



ESG at Sugar



ABF Sugar focuses on keeping its people safe, reducing its carbon footprint, and managing water and natural resources responsibly.



British Sugar engineers inspecting an evaporator at our factory in Wissington, UK.

ABF Sugar focuses on keeping its people safe, reducing its carbon footprint, and managing water and natural resources responsibly. ABF Sugar adopts farming practices and supply chain management strategies that aim to have a positive environmental and social impact. ABF Sugar also focuses on maximising the efficient use of raw materials, like sugar beet and sugar cane, as well as educating consumers on sugar and health.

In 2018, ABF Sugar launched its 2030 commitments in a sustainability framework, 'Global Mind, Local Champions', which categorises its environmental and social focus areas under three pillars: supporting rural economies, thriving and healthy communities, and consuming resources responsibly.

The division is also committed to reducing its carbon emissions and in January 2024, the Science Based Targets initiative (SBTi) validated its near-term and net zero emissions targets. Businesses within ABF Sugar are now updating their decarbonisation plans to align with these targets.

The 2030 commitments have played a key role in driving the division's sustainability agenda over the last five years. As ABF Sugar looks ahead, it has established a new five-year strategic plan that will shift the focus from ABF Sugar-wide targets to business-level strategies and targets, tailored to the specific risks and priorities of each business. For carbon emissions reduction, each business's target contributes to ABF Sugar-wide science-based targets.

ESG Governance

ABF Sugar is working towards a more comprehensive governance framework that integrates social and environmental issues into its decision-making processes. The Senior Executive Team has oversight of and responsibility for ESG risks and opportunities that are material to the division.

Managing directors of each business are responsible for setting strategies and action plans based on their material risks, local regulatory requirements and customer expectations. Where a divisional approach is needed, such as for reducing GHG emissions, ABF Sugar sets divisional-level targets and develops frameworks and guidance to support its businesses in achieving these goals.

In 2023/24, ABF Sugar developed a dashboard to internally monitor and report progress on ESG priorities, such as GHG emissions reduction. It also assisted its Spanish business, Azucarera, to conduct a preliminary double materiality assessment to enable future reporting under the EU Corporate Sustainability Reporting Directive (CSRD).

Our people - Sugar



ABF Sugar recognises its responsibility to foster safe, inclusive and fulfilling workplaces for its diverse workforce.



British Sugar colleagues at the Wissington sugar factory, UK.

Health, safety and wellbeing

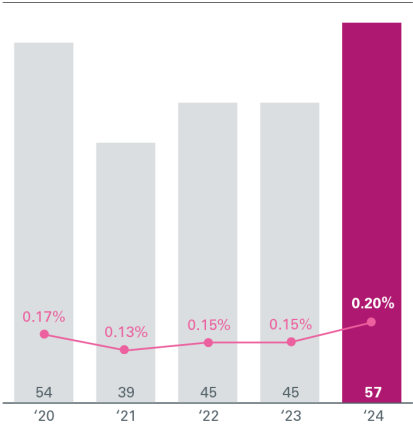
Loss of life in our operations is unacceptable and we expect all colleagues to return home after work as well as when they arrived. As such, we are deeply saddened to report one employee and five contractor fatalities this year. An employee died from drowning in a water canal in Malawi. In Tanzania, a contractor driver was fatally injured by a moving vehicle. In Zambia, a contractor was electrocuted during electric works and in South Africa, a contractor was fatally injured during tree felling. In Malawi, a security contractor died as a result of responding to criminal activity.

Following these tragic events, the priority was to ensure the families and colleagues of those who died were supported. Thorough root cause investigations were conducted by the businesses, and the learnings shared with all our operations. Remedial actions, including a review of our safety culture and training expectations with our contractors, have been implemented to minimise the likelihood of such events reoccurring

In 2023/24, the number of employee injuries increased from 45 to 57, which represents a rate increase of 27% from 0.15% in 2023, to 0.20% in the reporting year. The number of contractors experiencing a Loss Time

Injury (LTI) while on-site increased by 38% from 24 to 33. This is an LTI rate of 0.19% in 2023/24 for contractor on-site LTIs.

Employee on-site Lost Time Injuries and Lost Time Injury Rate (%)



Our sugar operations in the UK experienced a decrease in contractor LTIs in 2023/24, although operations in Spain and southern Africa had increased contractor safety incidents. The businesses are continuing to work hard to address the root causes of the injuries and share learnings with each other.

As safety is one of ABF Sugar’s most material issues and a number one strategic priority, we are very disappointed with the overall safety performance this year. All the businesses are dedicated to providing a safe place to work and to creating a culture of zero compromise towards safety.

ABF Sugar has implemented several key health and safety initiatives as part of its safety strategic priorities in 2023/24. The division conducted a comprehensive risk assessment, based on a data-driven approach, to assess and further mitigate the types of risk that it has identified as ‘critical to life’. This exercise identified critical controls necessary to address such risks, which ABF Sugar’s businesses then assessed and reinforced across their sites. The internal audit team reviewed these site assessments and corrective actions are being implemented to close any potential gaps.

ABF Sugar refined its governance structure, establishing clear safety targets and redesigning its organisational structure to ensure that those targets can be achieved. It has also developed metrics to track safety performance and created new processes to foster cross-business collaboration and communication.

In the area of competence and behavioural safety, ABF Sugar rolled out a Personal Choices programme across the businesses. Azucarera, in collaboration with an external consultant, developed a Health and Safety Competency Management Model, transitioning from traditional job specifications to competence-based management. A safety competence matrix was created to identify the technical and soft skills necessary for each role, allowing individuals to achieve the appropriate level of health and safety competencies. This successful approach is now being adapted by other ABF Sugar businesses.

ABF Sugar continually enhances its systems to maintain the robustness of its health and safety standards, risk management practices and performance measurement. It is continuing to invest in data and digital reporting systems to reduce reliance on paper-based processes and deal with hazards and risks more proactively. In 2023/24, ABF Sugar deployed an Integrated Safety Management System, developing a digital platform designed to manage various safety aspects, including audit processes, safety incident reporting, contractor pre-qualification assessments and action plans tracking.

Wellbeing

ABF Sugar businesses prioritise employee wellbeing, implementing programmes designed to promote physical, emotional, mental, social and financial wellbeing.

At our sugar businesses in Africa, new employee wellbeing committees were established in 2023/24 as part of the new operating model of the businesses' medical services, which delivers primary health care and occupational health. This strategic shift aims to improve the medical services capability to provide risk-based medical surveillance. The businesses proactively screen employees for workplace risks they are exposed to, supporting the objective of achieving safety through preventive measures rather than taking a more reactive approach.

During 2023/24, the sugar businesses in Africa recorded a total of 46,563 visits by employees to its medical facilities for occupational health services, including pre-employment, periodic, and exit medical examinations, lung function tests, hearing tests, biological monitoring, and vision screening. All new employees at our African sugar businesses are required to undergo an occupational health evaluation to assess their fitness to work in their specific work environments. These occupational health services are also provided to contractors working on our African sugar sites.

At British Sugar, the team has implemented several holistic wellbeing initiatives to support both office-based and site-based employees. These initiatives address various needs such as mental health, physical safety and financial wellbeing. They include dedicated quiet rooms across sites, offering staff a peaceful environment for reflection or prayer. Additionally, a cardiopulmonary resuscitation (CPR) training programme is being introduced to equip all staff with the skills and confidence to intervene in life-saving situations, both on-site and outside of working hours. Financial support and advice available through an independent advisor to help employees manage their finances more effectively.

In addition, at the Viverno Fuels site in the UK, the business has trained around 17% of its total workforce as Mental Health First Aiders.

Employee accommodation and living standards at our sugar businesses in Africa

Our sugar businesses in Africa have sugar estates that are situated in rural and remote areas, creating a need to provide accommodation for many employees and their families. Each operation has a comprehensive plan to continuously invest in its accommodation infrastructure.

In 2024, ABF Sugar began a review of the housing and living conditions across its sugar estates in Zambia, Malawi, Eswatini, South Africa and Tanzania. The findings of the review have formed the basis for the new ABF Sugar Housing and Living Standards Programme.

The programme aims to enhance decent and safe living conditions for employees living on the estates. Each country team has developed an updated set of minimum standards covering various aspects, including occupancy level, number of rooms per household and provision of amenities such as washing and cooking facilities.



