



OUR NEW NORMAL

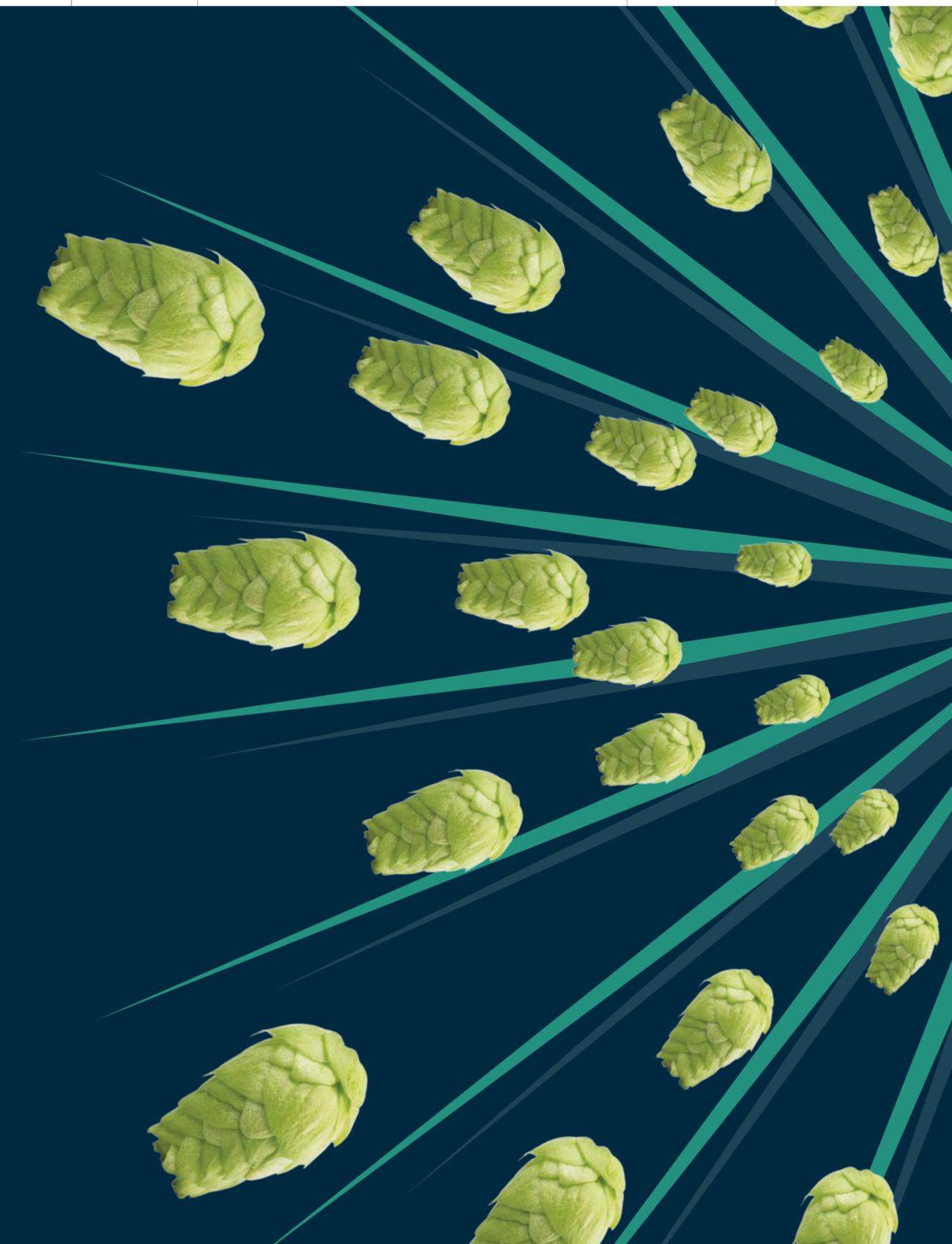


SUSTAINABILITY REPORT
2017-2020



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As the largest hop grower in Australia, it is important for us to consider the environmental, social and economic impact of every decision we make. After all, our farms are more than fields and hops. They are the future of our employees, customers and communities.

To create meaningful change, everything we think, say and do will come under scrutiny to ensure it fits with the cleaner, greener future we are working toward. We are already incorporating sustainability into our operations, but more is being planned and many innovations still need to occur. It is an enormous task, but I am confident our team can find solutions to ensure our business has a positive impact on people and the planet.

I encourage you to join us on this sustainability journey.

**Tim Lord
Managing Director**

A BIT ABOUT US

Hop Products Australia (HPA) is the largest hop grower in Australia, backed by a team of experts in plant breeding, farm operations, customer service and brewing support.

Our farms have been growing hops for more than 150 years, during which time we have developed a diverse portfolio of proprietary hops through our commitment to creating new flavours that inspire brewers everywhere. We are also regional representatives of BarthHaas, the world's largest supplier of hop products and services. This means we're able to share our hops with brewers around the world and bring a huge range of international hops and innovative hop products to brewers in Australia.

BarthHaas operates across all continents, providing support to its members along the whole value supply chain: from breeding and growing through to processing and the marketing of hops and hop products. Their innovation centres, Barth Innovations in the UK and HAAS Innovations in the US, are dedicated to sustainable research and development. Innovations are routinely shared and discussed, which means our brewing customers receive the full benefit of this collaboration. At the end of the

day, we are all invested in better, more sustainable beer.

Over the course of our rich history we have become vertically integrated, meaning we have sole custody of our proprietary hops across all stages of the hop production process, from breeding and cultivation all the way through to packaging and sales. However, with great control comes great responsibility. We recognise we are not just hop growers, but socially and environmentally accountable custodians of the entire supply chain.

While HPA produce a relatively small portion of the world's hops, we have introduced a number of world-renowned proprietary hops to the market, all of which are cultivated on Australian soil. The widespread recognition of names such as Pride of Ringwood, Super Pride, Vic Secret, Galaxy and newcomer Eclipse, clearly demonstrate our ability to commercialise new hops with relevance to the requirements of the global brewing industry. We are fiercely proud of our patch, but also view things in a global context. This means conducting ourselves in accordance with universal principals that ensure our everyday activities are performed with a sustainable mindset, so future generations can enjoy a world that is in as good or better shape than we found it.



STAKEHOLDERS

Open collaboration with stakeholders is central to the long-term success of our business. Each group has a valuable perspective on the sustainability issues that impact our operations.

STAKEHOLDER ENGAGEMENT

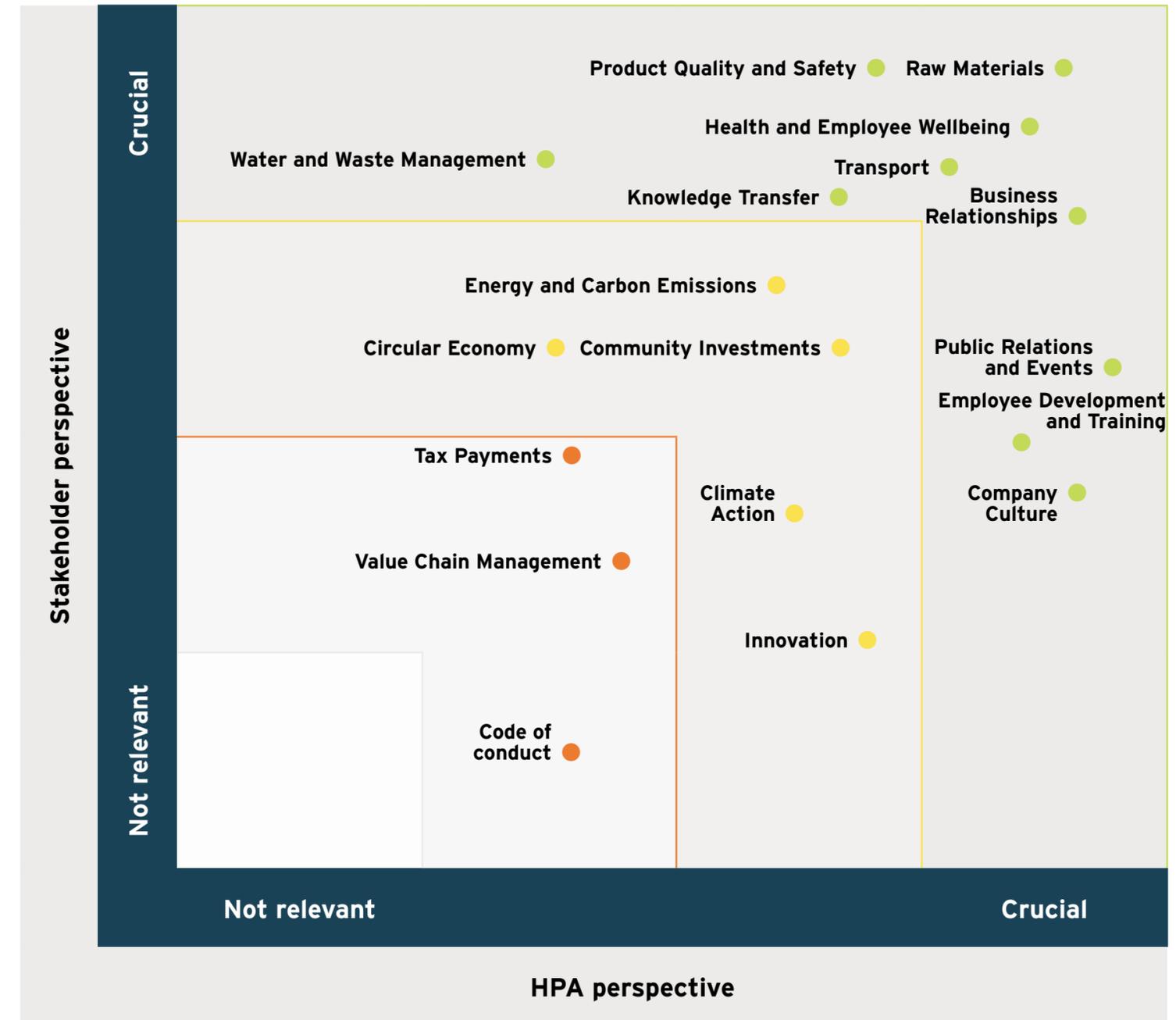
The success of our business, and the broader agriculture sector, is dependent on stakeholder engagement, in alignment with the UN's Sustainable Development Goals. We identify our most important stakeholder groups through consultation with internal business units, and engage with stakeholders in a variety of contexts. Listening carefully to their concerns and priorities helps inform our sustainability strategy and material issues on an ongoing basis.

