



ESG at Agriculture



AB Agri is passionate about producing responsible, affordable food and enabling people and animals to thrive.



A colleague sampling feed at a customer farm in Somerset, UK

AB Agri's goals and initiatives are designed to support the agriculture industry's long-term sustainability, characterised by its capacity to produce food that is both responsible and affordable.

ESG Governance

AB Agri's ESG governance framework is designed to effectively manage and oversee its impacts, risks and opportunities. Monthly steering groups, led by the Director of Responsibility, focus on climate, responsible sourcing, and animal health and welfare; these groups govern their respective areas together with metrics and actions.

In 2023, AB Agri established its Managing Directors' Responsibility Forum, which meets quarterly and includes managing directors or their delegates from each business unit. This forum facilitates the connection of senior management across businesses and integrates the management of ESG actions with commercial decisions and business strategy.

AB Agri identified key ESG impacts, risks and opportunities through a materiality assessment completed in 2022. This process included independent consumer surveys in several countries, research on future trends in

retailer demand and government policy, and an analysis of the scientific evidence behind policy and consumer perceptions.

The assessment identified nine 'Care' factors across four main themes:

- nutrition: to be responsible and affordable;
- environment: to reduce GHG emissions, resource use, land use and plastic waste, and to protect water and biodiversity;
- supply chain: to support lives and livelihoods; and
- animal welfare: to safeguard animal health and wellbeing.

AB Agri policies and statements are available on its website.

Our people - Agriculture



AB Agri's ambition is to create workplaces where every colleague can develop and succeed. It delivers this through action on diversity and inclusion, safety and wellbeing, and learning and development.



A colleague at AB Vista's technology and innovation centre in Ystrad Mynach, Wales

AB Agri offers a wide range of activities to broaden its colleagues' knowledge and expand its talent pool. It provides people with opportunities to develop their full potential and positively contribute to the business's goals. It also seeks to nurture and maintain a fair, innovative and inclusive culture where people can bring their whole selves to work every day.

Health, safety and wellbeing

AB Agri has seen a 44% reduction in its on-site Lost Time Injury (LTI) rate among employees, from 0.50% in 2023 to 0.28% in 2024. It considers its contractors valuable members of the workforce, and is pleased to report that in 2024, contractor LTIs reduced from three incidents to zero. AB Agri is committed to continuous improvement in reducing its overall injury rate year-on-year and its safety performance reflects the dedicated effort that is made to maintain a safe working environment for employees and contractors.

Health and safety is a fundamental pillar of AB Agri's Target Zero programme, which also covers feed safety, site environmental compliance and security. Alongside its commitment to safety, it seeks to provide healthy working environments and enhance all colleagues' working lives.

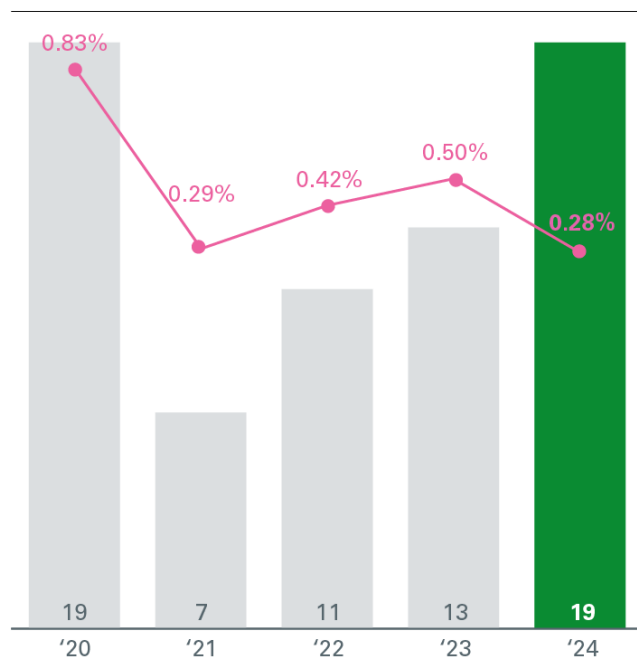
In 2023/24, AB Agri realigned its health, safety and environment support structure, taking into consideration growth areas across the businesses, and optimising support at the operational level with additional specialist expertise. Numerous risk reduction projects have been completed to ensure the safety of employees, contractors and visitors.

The integration of improved standards, training, awareness building and monitoring is fostering a proactive safety culture across AB Agri's operations.

Improved management system standards support the global operations with consistent assurance protocols. AB Agri has made significant investment in establishing standards to mitigate core risks, which helps the businesses prioritise the 'get it right by design' approach, and in improving communication with front-line workers.

AB Agri has continued strengthening its Target Zero culture amid business expansion. Target Zero training continues to be cascaded across the business, with an emphasis on the importance of attitude, behaviour, human factors and personal commitment. In 2023/24, these training programmes have seen significant engagement and success with nearly 4,000 e-learning health, safety and environment modules completed alongside monthly training led by subject matter experts. The 'Take 2' approach, which empowers people to stop and think before acting, was enhanced through new technology and the Target Zero calendar of bi-monthly activity.

Employee on-site Lost Time Injuries and Lost Time Injury Rate - Agriculture



Wellbeing

AB Agri is dedicated to providing a healthy working environment and improving the quality of working lives for all colleagues. AB Agri participates annually in World Wellbeing Week, which aims to raise awareness of keeping fit and well, inside and outside of work. The most recent activities included a walking challenge where colleagues kept a track of how far they had moved that week and recorded their times. Collectively, almost 21,000km was recorded.

