C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Associated British Foods (ABF) is a diversified international food, ingredients and retail group with revenues of £17.0bn, 132,000 employees and operations in 53 countries across Europe, Africa, the Americas, Asia and Australia. Our purpose is to provide safe, nutritious, affordable food and clothing that is great value for money. With the breadth of our business, our brands and global reach, ABF aims to consistently deliver value to its stakeholders.

We operate a devolved operating model across our five business segments of Grocery, Sugar, Agriculture, Ingredients and Retail and believe the best way to create enduring value involves setting objectives from the bottom up rather than the top down. We make operational decisions locally, because in our experience decisions are most successful when made and owned by the people with the best understanding of their customers and markets.

The Red Book is an internal document that contains all the information our executives need to meet their obligations and to operate freely within the framework. All businesses are required to operate in an ethical manner in terms of their stewardship of the environment, their employees, the people they work with and the communities in which they operate.

Grocery comprises brands with leading positions in markets across the globe, including Twinings, Ovaltine, Patak's, Kingsmill, Jordans, Tip Top, Yumi's and Mazola. Our grocery businesses pursue independent strategies appropriate to their particular market position and business requirements. Twinings Ovaltine, Acetum, Jordans Dorset Ryvita and AB World Foods have had considerable success extending their reach into new and emerging markets whilst some are focused on developing brands in their core domestic markets.

AB Sugar is a leading producer of sugar and sugar-derived co-products in Africa, the UK, Spain and north east China. We are a world-leading sugar business that employs 35,000 people and operates 27 plants in 10 countries, with the capacity to produce some 4.5 million tonnes of sugar. Our sugar-making plants are highly efficient 'bio-refineries' that enable us to produce a range of products maximising the value from every root of sugar beet and every stick of sugar cane. Our products include sugar, animal feed, biofuels and speciality products, sold into industry sectors including food and drink, fuels, pharmaceuticals, industrials, agriculture, horticulture, power and energy. We are also a largescale renewable power generator for both our own use and for export into national power infrastructure.

AB Agri is a leading international agri-food business operating across the supply chain, producing and marketing animal feed, nutrition and technology-based products.

With an expert understanding of agriculture and animal nutrition, our philosophy is to improve feed production in order that nutritious and affordable food is produced safely and responsibly. Across the agricultural supply chain, our products, data insights and technological innovations enable our customers to produce and process high-yielding, safe and nutritious food in a responsible way, using fewer chemicals and antibiotics, preserving natural resources and creating less waste and lower emissions. Employing more than 3,000 people around the world, we sell products into 86 countries and continue to grow our global operations.

Our **Ingredients** businesses are leaders in yeast and bakery ingredients and supply specialty ingredients to the food, nutrition, feed and pharmaceutical industries. Ingredients comprises two specialty businesses, AB Mauri and ABF Ingredients. AB Mauri has a global presence in bakers' yeast with significant market positions in the Americas, Europe and Asia. We are a technology leader in bakery ingredients, supplying bread improvers, dough conditioners and bakery mixes to industrial and craft bakers across the globe. ABF Ingredients is a global leader in specialty ingredients, offering innovative, differentiated and value-added products to the food, nutrition, pharmaceutical, animal feed and industrial sectors.

Primark is a leading international retailer with over 17.5 million sq ft of selling space across more than 410 stores in 15 countries. Our product range offers something for everyone from great quality essentials to stand-out style across womenswear, menswear and kidswear, plus beauty, homeware, accessories and exciting licensed ranges created in partnership with some of the biggest names in food, entertainment and sports. We want to make more sustainable fashion affordable for everyone. We are committed to ensuring that by 2030 all our clothes will be made from recycled or more sustainably sourced materials and carbon emissions halved across the entire value chain.