We maintain an active presence within the hop and brewing industry to stay current and contribute to innovations, strategies and scientific publications around the world. Information relating to our operations is communicated in a way that achieves the necessary level of transparency among our stakeholders, customers and community. This approach helps us build a healthy level of trust that is vital to maintaining our relationships within the hop and brewing industry.



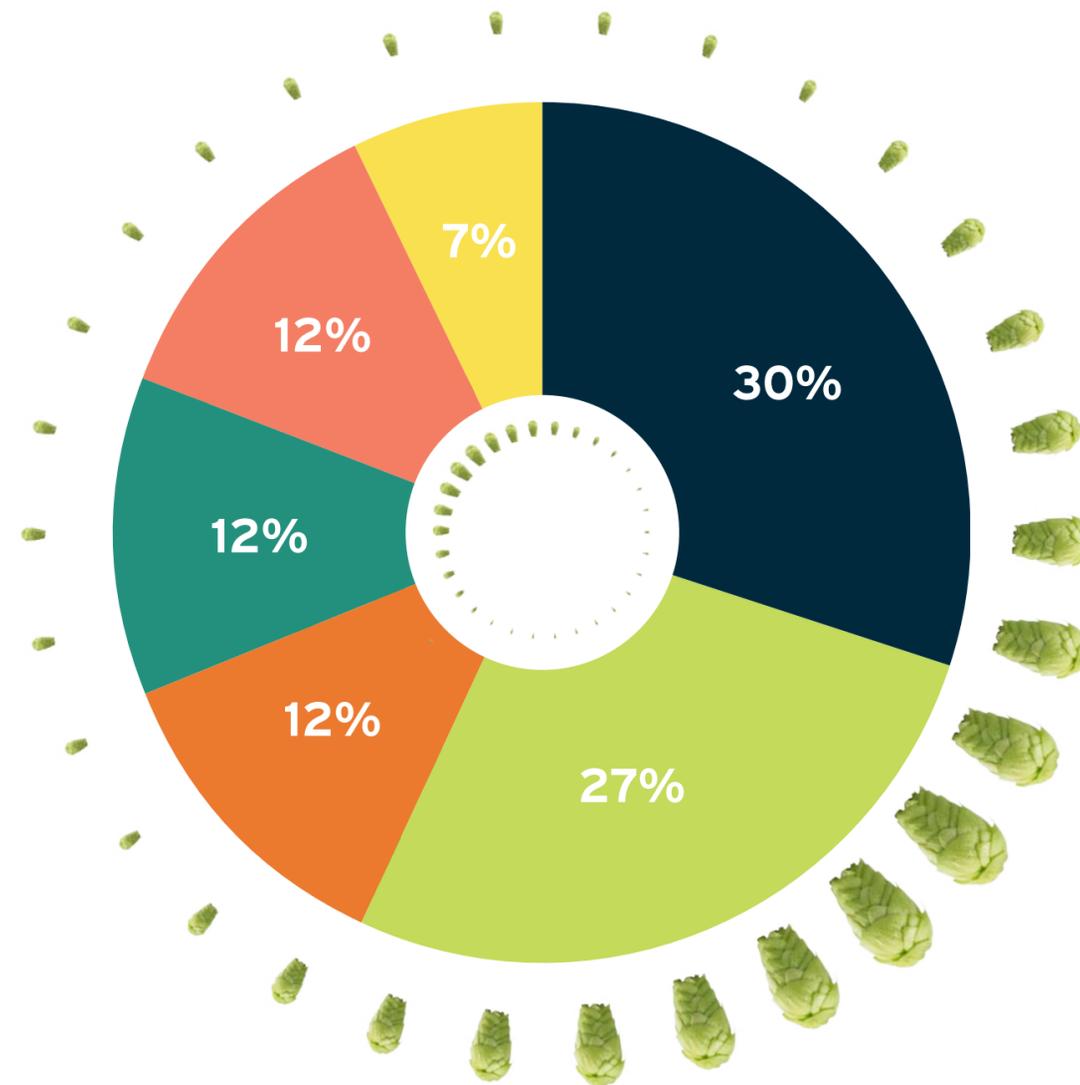
MATERIALITY MATRIX

The Materiality Matrix represents the guiding principles that both HPA and BarthHaas have agreed are specific to the needs and demands of providing quality hops. The matrix is complimentary to and supportive of the UN's Sustainable Development Goals (SDGs) and the Global Reporting Indicator (GRI) framework, with an extra focus on ever-improving innovation and quality for our brewing customers. The areas that have been identified to be of material importance by our stakeholders range from logistics to innovation, with the purpose of promoting sustainable growth through consideration of our customers feedback and overall brewing satisfaction.



FINANCIAL OVERVIEW

- Crop inputs
- Farm labour
- Purchasing hops
- Administration
- Depreciation
- Other - processing, storage, R&D, interest



FINANCIAL INTEGRITY

We manage our tax and economic contributions in line with Australian law. In addition, HPA is now a signatory to the UN Global Compact which provides a framework for incorporating sustainability into our operations. We measure our performance against universal management principles linked to the environment, human rights and anti-corruption. As such, we have policies in place to ensure financial integrity that will support long-term business sustainability.

PRODUCT PORTFOLIO

AUSSIE HOPS	IMPORTED HOPS	AROMA & FLAVOUR PRODUCTS	BITTERING PRODUCTS	ANTIFOAM PRODUCTS
<p>Type 90 Pellets</p> 	<p>Type 90 Pellets</p> <p>LUPOMAX®</p>	<p>Incognito®</p> <p>PHA® Classics</p> <p>PHA® Topnotes</p> <p>Natural Additions</p>	<p>CO2 Extract</p> <p>Flex®</p> <p>Isohop®</p> <p>Tetrahop Gold®</p> <p>Hexahop Gold®</p> <p>Redihop®</p>	<p>HopAid®</p> <p>Lipohop K®</p> 

GREEN HOP PROGRAM

Every harvest, we offer freshly picked hops to breweries along the south-east coast of Australia for immediate use in limited edition beers that are naturally vibrant and herbaceous. It is a true demonstration of paddock to pint, with only hours between the hops being harvested and arriving at the brewery. We are proud to provide this level of access to our hops and our farms, and are always excited to see which beer styles our brewing customers choose to showcase our green hops.





→ **Nurture strategically aligned customers**

- Establish service metrics and identify opportunities for improvement
- Pursue forward contracts to better align supply and demand

→ **Brands that create value for stakeholders**

- Implement customer satisfaction assessment framework
- Ensure key corporate communications are easily accessible to stakeholders

→ **Sustainable growth**

- Evolve product portfolio according to market demand
- Continue to execute capital projects that improve capacity to meet market demand



OUR SUSTAINABILITY STRATEGY

Our farms are more than fields and hops. They are the future of our employees, customers and communities. As the largest hop grower in Australia, it is important for us to consider the economic, environmental and social impact of every decision we make.

This report signifies our inaugural sustainability reporting cycle, in which we evaluated our core business activities in relation to sustainable practices, achieved milestones such as quantifying the carbon intensity of our operations, improved our anti-corruption and whistleblower policies, and assessed farms for opportunities to improve energy efficiency.

It is just the beginning of our sustainability journey, for which we have developed a roadmap that considers several key areas. Social responsibility, environmental footprint, responsible sourcing, consumption and production now underpin our sustainability strategy and management.



HPA supports the Sustainable Development Goals (SDGs). Our sustainability strategy is guided by the UN's 17 SDGs. These SDGs represent a unifying framework from which we can leverage transformational opportunities to achieve the 2030 Agenda for Sustainable Development. As a recent signatory to the UN Global Compact, we have undertaken a process of defining priorities, goal setting and integrating sustainable practices. Through this process we identified key SDGs across our supply chain that reflect who we are as a business, and the core competencies that are central to realising our sustainability strategy. While we will uphold all 17 SDGs, these particular goals are where we feel we can create real, positive change:

People

Our business could not exist without our dedicated team and the communities in which we operate. Therefore, the fair treatment of our employees, promotion of good health and wellness, as well as supporting our local communities is extremely important to us.



Planet

Our success rests on the health of the land and its limited natural resources, so we strive to reduce our environmental footprint and manage all natural resources responsibly.



Prosperity

To be sustainable we must enact responsible economic growth. We will continue to succeed in the hop industry through risk management and proper governance.



UN GLOBAL COMPACT



HPA became a proud signatory to the UN Global Compact in 2020 alongside other regional representatives of BarthHaas. This is a global initiative that offers businesses a framework to help them incorporate sustainability into their operations, as well as manage and measure their performance against universal goals linked to the environment, human rights, and anti-corruption. Since our success rests on the long-term health of the land and the people who farm it, we are taking shared responsibility for improving environmental, community and customer outcomes by setting meaningful targets.



RISK MANAGEMENT

We have a multidisciplinary approach to risk management designed to identify and assess different threats that could challenge the business. Our Managing Director, along with other key personnel, oversees 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. Risks to sustainability, such as water availability, natural disasters and climate 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.