In addition, a number of services are in place to help colleagues balance work and family commitments, manage stress and enjoy a healthier lifestyle. These include:

- Nudge – an impartial, global financial education platform that coaches people to better understand their finances, manage their money and plan for their future;
- Employee Assistance Programme – a service that delivers advice and solutions on mental health, practical problems, medical and nutrition worries, and any legal and financial issues; and
- Mental Health First Aiders – individuals who provide initial support, encouragement, guidance, and also have an understanding of mental health and what factors can affect wellbeing.



A feed mill operator at ABN in Enstone, UK

Diversity, equity and inclusion (DEI)

AB Agri fosters a fair, innovative and inclusive culture through its DEI approach. It believes a thorough and robust approach to talent management leads to a diverse workforce and a welcoming environment for all.

'This is Me', the inclusion campaign at AB Agri, aims to create a sense of belonging where everyone feels comfortable being themselves.

It has established several employee network groups, such as PRIDE, Parents and Carers, Women at Work, Race and Ethnicity, Enable (Disability Inclusion) as well as support groups covering Menopause and Men as Carers. Each group has a sponsor from the senior leadership team and the leads for each group meet monthly with the AB Agri Chief Executive and Group People and Performance Director to discuss challenges, advocate for underrepresented groups and seek support.

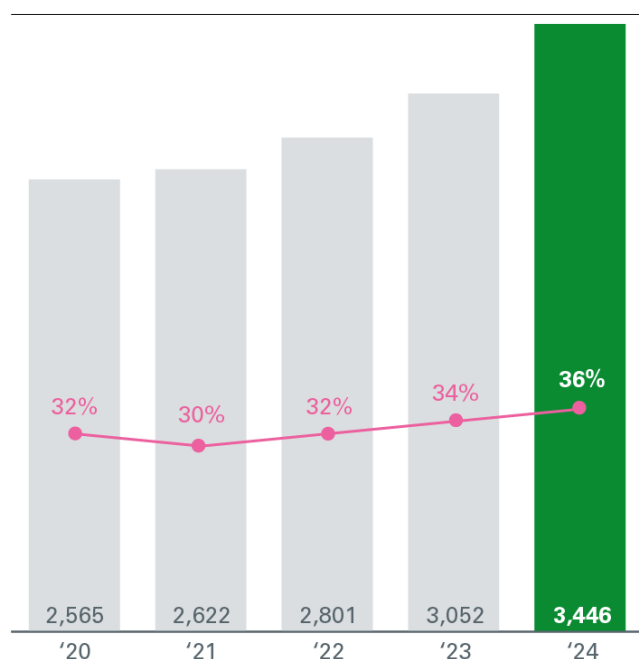
AB Agri has set targets to increase workforce diversity, focusing on attracting, developing and retaining a more diverse workforce. Currently 36% of its workforce is female, with women receiving 36% of all promotions this year. The division has maintained a gender pay gap below 2% (0.4% in 2024) for the third year, reflecting its commitment to gender equality. Women make up nearly 40% of the executive team and the leadership teams now include 42% non-UK nationals, highlighting a diverse representation.

AB Agri prioritises fair and inclusive recruitment practices to ensure a diverse talent pool of candidates from a variety of sources, enabling the business to find the best candidate for each role. This commitment is supported by its applicant tracking system (Eploy), which achieved Digital Accessibility Centre (DAC) certification this year. DAC ensures digital media accessibility for everyone, regardless of the platform, and meets best practices in accessibility standards and legislation.

AB Agri actively promotes gender balance when recruiting and selecting senior roles in the business by encouraging a balanced shortlist of male and female candidates. It also uses CV blinding practices to mitigate unconscious bias. Globally, all recruitment agencies working with AB Agri are required to adhere to the Group Supplier Code of Conduct. These agreements centrally reference AB Agri's policies on Equality, Diversity, Inclusion and Dignity at Work.

AB Agri partners with various organisations to inform internal process development and promote jobs externally.

Number of employees, highlighting percentage of women in workforce



These initiatives include:

- Armed Forces Covenant – membership of this organisation connects AB Agri with military veterans and their partners seeking employment in the UK;
- Disability Confident – AB Agri has achieved Level 1 certification, demonstrating its commitment to work practices, opportunity provision and support services; and
- Accessibility initiatives – AB Agri has an Accessibility Toolbar on all external websites and a dyslexia-friendly font is available on all desktops and laptops.

Engagement and development

Attracting talent to agriculture is an industry-wide challenge, with AB Agri's customers facing an ongoing struggle to fill operational farm roles. Additionally, the industry must compete for the specialist talent needed to address shared challenges, including skills in technology, marketing, engineering and data insights.

Beyond internal skills development, AB Agri supports the next generation of food and farming talent. This includes sponsorship of the Nuffield Farming Scholarship programme, a 12-month placement for a Harper Adams University student, and funding for 11 PhD students by AB Vista, its feed additives technology business.

AB Agri also focuses on talent as a strategic advantage for the business. It offers a wide range of activities to broaden employee knowledge and cultivate a deeper talent pool. These initiatives empower people to realise their full potential and contribute positively to the business's goals.

AB Agri provides opportunities for development within roles and facilitates broader career progression.

In 2023/24, over 1,000 delegates participated in 150 workshops. In addition to workshops, the psychometric assessment tool Insights Discovery is used by internal practitioners and coaches to support employees in understanding themselves and their teams more effectively.