ABF reports on data from countries where we have direct manufacturing, processing, retail operations and offices.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date
August 1 2021

End date
July 31 2022

Indicate if you are providing emissions data for past reporting years
Yes

Select the number of past reporting years you will be providing Scope 1 emissions data for
3 years

Select the number of past reporting years you will be providing Scope 2 emissions data for
3 years

Select the number of past reporting years you will be providing Scope 3 emissions data for
3 years

C0.3

(C0.3) Select the countries/areas in which you operate.
Argentina
Australia
Austria
Belgium
Brazil
Canada
Chile
China
Colombia
Czechia
Denmark
Ecuador
Eswatini
Finland
France
Germany
India
Ireland
Italy
Malawi
Malaysia
Mexico
Mozambique
Netherlands
New Zealand
Pakistan
Peru
Philippines
Poland
Portugal
Singapore
Slovenia
South Africa
Spain
Sri Lanka
Sweden
Switzerland
Thailand
Turkey
United Arab Emirates
United Kingdom of Great Britain and Northern Ireland
United Republic of Tanzania
United States of America
Uruguay
Venezuela (Bolivarian Republic of)
Viet Nam
Zambia

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.
GBP

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Other, please specify (Companies over which the Group has full operational control or financial control but does not fully own, and from joint ventures and associates where we do not have a majority shareholding but do have either joint control or significant influence.)

C-AC0.6/C-FB0.6/C-PF0.6

(C-AC0.6/C-FB0.6/C-PF0.6) Are emissions from agricultural/forestry, processing/manufacturing, distribution activities or emissions from the consumption of your products – whether in your direct operations or in other parts of your value chain – relevant to your current CDP climate change disclosure?

	Relevance
Agriculture/Forestry	Both own land and elsewhere in the value chain [Agriculture/Forestry only]
Processing/Manufacturing	Direct operations only [Processing/manufacturing/Distribution only]
Distribution	Both direct operations and elsewhere in the value chain [Processing/manufacturing/Distribution only]
Consumption	Yes [Consumption only]

C-AC0.7/C-FB0.7/C-PF0.7

(C-AC0.7/C-FB0.7/C-PF0.7) Which agricultural commodity(ies) that your organization produces and/or sources are the most significant to your business by revenue? Select up to five.

Agricultural commodity
Sugar

% of revenue dependent on this agricultural commodity
10-20%

Produced or sourced
Both

Please explain
AB Sugar's businesses represented 12% of the group's revenue in the reporting year. AB Sugar's businesses represent the single largest CO2e emission contributor to the group for scope 1 and 2. GHG emissions (scopes 1 and 2) from our sugar businesses contributed 65% to ABF's group emissions and 81% of the group's overall energy use in the reporting year.

Agricultural commodity
Cotton

% of revenue dependent on this agricultural commodity
20-40%

Produced or sourced
Sourced

Please explain
In the reporting year, Primark's revenue represented 45% of the group's revenue. From pyjamas to t-shirts, baby grows, jeans, towels and bedding, cotton is the most important fibre relied upon by Primark to make its products.
We want to make more sustainable fashion affordable for everyone. We are committed to ensuring that by 2030 all our clothes will be made from recycled or more sustainably sourced materials, carbon emissions halved across the entire value chain and pursuing a living wage for workers in the supply chain. Some 45% of our clothes today are already made from either recycled or more sustainably sourced materials. Primark has estimated it has removed over 600 million units of single-use plastic components packaging from its business. Started in 2013, we have expanded our Sustainable Cotton Programme by committing to train more than 275,000 farmers in more sustainable farming practices by 2023, in the largest programme of its kind managed by a fashion retailer.

Agricultural commodity
Wheat

% of revenue dependent on this agricultural commodity
Less than 10%

Produced or sourced
Sourced

Please explain
Wheat is sourced primarily by our bakeries, mills and other grocery businesses for use in the production of bulk and bagged flour, bread and associated bakery products. Our agriculture business also sources wheat. In the UK, Allied Mills, a division of ABF Grain Products Limited, operates six modern mills, one in Belfast, two in Manchester and three in Tilbury with one being a specialised semolina milling operation.
Taking action to address the effect of climate change impacts has been embedded into our businesses as part of normal commercial decision-making with the assessment of drought risk to the wheat supply in our Australian bakery business as an example.