DATA SECURITY

We comply with Australian data protection laws and adhere to multinational guidelines of the Organisation for Economic Cooperation and Development (OECD). These guidelines require any employee, customer or third-party's privacy to be respected by taking all reasonable measures to ensure the security of data entrusted to us. As such, we have developed policies to enhance our information systems as they relate to data security.



→ Innovation drives success

- Make investments to deliver better outcomes than the benchmarks set in this inaugural sustainability report

RESPONSIBLE SUPPLY CHAIN

We consider it our responsibility to work to reduce our resource consumption and environmental footprint along the entire supply chain: from growing, processing and packaging, to global and domestic distribution.

The past few years represent an unprecedented time in the hop industry's history, with demand for Aussie hops growing faster than we can accommodate. But the fundamentals of the market have not changed just because more people are drinking craft beer. Hop growers are still as sensitive to oversupply as they ever were, particularly with the recent downturn in beer production volume due to COVID-19. Climate change is also impacting hop growers around the world, increasing the rate of change to agricultural practices and regulations around crop protection and nutrition.

The hop industry needs a foundation on which to plan for the future. It was different when there were fewer, larger breweries buying hops. Now, the craft beer movement has led to an increase in smaller, incremental buyers which magnifies the effect of an unpredictable harvest or the ever-changing tastes of consumers. Open communication between hop growers and brewers is essential for hop supply to meet brewer demand. We aim to provide our brewing customers with valuable insights into industry trends, which in turn enables us to invest in quality and capacity improvements and adjust acreage accordingly.

We try to structure our supply chain in such a way that ensures:

- Both brewers and growers alike have insight into future demand
- Acreage allocations and expansion projects can be accurately forecast
- Shortages and over supply are clearly and regularly communicated
- A sense of certainty and stability of supply within the industry

We are thankful for the brewers who choose our hops. In return, we strive to manage supply responsibly by maintaining a reserve that allows for standard agricultural variance, and growing the most stable crop we possibly can to ensure we fulfil our customer and sustainability obligations.



OUR FARMS

Our farms - Bushy Park Estates, Rostrevor Hop Gardens and Buffalo River Valley - have been growing hops for more than 150 years. Together they grow 90% of Australia's hops, which is roughly 1% of the hops grown around the world. Our hops are created and cultivated in the Australian environment, ensuring only the best hops end up in brewers' hands. In 2020, 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. This expansion on our rich history is evidence of our commitment to sustainable business practices that begin on the farm and extend throughout 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 55km 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. Our Farm Manager Tom Parry spends his days taking care of the crop. He's one of those people you'd describe as being wise beyond his years and has the ability to put anyone at ease with his calm character and classic sense of humour. Tom was born and bred in the Derwent Valley, and has a deep appreciation for its rich history. But he's focussed on the future, specifically improving productivity through automation.

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 300km 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. Our Farm Manager Allan Monshing has been charged with looking after the crop. His Grandfather was William Panlook's blacksmith, so you could say it's something he was born to do. Allan was also born to tell stories, and it pays to listen closely because he knows more about growing hops than just about anyone you'll ever meet.

Buffalo River Valley, Victoria

Our newest farm stretches alongside the Buffalo River, right around the corner from Rostrevor Hop Gardens. It's lucky Allan knows a thing or two about hops, because he's been charged with looking after this crop as well, which upon completion will produce 800 metric tonnes a year. He uses the same on farm techniques to ensure the quality of our hops is consistent across the two Victorian farms.

Supporting growers

While we have the keys to some premium land where the soil is rich and the water supply is abundant, we also support other hop growers in north-east Tasmania and north-east Victoria. We entrust several of our proprietary varieties to some of the most experienced hop growers in the country to improve our capacity to meet brewer demand.

HOP BREEDING PROGRAM

Our hop breeding program began way back in the 1950s when we were all about growing bittering hops. Our primary focus was improving our alpha acid yield until the beginning of the craft beer movement rolled around. As beer drinkers began to move away from malt, bitterness and alcohol content toward flavour, aroma and diversity, we began to breed flavour hops for the emerging market. Our team has since used their expert understanding of hops, and how to pair plants to breed desirable traits, to bring a number of hugely successful proprietary hops to brewers - Eclipse®, Ella™, Enigma®, Galaxy®, Topaz™ and Vic Secret™. Through continually creating and cultivating hops in the Australian environment, we can ensure that new varieties are optimally adapted to the soil and climate conditions in which commercialised hops will ultimately be farmed. Our breeding program prioritises the production of consistently high yield in the development of new varieties, screening them against a yield expectation of ≥2000kg/ha over several years in order to maximise 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 AND FOOD SAFETY

We take pride in our hops, and the beers our customers create with them. That's why quality management is so important to us. We have a Quality Management System in place that is ISO 9001:2015 and HACCP certified. And we're committed to the continuous improvement of our quality and safety systems, choosing to subject every part of our production process to regular audits and certification.

Our hops are protected by a select range of products to ensure they comply with the BarthHaas Quality Control Guarantee, which is the most comprehensive safety screening program in the industry. Its integrated early warning system ensures our hops are held to the highest quality, safety and responsibility standards.

We ensure the quality and safety of our products are regulated through a mix of processes, policies, audits and third-party accreditations:

- ISO 9001:2015 certification
- HACCP AU05-5200 certification
- BarthHaas quality control guarantee
- Quality and food safety policy
- Standardised production process
- Kosher certificate
- Allergen statement
- GMO statement
- Irradiation and fumigation free statement





HOP QUALITY ANALYSIS

We are very aware that hop quality has an impact on performance in beer. Intensive hop quality analysis is performed through our entire production process to ensure we supply the highest possible quality hops with the lowest possible variability in flavour.

Our new Near Infra-Red analysis method, with predictive models built by Sagitto using reference values from recognised analytical methodologies, has enabled us to obtain more information from every sample. As a result, we have been able to tighten our harvest and processing windows, which has led to improvements in analytical quality and performance in beer.

Participation in the American Society of Brewing Chemists Laboratory Proficiency Program ensures our analytical measurements are validated against our peers, guaranteeing the brewing values of the packaged products are reliable. Our Quality Control processes are also performed according to methodologies developed by either the European Brewery Convention or American Society of Brewing Chemists.

In-house brewing trials

We are so passionate about the quality of our hops that we have developed an in-house brewing program to better understand how each of our hops perform in a range of beer styles. Our Friday tasting sessions are an educational and enjoyable way to end the working week.

2021 HARVEST

TOTAL SAMPLES TAKEN FROM THE FIELD	TOTAL MEASUREMENTS TAKEN FROM SAMPLES										
3,665	37,040										
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GLAND FILL	_____										
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CONE WEIGHT	_____										



FARM BIOSECURITY



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 introduce pests, diseases and weeds.

The biosecurity legislation of each Australian state and territory enforces restrictions on the movement of certain items to protect their unique environments and valuable agricultural markets.

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 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. This is enforced by biosecurity officers and detector dogs. In particular, fresh fruit and vegetables, cut flowers, plants, animal and fish products, seeds, soil and other agriculture related products are restricted or prohibited from entering the state. Pests, diseases and weeds may also travel unseen in mud, or lodged in the crevices of recreational machinery, vehicles and other gear. For this reason, it is important these items are checked, cleaned, disinfected, and dried before entering Tasmania.

To limit the risk of these threats to our hops, we ask our visitors to:

- Ensure vehicles, equipment and clothing are clean and free from pests and other plant material prior to their visit
- Park in the designated areas
- Sign the visitor register, clean and disinfect boots at the farm office immediately upon arrival

CUSTOMER SATISFACTION

Product quality, interpersonal relationships and effective complaint resolution are fundamental to our business operations. Our brewing customers can engage with us through social media, virtual and physical events, on top of ongoing communication with their local sales representative and customer service coordinator. We are focused on quality and innovation to drive increasingly positive customer experiences.



ETHICAL SOURCING OF MATERIALS

More than 3.5 million strings were deployed to support crop 2021. If they were laid end-to-end, they would stretch more than 20,285km, which is roughly half the Earth's circumference. This sheer quantity means sourcing sustainable strings is becoming more and more important, particularly as our Victorian expansion progresses and the new plantings begin to mature.

We choose to use coir strings. Coir is often thought of as a low-value by-product of coconut production. In most cases, the husks are left in the field, but a small portion are used to produce brushes, brooms, mats, mattresses and string. It is well suited to our farming operations because it has a high concentration of lignin, making it stronger and better able to withstand all kinds of weather than most natural fibres. It is also 100% biodegradable, which means the strings can be mulched along with the spent bines and returned to our paddocks where they help to improve soil fertility, retain soil moisture and suppress weeds.

Despite its relatively low trade value, coir provides significant economic support to populations in regional areas of India and Sri Lanka where women are particularly dependent on its production for their livelihood. We hope to ensure that our string suppliers are able to ethically and sustainably meet our increasing production requirements well into the future. The majority of our strings come from Hayley Fibre in Sri Lanka, who are ISO 9001:2015 compliant and a UN Global Compact signatory. The remainder of our strings come from Korlage Fibre Exporters in Sri Lanka and Ceres Fibre in India, both of whom are ethical family businesses with a high standard of manufacturing practices. All three suppliers demonstrate a high degree of professionalism as well as good governance, ethics and manufacturing practices. They also have the prospects and ambition to grow sustainably alongside us, which allows us to move toward a more sustainable future with confidence.





INNOVATION THROUGH COLLABORATION

We regularly contribute knowledge to the research community and maintain strong ties with institutions that drive innovation. Research conducted at HPA has been circulated through peer-reviewed publications, scientific and industry conferences, and the BarthHaas Hops Academy. HPA maintains ties with the University of Tasmania (UTAS) which has resulted in industry linked post-graduate qualifications. On occasion, industry linked research projects have won government funding through the Australian Research Council. As such, we have made a significant contribution to the research community while equipping students with valuable industry linked experience.