Three new initiatives were launched in 2024:

- Management Development Programme – a three-day programme equipping managers to better support their teams;
- Ruminant Technical Expertise Programme – a year-long experiential programme aimed at growing technical talent within the dairy field; and
- Translated e-learning bitesize programmes for colleagues facing language barriers or time constraints.

AB Agri offers levy-funded apprenticeships for residents of England, with an expanded programme offering. In 2024, the first Level Seven programme was completed with distinction. By the end of 2024, 49 people will have fully completed apprenticeships in the last four years.

The talent programmes across AB Agri continue to deliver a significant return on investment, with one third of high-potential programme attendees in the last 12 months either promoted or given increased responsibilities within their current role immediately following programme attendance.

Engaging people



A colleague at our Anhui Mill in China

Open communication is crucial, and AB Agri values employee feedback, ideas and suggestions. Its continuous listening platform 'Pulse' allows colleagues to voice their opinions and contribute to improvement efforts. Anonymous feedback channels are also available for employee use.

Conducted quarterly to ensure timely celebration of successes and addressing of issues, the survey results provide valuable insights for both line managers and people and performance teams. Line managers are provided with toolkits to facilitate regular action planning sessions where teams discuss their results and any potential improvements to be made.

The Pulse survey assesses employee engagement across various drivers, including wellbeing, inclusion and corporate social responsibility. All three areas currently rank among the highest scoring metrics in the survey, exceeding the benchmark provided by Qualtrics. AB Agri's overall engagement score across the division currently sits at 76%, also exceeding the benchmark.

AB Agri understands the importance of keeping colleagues informed. Launched in 2019, 'Between the Lines' is an internal publication featuring personal stories from across the company, serving as a platform for fostering a global, inclusive culture. Now distributed in seven languages, it has become a crucial component of the division. Digitally and in print, the publication reaches all locations at least three times per year. In 2024 it won the 'Best Internal Publication: Digital' category at the Internal Communications and Engagement Awards.

People in our supply chains and surrounding communities - Agriculture



AB Agri recognises the risk of human rights impacts in its businesses' global supply chains and takes its responsibility to respect human rights seriously.



ABN delivery at our feed mill in Enstone, UK

Human and labour rights in our supply chains

AB Agri's businesses source around 3,000 raw materials from over 1,400 suppliers, including bulk commodity suppliers and ingredient manufacturers. AB Agri's businesses take steps to introduce due diligence programmes and procedures targeting salient issues within these supply chains. AB Agri remains committed to providing information and training on issues relating to human rights for new employees as part of its induction process.

AB Agri values supply chain diversity and in particular seeks to support small and mid-sized suppliers in upholding its standards. If the business needs to implement new standards or data collection requirements, it aims to work in partnership with its suppliers and engage them as early as possible.

AB Agri's Responsible Sourcing Policy and its internal Responsible Sourcing Standards apply to all its businesses. The Policy outlines areas of focus, including deforestation and conversion of natural ecosystems, human and labour rights, and efficient and more sustainable resource use.

It also explains the roles and responsibilities of the businesses and their employees. The Responsible Sourcing Standards, based on the Group Supplier Code of Conduct and the Ethical Trading Initiative Base Code, describe the sourcing approach and processes required for different sourcing categories.

AB Agri has started to implement the requirements for its raw material sourcing category, and in the longer term, it has committed that all procurement categories will meet defined responsible sourcing standards by 2030. Human and labour rights risks for certain raw materials are identified and monitored using the Verisk Maplecroft global risk analysis tool and the Sedex (Supplier Ethical Data Exchange) online database.

AB Agri also works collaboratively with its suppliers to understand the country of origin of the feed materials purchased as the first stage of risk evaluation. This is now over 95% complete for all raw material suppliers.

Once it has completed the initial Verisk Maplecroft evaluation, AB Agri supports its suppliers in mitigating their risks and complying with its Responsible Sourcing Standards. This process involves completing an online Sedex assessment, which is reviewed by the ethical compliance team and may result in an on-site audit. Throughout this process, the focus is on supporting suppliers to achieve the standards in place and only seeking an alternative supplier if efforts to use its leverage to address relevant issues have failed.

As part of this process, AB Agri has assigned an ethical risk level to all its raw material suppliers, ranging from Level 1 to Level 3. Level 1 is for suppliers with higher potential risks, with a high or no Verisk Maplecroft risk rating and no risk mitigation in place. Level 3 is for suppliers with a low-risk rating in the Verisk Maplecroft evaluation or if the supplier is rated as medium or high risk on Verisk Maplecroft, but AB Agri has started to work with its suppliers on its risk mitigation process.

The aim is to achieve the highest ethical rating (Level 3) for all raw materials suppliers by 2025. While the number of suppliers has grown, progress is steady. At the end of this financial year, the percentage of suppliers in Level 3 had risen to 58%, a 26% increase over last year. The percentage of higher risk suppliers (Level 1) dropped from 54% to 5%. The vast proportion of this reduction was achieved after the AB Agri team in China introduced a further set of evaluation criteria to enable a more detailed assessment of their high-risk suppliers, as well as removing any suppliers that were no longer part of their supply chain.

AB Agri has expanded its focus beyond raw materials to include third-party manufacturing and contracted labour. Over the past year, AB Agri conducted a review of contracted labour used across its manufacturing sites globally, identifying potential risk. It has also assessed all its third-party manufacturers using a set of critical factors to evaluate risk levels. As a result of these evaluations, AB Agri has identified areas requiring

risk mitigation actions and plans to audit five third-party manufacturers and assess one contracted labour provider.