Employee housing on the Ubombo Sugar Estate in Eswatini

The programme is divided into three streams of work:

- immediate actions to address outstanding maintenance and repairs which will be completed in 2024/25. In 2023/24, renovations to approximately 150 houses for employees and their families have been completed at the Nchalo estate in Malawi;
- ensuring all entry level estate houses meet updated minimum standards, with completion expected by 2029 across more than 4,000 houses; and
- investigating future housing options for employees both on and off estate to support the evolving needs and expectations of the workforce.

Diversity, equity and inclusion (DEI)

ABF Sugar believes that diversity, equity, and inclusion (DEI) positively impacts business performance, innovation, talent attraction and retention. The business aims to ensure that it reflects the markets in which it operates and creates an inclusive environment where employees feel a sense of belonging.

ABF Sugar's Spanish business Azucarera holds an annual diversity week, DEI workshops, training with external partners and events to encourage younger women in the local community to consider technical careers. In November 2023, the regional government of Castille and Leon awarded Azucarera a prize in recognition of its work promoting gender equality in the workplace, going beyond regulation to take actions that address gender equality, including consideration of balancing work with personal and family life and reviewing any salary gaps.

Illovo Sugar Malawi launched the Illovo Women in Leadership Forum, aiming to help the business attract and retain female employees as well as foster support for women in leadership programmes.

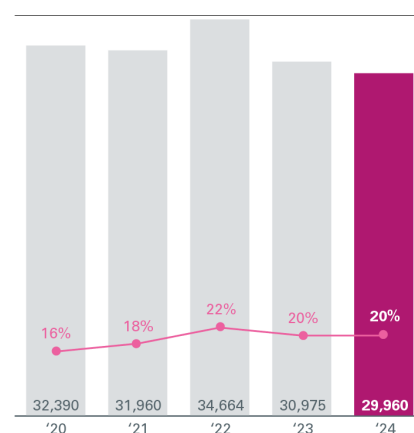
At British Sugar, there has been a focus on inclusion and diversity over the course of 2023/24. The business created a video to raise awareness and understanding of some of the barriers individuals face in their day-to-day work and launched an e-learning module called 'Conscious Inclusion', which over 70% of employees completed in 2024.

In addition, a series of 'Spotlight Inclusion' events have taken place, bringing people together to raise awareness of key topics and hear personal stories. Events so far have focused on women, neurodiversity, mental health and wellbeing, and menopause.

Engagement and development

ABF Sugar is dedicated to developing the skills and expertise of its people and supports their career progression. The division offers an International Experience Programme, allowing colleagues to spend six

Number of employees and percentage of women in workforce



months with another sugar business in a different country to promote shared learning and networking.

Individual businesses tailor their approach to their local context and develop projects to support the aspirations of their people. By the end of 2023/24, 850 leaders across the division had participated in Lumina team effectiveness sessions, from Executive level to front-line level across all functions. These sessions help identify individual strengths, fostering strong and diverse teams.

During 2023/24, a total of 43 people participated in talent programmes at Azucarera in Spain, and six took part in its mentoring programme. Azucarera also conducted a training programme for 128 leaders this year, covering three levels, operative, tactical and strategic leadership, to ensure managers have the necessary skills for their role.

At British Sugar, 92% of the workforce have an account on its Workplace platform, with 64% of colleagues engaging with content in 2023/24. The platform serves as a channel for sharing videos, best practices and recognising positive behaviours. This complements regular face-to-face communication, as well as weekly, monthly and annual briefings. In 2023/24, the network of Communication Champions expanded to 22, ensuring further that all voices are heard.

Our sugar businesses in Africa have a Leadership Development Programme, created in partnership with the Gordon Institute of Business Science in South Africa. In 2023, 23 leaders from the six countries where our sugar businesses in Africa operate completed the programme, with 22 more leaders participating in 2024. The eight-month programme includes assessments, classroom learning, action learning projects, in-country immersion and engagements with the Illovo Executive Committee.

Case study - British Sugar

Rolling out Personal Choices programme at British Sugar



British Sugar colleagues at our factory in Wissington, UK

The Personal Choices psychological safety programme has transitioned from its pilot phase and is now being implemented across British Sugar operations. The programme focuses on building an understanding of how we make choices at the point of risk.

The programme improves safety culture by educating employees on the subconscious factors that influence their choices, such as personal risk perception, the balance between time and risk, ingrained habits and the disconnect between mind and body.

Personal Choices was fully rolled out at three British Sugar sites and is being deployed across the rest of the business. Early results show an improvement in both language and behaviour, a reduction in all types of injuries, and an increase in near-miss reporting.

Case study - British Sugar

RoSPA Gold Standard for Safety



Representatives from British Sugar sites and the Safety and Health team at the RoSPA Awards, UK

British Sugar entered the Royal Society for the Prevention of Accidents (RoSPA) Awards in 2023/24. The RoSPA awards are a well-recognised way to benchmark and celebrate health and safety performance. British Sugar was delighted to receive three golds and one silver award for the four sites that entered.

Case study - Zambia Sugar

Zambia Sugar supporting financial literacy



Zambia Sugar launches Financial Wellness Program to enhance employee financial literacy and wellbeing

Zambia Sugar has launched a business-wide financial wellness programme to help employees manage any debts and support overall wellbeing. The programme was developed as part of a broader employee wellbeing strategy to address the increasing cost of living and lack of financial understanding among some employees. The action plan was created in August 2023, in collaboration with leading financial organisations in Zambia. A total of 6,366 employees, including both permanent and seasonal staff, participated in financial literacy training. By the end of October 2023, 3,800 employees had successfully completed the programme.

Case study - British Sugar

Apprenticeships at British Sugar



British Sugar colleagues at our factory in Wissington, UK

British Sugar is expanding its apprenticeship programme and is planning its largest intake yet starting in September 2024. New opportunities include engineering, agriculture, IT and commercial roles. The apprenticeships last between 18 and 48 months and lead to qualifications at Level 2 to Level 6.

Over 80% of apprentices still work within the business after 10 years. ABF Sugar is committed to developing the next generation of talent and welcomes applicants from all backgrounds.

People in our supply chains and surrounding communities - Sugar



As a group of diverse agriculture and manufacturing businesses working across four continents, ABF Sugar faces complex challenges.



Sugar cane growers at Illovo Sugar South Africa's 2024 growers' day in Sezela, South Africa

Human and labour rights in our supply chains

The global sugarcane industry is particularly vulnerable to human rights related risks due to its reliance on labour-intensive and seasonal activities such as weeding, planting, cane cutting, and harvesting.

ABF Sugar recognises that its long-term success relies on upholding the respect and dignity of its workforce, supply chain workers and other stakeholders. The division aims to ensure that 'Decent Work' conditions are respected across its operations. These conditions are defined by the [International Labour Organization](#), and include paying fair wages, providing safe working conditions and promoting dignity and equality.

The Group Supplier Code of Conduct sets out the values and standards which ABF Sugar's businesses require in their operations and supply chains. Additionally, our sugar businesses in Africa have implemented their own Code of Conduct and Business Ethics. All policies and codes are reviewed and communicated with the approval of ABF Sugar Executive Committee. It is the responsibility of each ABF Sugar business to comply with these policies and codes.

Driven by upcoming regulation requiring companies to implement more detailed due diligence processes, ABF Sugar has started a new review of its businesses' supply chain and operations-related activities. This assessment, guided by the risk-based approach set out in the UN Guiding Principles on Business and Human Rights (UNGPs) and Organisation for Economic Cooperation and Development Guidelines for Multinational Enterprises on Responsible Business Conduct (OECD Guidelines), has revealed opportunities for improvement.

As a first step, ABF Sugar is working at a divisional level to support its businesses to address these findings, including by developing a Human Rights Policy and Due Diligence Framework.

The Human Rights Policy will outline 'Decent Work' principles across its operations and supply chain while the Human Rights Due Diligence Framework guides the processes to identify, prevent, mitigate, and manage human rights risks and impacts. This Framework is aligned with the OECD Guidelines.

Additionally, to better assess the inherent risks in its businesses' supply chain, ABF Sugar has refined its country risk assessment approach in 2023/24, using a number of external tools. The updated methodology serves a dual purpose: to trial an early warning process for its businesses, identifying in which countries potential risks, including those related to human rights, are more likely to occur; and to enable the businesses to make more informed purchasing decisions by evaluating and prioritising countries based on their risk profiles.

Training is a key part of its approach to mitigate human and labour rights-related risks, with businesses required to train their staff and grower partners on issues such as child labour, forced labour and safety. This includes online training for all head office staff at ABF Sugar and each of the businesses every three years, training for all new starters, and in-person training.