Since 2017, we have contributed to 7 co-authored peer-reviewed scientific publications:

- Laura Tedone, Lada Staskova, DanDan Yan, Simon Whittcock, Robert Shellie & Anthony Koutoulis (2020) Hop (*Humulus lupulus* L.) Volatiles Variation During Storage, *Journal of the American Society of Brewing Chemists*, 78:2, 114-125, DOI: 10.1080/03610470.2019.1704674.
- Andreja Čerenak, Zala Kolenc, Petra Sehur, Simon P. Whittcock, Anthony Koutoulis, Ron Beatson, Emily Buck, Branka Javornik, Suzana Škof, and Jernej Jakše. New Male Specific Markers for Hop and Application in Breeding Program. *Sci Rep* 9, 14223 (2019). <https://doi.org/10.1038/s41598-019-50400-z>.
- Simon P. Whittcock, Laura Tedone, Lada Staskova, Michael Bird, DanDan Yan, Aina Price, Anthony Koutoulis & Robert Shellie (2019). Hop flavoromics for distinctive beer. *Acta Hort.*1236, 113-120.
- DanDan Yan, Yong Foo Wong, Robert A. Shellie, Philip J. Marriott, Simon P. Whittcock, Anthony Koutoulis, Assessment of the phytochemical profiles of novel hop (*Humulus lupulus* L.) cultivars: A potential route to beer crafting, *Food Chemistry*, Volume 275, 2019, Pages 15-23, ISSN 0308-8146, <https://doi.org/10.1016/j.foodchem.2018.09.082>.
- DanDan Yan, Yong Foo Wong, Simon P. Whittcock, Anthony Koutoulis, Robert A. Shellie, and Philip J. Marriott. Sequential Hybrid Three-Dimensional Gas Chromatography with Accurate Mass Spectrometry: A Novel Tool for High-Resolution Characterization of Multicomponent Samples, *Analytical Chemistry* 2018 90 (8), 5264-5271. DOI: 10.1021/acs.analchem.8b00142.
- DanDan Yan, Laura Tedone, Anthony Koutoulis, Simon P. Whittcock, Robert A. Shellie, Parallel comprehensive two-dimensional gas chromatography, *Journal of Chromatography A*, Volume 1524, 2017, Pages 202-209, ISSN 0021-9673, <https://doi.org/10.1016/j.chroma.2017.09.063>.
- DanDan Yan, Yong Foo Wong, Laura Tedone, Robert A. Shellie, Philip J. Marriott, Simon P. Whittcock, Anthony Koutoulis, Chemotyping of new hop (*Humulus lupulus* L.) genotypes using comprehensive two-dimensional gas chromatography with quadrupole accurate mass time-of-flight mass spectrometry, *Journal of Chromatography A*, Volume 1536, 2018, Pages 110-121, ISSN 0021-9673, <https://doi.org/10.1016/j.chroma.2017.08.020>.

HPA were awarded a 3-year Australian Research Council Linkage Project (LP140100160: Hop flavoromics for distinctive beer) in 2014, in collaboration with Associate Professors Anthony Koutoulis and Robert Shellie from UTAS. This project furthered our understanding of the genetic control of secondary metabolite chemistry in hops, and supported a student completing a Bachelor of Biotechnology with Honours, and a Doctor of Philosophy in 2019:

- DanDan Yan (PhD) 2019, Advanced gas chromatography with Mass Spectrometry for phytoanalysis of hop.
- Lewis Rands (BBiotech Honours) 2019, Quantitative trait loci analysis in hop.

In a separate project, we supported a student completing a Bachelor of Agricultural Science with Honours in 2019:

- Oliver Hayes (BAgrSc Honours) 2019, Biostimulants in hop production.

FRUITFUL PARTNERSHIPS

We engage with relevant industry bodies including the American Society of Brewing Chemists, Institute of Brewing and Distilling, and the Australian Independent Brewers Association to stay current and contribute to discourse and new developments.

In our inaugural sustainability reporting cycle, HPA also gained membership to the Australian Sustainable Agricultural Initiative to give and receive guidance on issues that impact the agricultural sector, and joined Sedex to improve the management of our supply chains.





→ **Optimise operations**

- Deliver more consistent yield and quality

→ **Transform our infrastructure**

- Improve business systems
- Support yield improvement

→ **Innovation that drives choice and diversity**

- Develop innovative brewing products for our Australian proprietary hops
- Put 3 leading experimental cultivars through rigorous pre-commercial brewing evaluations

→ **Equip our farm teams for success**

- Refine and align processes for key agronomic practices

→ **Enhance our quality management system**

- Further develop in-house sensory capability to improve our hops performance in beer

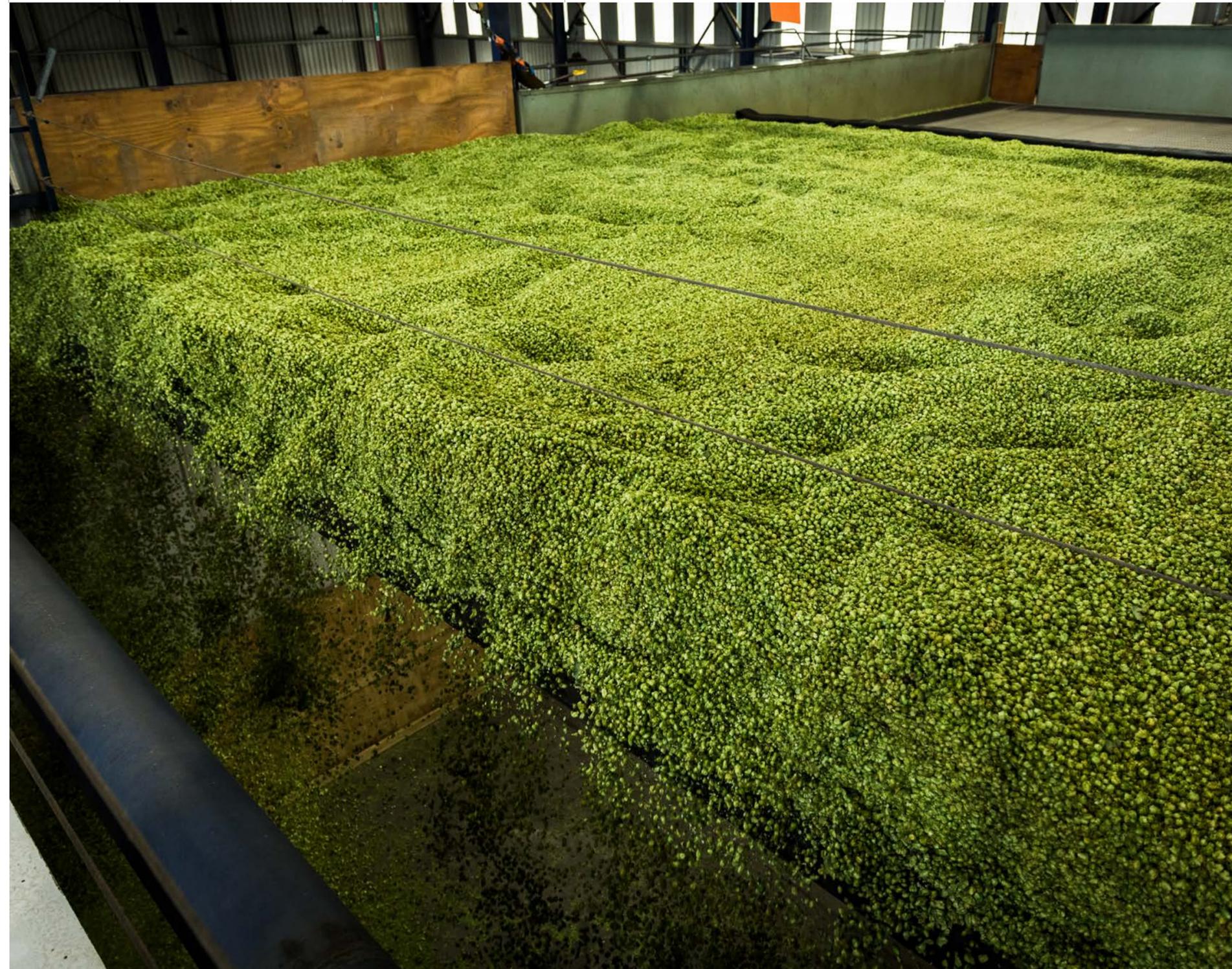


ENVIRONMENTAL FOOTPRINT

We understand the way we operate has direct consequences for the environment. Our relationship to the natural resources required to produce our hops informs much of our sustainability strategy. In support of the UN SDGs, we have calculated our carbon footprint, developed and executed projects focused on waste and emission reductions, and set goals that will see our operations better aligned with sustainability practices.

First steps toward sustainability

- Elect sustainability and corporate social responsibility frameworks
- Quantify greenhouse gas emissions
- Energy audit of Victorian farms
- Alternative kiln fuel study at Tasmanian farm
- Reduce solvent usage in labs
- Eliminate heavy metal usage in labs
- Reduce lighting power consumption
- Improve farm biosecurity
- Initiate cover cropping program





KEY PERFORMANCE INDICATORS

- Greenhouse gas emissions
- Energy consumption
- Waste
- Farming inputs
- Water

EMISSIONS REPORTING

This is the first time we have quantified the greenhouse gas (GHG) emissions we produce both directly and indirectly.

SCOPE 1:	SCOPE 2:	SCOPE 3:
Direct emission sources	Electricity emission sources	Indirect emission sources
Production process emissions	Electricity generated to run production sites and offices	Purchased goods and services
Office heating and cooling		Employee commuting
Mobile emissions		Business travel
Fugitive emissions from refrigerants		

Establishing an emissions baseline enables us to assess the impact of projects designed to reduce our environmental footprint.