Regarding its own operations, all AB Agri manufacturing sites have completed an annual Sedex self-assessment. In 2022, it implemented a three-year rolling internal audit plan to conduct SMETA audits on all its manufacturing sites globally. Seven of these audits were conducted in 2024, with further sites to be scheduled in 2025.

Carbon and climate - Agriculture



AB Agri is working hard towards reducing GHG emissions across its business and aims to support its customers in reducing the environmental impact of food production.



The Amur Energy anaerobic digestion plant in Yorkshire, UK

AB Agri recognises the significant role of the agricultural sector in global GHG emissions.

A warming planet, evidenced by rising global temperatures and increasingly volatile weather patterns, presents a major challenge for agriculture. Threats such as extreme heat, drought and flooding could disrupt AB Agri's supply chain at every stage, from sourcing crops for feed to its own manufacturing sites and customers' farm businesses.

Climate risk

AB Agri has identified an initial list of climate-related physical and transition risks and opportunities in alignment with the Task Force on Climate-Related Financial Disclosures (TCFD) framework. These risks are managed within the AB Agri Risk Register.

The primary risks include extreme weather events and temperature changes that could affect the availability of critical raw materials in the supply chain or hinder AB Agri's manufacturing operations. To mitigate these risks, AB Agri has implemented effective measures to manage stock requirements and established contingency plans for critical raw materials.

In its manufacturing sites in the UK and China, AB Agri has implemented controls and mitigation plans to address snow, flooding, and extreme temperatures. Additionally, AB Agri uses the Verisk Maplecroft global risk analysis tool to monitor temperature variations and any business interruptions caused by extreme weather events.

Its seed business, Germains, recognises the challenges faced by US farmers from the combination of intensifying heat and water restrictions. To address this, Germains is developing heat-resistant seed varieties to help maintain yields. The business is also exploring commercially promising markets that may develop from future climate shifts.

GHG emissions, energy and renewables

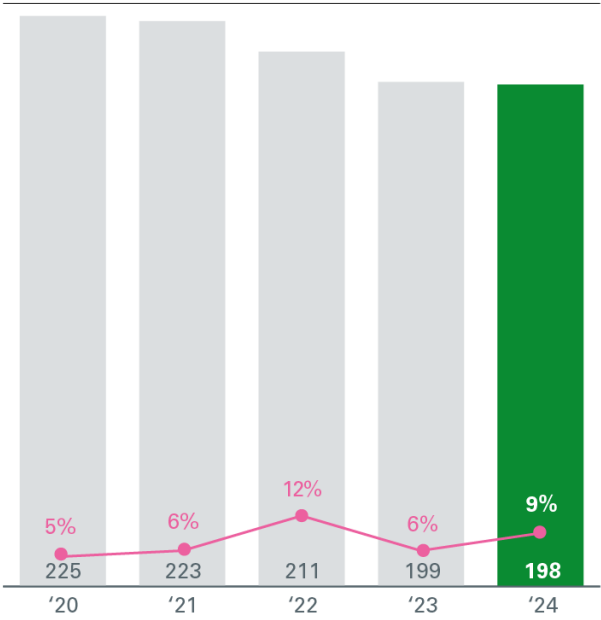
AB Agri seeks to improve energy efficiency and reduce the fossil fuel reliance of its sites globally. The business has set a roadmap for reduction, with 'energy used in manufacturing' and 'distribution operations' its priority focus areas.

AB Agri's total energy use in 2024 was 198 GWh, a decrease of 1% compared with 2023. Of that total energy consumption, 9% came from a renewable source. During 2024, AB Agri exported 35 GWh of energy to the national grid.

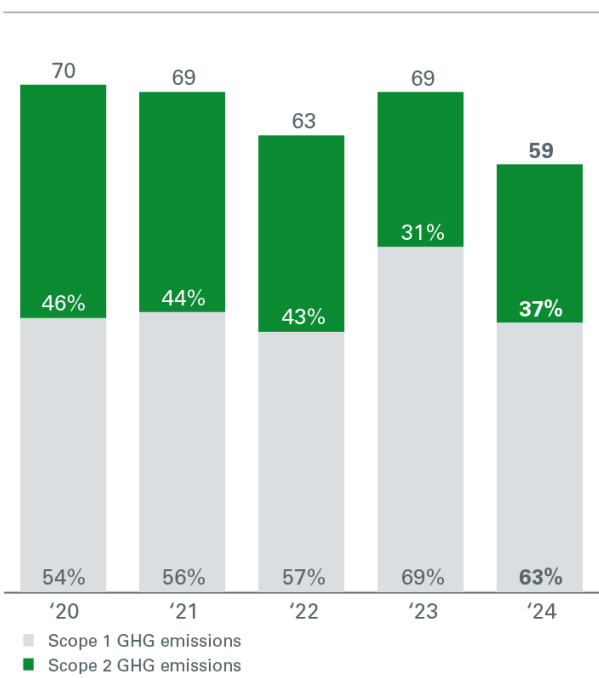
AB Agri's Scope 1 and 2 emissions reduced by 14% from 69 ktCO₂e in 2023 to 59 ktCO₂e in 2024. This reduction is partly driven by one site in the UK operating at reduced capacity due to operational reasons. Additionally, efforts across the business were put in place to improve process efficiencies, investments were made in technology and fuel sources were changed, including the installation of solar panels.

AB Agri continues to make progress in transitioning to lower emission sources across its estate, with solar panels installed at nine sites globally. Additionally, its anaerobic digestion plant in Yorkshire, UK, produces renewable gas from food waste, equivalent to around 69% of the gas used to power AB Agri's UK manufacturing sites.