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	0006731235

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Board-level committee	The board of Associated British Foods plc (the Board) is responsible for overseeing our businesses' management of climate-related issues. The Board reviews each division in depth every year, which includes a review of material ESG issues, including climate-related issues. The Board also monitors the Group's exposure to risks, which includes climate-related risks, as part of performance reviews with each business. Both the Board and the Audit Committee have been briefed specifically on the Task Force on Climate-related Financial Disclosures (TCFD) reporting (see 2022 Annual Report pages 83 to 93). In 2021 we created a cross-functional steering committee to oversee governance of the TCFD programme.
Chief Executive Officer (CEO)	The Group CEO receives and reviews a summary of risks, including environmental and climate risk, from each business segment at least annually. ABF's five business segments are Grocery, Agriculture, Sugar, Ingredients and Retail. In addition, material environmental and climate risks may be reported to the Group CEO via the Group Chief People and Performance Officer, and the Group Company Secretary. Otherwise, environmental and climate risks are incorporated into the group's standard risk processes. Where environmental and climate risks are considered material the Group CEO keeps the other Group directors fully informed of how the risks are being managed.
Chief Financial Officer (CFO)	ABF has implemented an enterprise-wide risk management system for which the Group Finance Director (equivalent title to Chief Financial Officer) is accountable to the Board. The Group Finance Director is a member of the Board. The CEO and Group Finance Director are accountable to the Board for matters relating to risk. This includes keeping the Board informed of climate-related risks through the group's risk management procedures. Climate-related issues and potential financial implications are reviewed, monitored and escalated to the Board through this risk management system for which the Group Finance Director has responsibility.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding annual budgets Overseeing major capital expenditures Overseeing acquisitions, mergers, and divestitures Reviewing innovation/R&D priorities Overseeing and guiding employee incentives Reviewing and guiding strategy Overseeing and guiding the development of a transition plan Monitoring the implementation of a transition plan Overseeing and guiding scenario analysis Monitoring progress towards corporate targets Reviewing and guiding the risk management process	<Not Applicable>	The Board receives updates and provides views on TCFD related matters. As part of an annual standing agenda item, the Board receives updates in February and September from the Group Corporate Responsibility Director and the Chief People and Performance Officer on climate and environmental issues. As we press forward with our sustainability activities, these updates will be expanded to include progress against climate-related goals and metrics. In February 2022, the Director of Legal Services and Company Secretary, Group Corporate Responsibility Director and the Finance Project Director for ESG and TCFD Reporting presented an ESG update to the Board. This included: • a specific focus on climate commitments from our different divisions and businesses; • an update on the GHG reduction roadmaps for AB Sugar and Primark; • an example of how AB Sugar assesses project returns at different carbon pricing levels; • an update on the Primark Sustainable Cotton Programme; and • a review of climate risks and opportunities identified as part of the risk assessment process. Individual businesses may also include climate-related matters in their regular updates to the Board.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	We believe that members of the Board should collectively possess a diverse range of skills, expertise, industry knowledge, business and other experience necessary for the effective oversight of the Group. In our 2022 Annual Report and Accounts (p.118) we published a director skill sets matrix which provides a snapshot of the diversity of skills of the Board, which includes environmental skills. Board members are appropriately informed, skilled and with a range of experiences from other roles to make informed decisions to create long-term value for our shareholders, business partners, employees and the communities and environments in which we operate. In addition, the Board has received specific briefings on climate change matters and on TCFD throughout the year, with external experts engaged to support our knowledge growth and TCFD implementation. As demonstrated during our third ESG investor day, held in May 2022, members of our board possess knowledge and skills related to climate-related risks and opportunities relevant to our businesses. This year we held our third ESG (environmental, social and governance) investor day in response to increasing requests from investors to understand more about what we do as a Group in respect of ESG matters. This third event focused on the most material environmental factors across a broad range of companies in the Group. We included an analysis of the most important environmental factors relevant to our businesses, including an overview of our TCFD analysis. Investors had the opportunity to ask questions at the events and three subsequent events were held for banks, insurers and employees respectively, giving them the opportunity to ask questions which included those relating to climate-related issues. All the investor events, including the questions and answers, are available on the ABF website.	<Not Applicable>	<Not Applicable>