In the UK, British Sugar introduced a Responsible Procurement Policy that outlines how the business should engage with suppliers and manage environmental and social risks in its operations and among its suppliers. This Policy covers key priorities such as decarbonisation, more sustainable agriculture practices and respect for human rights.

Supporting communities

ABF Sugar's businesses continue to invest in their relationships with communities and key stakeholders. For instance, our sugar businesses in Africa recognise that their sugar estates are a key part of the communities where they operate, and this is reflected in their activities to support those communities, for example by helping with the provision of clinics, schools or local services to support their workforce, and in some cases their communities and surrounding neighbours.

In 2023/24, our sugar businesses in Africa invested in several community support projects across their operational areas. These initiatives focused on providing access to potable water, offering natural disaster relief, improving healthcare, advancing education and developing infrastructure.

Emergency relief

In Africa, ABF Sugar suffered the effects of extreme weather events again in 2023/24. Persistent heavy rainfall across the Central Region of Malawi in early March 2024 triggered flooding in many areas, affecting one of our African sugar estates in Dwangwa, Malawi. The situation affected thousands of livelihoods in the district and caused considerable damage to company farms, machinery and equipment. Illovo Sugar Malawi supported the Government of Malawi by leading the rescue efforts in the area and providing shelter for displaced communities in schools on the estate.

Illovo Sugar Malawi provided fuel for boats that were rescuing people trapped by the floods, and distributed maize flour, blankets, buckets, sanitary pads and small tents to flood victims who were accommodated on the estate. Working together with the Ministry of Health, Illovo Sugar Malawi Dwangwa hospital was designated as a temporary referral medical facility for all medical emergencies that isolated Government Health Centres were not able to manage.

Case study - Kilombero Sugar Company Limited

Targeting secure and more sustainable sugar cane supply in Tanzania



The K4 sugar factory and warehouse under construction at Kilombero in Tanzania

In 2021, ABF Sugar's business, Kilombero Sugar Company Limited (KSCL), in which Illovo Sugar Africa holds 75% of the shareholding and the Government of the United Republic of Tanzania holds 25%, announced a sugar manufacturing expansion project in Tanzania, in response to the growing regional demand for sugar.

Landesa, an international NGO, and local partners PELUM Tanzania, are implementing a Community-Smart Consultation and Consent project to strengthen land rights and inclusive, collaborative natural resource governance within the Kilombero Valley in Tanzania. KSCL as a corporate partner to the project provides technical input to village land use plans and in turn is empowered to implement and apply the business's Guidelines on Land and Land Rights, especially the commitments to free, prior, and informed consent and gender equity.

The project also seeks to promote community development rather than simply increase production. By working closely with local communities and village leaders, the initiative aims to enhance capacity in land and natural resource management. So far the project has reached 876 villagers and distributed educational materials, including a villagers' land rights handbook. Additionally, the project has issued 2,372 Community Certificates of Rights Occupation (CCROs), with 36% allocated to women, and conducted participatory village land use planning for 13,228 hectares.

In addition, the project is implementing advanced irrigation systems and best agricultural practices, including sophisticated soil and leaf analysis, efficient harvesting techniques, and improved pest and disease control.

Case study - Zambia Sugar

Tackling Zambia's devastating cholera outbreak



Donation of goods from Zambia Sugar to assist the fight against a cholera outbreak in the Mazabuka district, Zambia

Zambia experienced a severe nationwide cholera outbreak between October 2023 and April 2024, with close to 23,000 cases and over 700 deaths reported. The Government of Zambia subsequently declared the cholera outbreak a public health emergency.

In response to the outbreak, Zambia Sugar supported the public health response by rehabilitating a 40-bed cholera treatment facility near one of its estates and providing medical and water treatment supplies to the local government medical facilities. Zambia Sugar's medical services teams supported local communities by educating them about cholera and conducting health awareness talks.

Case study - Zambia Sugar

Malaria response in Zambia



The Nakambala Urban Clinic, a health facility in Mazabuka, Zambia, that was refurbished with funding by Zambia Sugar in 2023

Zambia Sugar has been proactively addressing the challenge of malaria by implementing comprehensive new control measures. Collaborating with local health authorities and NGOs, the company deployed interventions including biological control measures and malaria surveillance.

Surveillance approaches range from malaria testing and treatment, delivered through community health workers and health facilities, to active surveillance in the community, targeting groups such as migrant workers and farm workers.

Carbon and climate - Sugar



ABF Sugar aims to reach net zero greenhouse gas emissions across its entire value chain by 2050.



British Sugar engineers with the boilers for the animal feed dryers at our factory in Wissington, UK.

Climate change is affecting ABF Sugar, with changing weather patterns, extreme events, and the increasing lack of water security. To address these challenges, the division is seeking solutions to reduce its carbon footprint, understand its emissions across Scope 1, 2 and 3, and drive innovation in agriculture, transportation, and manufacturing sites.

ABF Sugar aims to reach net zero greenhouse gas emissions across its entire value chain by 2050. To reach this goal, it has set ambitious targets to reduce Scope 1, 2 and 3 and FLAG (Forest, Land and Agriculture) GHG emissions by 2030. These targets, including its net zero commitment, have been validated by the Science Based Targets initiative (SBTi).

Every ABF Sugar business has developed a plan to reduce carbon emissions as part of their five-year strategy. This plan is based on a thorough analysis and is tracked using the ABF Sugar decarbonisation

dashboard. The dashboard brings together all decarbonisation plans and aligns them with the science-based targets set by ABF Sugar, allowing teams to focus on important areas and monitor progress. Monitoring progress against these decarbonisation plans is crucial for improving performance and will influence decisions about where to allocate resources and capital investments in each business.

GHG emissions, energy and renewables

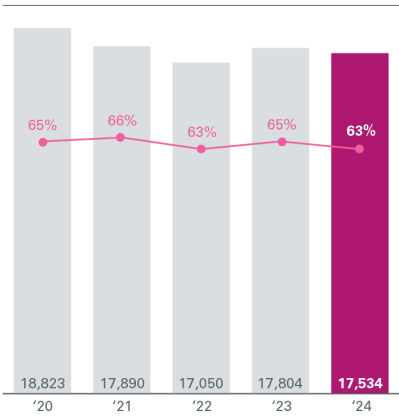
ABF Sugar is working on projects to support the transition to a low-carbon economy. These projects focus on energy efficiency, switching to renewables, and the implementation of process improvements.

Compared with 2023, ABF Sugar's energy consumption decreased by 2% in 2024 from 17,804 GWh to 17,534 GWh. The amount of renewable energy consumed decreased by 4% from 11,550 GWh in 2023 to 11,109 GWh in 2024. Renewable energy as a proportion of total energy decreased from 65% to 63%. The majority of this renewable energy comes from bagasse, the renewable plant-based fibre that remains after the juice is extracted from the crushed sugar cane stalks.

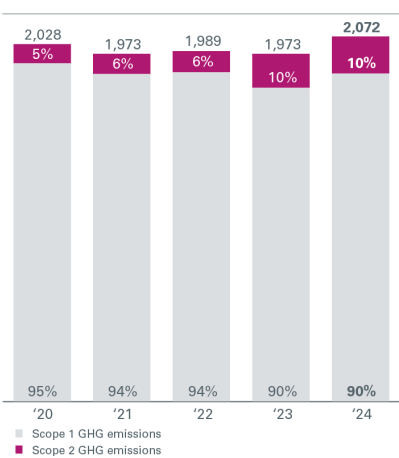
ABF Sugar remains focused on reducing Scope 1 and 2 emissions, which accounts for 31% of its overall GHG emissions footprint. This effort resulted in a reduction of approximately 493 ktCO₂e, representing a 18% decrease compared with its 2018 baseline. British Sugar, the largest contributor to ABF Sugar's Scope 1 and 2 GHG emissions, has reduced its emissions by 21% from the baseline year.

Comparing 2024 with the prior year, ABF Sugar increased by 5% its Scope 1 and 2 GHG emissions from 1,973 ktCO₂e in 2023 to 2,072 ktCO₂e in 2024. The increase is as a result of Vivergo (our bio-ethanol plant) returning to near full operating capacity, British Sugar contending with the operational challenges due to difficult wet weather conditions and Azucarera processing more sugar beet.

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



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



A crucial component of ABF Sugar’s decarbonisation strategy is replacing fossil fuels with low-carbon alternatives, particularly in Europe and South Africa. In South Africa, the Sezela and Noodsberg factories have reduced coal use in boilers by optimising the use of bagasse, a byproduct of sugar cane processing.