Total energy consumed and proportion from a renewable source
(GWh)



Scope 1 and 2 (location-based) GHG emissions
(000 tonnes of CO₂e)



Scope 3 emissions

This year, AB Agri successfully completed a project to calculate its Scope 3 emissions in accordance with the GHG Protocol. In preparation for public disclosure in 2024/25, a pre-assessment assurance audit is being conducted on its Scope 3 data.

Waste and packaging - Agriculture



AB Agri takes pride in its heritage and track record of sourcing ingredients for animal feed that would otherwise go to waste, avoiding the use of primary products.



Testing the gas-yield potential of waste for use as anaerobic digestion feedstock at Amur Energy's lab in York, UK

Waste and circularity

AB Agri contributes to more responsible and efficient resource use in agriculture. Any co-products and food waste not suitable for animal feed are used to generate bio-energy through its specialist anaerobic digestion business, Amur.

In 2024, there was a 19% increase in the total waste generated by AB Agri from 5.3 kt in 2023 to 6.3 kt this year. Of this waste, 87% or 5.5 kt was recycled, with under 1 kt being sent to landfill. This increase is partly as a result of two sites cleaning large on-site equipment in the reporting year.

AB Agri's nutritional expertise ensures the optimal use of various food co-products, such as the fibre-rich pulp from sugar beet production and the nutritious grains left over from brewing beer and whisky.

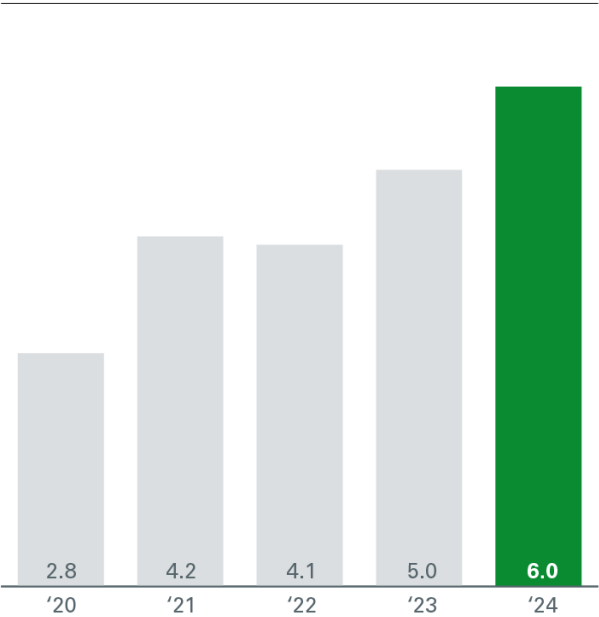
Plastic and packaging

In 2024, AB Agri used 6.0 kt of packaging, a 20% increase compared to 2023. This increase is in line with higher production output, improvements in the internal reporting of packaging volumes and weights, as well as the introduction of new product lines requiring different packaging materials. This year, AB Agri also measured its packaging usage across its UK businesses and it is now evolving this data to incorporate all of its non-UK businesses so that it can establish a global view of the packaging used.

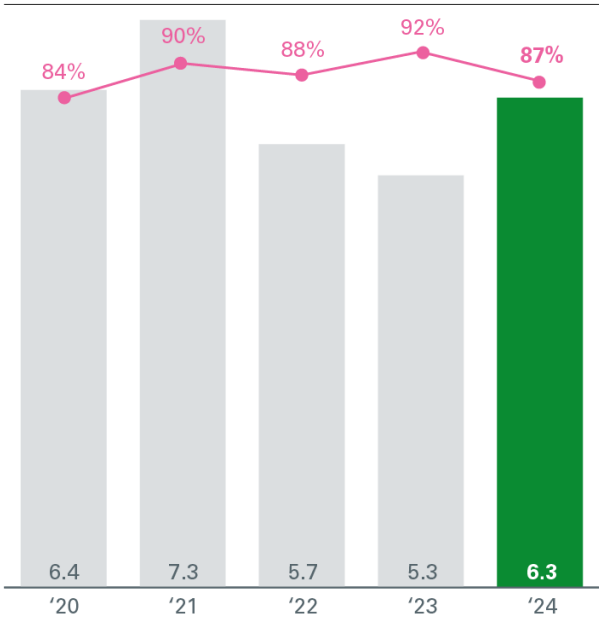
AB Agri remains committed to eliminating, reducing or redesigning the packaging it uses for its products. It has successfully conducted trials aimed at transitioning towards using recycled-content plastic packaging. Changes have been implemented across some of its UK businesses, such as using recycled materials in shrink wrap, tote bags, and plastic tubs within Premier Nutrition's equine range.

AB Agri has been mapping its packaging data to gain a precise understanding of its packaging usage and enable the identification of opportunities for improvement. This analysis has helped to set internal targets at business unit level aimed at reducing overall packaging use and increasing the volume of recycled plastic content.

Quantity of packaging used
(000 tonnes)



Total waste generated highlighting proportion of total waste sent for recycling or other beneficial use
(000 tonnes)



Case study - Amur

Amur turning waste into energy



Colleague testing feedstock sample at Amur Energy lab in York, UK

AB Agri's anaerobic digestion (AD) business, Amur, helps AD operators increase biogas production through performance products, feedstocks and technical advice. By maximising value from raw materials that would otherwise go to waste, Amur contributes to waste reduction and reuse, as well as reducing reliance on fossil fuels.