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee
Other C-Suite Officer, please specify (Director of Legal Services and Company Secretary)

Climate-related responsibilities of this position
Conducting climate-related scenario analysis
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line
More frequently than quarterly

Please explain
The Director of Legal Services and Company Secretary has overall accountability to the Chief Executive for corporate responsibility issues and acts as the focal point for communications to the Board and shareholders on corporate responsibility matters, including climate-related issues.

Position or committee
Other C-Suite Officer, please specify (Divisional CEOs)

Climate-related responsibilities of this position
Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Managing climate-related acquisitions, mergers, and divestitures
Developing a climate transition plan
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Conducting climate-related scenario analysis
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line
Quarterly

Please explain
Our divisional CEOs are responsible for managing the impacts of climate change in their division, with the Chief Executive responsible for the impacts of climate change across the Group. The divisions and the Chief Executive, Finance Director, members of the Executive Committee and the Financial Controller hold quarterly reviews where any material climate-related matters are raised.

Position or committee
Other C-Suite Officer, please specify (Chief People and Performance Officer)

Climate-related responsibilities of this position
Providing climate-related employee incentives
Monitoring progress against climate-related corporate targets

Coverage of responsibilities
<Not Applicable>

Reporting line
CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line
More frequently than quarterly

Please explain
The Chief People and Performance Officer, who reports to the Chief Executive, is responsible for measuring and reporting the environmental performance of our own operations.

Position or committee
Chief Sustainability Officer (CSO)

Climate-related responsibilities of this position
Conducting climate-related scenario analysis
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
Corporate Sustainability/CSR reporting line

Frequency of reporting to the board on climate-related issues via this reporting line
Half-yearly

Please explain
The Group Corporate Responsibility Director, who reports to the Director of Legal Services and Company Secretary, is responsible for monitoring climate-related activities across the Group and for reviewing the robustness of external non-financial targets set by each of our businesses. The Group Corporate Responsibility Director leads the Corporate Responsibility Hub, which supports all our businesses on environmental issues and brings together all the professionals in our businesses working in these areas to share knowledge and best practice.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	In 21/22, ESG measures were included in both the personal performance targets for the short term incentive plan (STIP) and the discretionary framework for the long term incentive plan (LTIP). A narrative in relation to delivery against STIP personal performance measures in the year is set out on pages 142 and 143 of our annual report. A description of progress on ESG KPIs is set out on page 144 of our 2022 annual report.

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive
Chief Executive Officer (CEO)

Type of incentive
Monetary reward

Incentive(s)
Bonus - % of salary
Shares

Performance indicator(s)
Other (please specify) (Oversaw progress on locally developed and led initiatives across the Group to reduce energy use and improve carbon footprint.)

Incentive plan(s) this incentive is linked to
Short-Term Incentive Plan

Further details of incentive(s)
From 2023, 15% of the Chief Executive short-term incentive target, equivalent to 30% of their base salary, will be linked to strategic, primarily ESG, measures designed to drive focus in this area. This is aligned to our increased focus on ESG KPIs.
Whilst these changes will not come into effect until 2023, the review and decisions were made in 2022.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan
The incentive will be linked to the delivery of projects that will lead to progress against our top ESG priorities.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?
Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	1	3	Short-term risks and opportunities have been considered over the period to 2025.
Medium-term	3	10	Medium-term risks and opportunities have been considered over the period to 2030. Our most financially material businesses, Primark, AB Sugar and Twinings have set 2030 emission targets. These targets are supported by emission reduction plans.
Long-term	10	30	Long-term risks and opportunities have been considered over the period to 2050. Year 2050 is consistent with many national and industry targets. Primark is aligned with the UNFCCC Fashion Industry Charter goal of net zero emissions across all three Scopes by 2050.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

The delivery of our strategic business objectives and long-term shareholder value are of paramount importance to ABF and are dependent on effective risk management.