Combined heat and power plants (CHP) are used across many of ABF Sugar’s sites to provide the necessary steam and electricity throughout the sugar-making process. By efficiently generating its own heat and electrical energy, the business is reducing its carbon emissions and impact on the environment. The surplus electricity is fed back to the national grid in the UK, Spain and Eswatini.

ABF Sugar has a roadmap outlining projects that are delivering impact today and that will continue to deliver key savings up to and beyond 2030, in order to achieve its GHG reduction commitments. Initiatives that have already been implemented include mechanical cane harvesting, heat recovery, steam reduction and renewable energy Power Purchase Agreements (PPAs). Towards 2030, the focus will shift to carbon capture projects, efficient drying processes, fuel switches and implementation of new farming systems. Beyond 2030, ABF Sugar plans to explore hydrogen use and further develop biomethane production and anaerobic digestion technologies.

British Sugar, the largest contributor to ABF Sugar’s Scope 1 emissions, achieved a 21% reduction in Scope 1 emissions compared with the baseline year of 1,024 ktCO₂e, reducing total Scope 1 emissions to 807 ktCO₂e for the year ending July 2024. Initiatives such as the energy reduction scheme at the Wissington site, which aims to cut steam usage by 25%, and ongoing investments in pulp pressing improvement processes across multiple sites, have contributed to a significant reduction in Scope 1 emissions.

Case study - ABF Sugar

ABF Sugar's SBTi-validated target



One of our Azucarera employees demonstrating the Visor crop monitoring platform to a sugar beet farmer on his farm, Spain

Overall net-zero target

ABF Sugar commits to reach net-zero greenhouse gas emissions (GHG) across the value chain by 2050.

Near-term targets

Energy and Industrial

- ABF Sugar commits to a 52% reduction in absolute Scope 1 and 2 GHG emissions by 2030 from a 2018 base year*.
- ABF Sugar also commits to a 30% reduction in absolute Scope 3 GHG emissions from purchased goods and services, capital goods, fuel and energy-related activities, upstream transportation and distribution, waste generated in operations, business travel, employee commuting and downstream transportation and distribution within the same timeframe.

*The target boundary includes biogenic land-related emissions and removals from bioenergy feedstocks.

Forest, Land and Agriculture (FLAG)

- ABF Sugar commits to reduce absolute Scope 1, 2 and 3 FLAG GHG emissions 36.4% by 2030 from a 2018 base year*.
- ABF Sugar also commits to maintain no deforestation across its primary deforestation-linked commodities.

*The target includes FLAG emissions and removals.

Net-zero targets

Energy and Industrial

- ABF Sugar commits to reduce absolute Scope 1 and 2 GHG emissions by 90% by 2050 from a 2018 base year*.
- ABF Sugar also commits to reduce absolute Scope 3 GHG emissions by 90% from purchased goods and services, capital goods, fuel and energy-related activities, upstream transportation and distribution, waste generated in operations, business travel, employee commuting and downstream transportation and distribution within the same timeframe.

*The target boundary includes biogenic land-related emissions and removals from bioenergy feedstocks.

Forest, Land and Agriculture (FLAG)

- ABF Sugar commits to reduce absolute Scope 1 and 2 FLAG GHG emissions 90% by 2050 from a 2018 base year*.
- ABF Sugar also commits to reduce absolute Scope 3 FLAG GHG emissions 72% by 2050 from a 2018 base year*.

*The target includes FLAG emissions and removals.

Case study - British Sugar

British Sugar decarbonising operations



British Sugar engineers with a new evaporator that is helping to reduce GHG emissions at our factory in Wissington, UK

British Sugar has established a decarbonisation strategy to significantly reduce its Scope 1 and 2 emissions by 2030. The business has implemented a range of projects focusing on energy efficiency, renewable resources and fuel switching.

From the baseline year of 2017/18 through to 2023/24, British Sugar invested approximately £96 million in these initiatives, achieving a cumulative reduction of around 162,000 tonnes of CO₂e.

At the Wissington site, the installation of additional evaporators, heat exchangers and other equipment significantly lowered steam usage, reducing emissions by 30,000 tonnes of CO₂e annually and reducing process steam demand by 25%. Additionally, Wissington integrated an Air Liquide CO₂ capture plant, utilising the CO₂ from bioethanol production and reducing total Scope 1 emissions of the site by approximately 5%. Also, performance improvements to gas turbines at Wissington have reduced emissions by 10,407 tonnes of CO₂e.

Across all sites, ongoing investment in pulp pressing processes has improved the efficiency of animal feed drying, reducing energy consumption. Fuel-switching projects at Newark and Bury have transitioned dryers to operate on natural gas, displacing higher carbon-emitting fuels. Similarly, the Cantley site's shift from heavy fuel oil to natural gas has reduced carbon emissions by 1,422 tonnes of CO₂e.

Upgrades at the Bury site, including replacing older slicer machines, have improved cossette quality and reduced water usage, leading to a reduction of 20,242 tonnes of CO₂e due to decreased evaporation demand in the sugar extraction process.

Looking ahead, British Sugar is set to further its decarbonisation efforts with key projects at the Cantley and Bury sites. The Cantley site will see the introduction of a new modular gas-fired Combined Heat and Power (CHP) plant, scheduled for full operation by 2025. This plant, which will replace the existing coal boiler, is expected to reduce carbon emissions by around 16,000 tonnes of CO₂e annually. The Bury energy reduction project, already underway, aims to mirror the success of similar initiatives implemented at Wissington, with an anticipated reduction of approximately 20,000 tonnes of CO₂e per year once fully operational.

Case study - ABF Sugar

Scope 1 and 3 GHG emissions from forest, land and agriculture (FLAG)



Cane fields on the Ubombo sugar estate in Eswatini

As part of its science-based targets, ABF Sugar has developed new targets covering Scope 1 and Scope 3 emissions from forest, land and agriculture activities. It is also developing plans at business unit level and gaining a deeper understanding of the emissions factors linked to its agriculture activities.

As the sugar industry faces the effects of climate change, ABF Sugar is focusing on building resilience at its own estates and with its farming partners. The aim is to maintain yields and improve them in the medium term where possible.

ABF Sugar has identified synthetic nitrogen fertilizer and field movements as the two highest sources of emissions within its agricultural operations and supply chain. Given that maximising yield is central to ABF Sugar's agricultural strategy, reducing GHG emissions from these areas is a priority to support its ambition to maintain and improve yields. For instance, minimising field movements preserves soil structure, enhances water retention, improves air circulation and boosts organic matter, all of which contribute to better yields. Proper application of synthetic nitrogen at optimal times in the growing cycle is essential for maintaining or increasing yields.

In addition to fertiliser management and field movements, other factors affecting yield include moisture management (irrigation scheduling), timing of operations, planting at the right time, crop management and integrated pest management. Efficient use of land through best practices that maximise yields is vital for maintaining the current land footprint while expanding high-yielding crops using sustainable and regenerative agricultural principles.

Case study - Vivergo Fuels

Vivergo delivering energy savings



The Vivergo Fuels plant in Hull, UK, which converts surplus non-food-grade wheat into bioethanol and animal feed

Since recommissioning in 2022, a process of plant optimisation and planning efficiencies has driven substantial improvements in the energy performance of the Vivergo Fuels plant. In 2024, it has seen a 16% reduction in electricity, steam and gas usage per tonne of products made compared 2023.

In addition, Vivergo is working with partners to explore the opportunity to displace natural gas consumed in the manufacturing process with Green Hydrogen. There are currently several projects in development in the Humber region dedicated to producing hydrogen and replacing existing sources of GHG emissions.

Case study - ABF Sugar

ABF Sugar's transition plan



British Sugar's factory at Wissington, UK

Recognising its role in transitioning to a low-carbon economy, ABF Sugar formalised its climate transition plan, laying out the strategy for meeting its GHG emission reduction targets.

Governance

The ABF Sugar CEO and Business Unit Managing Directors are responsible for overseeing the transition plan developed to achieve the SBTi commitment, climate-related risks, opportunities and the overall strategy. Throughout the year, an increased number of cross-functional meetings have been held to ensure transition plans are progressing against targets.

To ensure plans will be delivered and GHG emissions and monetary savings captured for all projects, ABF Sugar has developed a central system that provides up-to-date carbon information and categorises projects that will contribute to GHG emission reductions. Through this system all ABF Sugar businesses can track progress against targets and monitor their savings.