Amur uses AB Agri's AD facility in Yorkshire as a test site for its research and development. The site produces biogas from materials, including locally sourced food waste and material from animal feed mill sites that have failed to meet quality control standards. In the reporting year, the AD facility has produced 3.6 GWh of electricity and 30.8 GWh of biogas, which has been exported to the UK National Grid. Due to the lack of available feedstock during the reporting period, the amount of biogas exported in 2024 has decreased by 19%.

Amur continues to invest in developing new products to increase biogas production and replace currently used minerals and additives with materials that have a reduced environmental footprint. One example is the ADFe additive, an iron hydroxide-rich material sourced from disused coal mines in partnership with the British Coal Authority. ADFe is a recovered material and has a lower carbon footprint compared to other similar dry materials, as it is dried naturally in the sun rather than through energy-intensive methods. Iron hydroxide is an essential additive to manage hydrogen sulphide levels in biogas facilities. In trials, ADFe has been shown to be 30% more effective than conventional products.

Case study - Premier Nutrition

Premier Nutrition implementing more sustainable packaging solutions



Packaging product at our manufacturing site in Staffordshire, UK

Several years ago, AB Agri's business Premier Nutrition undertook a project to find and implement more sustainable packaging solutions for its equine product range. The project initially focused on its largest equine customer as a pilot.

During a comprehensive review of all packaging product lines, it was discovered that 40% of the plastic packaging used was in the form of plastic tubs and lids. The business worked with its supplier to successfully trial and implement an alternative with 30% recycled plastic content, leading to a significant reduction in the use of new plastic.

The success of this project inspired Premier Nutrition to explore other opportunities for improvement, resulting in 30% recycled content now being used in other types of packaging, such as tote bags and shrink wrap. This positive change extended beyond its Premier Nutrition business, benefiting other AB Agri businesses as well. The knowledge and experience gained from this initiative have led to ongoing trials on plastic bags, which constitute the majority of packaging used across AB Agri.

Food safety and nutrition - Agriculture



Animal feed safety is non-negotiable for all AB Agri's businesses. The division strives to supply safe products, services and advice, supported by clear and consistent policies and standards.



A quality technician testing product at Premier Nutrition's lab in Fradley, UK

AB Agri's roots in agriculture span more than 100 years. As a supplier of animal nutrition and farm performance services to the agri-food supply chain, it is proud of the contribution its businesses have made, during that time, to improving how food is produced.

The importance of responsible and affordable nutrition for both people and animals has never been more critical. AB Agri is committed to supporting the long-term sustainability of the industry.

As global dietary habits shift and nutritional challenges emerge due to population growth, rising incomes, and changing consumer preferences, AB Agri is strategically positioned to anticipate and respond to future food demands.

Food and feed safety

Delivering feed safety and quality in a continually changing global environment poses significant challenges, particularly with risk related with economic, biological, technological, or labour factors. To address these, AB Agri adopts a systematic approach to identifying, assessing, and mitigating threats.

Working with RQA, a leading provider of risk management services, AB Agri conducted a comprehensive review of its Threat Analysis and Critical Control Point (TACCP) programme. In addition to its longstanding HACCP (Hazard Analysis and Critical Control Point) programme, which focuses on unintentional contamination, TACCP complements its overarching Feed Defence Plans by identifying vulnerabilities where intentional threats may be present.

The assessment included a selection of AB Agri sites, based on their different activities, and allowed the business to critically assess the comprehensiveness of its existing plans against the latest thinking in this critical area, particularly in risk identification and mitigation.

The work also identified opportunities to refine and enhance AB Agri's training programmes, ensuring its sites are better supported to meet the standards set by the AB Agri Feed Safety policy. By better understanding and mitigating risks associated with its Feed Defence plans, AB Agri enhances its overall approach to feed safety resilience, regulatory compliance, and the integrity of AB Agri's products and services.

Feed safety is a cornerstone of food safety and is integral to AB Agri's Target Zero programme. Now in its fourth year, this comprehensive initiative covers feed safety, health and safety, security, and environmental considerations.

Target Zero ensures all teams are equipped to deliver their feed safety responsibilities by driving collaboration across the businesses and continuously seeking effective solutions to meet both current and future safety and quality challenges.

Nutrition and health

AB Agri is committed to supporting the agriculture industry in providing affordable, safe and nutritious food for all. Its focus aligns with the growing demand, particularly in developing markets, for accessible protein sources like chicken, milk and eggs.

Dietary trends over the previous century suggest that as wealth increases, individuals tend to consume more protein and other macronutrients like carbohydrates and fat.

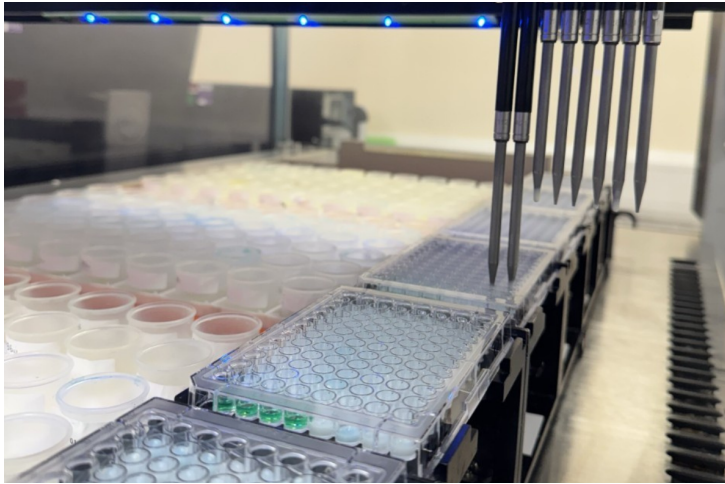
As population growth rates slow towards 2050, changes in nutritional demand are likely to stem primarily from increasing wealth in low- and middle-income countries, enabling greater access to protein-rich diets.