An event, or series of events, resulting in the inability to deliver the strategic objectives of the business and long-term shareholder value would be considered an event that would have a substantive financial or strategic impact on our business.

As with any business, risks and uncertainties are inherent in our business activities. ABF regularly faces business uncertainties, and it is through a structured approach to risk management that it is able to mitigate and manage these risks and embrace opportunities when they arise.

The Board has identified £65 million as a material financial impact threshold for the group. An event or series of events that exceed this financial threshold could be considered to have a substantive financial or strategic impact as it would most likely impact the delivery of the group's strategic objectives or have a detrimental effect on the group's sustainable growth and long-term shareholder value.

The Board undertakes a robust annual assessment of the principal risks, including emerging risks which could threaten the business model, future performance, solvency or liquidity. These are the principal risks of the group as a whole and the risks which could prevent ABF from delivering its strategic objectives. These are the principal risks which ABF believes are likely to have the greatest current or near-term impact on our strategic and operational plans and reputation.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered
Direct operations
Upstream
Downstream

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
Annually

Time horizon(s) covered
Short-term
Medium-term
Long-term

Description of process
The Board is accountable for effective risk management, for agreeing the principal, including emerging, risks facing the Group and ensuring they are successfully managed by the businesses.
The process for identifying, assessing and managing climate-related risks is the same as for other risks within the Group and sits with the business where the risk resides. These risks, including climate risks, are collated and reviewed at both a business and divisional level, and then any material risks reported to the Director of Financial Control who reviews the key risks with the Board.
Climate risk is considered a material risk to the Group and is included in the principal risk 'Our use of natural resources and managing our environmental impact' of the 2022 Annual Report, recognising the impact it may have on the business in the short, medium and long term.
The Board also monitors the Group's exposure to risks as part of performance reviews with each business.
In our 2021 Annual Report and Accounts, we outlined a 2022 action plan for more in-depth assessments on the identification, assessment and management of climate-related risks and opportunities. We have now conducted a comprehensive risk assessment, across the supply chain, focused on climate-related risks and opportunities at a divisional level, aligned with the risk management processes at ABF and our decentralised structure.
1. We conducted a high-level review of potential risks across the Group and, as a result, our TCFD efforts to date have been focused on AB Sugar, Primark and Twinings which account for 81% of the adjusted operating profit for the Group and some 70% of the Group's total Scope 1 and Scope 2 emissions.
2. In these businesses:
a. Cross-functional business teams worked with third-party experts (South Pole) to develop an initial list of climate-related physical and transition risks and opportunities that could impact these businesses in line with the TCFD framework and guidance.
b. We held climate risk/opportunity workshops with key stakeholders to prioritise risks and opportunities for scenario analysis. Selection criteria included the importance of those risks and opportunities to the business, South Pole's judgement on how climate change may potentially change those risks and opportunities and the availability of appropriate models to assess impacts.
3. We conducted high-level assessments across all our other businesses, involving relevant business segment leaders and third-party experts. These assessments ensured we not only understand the material climate risks and opportunities in those businesses but also identified risks and opportunities that could be material if accumulated across the Group. All identified risks were then reviewed, and those that could have the most significant financial impact on the Group were subject to scenario analyses.
