.com/sustainability_report_2021



JOHN I. HAAS, INC.

www.johnihaas.com/news-views/haas-2021-sustainability-report



HOP PRODUCTS AUSTRALIA

www.hops.com.au/downloads/news-events/HPA-Sustainability-Report-2017-2020.pdf



DISCLOSURE No.	DISCLOSURE TITLE	PAGE	COMMENTS
102-1	Name of the organization	1, 6	
102-2	Activities, brands, products, and services	6, 19, 20, 21	
102-3	Location of headquarters	6	
102-4	Location of operations	6	
102-5	Ownership and legal form	6	
102-6	Markets served	6	
102-7	Scale of the organization	44 & see comments	Organizational scale can be found in each of our regional reports, please see the QR codes on p.48
102-8	Information on employees and other workers	44	on p.48
102-9	Supply chain	18, 19	on p.48
102-10	Significant changes to the organization and its supply chain	see comments	No significant changes
102-11	Precautionary Principle or approach	14, 15, 19, 20	Additional initiatives can be found in our regional report. See p.48 for QR codes.
102-12	External initiatives	12, 23	
102-13	Membership of associations	12, 23	
102-14	Statement from senior decision-maker	3	
102-15	Key impacts, risks, and opportunities	14, 15	
102-16	Values, principles, standards, and norms of behavior	11	
102-17	Mechanisms for advice and concerns about ethics	14, 15	
102-18	Governance structure	10	Please see regional reports for more information about regional governance. The QR codes for these reports can be found on p.48
102-19	Delegating authority	see comments	The global sustainability manager oversees operations of the regional sustainability teams. The sustainability teams are the central decision making body and steers the global implementation of the BarthHaas sustainability strategy. They coordinate the activities in the operating divisions and the sustainability teams of the BarthHaas Group companies.
102-20	Executive-level responsibility for economic, environmental, and social topics	3	Manager of Global Sustainability
102-21	Consulting stakeholders on economic, environmental, and social topics	7	
102-22	Composition of the highest governance body and its committees	see comments	Management Board
102-23	Chair of the highest governance body	see comments	Owners
102-25	Conflicts of interest	see comments	Policy regarding conflicts of interest can be found in the BarthHaas Code of Conduct
102-26	Role of highest governance body in setting purpose, values, and strategy	see comments	Management Board

DISCLOSURE No.	DISCLOSURE TITLE	PAGE	COMMENTS
102-27	Collective knowledge of highest governance body	see comments	The management teams of each of the BarthHaas Group carries the overall responsibility for the sustainability policy and directs the business policy to the requirements of sustainable and socially responsible business practices.
102-29	Identifying and managing economic, environmental, and social impacts	11, 13	
102-30	Effectiveness of risk management processes	12	
102-31	Review of economic, environmental, and social topics	11, 13	
102-32	Highest governance body's role in sustainability reporting	see comments	The Global Sustainability Manager oversee the sustainability team, comprised of officers. The sustainability officer leads the sustainability team and is responsible for initiating, implementing and monitoring sustainability goals and projects. For each operational area, there is a sustainability officer (S-B) on the team who is responsible for implementing the projects and measures in the respective area.
102-33	Communicating critical concerns		Each company has feedback systems in place to receive ideas and concerns from employees around materiality topics. Customer feedback is also measured through annual survey.
102-34	Nature and total number of critical concerns	13	
102-35	Remuneration policies	13	
102-40	List of stakeholder groups	7	
102-42	Identifying and selecting stakeholders	7	
102-43	Approach to stakeholder engagement	7	
102-44	Key topics and concerns raised	11, 13	
102-45	Entities included in the consolidated financial statements	see comments	financial breakdowns can be found scanning the QR codes on p.48
102-46	Defining report content and topic Boundaries	2, 13	
102-47	List of material topics	13	
102-49	Changes in reporting	see comments	This is the BarthHaas Group's first ever global sustainability report. The sections carbon & energy are new and reported in detail for the first time.
102-50	Reporting period	48	
102-51	Date of most recent previous report	see comments	August 2016
102-52	Reporting cycle	48	
102-53	Contact point for questions regarding the report	48	
102-54	Claims of reporting in accordance with the GRI Standards	48 & see comments	This report has been prepared in accordance with the GRI Standards: Core option
102-55	GRI content index	49-53	
102-56	External assurance	see comments	no external assurance can be provided

DISCLOSURE No.	DISCLOSURE TITLE	PAGE	COMMENTS
MANAGEMENT APPROACH			
103-1	Explanation of the material topic and its Boundary	11, 13	
103-2	The management approach and its components	3, 10, 11	
ECONOMIC PERFORMANCE			
201-1	Direct economic value generated and distributed	see comments	Please see regional reports for a breakdown of financial data. The QR codes can be found on p.48
201-2	Financial implications and other risks and opportunities due to climate change	20, 30, 31 & see comments	Please see regional reports for details on risk management and opportunities due to climate change. The QR codes can be found on p.48
201-3	Defined benefit plan obligations and other retirement plans	see comments	Please see regional reports for information on employee benefits and other retirement related plans. The QR codes can be found on p.48
MARKET PRESENCE			
202-2	Proportion of senior management hired from the local community	see comments	Please see regional reports for information about senior management. The QR codes can be found on p.48
INDIRECT ECONOMIC IMPACTS			
203-1	Infrastructure investments and services supported	see comments	Please see regional reports for information about infrastructure investments. The QR codes can be found on p.48
203-2	Significant indirect economic impacts	see comments	Please see regional reports for information about significant indirect economic impacts. The QR codes can be found on p.48
PROCUREMENT PRACTICES			
204-1	Proportion of spending on local suppliers	see comments	Please see regional reports for information about spending on local suppliers. The QR codes can be found on p.48
ANTI-CORRUPTION			
205-2	Communication and training about anti-corruption policies and procedures	see comments	No official training is given on anti-corruption. Our policy on anti-corruption can be found on the BarthHaas Code of Conduct.
205-3	Confirmed incidents of corruption and actions taken	see comments	no confirmed incidents were reported
MATERIALS			
301-2	Recycled input materials used	see comments	A detailed overview of the region-specific waste management practices and use of raw materials can be found in the regional reports. The QR codes can be found on p.6