In markets such as Europe, the UK and the USA, while affordability remains a key factor for many parts of the population demographic, dietary preferences are increasingly shaped by environmental concerns, animal welfare and a focus on enhanced human nutrition.

AB Agri research in 2022 found that price also remains a major factor in food choices across various markets¹. AB Agri recognises the importance of consumer choice and remains committed to providing a variety of solutions that support balanced and healthy diets for everyone.

Case study - AB Agri

Powering dairy farm performance through data and advisory services



Testing for Johne's disease at NMR lab at Wolverhampton, UK

Dairy products like milk, yoghurt, and cheese are widely recognised for their nutritional value and are recommended by organisations such as the USDA and NHS. As the focus on sustainable food production grows, dairy processors are increasingly rewarding farms that produce milk to higher environmental standards, aligning profitability with both output and environmental stewardship.

AB Agri has built a comprehensive portfolio of products and services for the dairy industry including data and advisory services through National Milk Records (NMR), IFCN, Kite Consulting, and its existing feed and on-farm carbon measurement services from AB Sustain. This unique combination allows AB Agri to provide extensive insights into both output data, such as production volumes, milk quality, and on-farm emissions, and input data, including genomics and feed analysis. By integrating these insights with specialist knowledge, AB Agri helps dairy farmers optimise their operations, enhance productivity, and support a more responsible and sustainable dairy industry.

Agriculture and farming practices - Agriculture



For AB Agri, more sustainable ecosystems relate to both individual farms and whole food systems, where land use is optimised for food production, carbon storage, energy generation and human use.



One of our AB Agri consultants with a client farmer on their farm in Somerset, UK

Over the last century, improvements in farming practices and technology have enabled food to be produced at scale, and more economically than ever before. In addition, as the world has globalised, agricultural supply chains have become increasingly complex.

Some inputs that are essential to agriculture are known to contribute to climate change. For example, CO₂ is crucial for plant growth and nitrogen is a key component of livestock feed proteins. In many cases, effectively managing and improving the efficiency of these inputs not only reduces CO₂ emissions per unit of food, such as per kilo of chicken or litre of milk, but also helps keep food affordable by optimising the use of nutrients.

AB Agri evaluates the livestock farming ecosystem to identify commercial opportunities and develop solutions to address these challenges. Science and research are the cornerstones of AB Agri's approach. Underpinned by its community of scientists, all commercial solutions developed by its businesses are rigorously assessed to demonstrate their safety and efficacy. Its businesses invest in researching scientific advancements, by collaborating with universities and utilising its own laboratories and trial sites. These include the AB Neo Centre of Excellence trial farm in Spain and the Amur laboratory at the University of York Science Park.

External standards and the regulatory landscape are also vital considerations for AB Agri. While the agriculture industry upholds high standards, regulatory frameworks may not always keep pace with scientific developments. This creates opportunities in more adaptable markets to responsibly implement new technologies.

Industry groups and bodies play an essential role in agriculture. They help to improve food production standards and represent agricultural businesses in interactions with audiences such as consumers and governments.

AB Agri businesses and employees actively participate in industry organisations at national and international levels. These include representation on the Agriculture Industries Confederation (AIC), the European Feed Manufacturers' Federation (FEFAC), the International Feed Industry Federation (IFIF), Global Feed LCA Institute (GFLI), the Global Dairy Platform (GDP) and the British Equestrian Trade Association (BETA), to name just a few.

Responsible agriculture, biodiversity and land use

For AB Agri, more sustainable ecosystems relate to both individual farms and whole food systems, where land use is optimised for food production, carbon storage, energy generation and human use. Nutrients are retained within the agri-food ecosystem and distributed to wherever they can have the greatest value.

There are three interconnected principles which underpin AB Agri's priorities for action in this area:

- conserving and elevating nutrients within its farming ecosystems, reducing biogenic emissions and pollution;
- reducing use of fossil fuel (thermogenic emissions) and fossil-derived products (plastics); and
- removing potential links to deforestation from the supply chain.

Traceability and risks

In managing its supply chain, AB Agri prioritises the safety and quality of its products while respecting the lives and livelihoods of those within the supply chain and the environment. AB Agri recognises the unique contribution that each business along the value chain plays, from micronutrient producers for animal feed, to milk processors. AB Agri assesses its supply chain risk against criteria aligned to its 'Care Factors' and has prioritised mapping specific ingredients with high inherent ethical risk or where a single market supplies over 90% of global demand. In complex areas where traceability is challenging, AB Agri believes that transparency and good supply chain governance are critical, while recognising the potential for traceability enhancements in the future through better use of technology.

Deforestation and forest risk commodities

As a soybean meal, soy oil and palm oil user, AB Agri has long prioritised mitigating the risks associated with forest-risk commodities. Considerable progress has been made, particularly with soybean meal, a key

ingredient in poultry feeds due to its nutrient efficiency and cost-effectiveness.

AB Agri has committed that all palm oil and soya usage will be certified by 2025, supporting zero deforestation responsible sourcing schemes. In 2023/24, 100% of its palm oil was RSPO certified using a combination of book and claim and mass balance. As of the end of 2024, 74% (2022/23: 64%) of the soya products AB Agri bought worldwide were certificated to schemes meeting the FEFAC benchmark for responsibly sourced soya. This is a significant increase compared to 37% in 2020.