4. Following the scenario analyses and workshops, the most significant climate-related risks were identified and assessed by each business segment and incorporated into relevant risk registers, in line with their existing risk management processes.
5. Our Non-Executive Directors and PwC were then engaged to challenge our approach in identifying material risks and consider if we had missed anything material. We assessed the outcome of these challenges and adjusted our approach as considered appropriate.
While we have considered the principal climate risks, we recognise that there are wider climate impacts that are challenging to model. For example, socio-economic and geopolitical issues directly linked to climate change and other societal challenges that may be exacerbated by climate change. Our businesses will still capture these risks within their risk registers and consider actions they can take to mitigate their impact.
Our businesses are responsible for managing risks relevant to them.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	ABF operates across numerous jurisdictions and is subject to multiple climate-related regulations. We comply with the regulations of the countries in which we operate and where possible exceed standards. Climate regulation is included in our business's risk assessments as the risk of non-compliance could result in unnecessary financial and reputational implications. We have engaged external technical experts to support our programme to address the requirements of the Task Force on Climate-related Financial Disclosures (TCFD) and established a cross-functional steering committee to oversee governance. We have engaged formally with each division on TCFD, building on existing awareness and action on climate change issues. ABF has developed a strong TCFD disclosure with clear business linkage and relevance, including robust climate scenario analysis and materiality assessment. Using Illovo as an example of managing regulatory risk; South Africa's carbon tax includes a tax on the non-anthropogenic component of bagasse and biomass. These are created from the sugar cane crushing process used by Illovo to generate its own-use energy and export surplus energy to the grid. Thus, Illovo is exposed to the carbon tax even if it phases out fossil fuel consumption. Illovo has plans to improve energy efficiency to reduce use of grid electricity and coal.
Emerging regulation	Relevant, always included	Emerging regulation related to climate risk is always included in our risk assessment process as it may impact budgeted operating costs, financial performance or cause reputational harm in the event of non-compliance. In addition, there is emerging regulation relating to the disclosure of climate activities and performance which if not effectively managed through risk procedures could lead to a negative reputational impact. ABF's ESG legal department has an active role in monitoring emerging regulation and helps businesses to comply with any upcoming requirements. For example, some of our businesses operate within energy-intensive industries and therefore there is the potential in the future of new costs related to new carbon taxes and trading schemes, and changes to existing initiatives that may bring our operations in scope. For country-specific regulation, our businesses are tasked with identifying and assessing the risks related to the emerging regulation and ensuring that we are aware of, and in a position to comply with the new laws. Emerging legislation may also bring opportunities where our businesses can help to shape programmes and legislative responses which help industry to reduce emissions. Where changes to schemes take place or there are key legislative changes which are classified as a risk, each business CEO may report this to the Group level, depending on materiality of the risk. We also engage with governments, local regulators and community organisations to contribute to, and anticipate, important changes in public policy. As examples, ABF is closely monitoring developments of the EU Taxonomy, the UK Green Taxonomy, the EU Corporate Sustainability Reporting Directive (EU CSRD), the UK Sustainable Disclosure Requirements (UK SDR) and the Principles of the Taskforce on Nature-related Financial Disclosures (TNFD).