Progress on projects contributing to the science-based targets is monitored by a defined governance structure through the establishment of a dedicated function: the Results Delivery Office. The CEO and Business Unit Managing Directors review the progress on each of the projects on a quarterly basis. The review aligns with the investment capital plan and Performance Improvement Programme of each business.

The ABF Sugar executive team conducts regular meetings to monitor and review progress against the strategic five-year plan. Typically, three key strategy meetings take place each year:

- **Long-Term Strategy Review:** The ABF executive team visited a business, gaining a deep understanding of its strategy and the status of its execution.
- **Assumption and Parameter Alignment Meeting:** In this meeting, the Finance Director, Business Intelligence team, Managing Director, and Transformation team monitor progress of fundamental KPIs, assessing how the business plans to achieve its targets.
- **Five-Year Strategic Plan Meeting:** This meeting focuses on the affordability and prioritisation of the strategic plan, ensuring that all proposed initiatives are realistic and achievable within the set timeframe.

There are also regular meetings held between ABF Sugar and the ABF Group. These act as a forum to discuss climate-related issues, including progress on climate commitments, GHG reduction roadmaps and any additional risks or opportunities identified.

Risk management

The CEO and Business Unit Managing Directors are accountable for effective risk management. The process for identifying, assessing, and managing climate-related risks is the same as for other risks and sits with the business where the risk resides. Each business within ABF Sugar develops action plans through a well-established governance process that examines each performance improvement proposal against internal criteria. These plans are then approved by the ABF Sugar CEO and Business Unit Managing Director.

Strategy, metrics and targets

The current five-year planning process, initiated in 2023, involves each business unit analysing its risks and opportunities while determining the necessary approach to achieve the group science-based targets. With the guidance of relevant Group Functional Directors and facilitated by the Chief Transformation Officer, all businesses are crafting transition plans aligned with their respective five-year strategies. These plans underwent endorsement by the ABF Sugar executive team in July 2024 and subsequent ratification by the ABF board in September.

In working towards reducing GHG emissions for Scope 1 and 2 for Energy and industry, ABF Sugar has categorised proposed plans and projects into three timeframes:

- Immediate term: focusing on reducing operation GHG emissions, investing in energy efficiency with the aim of reducing energy consumption and eliminating the use of coal;
- Short-term (to 2030): targeting key sites and pairing them with key technological resources; and
- Long-term (to 2050): focusing on employing low emission technologies, managing climate-related risks across the value chain, and partnering to innovate at factories across the business.

ABF Sugar will not be utilising carbon offsets in its decarbonisation strategy.

The FLAG targets are new for the division in Scope 1 and 3 and include those emissions related to agriculture use. ABF Sugar is building plans at each business unit level based on previous programmes of work and the more detailed understanding of emissions factors. The two highest areas of emissions are synthetic nitrogen fertiliser and movements in the field. Action on these areas is the company's top priority and will support its ambition to maintain and improve yields.

Emission reduction plan

Looking forward, there is a strong pipeline of accretive GHG reduction projects. Each business has their own environmental plan which has been categorised between short and long term.

To achieve the targeted emissions reduction, each business will focus on the following areas:

Energy and Industrial – short-term:

- British Sugar: projects focus on smaller factory energy efficiency/steam reduction, coal elimination and reduction of energy use for pulp drying;
- Our sugar businesses in Africa: projects focus on energy efficiency and coal elimination/ reduction in RSA and green cane harvesting; and

- Azucarera: projects focus on factory energy efficiency and automation as well as a specific Guadalete project.

Energy and Industrial – long-term:

- British Sugar: projects focus on technological advancements for factory energy efficiency/steam reduction and alternate pulp drying technologies;
- Our sugar businesses in Africa: projects are aligned to those in the short term. However, the technology is yet to be developed; and
- Azucarera: projects focus on alternate fuel projects. However, current regulations present a challenge now.

In FLAG, businesses have developed plans targeting both yield improvements with carbon reductions.

FLAG – short-term (2023-2025 growing cycle):

- Azucarera: water and nitrogen reduction through precision agriculture tools;
- British Sugar: reducing synthetic nitrogen fertiliser for our 'Self-Grow' segment and reducing impurities pilot;
- Illovo Sugar Zambia: Nakambala New Farming System and trials reducing nitrogen; and
- Illovo Sugar Eswatini: rolling out the new farming system, chopper harvesting efficiency and ratoon management activities.

FLAG – long-term (2025 onwards):

- Azucarera: increase yields thanks to the 'net beet project' which consists of sustainable fertilising, efficient irrigation, optimal crop timing and soil health surveillance using predictive tools;
- British Sugar: deliver plan to improve yield;
- Illovo Sugar Zambia: Nakambala New Farming System; and
- Illovo Sugar Eswatini: rolling out the new farming system, chopper harvesting efficiency and ratoon management activities.

Projects supporting carbon reduction (Energy and Industrial)

ABF Sugar has a continued focus on Energy and Industrial Scope 1 and 2 as this is the most material risk to the business and is an area of significant spend. In 2023/24, ABF Sugar spent approximately £73m on 39 approved projects. To date, 30 of these projects have contributed a saving of 53,721 tCO₂e. For its five-year plan, ABF Sugar is planning to spend 6% of its planned capex to support climate change strategy and ESG initiatives.

Projects supporting carbon reduction

Entity British Sugar – Bury	
Project	Decarbonisation steam reduction [Phase 1]
Description	This project replaces four existing Roberts type evaporators with three new falling-film type evaporators. This will realise a significant reduction in LP liquid propane gas burn for sugar manufacturing (approx. 25%) as well as increasing engineering reliability of the station. The second main element of the project will be to upgrade the Raw Juice Heating Station. This project will replace the station as a whole, eliminating the planned essential replacement plan spend, and will allow the factory to realise the full gas burn reduction of the three new evaporators as well as improving engineering and process reliability of the site.
Year of approval	2023/24
tCO2e saving	19,822
Target project close-out date	December 1, 2026

Entity British Sugar – Cantley	
Project	Provision of modular steam and power
Description	This project will re-establish a steam generation capacity of up to 60 t/hr at the Cantley Factory to meet a range of business requirements within upcoming Medium Combustion Plant Directive emission limits. The low-pressure 'modular technology' utilised will deliver process/maintenance simplification, improve process safety, as well as enable operational effectiveness through 'Industry 4.0' methodology.
Year of approval	2023/24
tCO2e saving	16,460
Target project close-out date	September 1, 2025

Entity Azucarera – Guadalete	
Project	Pre-scalders and 6th evaporation effect
Description	This project reduces the global energy consumption of the Guadalete factory through the installation of pre-scalders, and implementation of evaporators. In turn, this will improve the heating steam scheme.
Year of approval	2023/24
tCO2e saving	5,202
Target project close-out date	Completed

Entity Illovo Sugar – Sezela	
Project	Steam traps replacement on juice heaters
Description	Over the years, the steam traps on the juice heaters were replaced with non-return valves (NRVs) which has caused excessive steam wastage. The ideal opportunity is to reinstate the steam traps on the juice heaters to allow energy savings to be made. It would look at installing will install x13 steam traps on the various heaters and these will be placed before the NRV to ensure the energy is captured. In turn, this will reduce energy and save coal use within the Sezela heaters area.
Year of approval	2022/23
tCO2e saving	3,605
Target project close-out date	July 17, 2023

EntityAzucarera – Miranda	
Project	Energetic improvements APRO [Phase 1]
Description	The objective of the project is to modify the heating of the raw juice, improving the use of the pan vapours and reducing the consumption of steam in the heating of the purification stage.
Year of approval	2023/24
tCO2e saving	1,200
Target project close-out date	December 1, 2025

EntityIllovo Sugar – Ubombo	
Project	Entry-level housing upgrade [Phase 8 – 15]
Description	The project involves the phased upgrading of staff housing at agricultural and industrial villages to comply with the minimum Illovo Group entry-level housing standards. As part of the project, houses for employees at Nyetane, Majombe and Shonalanga villages will be electrified to eliminate the usage of domestic coal within the villages
Year of approval	2023/24
tCO2e saving	1,177
Target project close-out date	August 12, 2024

Water - Sugar



ABF Sugar recognises the critical importance of water for its crop growing activity and factory operations, making water management a key focus area.