Since September 2023, all of AB Agri's South American maize and maize co-products have been certified to a minimum book and claim standard. This includes adopting a supplier scheme for sourcing Argentine flint maize, where AB Agri takes the co-product, maize germ. This is a segregated scheme that enables a direct link to the material compared to the 'book and claim' standard.

AB Agri is an active member of the FEFAC Sustainability Committee (which introduced soya sourcing guidelines in 2015), the Agricultural Industries Confederation Sustainability Committee and the UK Roundtable on Sustainable Soy, all of which are working on achieving supply chain solutions.

New laws addressing deforestation, such as the EU Deforestation Regulation, will require new supply chain practices across global markets especially with respect to traceability and data management. AB Agri is working closely with external bodies such as FEFAC, AIC, suppliers and customers, and with its purchasing and commercial teams to build knowledge and capability and develop enhanced processes across its supply chains to address requirements such as these.

Animal health and welfare

Consumers expect the agricultural industry to uphold high standards of animal health and welfare in livestock farming worldwide. Although AB Agri does not operate commercial livestock farms, its technical expertise helps to support animal health through advanced technology and better nutrition.

Animal health and welfare relates to a broad spectrum of considerations, from disease prevention to stocking density and other living condition factors. These are best described by the Five Domains Model for animal health and welfare, which form the basis of AB Agri's Animal Health and Welfare Policy.

Antimicrobial resistance is recognised as a threat to human health, and the livestock sector has been making efforts to reduce antibiotic use for decades. In 2016, a UN declaration encouraged governments to work together on responsible antibiotic use and international co-operation.

While significant progress has been made, concerns remain around the risk and impact of disease, which can lead to reduced production rates and lead to waste. To minimise this risk, AB Agri has operational procedures in place to prevent being a vector in the spread of diseases in customer farms.

AB Agri's Animal Health and Welfare Steering Committee, which is responsible for monitoring and responding to animal health and welfare challenges, has mapped the top five focus areas across its species groups: pigs, poultry, ruminants, pets and equines.

The five issues currently cover:

- prevalent diseases;
- commercial and economic pressures;

- product regulatory requirements;
- problems associated with inefficient production; and
- animal robustness.

AB Agri has mapped where its businesses can offer support to livestock farmers and horse and pet owners to address these concerns and how it can positively influence the welfare for each species group.

It reviews these five areas of focus annually to ensure it continues to offer relevant products and services, including technical consultation to improve health and welfare across the industry. Four material components, genetics, nutrition, management, testing and monitoring, work in harmony to better support animal health and welfare today and in the future.

Where veterinary medicines can only treat illness once it is already present, AB Agri's approach is to focus on proactively protecting animal health and supporting immune systems through nutritional strategies, monitoring and advice.

Animal testing

In 2024, the AB Agri Animal Health and Welfare Steering Committee updated the AB Agri Animal Testing Policy, covering all business activities related to animal testing².

2. Defined as scientific procedures performed on living animals outside of what an animal would expect to experience either in its natural environment or in a typical domestic or farmed situation.

Case study - AB Agri

Supporting food and farm ecosystems



A colleague sampling feed at our ABN mill, Enstone, UK

Supporting customers in achieving more sustainable farm ecosystems has become an essential part of AB Agri's service offering.

AB Sustain plays a crucial role in connecting consumers, retailers, processors and farmers by offering farm and supply chain programmes and tools which support more sustainable supply chains. Its 'Farm Footprints' on-farm carbon footprint assessment service, launched in 2007, helps major international food producers to measure their supply chain emissions. Additionally, AB Agri's dairy consultancy business, Kite Consulting, provides practical guidance on emissions reduction and nutrient conservation to individual farm operations.

AB Agri has committed to calculating product environmental footprints for all branded animal nutrition products by 2027. This initiative leverages diverse data sources, including primary production data, Global Feed Lifecycle Assessment Institute (GFLI) information and suitable proxies for unlisted materials. The tool and its methodology have been peer-reviewed and validated by University College London.

In 2023, AB Agri completed the collection of carbon emission values for all the raw materials used in its compound feeds globally. AB Agri is now collecting carbon values for its specialty feed ingredients, where data is often scarce or hard to obtain. However, AB Agri is working closely with its technical teams, suppliers and carbon footprint specialists, and aims to have completed this work by the end of 2025, with all remaining products completed by 2027.

Building nutritional knowledge to support animal health



Piglet feed, AB Neo Centre of Excellence

AB Agri's business, AB Neo, which focuses on neonatal and maternal stages in animals, uses its Centre of Excellence piglet trial farm facility in Spain, to better understand the impact of early nutrition for piglets. In 2023/24 this has included trials focused on supporting gut health during the 'transition' period, where a piglet's diet shifts from milk to solid feed. This is a critical period for piglets, due to significant changes in the gut environment. By optimising the diet during this phase, AB Neo aims to harness its transition-period expertise to help the animal maintain robust health.

Case study - AB Agri

NMR early detection



Milk testing at NMR laboratory in Wolverhampton, UK

In recent years, there have been improvements in the potential for testing and monitoring to detect early, sub-clinical signs of infection in livestock. Developed by AB Agri's milk testing and analytics business, NMR, 'GenoCells' is a next-generation milk test that provides individual cow Somatic Cell Counts (SCC) using a single bulk milk sample enabling the early detection of mastitis. GenoCells analyses the genetics of all cows in the herd. If the bulk milk sample shows a high SCC, GenoCells can pinpoint the specific cow responsible. This allows for early intervention, helps to detect sub-clinical mastitis, improves milk quality and reduces the need for antibiotics.