OPERATING AND PROCESSING GHG EMISSIONS

Scope 1: Direct emission sources

Our direct emissions (Mt CO₂e - the production of metric tonnes of GHG adjusted to the equivalent warming potential of carbon dioxide) increased 3.7% over the reporting period. The primary source of this increase was a rise in fuel used for agricultural operations, primarily diesel and liquified petroleum gas (LPG). Ongoing expansion of our farming operations in Victoria, including the construction of a new processing facility, saw us acquire diesel generators to power construction as well as irrigation and kiln drying the additional acreage of hops. At present, the kiln is operating at 50% capacity until the additional acreage becomes more mature. As these new plants mature, we are expecting the greater yield to offset emissions slightly. Scope 1 emissions should reach equilibrium once forecast production volumes of the expansion are realised.

Scope 2: Electricity emission sources

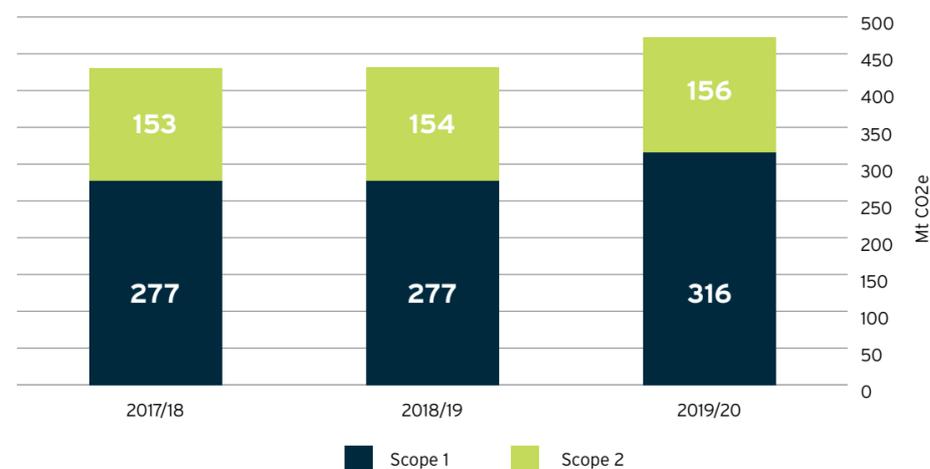
Similar to Scope 1, our electricity emissions increased 4.8% over the past 3 years. This can be attributed to the ongoing expansion of our farming operations in Victoria, where coal remains the primary source of power. In contrast, our farming operations in Tasmania run on 100% renewable hydroelectricity.

Scope 3: Indirect emission sources

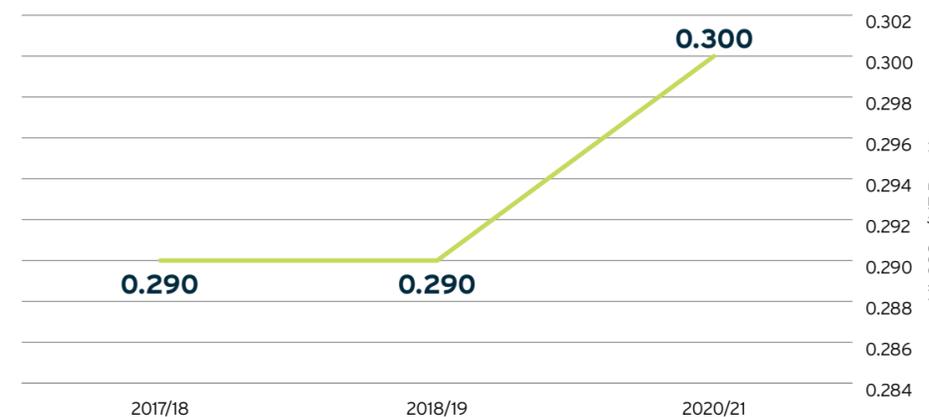
An internal audit revealed a comparable trend to the previous scopes, with scope 3 emissions increasing annually as our business has undergone steady growth to meet supplier demand. Purchased goods and services accounted for ~167 Mt CO₂e for the reporting period, while employee commuting and business travel accounted for ~8 Mt CO₂e and ~4 Mt CO₂e respectively. The process of fully quantifying these indirect emissions remains a work in progress, with a goal to improve the resolution of emission contributions upstream and downstream of our internal business operations. This includes performing a complete life cycle analysis of our business and improved dialogue with our suppliers to best identify the critical areas and appropriate targets to facilitate emission reductions.



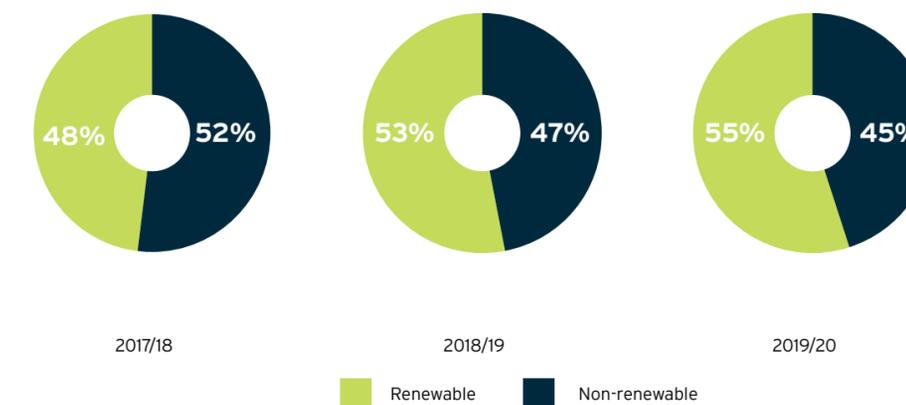
Total scope 1 & 2 GHG emissions 2017-2020



Emissions intensity



Annual consumption of renewable and non-renewable electricity



Through the emissions reporting process, we found that emissions have been steadily increasing due to the ongoing expansion of our farming operations in Victoria. While several carbon emission reduction projects were executed, the reductions were not sufficient to offset the emissions output associated with the construction of an additional 300 hectares of hop trellis and the associated infrastructure required to process the yield. This resulted in an increase of 0.02 Mt CO2e for each tonne of hops processed.

We now also have a baseline for the proportion of renewable to non-renewable electricity consumption, which is currently skewed toward non-renewables by ~10%. It is our goal to use this data to take meaningful action to minimise our footprint. This will involve a full life cycle assessment of our hop supply chain in order to target low emission practices.

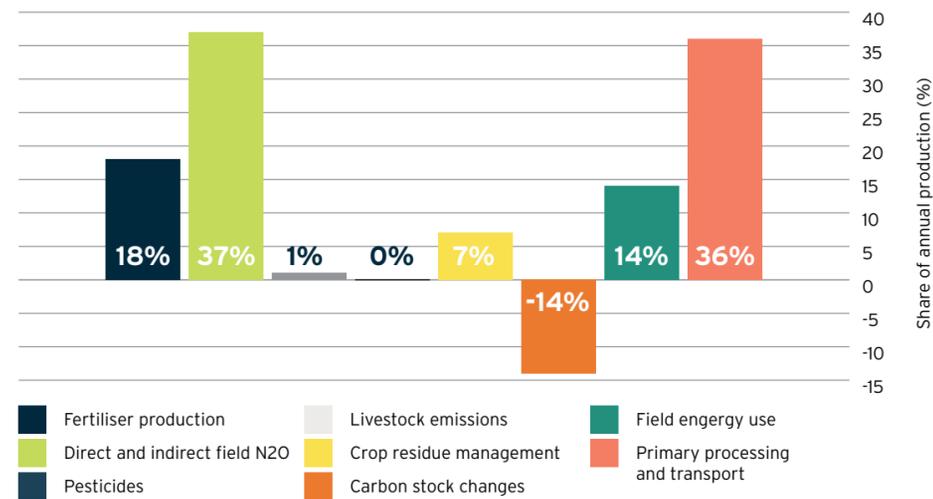
A link to a full breakdown of our emissions can be found in the index of this report.

OVERALL FARMING EMISSIONS

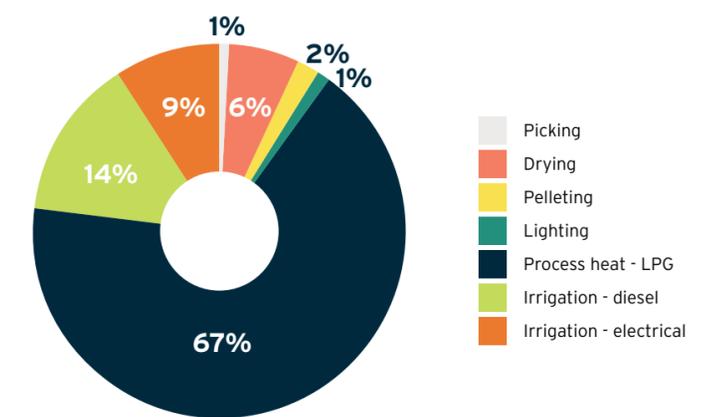
Our farms generate ~10.0 tonnes of CO2e per hectare each year. We are currently researching projects that will allow us to minimise farming inputs that contribute to our overall emissions. Achieving this while simultaneously meeting the demands of our brewing customers is a challenging aspect of our sustainability strategy.

We have conducted several studies aimed at improving energy efficiency in our farming operations.

Agricultural emissions summary



Annual energy consumption, Victoria



FARM ENERGY ASSESSMENTS

In 2019, we undertook farm energy assessments to identify opportunities for improved energy efficiency and their feasibility, with the aim of building greater energy resilience into our farm operations.

Two assessments were conducted by environmental consultants Pitt & Sherry:

1. Energy consumption trends on our Victorian farms as part of the Agricultural Energy Investment Plan (AEIP), funded by the Department of Jobs, Precincts and Regions (DJPR).
2. A pre-feasibility study for replacing LPG with a renewable fuel source for the purpose of kiln drying green hops. This study was undertaken on behalf of the Australian Alliance of Energy Productivity (A2EP).