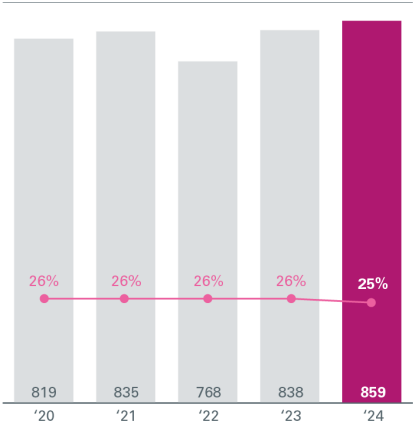


Solar irrigation project, Azucarera, Spain

ABF Sugar has set a 2030 commitment to reduce its water footprint by 30% from its 2018 baseline. Each business has set a clear target to reduce water usage as part of its environmental plan in their five-year strategies.

In 2023/24, the division focused its activities in two main areas, improving the accuracy of water measurement and investing in irrigation efficiency so that every drop of water can reach the crop. ABF Sugar increased water abstraction in 2023/24 by 3% compared with the prior year and by 7% against its 2018 baseline. This rise is driven by an increase in irrigation demand mainly due to drought impacting our sugar businesses in Africa. In 2023/24, the division reduced water abstraction per tonne of product by 1%, which indicates an improvement in water-use efficiency, and reused 25% of the total abstracted water before it was returned to the environment.

Total water abstracted & percentage of total water reused
(million m³)



Water use within our sugar businesses in Africa

ABF Sugar's primary use of water is for growing crops at its sugar estates in Africa. These businesses have a long-standing focus on optimising water use and investing in improved irrigation systems across their estates. Water management programmes are implemented across their operations in Zambia, Malawi, and Eswatini, which collectively account for 92% of the water abstracted for irrigation.

Every business has an action plan aimed at improving outcomes in three areas: reducing water loss, increasing water productivity and fostering a culture of expertise in more sustainable water use. To reduce water consumption, the businesses focus on reducing bulk water losses, reducing infield water losses and improving irrigation schedules.

To improve water efficiency and get more water to the crop, the businesses are investing in advanced irrigation systems. For example, at the Nakambala estate, they are replacing furrow irrigation with sub-surface drip irrigation alongside Synergistic Surface Irrigation and Drainage (SSID), a new system which combines irrigation methodologies to improve crop yield and soil health.

Water productivity has also been a priority, with a focus on irrigation scheduling, metering and in-field technologies. From the baseline year of 2018 to 2023/24, some African sugar sites have successfully increased cane yields while reducing the amount of water used per tonne of product. To promote a culture of sustainable water management, the businesses have also launched training sessions and workshops on irrigation scheduling.

Water use across other ABF Sugar businesses

ABF Sugar's Spanish business, Azucarera, is leveraging innovative and smart technology with its 80 watering systems. It is collaborating with AIMCRA to reduce irrigation water usage and promote energy efficiency in sugar beet production. Through this collaboration, it offers advice to growers on irrigation to help them cut costs, improve efficiency and reduce carbon emissions.

Water efficiency is also a priority for British Sugar, as most of its growers are based in the beet-growing areas of East Anglia, which face water shortage challenges. The business works closely with growers, external organisations and the National Farmers Union Sugar Board to manage on-site operations and minimise water usage and reduce water pollution throughout the supply chain.

In the UK, all of British Sugar's current farmers are RedTractor assured, meaning they are regularly assessed and audited against a set of environmental measures and practices, including limiting excessive water use and prohibiting water pollution. The British Beet Research Organisation (BBRO) also provides guidance on soil health that directly impacts water health. All the growers for British Sugar are required to adhere to DEFRA's farming rules for water, which were introduced in 2018 to reduce and prevent diffuse water pollution from agricultural sources.

As a founding member of the Sustainable Agriculture Initiative (SAI) platform, British Sugar is also fully engaged on the deployment of the SAI Regenerating Together programme and its efforts regarding water resources.

Case study - Ubombo Sugar

Water irrigation projects creating improved yields and further resilience in Zambia and Eswatini



A sugar cane irrigation system at the Ubombo estate in Eswatini

Growing high yielding and resilient sugar cane is a major focus for our sugar businesses in Africa and efficient use of water is essential to achieving this goal. We are investing in more precise irrigation systems that maximise efficiency and help sustain the agricultural systems on which our businesses rely.

Specifically, we are currently focused on more efficient irrigation systems at our Nakambala estate and Nanga Farms in Zambia. At Nakambala, we are replacing traditional furrow irrigation with sub-surface drip irrigation and 'synergistic surface irrigation and drainage', a new system that will improve crop yield and soil health. We are actively considering further investments in these systems at Nanga Farms. Together with the use of precision agriculture technologies, we can concentrate more on areas of the field where the crop experiences weather stress and adapt our field layouts so that every stick of cane receives the precise amount of water it needs.

The projects are driving better yields while improving water use efficiency and providing greater weather resilience. Over the seven-year period of implementation, the investment at the two estates is approximately \$20m. Our focus on water also benefits the communities in which we operate. In Eswatini, we are making significant strides towards reducing local poverty by partnering with the Eswatini Water and Agricultural Development Enterprise, a government agency, to support the Lower Usuthu Smallholder Irrigation Project which is developing 11,500 hectares of smallholder irrigation. Some 2,300 households are expected to benefit directly from the project which is also establishing 28 farmer companies to cultivate cane and other crops, providing greater food security and nutrition for local communities.

Our Ubombo Sugar business has invested significantly to optimise factory capacity to enable the processing of the additional cane that will be produced as a result.

Case study - British Sugar

Working to improve water quality at British Sugar's factories



New water treatment facility, Newark, UK

British Sugar treats all of the water it uses on-site before discharging it into the environment. The business complies with all environmental permit requirements, ensuring that all discharged water meets specific treated water standards.

Since 2022, British Sugar has invested over £20m to further improve the quality of water discharged from its sites. This includes the construction of new water treatment plants in Newark and Cantley, as well as the upgrading of existing facilities at other locations.

British Sugar's sites return more water into the catchment area than they consume. However, the business is currently evaluating the possibility of achieving water self-sufficiency at two of its sites, which would reduce the need to extract water from rivers or boreholes.

Waste and packaging - Sugar



ABF Sugar strives to be efficient in its use of resources across sugar beet and sugarcane production, from the field to the factory and to customers and consumers. ABF Sugar continually invests in new technology and process optimisation to make its factories more efficient, improve its use of raw materials, and move towards a more circular approach.



Production of the bagasse co-product at the Nakambala sugar factory in Zambia

Waste and circularity

ABF Sugar's ethos is that waste materials are products for which it has yet to find a use. This is demonstrated by its bio-refineries, which transform sugar beet and sugarcane waste into a range of commercially viable products thanks to innovative manufacturing processes. The business continues to work to maximise the quantity of sugar beet processed so as little as possible is left in the field.

In 2023/24, the business increased the total amount of waste produced through its activities by 47% compared with the previous year. This increase is primarily due to our sugar business in Spain operating longer campaigns and processing larger quantities of sugar beet, as well as management of settlement ponds to maintain efficient operations. The soil from the settlement ponds is sent off-site for agricultural purposes as fertiliser and soil conditioning. Over 60% of the total waste generated this year was recycled waste from our operations in Spain.

In 2024, only 14% of all waste generated was sent to landfill with the remaining 86% recycled or used in another capacity.

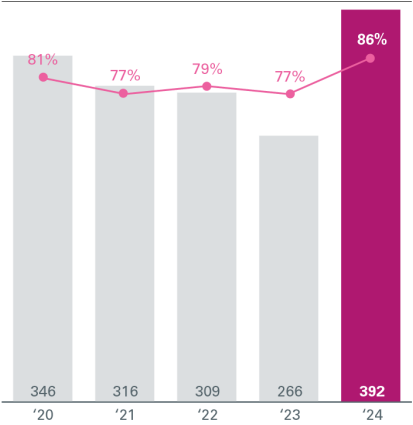
ABF Sugar businesses use by-products to generate electricity. British Sugar uses bio-methane produced from its fermented sugar beet pulp to generate electricity, and carbon dioxide and low-grade heat generated at its operations to grow medicinal cannabis under licence.

Our sugar businesses in Africa use bagasse, the dry fibrous material that remains after crushing sugarcane, as its feedstock to generate up to 87% of the annual power requirements of its own factories. It also provides the opportunity to co-generate electricity in Eswatini which goes into the national grid. In June 2023, the Eston plant in South Africa also started to export power into the national grid.