	Relevance & inclusion	Please explain
Technology	Relevant, sometimes included	ABF acknowledges that consumers are becoming more aware of the environmental impact of the products they purchase; this awareness is across the value chain including sourcing, packaging, use and end of life. To remain financially competitive, innovative and sustainable; products are required which consider energy efficiencies and the use of renewables, reductions in emissions during production or to help consumers reduce emissions, and products or services which help customers adapt to climate change such as agricultural technology. Technology is key to creating these innovative products which will meet the needs of our customers and changing demands on agricultural, production and retail processes. The risk is that as low-carbon technology develops, that we could lag behind others if our operations do not invest or adopt the opportunities. Each business is responsible for the identification of new or more efficient technologies and may investigate technological and infrastructural alternatives when considering climate-related risks. Where these risks are identified, each business undertakes cost benefit analysis which may be reported to ABF by the business CEO depending on materiality. R&D centres exist at AB Mauri in Australia, the Netherlands, the USA and in the UK, and ABF Ingredients' business AB Enzymes in Finland and Germany. These centres support the technical resources of the divisions and work in collaboration with customers from around the world to bring innovations to local markets. AB Sugar's corporate engineering team supports the individual businesses and sites, especially around energy efficiency, and to horizon-scan technological developments and check operational feasibility. Cross-discipline teams operate at various levels to identify a short, medium and long-term roadmap. The short-term plans are predominantly compiled at site and business level within AB Sugar, while the long-term plans are considered at the business and division level. In parallel, AB Sugar aims to take advantage of new national infrastructure and upcoming technologies that could help significantly reduce carbon emissions. The risk is that the national infrastructure is slow to keep pace with business ambition and new technologies are not supported to scale up for businesses such as AB Sugar.
Legal	Relevant, always included	ABF's financial control framework and board-adopted tax and treasury policies require all businesses to comply fully with relevant local laws. We adopt a similar approach to legal risks and potential litigation as we do to emerging and current regulation risk. Together they provide the structure within which our businesses operate; to remain profitable while ensuring that we minimise any negative impact on the natural environment. ABF is committed to complying with the legislation and regulations of the countries in which we operate and as such, the climate-related legal environment is always included in our risk assessments. The businesses manage the processes and costs incurred to comply with climate-related legislation. Climate legislation is also included in our risk assessments as the risk of non-compliance and litigation could result in unnecessary additional financial and reputational implications. Each business is responsible for complying with all relevant legislation in the geographies in which they operate. Some businesses use legislation trackers to monitor any new regulation that may impact their operating environment, product stewardship and wider industry. In addition, the group runs an external audit programme, with the support of a third-party company (ERM), which monitors the main environmental risks and environmental legal compliance at our own manufacturing sites and retail store level. This rolling programme of audits and actions, which is monitored by the Group Director of Health, Safety and Environment, address issues such as compliance with environmental permits and licenses for that specific site being audited. Such matters include prevention of excessive amounts of dust, management of acid gases and carbon monoxide and the types of fuel allowed to be burnt. Where risk associated with climate legal standards is identified, each business CEO may report this to the Group level depending on materiality. At the group level, it is a requirement of our listing on the London Stock Exchange to disclose our approach to material environmental issues, of which adapting to and mitigating climate change is one. As such, ensuring the group meets these reporting requirements is included in our approach to risk management.
Market	Relevant, always included	As ABF operates in 53 countries with sales and supply chains in many more, we are exposed to global market forces. Failure to respond to market risks, could directly impact the profitability of our operations. For example due to changing clothing requirements throughout the year or seasonal food choices. In addition, entering new markets is also a key risk and we conduct rigorous due diligence when entering or commencing business activities in new markets. This includes consideration of the impacts of climate change on the region's weather, temperature and rainfall patterns which may, in turn, affect yields, production and customer demand for products. Our approach to risk management always includes potential short-term market volatility and evaluates longer-term socio-economic, political and environmental scenarios including climate change. Market risk can impact the income ABF receives for its products. The availability of raw materials, which may be impacted by weather changes for example, can lead to a change in price for materials such as sugar, cotton or wheat and can also include tariffs, quotas and other levies. As a principal risk to the group, fluctuations in commodity and energy prices can have a material impact on the group's operating results, asset values and cash flows. These fluctuations can occur because of climate influences ranging from national energy policies to weather impacting crop yields. Commodity price inflation has been a global factor throughout the year. A number of our food and agriculture businesses have seen increases in energy and agricultural inputs e.g. fertiliser and agricultural commodity prices in the latter part of the financial year, with expectations of further increases in the new financial year. Energy prices, particularly in the UK and Europe, have increased materially as a result of significant market uncertainty. Our businesses continue to manage price risk under their existing risk management frameworks and, where appropriate, reflect this in pricing of products. The world sugar price continued to rise through the year. European sugar prices also increased with a reduction in stocks following lower EU sugar production in the last two campaigns. The group purchases a wide range of commodities and therefore constantly monitors the markets in which we operate, including short and long-term climate implications; managing these exposures with strategies such as exchange traded contracts and hedging instruments.