The key farm activities identified as offering opportunities for reduced energy consumption are:

Irrigation upgrades

Upgrading old pump motors, electrification of diesel pumps, and expansion of drip irrigation.

Kiln heat recovery

Recapturing and recycling warm air in our kilns to reduce the amount of LPG required. This would involve significant infrastructure, workplace safety and regulatory hurdles to overcome.

Replacing LPG with renewable fuel sources, Tasmania

Using biomass to heat our kilns in Tasmania. While the emissions reduction would be substantial, there are considerable risks associated with fuel supply and the technology is currently costly and unproven.

We will continue to explore innovations that could mitigate energy use within existing infrastructure.



FARM RESOURCE MANAGEMENT

Our success rests on the health of the land and its limited natural resources, so we strive to reduce our environmental footprint and manage all natural resources responsibly.

Soil health

Soil health provides the foundation for sustainable crop production. We are constantly refining our farming practices to restore and rejuvenate ground that has potentially seen over 100 years of hop production. Cover crops are used to reduce erosion, compaction and improve nutrient retention as well as control the establishment and spread of weeds that would suppress the emergent growth of hop plants and compete for nutrients.

Cover crops also enable carbon to be sequestered through biomass production, reducing the environmental footprint of our farming operations. Our calculations show that cover crops may account for the sequestrations of 1.2 tonnes of CO₂ per hectare per annum. Rotation of our annual cover crops mean the organic carbon content of the soil is increased and able to be used by our hop plants.

In conjunction with cover cropping, annual tests are performed to quantify the residual nutrient profile of the soil. This has produced a valuable data set that can be used to review fertiliser selection and application, which will in turn lead to lower environmental impacts due to reduced emissions related to the production and application of synthetic fertilisers.



Water availability

Our farms have been established where water is abundant, but we understand this natural resource is coming under increasing pressure in our changing climate so we strive to manage it responsibly. Climate modeling predicts rainfall to decline over the hop growing season, with the impact on future hop crops becoming more complex.

Maintaining production in diverse catchments will be the key to mitigating risk, as will investment in water security.

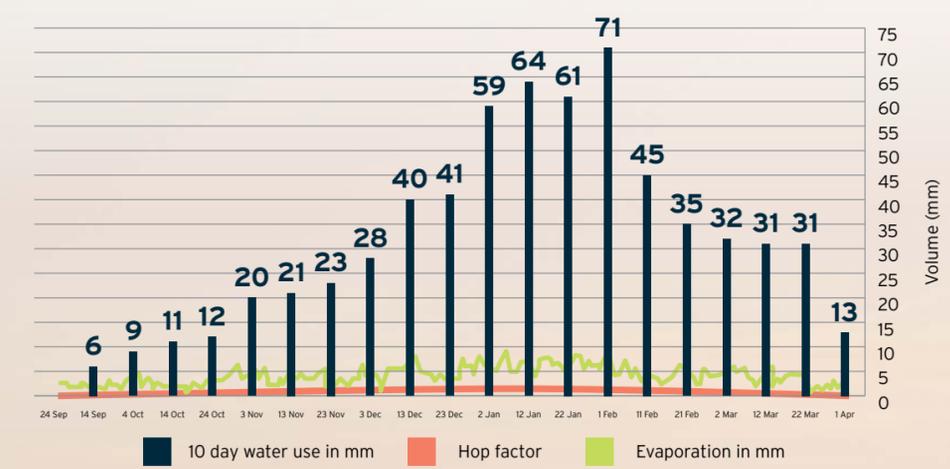
The efficient and effective use of water will be a major piece of our sustainability strategy. Soil moisture levels are remotely monitored to ensure we only use as much water as we need to deliver high quality hops to

brewers, while conserving the rest to support the local flora, fauna and recreation. By following current evaporation rates and historical climate data, the weather forecast, the current soil moisture status, the age and growth stage of a crop, we can accurately predict our irrigation needs for the week ahead throughout the growing season

We are also planning to construct a new 300 megalitre dam on our Victorian farm to simultaneously manage the water requirements of our hop crop and protect the flow of the Ovens River. In Tasmania, we are working with the Derwent Catchment Program to manage and restore the biodiversity of the riparian zones that comprise parts of our farm.



Evapotranspiration trends in 2019



Waste streams

Heavy metals

We set ourselves the target of eliminating heavy metals throughout our operations. Lead is a highly toxic metal that has the potential to contaminate soil and waterways. In consultation with our brewing customers, we have phased out the lead conductance value (EBC 7.4:LCV) titration method from our labs, replacing it with either ASBC Spectrophotometric determination of alpha acid or NIR analysis of hop chemistry. We took a similar approach to eliminating mercury thermometers. The use of lead and mercury was eliminated from our labs in 2019, over a one-year period.

Recycling

We endeavor to recycle our waste streams whenever and wherever possible. We make use of Australia's national recycling program as well as contracting third parties to collect reusable waste streams where appropriate. We contract Recycal to dispose of our scrap metal, with 3 tonnes diverted from landfill each year. Terracycle collects and repurposes our single use plastics, specifically ziplock bags and gloves that are used for lab analyses. And a Drum Muster program run by the AgSafe Products Stewardship Program safely removes and disposes of our depleted agricultural chemical containers.

Big bag program

We have developed a packaging system for bulk handling of T90 hop pellets in collaboration with Lion, a major Australian brewery. The system allows us to pack 500kg 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.



SUSTAINABLE INNOVATION



IMPROVING ENVIRONMENTAL OUTCOMES

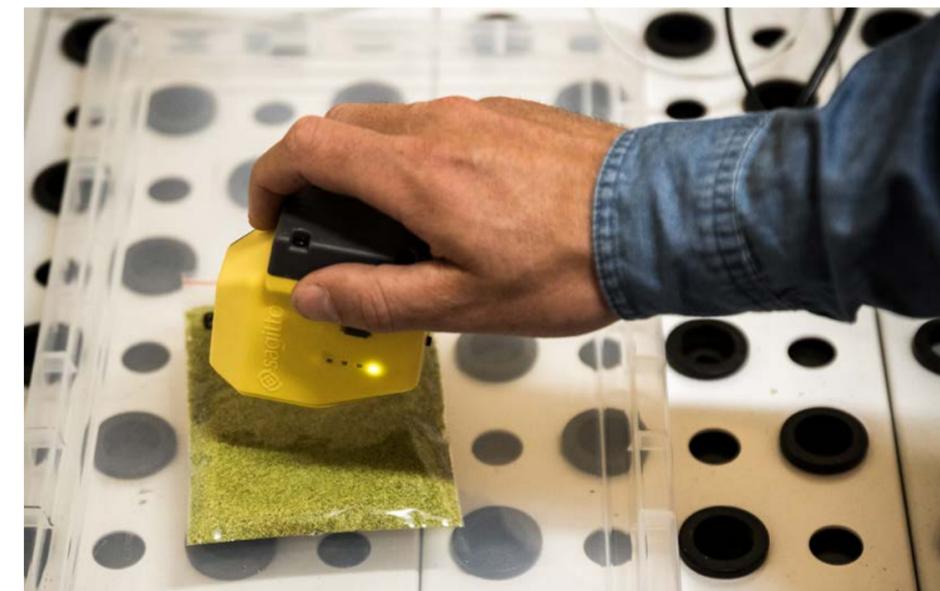
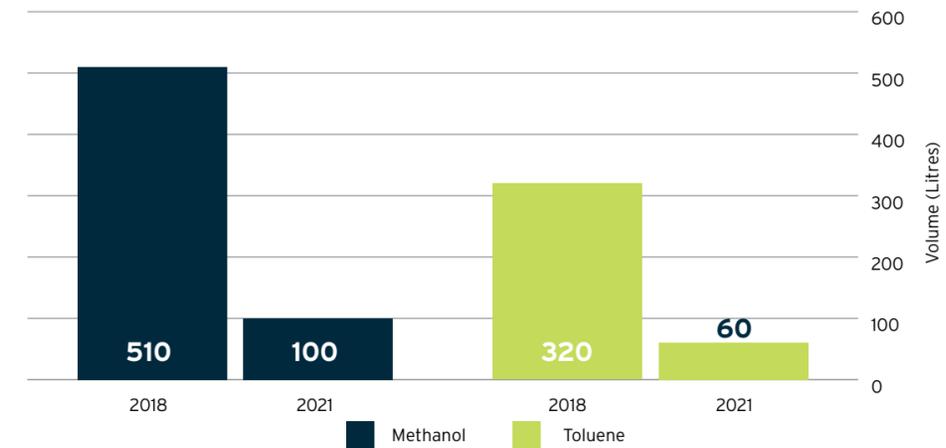
We set ourselves a target of assessing hop chemistry without using traditional solvent-based methods in the lab. Industry standard analysis of alpha acid content currently involves the use of toluene and methanol, two harmful and highly flammable solvents that require specialised waste handling measures post-analysis. Reducing the transport, storage and handling of these chemicals was identified as a means to simultaneously improve the safety of our lab team and reduce hazardous waste.

Near Infra-Red (NIR) spectroscopy was determined to be the most suitable method to indirectly analyse hop chemistry. We built predictive models in partnership with data science company Sagitto. We can now produce hop chemistry measurements accurately enough to eliminate the need for solvent analysis of pre-harvest maturity, bale condition and experimental varieties. Over a 3 year period, the development and deployment of this technology resulted in a ~70% reduction in solvent use and waste.

Reliance on other direct analytical methods that are energy intensive have also been reduced, including oven drying for moisture and oil distillation. NIR now accounts for the bulk of our internal hop analysis requirements and has been rolled out across all labs, including our new farm in Victoria which has our first ever solvent-free production site. It is hoped that widespread uptake of this technology could see it adopted as an industry standard in future years.

NIR analysis has led to a significant reduction in emissions associated with the removal and disposal of toxic substances as well as a significant reduction in the risk of environmental contamination occurring. The NIR method developed by HPA and Sagitto is new to the hop industry and exemplifies our vision for sustainable business practices.