Among the commercially viable products its businesses produce, British Sugar is a major producer of animal feed and a supplier of raffinade and betaine for use in the petrochemical and pharmaceutical sectors. African sugar by-products include furfural, a natural chemical feedstock with numerous applications in the food and other industries.

Vivergo is the largest bioethanol plant in the UK and one of the largest in Europe. Vivergo Fuels is now operational, and at peak capacity it will use around one million tonnes of UK animal feed-grade wheat. One of the main co-products is protein for animal feed, and at peak capacity the business will also be the largest single-source animal feed supplier in the UK. The blending of bioethanol with petroleum is a key aspect of many governments’ greenhouse gas reduction strategies. At full capacity, it is estimated that the Vivergo plant will produce 420 million litres of ethanol product per year. The net benefit of using this product blended with gasoline to create E10 is the saving of approximately 500,000 tonnes of CO2 which would otherwise be emitted from vehicle tailpipes annually.

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



Plastic and packaging

ABF Sugar is committed to ensuring all its plastic packaging is reusable, recyclable, biodegradable or compostable by 2030. Plastic has a role to play in maintaining the integrity and safety of its products for customers, but it is striving to reduce packaging to minimise the impact on the environment.

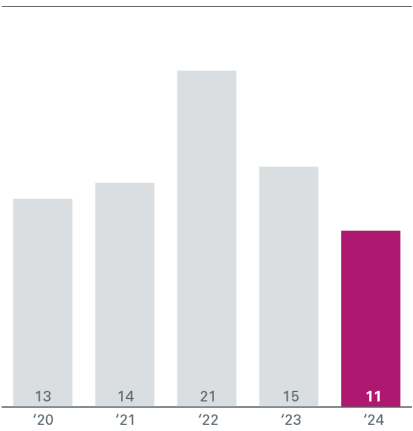
In 2023/24, ABF Sugar reduced its total packaging by 26% from 15 kt to 11 kt. This reduction is primarily driven by a decrease in plastic packaging in ABF Sugar’s operations in Africa. Additionally, our businesses continue to explore innovative packaging to reduce the volume of materials used.

Plastic use across ABF Sugar, which accounts for 51% of total packaging reported by ABF as a Group, reduced by 36% from 8.7 kt in 2023 to 5.6 kt in 2024. Paper packaging contributes 34% of the total packaging materials in 2023/24, and reduced by 10% from 4.2 kt in 2023 to 3.8 kt in 2024.

Azucarera has a long-standing strategy to reduce its packaging. In 2023/24, achievements included replacing the plastic pouch of its sugar for marmalades with a paper pack, reducing the plastic weight used in the film retractile of pallets, replacing its agave syrup jar with a 100% recycled jar, increasing the proportion of recycled material in its icing sugar jar to 50%, and using a plastic for its panela doypack and coconut sugar that is easier to recycle.

Our African sugar businesses’ strategy is to reduce packaging weight and use more packaging that can be reused or recycled. 97% of their packaging is recyclable. They have over 10 workstreams looking at packaging solutions, trialling new products and finding ways to enable customer recycling. One area of particular focus in 2023/24 was assessing solutions where local recycling is sparse, as not all of the countries where our sugar businesses in Africa operate currently have recycling facilities. In Tanzania, they are trialling Biaxially Oriented Polypropylene 25kg and 50kg bags without plastic liners. These bags are extremely durable and resistant to water. Without plastic liners, the business’s intention is to see if it can reduce the volume of packaging or remove other plastic liners and see if the new packaging can be used or recycled in the future.

Quantity of packaging used
(000 tonnes)



Food safety and nutrition - Sugar



ABF Sugar takes a responsible approach to informing and educating people about sugar and its role in a healthy balanced diet.



Granulated sugar on the packing line at British Sugar's packing and warehouse facility in Wissington, UK

Food safety

Across ABF Sugar a culture built on quality and food safety has been embedded with a clear focus on the continual improvement of management systems and processes. This is underpinned by a rigorous approach that targets assurance, control for product quality and food safety, regular auditing and reviews, education, training and investment.

Our sugar businesses in Africa implemented the 'Quality Way' in 2023 to drive a step change in ways of working and behaviours. This has delivered a major improvement in 'Right First Time' quality for its Malawi business.

In Spain, Azucarera's Food Safety Culture Plan introduced in 2015 continues to see behaviour change in line with the ethos of quality and food safety. In 2023, this was further enhanced through the creation of a multidisciplinary group within the Miranda de Ebro factory to focus on zones of excellence regarding quality and food safety, and to share the conclusions across the whole business. In 2023/24, the business started a digitalisation project to improve the preventive maintenance of critical food safety facilities. At British Sugar,

major efforts over 2023/24 have included achieving certification for the FSSC 22000 Food Safety and Quality Management Standard, while also building on its established ISO 9001 Quality Management standard.

Nutrition and health

ABF Sugar is keen to play its part in informing and educating people about sugar and the role it can have in a healthy balanced diet. It is committed to providing information so consumers can make informed choices about what they eat.

Making Sense of Sugar is ABF Sugar's global platform for providing access to information based on robust science and helping to find collaborative solutions to health challenges as part of its commitment to thriving and healthy communities.

In the UK, it partners with the British Nutrition Foundation and draws from the UK Government's Eatwell Guide to aid consumer understanding. Guidance includes practical suggestions for estimating portion sizes that are easy to follow at home and examples of alternative healthy options to reduce consumption.

Agriculture and farming practices - Sugar



ABF Sugar's businesses are deploying more sustainable farming practices across their estates, implementing regenerative agriculture approaches in some of their operations, and working to ensure growers in their agricultural supply chain have access to the necessary expertise for successful sugar cultivation, in order to increase resilience.



Cane fields on the Ubombo sugar estate in Eswatini

ABF Sugar attributes part of its business success to productive, high-yielding and robust agricultural practices at its own sugar estates and those of its third-party growers. The production of sugar beet and sugar cane faces potential challenges due to changing weather patterns, loss of biodiversity, land degradation and water scarcity. These conditions can lead to more volatile crop yields, further exacerbated by rising pest and plant disease pressures, as well as the reduced availability of active plant protection products due to stricter regulatory controls.

To gain deeper insights into our nature-related dependencies, impacts, opportunities and risks, ABF Sugar has partnered with Resilience Limited, a sustainability intelligence company, to comprehensively assess its material nature-related dependencies, impacts, opportunities and risks. The insights gained from this project will inform ABF Sugar's strategic direction over the next five years, enabling the division to make more informed decisions on future agricultural strategies that integrate both nature dependencies and climate impacts.

In 2024, ABF Sugar businesses faced significant challenges due to extreme weather events, including heatwaves, droughts and floods, which had a substantial impact on its agricultural and farming practices.

These experiences have driven the development of innovative approaches to strengthen resilience and create new opportunities for the future.

Responsible agriculture, biodiversity and land use

ABF Sugar is an active member of the Sustainable Agricultural Initiative (SAI), the global food and drink industry platform that aims to develop more sustainable agriculture solutions. It is also a founding member of SAI's Regenerative Agriculture Platform.

Growers for Azucarera in Spain and British Sugar in the UK, as well as our own estates in Africa, are using the SAI Platform Farm Sustainability Assessment (FSA) 3.0 tool to drive continuous improvement on-farm. The tool assesses operations and benchmarks them against standards already being used in the field, such as RedTractor Crops and Sugar Beet Standards in the UK or SUSFARMS ([susfarms - SASRI](#)) in South Africa.

ABF Sugar has achieved FSA Silver Level equivalence across all its businesses' own operations, and grower operations in Nchalo and Dwangwa in Malawi. One key co-operative, Phata in Malawi, which supplies the Nchalo estate, was awarded by the SAI Platform the FSA Growing a Better Planet Award in 2023. In South Africa, Illovo Sugar South Africa has achieved Proterra Certification for selected farms, Sezela Sugar Mill and Sezela downstream products factories. Also, Azucarera is currently updating its farm sustainability assessments in alignment with the FSA 3.0 tool. This process of assessing, improving and validating on-farm sustainability using SAI's FSA tools will guide farmers towards more sustainable practices and enable ABF Sugar to measure and demonstrate its collective progress toward its GHG emissions reduction targets.

ABF Sugar businesses co-fund research institutions with our growers, including:

- the Research Association for Sugar Beet Crop Improvement (AIMCRA) (Spain);
- the South African Sugarcane Research Institute (SASRI); and
- the British Beet Research Organisation (BBRO).