DISCLOSURE No.	DISCLOSURE TITLE	PAGE	COMMENTS
ENERGY			
302-1	Energy consumption within the organization	32-34	A detailed overview of the region-specific energy consumption can be found in the regional reports. The QR codes can be found on p.48
302-2	Energy consumption outside of the organization	36	A detailed overview of the region-specific energy consumption can be found in the regional reports. The QR codes can be found on p.48
302-3	Energy intensity	35	A detailed overview of the region-specific energy consumption can be found in the regional reports. The QR codes can be found on p.48
302-4	Reduction of energy consumption	36-40	A detailed overview of the region-specific energy consumption can be found in the regional reports. The QR codes can be found on p.48
302-5	Reductions in energy requirements of products and services	36-40	A detailed overview of the region-specific energy consumption can be found in the regional reports. The QR codes can be found on p.48
BIODIVERSITY			
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	see comments	No Sites
304-2	Significant impacts of activities, products, and services on biodiversity	see comments	A detailed overview of specific impact on biodiversity can be found in the regional reports. The QR codes can be found on p.48
304-3	Habitats protected or restored	see comments	A detailed overview of the region-specific biodiversity protection strategy can be found in the regional reports. The QR codes can be found on p.48
EMISSIONS			
305-1	Direct (Scope 1) GHG emissions	32-34	A detailed overview of the region-specific GHG emissions can be found in the regional reports. The QR codes can be found on p.48
305-2	Energy indirect (Scope 2) GHG emissions	32-34	A detailed overview of the region-specific GHG emissions can be found in the regional reports. The QR codes can be found on p.48
305-3	Other indirect (Scope 3) GHG emissions	36	A detailed overview of the region-specific GHG emissions can be found in the regional reports. The QR codes can be found on p.48
305-4	GHG emissions intensity	35	A detailed overview of the region-specific GHG emissions can be found in the regional reports. The QR codes can be found on p.48
305-5	Reduction of GHG emissions	36-40	A detailed overview of the region-specific GHG emissions can be found in the regional reports. The QR codes can be found on p.48

DISCLOSURE No.	DISCLOSURE TITLE	PAGE	COMMENTS
305-6	Emissions of ozone-depleting substances (ODS)	see comments	A detailed overview of the region-specific GHG emissions can be found in the regional reports. The QR codes can be found on p.48
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	see comments	included in greenhouse gas emissions calculations. A more detailed overview of other significant air emissions can be found on p.48
EMPLOYMENT			
401-1	New employee hires and employee turnover	see comments	For this information, please see regional reports. The QR codes can be found on p.48
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	see comments	For this information, please see regional reports. The QR codes can be found on p.48
401-3	Parental leave	see comments	For this information, please see regional reports. The QR codes can be found on p.48
OCCUPATIONAL HEALTH AND SAFETY			
403-1	Workers representation in formal joint management-worker health and safety committees	see comments	Yes, workers are represented in these meetings for BH UK
404-3	Workers with high incidence or high risk of diseases related to their occupation	see comments	none
403-4	Health and safety topics covered in formal agreements with trade unions	see comments	At JIH, the employees are partially unionized and these topics are covered
TRAINING AND EDUCATION			
404-1	Average hours of training per year per employee	45 & see comments	For this information, please see regional reports. The QR codes can be found on p.48
404-2	Programs for upgrading employee skills and transition assistance programs	see comments	For this information, please see regional reports. The QR codes can be found on p.48
404-3	Percentage of employees receiving regular performance and career development reviews	see comments	all employees eligible for yearly performance review
DIVERSITY AND EQUAL OPPORTUNITY			
405-1	Diversity of governance bodies and employees	45 & see comments	For this information, please see regional reports. The QR codes can be found on p.48
LOCAL COMMUNITIES			
413-1	Operations with local community engagement, impact assessments, and development programs	46, 47	
CUSTOMER HEALTH AND SAFETY			
416-1	Assessment of the health and safety impacts of product and service categories	24	
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	see comments	no incidents reported

Imprint

CONTACT

For all questions regarding the report and its content:

BarthHaas GmbH & Co. KG
Dr. Reinhold Kugel
Freiligrathstr. 7-9
90482 Nuremberg
reinhold.kugel@barthhaas.de

Hop Products Australia
Dr. Simon Whittock
446 Elizabeth Street,
North Hobart, Tasmania 7000, Australia
simon.whittock@hops.com.au

John I. Haas, Inc.
Laxmi Pandit
5185 MacArthur Blvd. N.W. Suite 300
Washington, DC 20016
laxmi.pandit@johnihaas.com

PRESS ENQUIRIES

Thomas Raiser
Director Sales & Marketing/
Member of the Board of Directors
BarthHaas GmbH & Co. KG
thomas.raiser@barthhaas.de

LAYOUT

claudiusbähr+friends GmbH

PRINT

Pinsker Druck und Medien GmbH, Mainburg



*A passion
for hops*

WHAT MATTERS
TO YOU?



BarthHaas®



HAAS

HPA

www.barthhaas.com

www.johnihaas.com

www.hops.com.au