Lab solvent consumption before and after NIR implementation



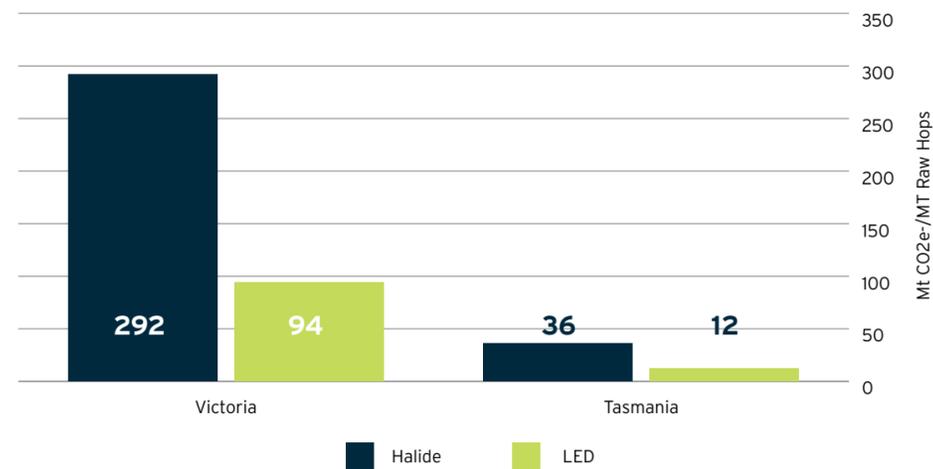
IMPROVING ENERGY CONSUMPTION THROUGH LIGHTING CONVERSION



Up until recently, our processing facilities had been fitted with metal-halide lights. All 142 fixtures across our Victorian and Tasmanian sites have now been converted to LEDs, which resulted in a 68% reduction in energy consumption. This conversion led to a corresponding 221 Mt CO₂e reduction in our Scope 2 emissions p.a. Furthermore, the transition away from metal-halide lights has eliminated mercury and other heavy metals from our hop production areas.

The largest reduction occurred in Victoria where electricity production is more carbon intensive compared to the renewable production of hydroelectricity in Tasmania.

Energy consumption before and after LED lighting conversion



IT INFRASTRUCTURE

All areas of our business are dependent on functioning IT infrastructure and accurate data. We are continually improving our process to evaluate, evolve and reduce our dependency on particular resources.

Electricity

We have reduced the number of physical servers we host by combining our virtual machines on a more efficient platform, resulting in a 30% reduction in our system infrastructure footprint.

Paper

We are in the process of changing the way we interact with our brewing customers by embedding digital signatures into customer contracts. This will eliminate the need for a portion of our printing each year, reducing our use of paper, time and electricity.

Hardware

When required to select new equipment, we only purchase computers, monitors, printers and servers with a minimum energy rating of 6 stars based on the MEPS energy rating standard set out in AS/NZS 5813.1.

Waste

We have implemented a new standard for electronic devices, meaning all hardware is utilised until end of life and then repurposed either by donation to a charitable organisation or recycled through the shred-x network.



→ Refine and optimise operations

- Reduce environmental footprint through business-wide efficiencies and use of appropriate IT infrastructure
- Establish assessment criteria to identify and minimise occurrence of over-watering to improve yield, crop management and energy consumption relating to irrigation
- Establish assessment criteria to identify and minimise occurrence of over-fertilisation to improve yield, soil health and emissions relating to the production of synthetic fertilisers
- Establish assessment criteria to identify and minimise occurrence of ineffective or overuse of herbicides to improve product safety and minimise environmental risks
- Establish assessment criteria and practices to improve consistency of moisture outcomes and minimise unnecessary energy consumption relating to kiln drying green hops
- Develop 300 megalitre dam in Victoria to safeguard the local river systems during the growing season
- Conduct full life cycle analysis by end of 2024 that will guide overall approach to emissions reduction





PEOPLE & CULTURE

Our business could not exist without our dedicated team and the communities in which we operate. Therefore, the fair treatment of our employees, promotion of good health and wellness, as well as supporting our local communities is extremely important to us.

Employees

Our dedicated team are experts in plant breeding, farm operations, customer service and brewing support. We each play an important part in bringing high quality hops to brewers around the world so they can create beers that bring people together.

Safety

Employee safety is the foundation of any business. Our occupational health and safety (OH&S) management system covers employees and supervised contractors for activities across all sites. Ensuring our sites are safe is an important part of everyone's job, and all are expected and encouraged to uphold our protocols, report any incidents and suggest improvements. We continually take the appropriate steps to ensure compliance with State and Federal regulations that minimise risk to employee health, including statutory inspections, safeguards, danger signals, controlled handling of dangerous substances, measures against dangerous work, and compliance with designated protective equipment.

Local teams report safety metrics to the OH&S department on a quarterly basis. The department then reviews all incidents and works with the local teams to resolve issues, including identifying corrective actions, safety improvement plans and training priorities to drive continuous improvement.

We are targeting an accident-free workplace by upholding a set of policies, protocols and programs in three key areas:

1. Governance

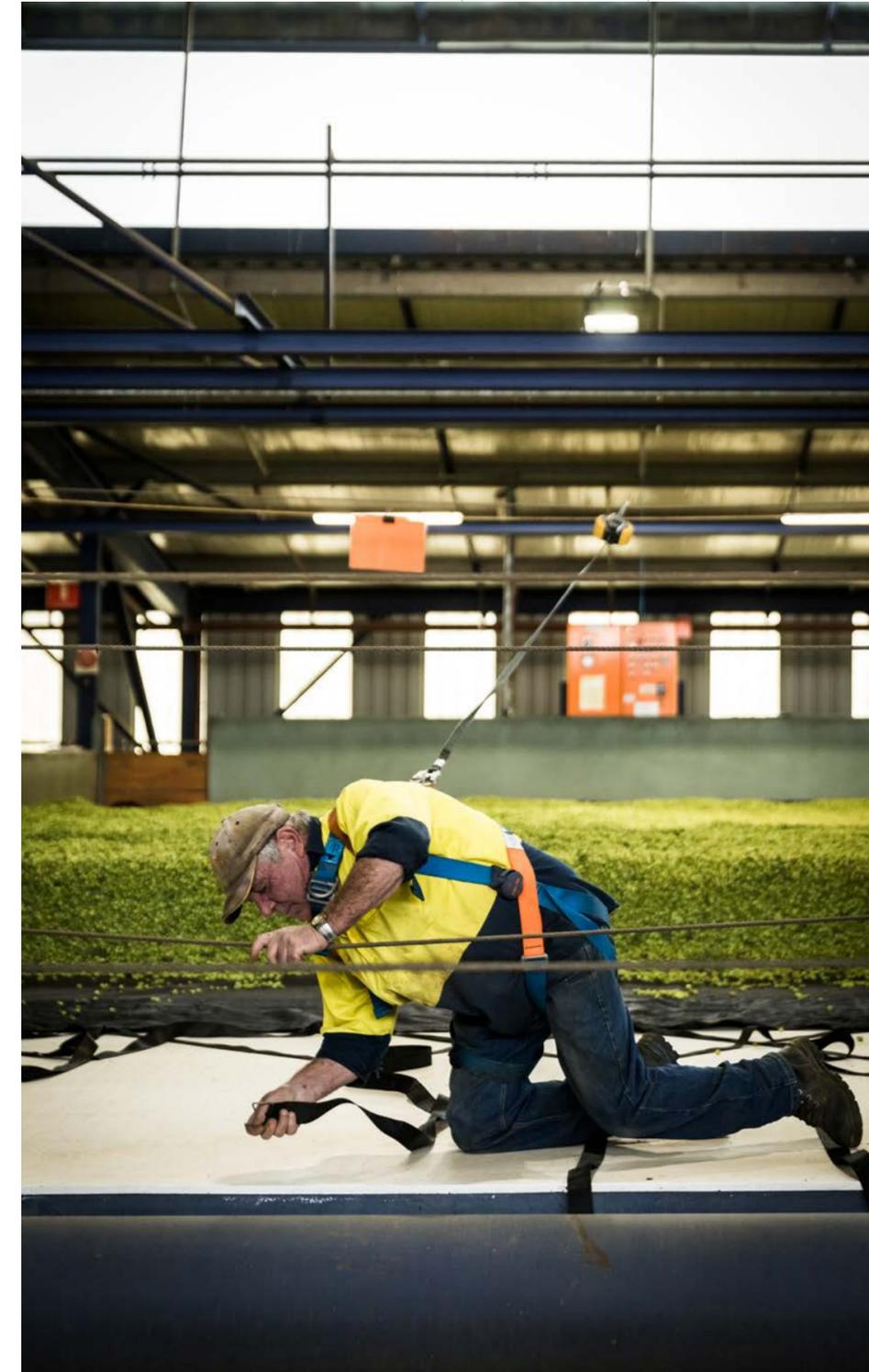
Our OH&S department is responsible for developing comprehensive safety policies and procedures that guide our employees and operations. The department conducts periodic internal inspections and audits to ensure each site meets our rigorous standards.

2. Training

Employee OH&S training is managed at each site, providing programs based on the local requirements and government standards. Mandatory training is held for leaders at all sites. The key topics include incident management, fire prevention, grounding and bonding, and handling raw materials safely. These are based on safety priorities and reflect OH&S best practice, regulatory requirements and internal policies.

3. Culture

We maintain a strong and proactive safety culture through awareness and communication. We provide training that empowers our employees to identify potentially unsafe actions and report near misses so improvements can be made to prevent possible incidents in future. Local safety committees meet and report to Head Office on a monthly basis.