These engagements aim to enhance crop resilience and productivity while reducing negative environmental impacts. This is achieved by partnering with SASRI in South Africa to trial new sugar cane varieties and working with the BBRO in the UK to test different approaches to monitoring emissions from sugar beet cultivation. The collaboration with AIMCRA in Spain strengthens the links between individual farmers and field technicians to provide better guidance on crop management.

ABF Sugar is also promoting biodiversity and ecosystem health across its operations and supply chains through various initiatives. These include the creation of beetle banks and refuge areas, the use of cover crops, and tree planting at all sites. In Zambia, at its Nakambala site, a key initiative is focused on ecosystem and biodiversity restoration through tree planting, with the goal of planting 1,000 trees monthly, starting from July 2024, with an aim to combat climate change and promote biodiversity. In addition, Illovo Sugar Malawi established protected areas on both the Dwangwa and Nchalo estates, which are home to diverse plant and animal life.

Fighting VirusYellows disease in the field at British Sugar and Azucarera



One of our Azucarera employees examining a sugar beet with a farmer on his farm, Spain

In recent years, the sugar beet industry has been significantly impacted by VirusYellows disease, which is transmitted by aphids and reduces the yield and sugar content of each plant. Research into integrated pest management and more sustainable solutions for controlling VirusYellows has become a priority for ABF Sugar's UK and Spanish businesses.

British Sugar is investigating innovative grower practices that can affect the aphids' ability to detect sugar beet crops. This includes exploring the use of natural soil colourings or inter-row crops to camouflage the sugar beets, as well as using odours like onion, peppermint, and garlic to distract the aphids from identifying the crop.

British Sugar has also invested in a collaborative project with agriculture biotechnology company Tropic to explore how gene editing (GE) can be used to specifically target the yellowing viruses.

This collaboration makes use of Tropic's GE induced Gene Silencing (GEiGS®) technology platform to make minimal and precise gene edits in sugar beet enabling the crop to resist infection. The initial stages of the project, including mapping the sugar beet genome sequence and computational designs for gene editing, have been completed.

The project is expected to continue through to 2026, and it may take at least another five years before the VirusYellow-resistant sugar beet seed is commercially available. In 2024, the project received a boost with a £660,000 grant from Innovate UK's Farming Futures R&D Fund, jointly awarded to British Sugar, Tropic and The John Innes Centre. The British Beet Research Organisation (BBRO) is also supporting the project.

In Spain, research projects have focused on understanding the disease's low polarisation and providing specific support for fighting VirusYellows. This is done in coordination with national and regional governments, focusing on recommendations for improved seed varieties and coordinating trials on other diseases. AIMCRA remains the technical expert for Azucarera's beet crop management, providing timely information on the plant's evolution through their online and offline channels.

Case study - Our sugar businesses in Africa

South Africa and growers fostering soil health outcomes



Sugar cane growers at Illovo Sugar South Africa's 2024 growers' day in Sezela, South Africa

Our sugar businesses in Africa are building stronger relationships with the communities surrounding their factories through a mutually beneficial community bean planting programme. This initiative, in place at the Sezela, Glenroy, Esperanza and Isonti farms, allows approximately 150 community members to use the fields between sugar cane harvests to plant their own beans. This provides a food source to sustain their families and helps them earn an income.

The programme runs when the sugar cane harvest is complete, typically between February and May. Beans are a cover crop that benefits the land by increasing soil organic matter, controlling pests and fixing nitrogen. Sugar cane and soybeans complement each other in pest control, disrupting pest cycles and reducing overall pest populations by decreasing the concentration of host plants. The businesses benefit from the leftover soybean residue, which decomposes and acts as a natural fertiliser for the next sugar cane season. Intercropping with soybeans also improves crop development.

Case study - Our sugar businesses in Africa

Pilot to improve soil biodiversity



Soil samples being collected at the Nakambala estate, Zambia

In collaboration with experts from the University of Cape Town, our sugar businesses in Africa are conducting research on soil biodiversity in order to improve sugar cane yields in its southern African supply chains and establish more sustainable agricultural practices.

The project aims to educate the local teams about the benefits of increased soil biodiversity and to develop protocols for on-farm teams to monitor soil biodiversity over time as more regenerative practices are adopted and modified according to local conditions.

Soil biodiversity plays a crucial role in agroecosystems, particularly in litter decomposition, nutrient cycling, and pest regulation. Initially, the project will employ a range of tools, including taxonomic, molecular, ecological and stable isotope tools, to assess soil biodiversity in sugar cane fields subject to different management, such as conventional versus regenerative agriculture, and green cane harvesting.

The primary objective is to evaluate soil fauna density and diversity in fields under various management, ultimately contributing to the development of a rapid assessment for long-term monitoring of soil biological quality in sugar cane fields. Additionally, the project aims to study soil food webs under different sugar cane management practices, shedding light on the diversity of decomposers and predator-prey relationships in soil under sugar cane cultivation and guiding efforts to promote natural predators.

Overall, this project will contribute to deepening ABF Sugar's understanding of the composition and resilience of soil biodiversity in sugar cane cropping systems while providing insights into how to improve soil biological quality. By 2023/24, the had project collected nearly 1,000 samples from sugar cane fields at Nakambala in Zambia, Nchalo in Malawi and Ubombo in Eswatini.

Looking ahead, our sugar businesses in Africa will adopt the protocols recommended by this research to measure soil health in their fields with the aim of encouraging and accelerating the adoption of these practices across their operations.

Case study - British Sugar

Trialling more sustainable agriculture with robots



Robotti sugar beet seed planting demonstration in Cambridgeshire, UK

British Sugar is testing the use of autonomous robots to improve sugar beet cultivation. In partnership with Sentry and Autonomous Agri Solutions, the Robotti robot is being deployed for planting and weeding crops. The goal is to reduce reliance on chemical treatments, increase yield and enhance quality. The overall objective of the trial is to evaluate the feasibility and cost-effectiveness of robotic farming for sugar beet production.

Key improvements being tested through the trial this year includes:

- precise fertiliser placement to reduce nitrogen use;
- optimised row spacing for easier harvesting; and
- wider headlands for better robot and harvester operation.

Case study - British Sugar

Innovation with British Sugar's in-house growing team



A sugar beet grower with one of the agricultural account managers from British Sugar

Working with over 150 industry partners, British Sugar's in-house growing team supports knowledge exchange among its agriculture colleagues, evaluates growing techniques, supports contractors, and provides a platform to encourage farmers to grow sugar beet in the region.

The team is focused on three areas that could help to reduce Scope 1 GHG emissions on-farm: protecting soils, improving biodiversity and reducing artificial inputs. With several field-scale experiments underway to monitor impacts, the overall aim is to measure emissions from the growth and production of sugar beet to establish a baseline to further reduce emissions. The team is celebrating its 15th year of operation and continues to make progress.

Case study - Zambia Sugar

Zambia Sugar's new farming system producing exceptional yields



Harvesting of sugar cane at the Nakambala Estate in Zambia

The Nakambala sugar cane estate in Zambia has implemented a new farming system to improve resource stewardship, yields and agricultural profitability.

Following early analysis of the data gathered, results show that the system has led to significant improvements in yield, with an increase of 20 tonnes per hectare compared to the previous growing cycle.

The key components of the system include an innovative replanting schedule, minimal tillage, upgraded drainage and irrigation systems to develop more efficient water distribution to the crops, precise application of fertilizers, the use of green-cover manures, and GPS-assisted vehicles for efficient soil preservation and fuel savings. This reduction in replanting leads to substantial cost savings, while the minimised soil disturbance helps protect natural resources such as soil and water.

Our sugar businesses in Africa will be extending the programme to more hectares at Nakambala in Zambia and piloting in Ubombo in Eswatini, Nchalo and Dwangwa in Malawi.

Case study - Azucarera

Precision agriculture in Azucarera



One of our Azucarera employees demonstrating the Visor crop monitoring platform to a sugar beet farmer on his farm, Spain

Since 2018, Azucarera has been implementing precision agriculture projects, focusing on expanding its control over the entire process of the crop production. This includes extensive data collection on soil conditions, setting potential yields and using advanced simulators.

The current focus of this approach is to improve the continuous digital measurement of polarisation, nitrogen and other testing devices to monitor the condition of the sugar beets in the field and during their delivery to the factory. By employing an artificial intelligence system that integrates satellite data with information on climate, soil, sugar beet samples and more, Azucarera is able to assess the crop's health, nitrogen and irrigation requirements, and sucrose levels. This enables the identification of the optimal time for harvesting.