Health and wellbeing

The mental and physical health of our team is central to the cohesive and constructive workplace that we pride ourselves on. We have established a health and wellbeing program that is beneficial for employees overall welfare and encourages safe work practices. We also organise mental health awareness days across our sites and promote access to mental health services. In this reporting period, COVID-safe plans were developed in accordance with Government guidelines to protect the health of our employees and minimise risk of transmission in the workplace.

Company culture

Our healthy company culture is promoted through social events, internal policies and a vested interest in the mental and physical health of our employees.

We also maintain appropriate industry relationships in the countries where we conduct business, and ensure fair business practices are observed through annual auditing, domestic laws, Australian ratification of the United Nations Convention Against Corruption, and as a signatory to the UN Global Compact. These items provide the necessary framework for remaining vigilant against competition law violations, insider trading, price manipulation, conflict of interest, and systems for responding to complaints from outside the company.

The newly instated whistle-blower policy protects employees who report wrongdoing either internally or externally.

'How we do things' award

We like to acknowledge those who go above and beyond in their contribution to the culture of our business. The 'how we do things' award is a recognition program that affirms our attitude of community through inclusivity.

Social occasions

Social occasions, such as brewery tours, give our team a chance to experience how our hops are used once they leave the farm. Coming together over a beer or two instils a sense of pride in the work they do each and every day.

Our newly established health and wellbeing program also encourages social occasions that promote an active lifestyle, like a day of angling for fish or a friendly game of cricket.



Diversity, equity and inclusion

Employees are hand-picked based on their qualifications and ability to embody our company values, regardless of gender or ethnicity.

Permanent full-time staff summary

Age	Total	Head Office		Tasmanian Farm		Victorian Farms	
		Male	Female	Male	Female	Male	Female
Under 30 Years	12	0	1	5	1	5	0
30 - 50 Years	41	10	5	10	3	12	1
50 + Years	25	5	2	5	1	9	3
		15	8	20	5	26	4
		23		25		30	



2021 HARVEST MALE/FEMALE STAFF RATIO

70/30

249 male staff
107 female staff

59 permanent staff
298 casual staff
356 total harvest staff

VICTORIA TASMANIA

30	29
178	120
207	149

HARVEST STAFF FROM

26 COUNTRIES



Australia	180	USA	4
France	41	Belgium	3
Italy	18	Canada	3
Congo	16	Czech	3
UK	15	Thailand	3
Germany	13	Bhutan	2
China	11	Nepal	2
Indonesia	10	Hungary	1
Japan	7	India	1
Chile	6	Mexico	1
Netherlands	5	New Zealand	1
Argentina	4	Romania	1
Sudan	4	Spain	1

Fair remuneration

Our remuneration structure is intended to properly compensate employees for the work they do, so they can enjoy a better quality of life and socioeconomic outcomes that benefit their families and communities. We abide by the legal minimum wage in Australia and ensure agreements regarding overtime or payment methods are applied. In addition, we have developed Enterprise Agreements for farm employees in accordance with the guidance of the Australian Fairwork Commission and the relevant Union representation.

Professional development

We are committed to employee development and career advancement. This means opportunities such as promotion and training are provided equally. We support HACCP, teamwork and leadership, and youth training programs, as well as employees wishing to formalise their skills with tertiary education qualifications.

Our average training time was 36.2 hours per employee in 2019/2020.

Community 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:

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

Donations and sponsorships 2017-2020 = \$6,900

Neighbourly support

We aim to be a positive presence in the sustainable development of the regional communities in which we operate. Job creation, skills development and priority purchasing of local products and services are fundamental to our values. This helps us to achieve harmonious coexistence of business and community. We manage relationships with our neighbours through good business practice, abiding by Australian law, and performing all agricultural operations according to regulations set out by the relevant State and National authorities.





→ Capable and culturally aligned people

- Work to ensure all employees have the appropriate training and skills to perform their role
- Develop succession plans for 10 key roles
- 80% of employees will be assessed as living the business values effectively by 2024

→ Equip our farm teams for success

- Prevent occurrence of farming and production delays due to labour shortages
- Rapidly and effectively deal with any reported workplace health and safety issues

→ Inspire commitment

- Target 50% reduction in LTIFR by 2024
- Implement a people engagement assessment framework, and achieve scores above 80% by 2024



ABOUT THIS REPORT

Reporting framework

This is the first sustainability report from Hop Products Australia and concerns the fiscal years from the 1st August 2017 to the 31st July 2021. The Sustainability Report was produced in accordance with the “Core” option of the Global Reporting Initiative Version 4.0.

Global Reporting Initiative (GRI) Content Index

The following table identifies where information corresponding to reporting elements and indicators in the Global Reporting Initiative (Version 4.0) can be found in our sustainability report.

Source

BarthHaas Global Sustainability Report



INDEX

We are willing to share all information relating to the reporting criteria and emissions data presented in this report, including a full [emissions summary](#).

GRI Standard Title	Disclosure Nbr.	Disclosure Title	Comments	Page
General Disclosures				
	102-1	Name of the organization		3
	102-2	Activities, brands, products, and services		3, 7, 8
	102-3	Location of headquarters		3
	102-4	Location of operations		3
	102-5	Ownership and legal form		3
	102-6	Markets served		3
	102-7	Scale of the organization		3, 43
	102-8	Information on employees and other workers		43
	102-9	Supply chain		14-21
	102-10	Significant changes to the organization and its supply chain		14
	102-11	Precautionary Principle or approach		13
	102-12	External initiatives	Sedex, SAI	12, 18, 33-34
	102-13	Membership of associations		23
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	102-16	Values, principles, standards, and norms of behavior		5, 11
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	102-18	Governance structure		13
	102-19	Delegating authority		2
	102-20	Executive-level responsibility for economic, environmental, and social topics		13

GRI Standard Title	Disclosure Nbr.	Disclosure Title	Comments	Page
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	102-22	Composition of the highest governance body and its committees		13
	102-23	Chair of the highest governance body		13
	102-25	Conflicts of interest	Policy regarding conflicts of interest can be found in the HPA Code of Conduct	see comment
	102-26	Role of highest governance body in setting purpose, values, and strategy		2, 5, 13
	102-27	Collective knowledge of highest governance body		13
	102-29	Identifying and managing economic, environmental, and social impacts		11
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	102-31	Review of economic, environmental, and social topics		5, 13
	102-32	Highest governance body's role in sustainability reporting		2
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	102-34	Nature and total number of critical concerns		5
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	102-42	Identifying and selecting stakeholders		4
	102-43	Approach to stakeholder engagement		4
	102-44	Key topics and concerns raised		5
	102-45	Entities included in the consolidated financial statements		4
	102-46	Defining report content and topic Boundaries		1
	102-47	List of material topics		5
	102-49	Changes in reporting	This is the inaugural report	see comment
	102-50	Reporting period		46
	102-51	Date of most recent previous report	This is the inaugural report	see comment
	102-52	Reporting cycle	August 2017-August 2020	see comment
	102-53	Contact point for questions regarding the report		52
	102-54	Claims of reporting in accordance with the GRI Standards		46
	102-55	GRI content index		47
	102-56	External assurance	No external assurance	see comment

GRI Standard Title	Disclosure Nbr.	Disclosure Title	Comments	Page
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	103-2	The management approach and its components		10-14
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	201-1	Direct economic value generated and distributed		6
	201-2	Financial implications and other risks and opportunities due to climate change		14
	201-3	Defined benefit plan obligations and other retirement plans	9.5% of employee wage contributed to retirement fund of choice	see comment
Market Presence				
	202-2	Proportion of senior management hired from the local community	All management from HPA have been hired from the local community	see comment
Indirect Economic Impacts				
	203-1	Infrastructure investments and services supported		39-41
	203-2	Significant indirect economic impacts		21, 38-42
Procurement Practices				
	204-1	Proportion of spending on local suppliers	Local suppliers prioritised where possible	see comment
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	205-2	Communication and training about anti-corruption policies and procedures	Policy regarding conflicts of interest can be found in the HPA Code of Conduct	see comment
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	301-2	Recycled input materials used		34
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	302-1	Energy consumption within the organization		25-31
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	302-3	Energy intensity		29
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	302-5	Reductions in energy requirements of products and services		31, 35-36



GRI Standard Title	Disclosure Nbr.	Disclosure Title	Comments	Page
Biodiversity				
	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Under evaluation for next reporting cycle	see comment
Emissions				
	305-1	Direct (Scope 1) GHG emissions		27-29
	305-2	Energy indirect (Scope 2) GHG emissions		27-29
	305-3	Other indirect (Scope 3) GHG emissions		27-29
	305-4	GHG emissions intensity		29
	305-5	Reduction of GHG emissions		31, 36
	305-6	Emissions of ozone-depleting substances (ODS)	Included in greenhouse gas emissions calculations	see comment
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	Included in greenhouse gas emissions calculations	see comment
Effluents and Waste				
	306-2	Waste by type and disposal method		34
Environmental Compliance				
	307-1	Non-compliance with environmental laws and regulations	None	see comment
Employment				
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	No distinction between full-time and part-time employees	see comment
	401-3	Parental leave	Mandatory provision in accordance with Australian law	see comment
Occupational Health and Safety				
	403-1	Workers representation in formal joint management-worker health and safety committees		40
	403-3	Workers with high incidence or high risk of diseases related to their occupation	None	see comment
	403-4	Health and safety topics covered in formal agreements with trade unions		40, 44

GRI Standard Title	Disclosure Nbr.	Disclosure Title	Comments	Page
Training and Education				
	404-1	Average hours of training per year per employee		44
	404-2	Programs for upgrading employee skills and transition assistance programs		44
	404-3	Percentage of employees receiving regular performance and career development reviews	All employees eligible for yearly performance review	see comment
Diversity and Equal Opportunity				
	405-1	Diversity of governance bodies and employees		43
Local Communities				
	413-1	Operations with local community engagement, impact assessments, and development programs		44
Customer Health and Safety				
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	See HACCP Report attachment	see comment





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