Reputation	Relevant, always included	As a global enterprise, ABF comes under increasing scrutiny from all its stakeholders including investors, shareholders, employees, customers and other parties in the supply chain in relation to climate change action and sustainability performance. In order to remain profitable for the long term and a partner of choice, ABF recognises the need for its brand, product offering and reputation to be highly regarded by these stakeholders. In addition to living our values, ABF's policies, internal controls and risk assessment processes ensure our operations meet the expectations of our stakeholders and therefore climate is considered in business risk assessments. This year in May 2022, we held our third ESG investor day in response to increasing requests from investors to understand more about what we do as a Group in respect of ESG matters. This third event focused on the most material environmental factors across a broad range of companies in the Group. We included an analysis of the most important environmental factors relevant to our businesses, including an overview of our TCFD analysis. We recognise that there may be a risk that our performance is not communicated effectively, that we do not meet our business level climate-related commitments or that our emissions performance is not valued sufficiently thereby potentially reducing demand for our goods and services and damaging our corporate reputation. As such, we consider reputational risk and how we can mitigate this risk through effective disclosures of activity related to climate-risk and opportunity through our annual reporting, CDP, the ESG investor days and other engagement with key stakeholders. Each business is responsible for engaging with stakeholders and monitoring media for activities that may impact reputation. Where potential risks to reputation are identified, each business CEO may report this to the Group level depending on materiality.
Acute physical	Relevant, always included	Acute risks that are unanticipated and event-driven, including increased severity of extreme weather events, may impact the availability of key agricultural raw materials and disrupt our operations. For ABF, these raw materials could be sugar on our own or leased land, cotton in our supply chain or other commodities such as wheat, rice, tea and edible oils. As experienced over recent years, acute physical events have led to crops in our supply chain being damaged by floods, extreme frosts and winds. These risks have the potential to disrupt the value chain, increase operational costs and impact our ability to do business. Some of the locations in which we operate are prone to flooding, drought and extreme weather events such as cyclones and heatwaves, which can affect harvests and impact supplies of raw materials, energy and water. Our businesses invest in a range of adaptation measures such as infrastructure upgrades to reduce flood damage, improved water efficiencies and reused more water where possible. They also collaborate with suppliers to build resilience in the supply chain where flooding and drought are prevalent. In recent years, our sugar business, Illovo Sugar Africa (Illovo), which has operations across southern and eastern Africa, has taken action to manage the impacts of cyclones and subsequent flooding, as well as the consequences of heatwaves and temperature volatility. The effects of these events have included reductions in crop yields and damage to infrastructure and distribution systems. Given our diversified structure, our businesses and divisions are empowered to consider and implement their own mitigation and adaptation strategies. Each business CEO may report risks to the Group level depending on materiality.
Chronic physical	Relevant, always included	ABF has a substantial international agricultural footprint through our supply chain and operations on our own land. Therefore it is imperative that we respect the natural environment by managing our impacts as well as responding to changes resulting from climate change such as variability in seasons, changing weather and precipitation patterns, changing mean temperatures and the impact of these on natural resources. These physical risks could impact the availability, quality and price of key agricultural raw materials and commodities. In addition, chronic physical risks could start to impact the secure supply of materials, geographical growing regions or harvest seasons. Each business is responsible for understanding the risks pertinent to each location in which they operate. Where potential risks are identified, each business CEO may report risks to the Group level depending on materiality. The inability to source raw materials as a result of change in climate patterns is mitigated through our risk processes and engagement with suppliers. As examples, Illovo Sugar Africa and AB Sugar China work with their third party sugar growers to improve resilience to climate change impacts. One area of focus is to improve irrigation methods and practices including converting to more efficient irrigation systems such as drip irrigation. The objective is to support our journey to mitigate against long-term climate change impacts to use water efficiently, and reduce the associated energy. Through its risks assessments, Westmill Foods identified a risk to its supply of rice from Pakistan due potential future water-related risks because of climate change. In response the business has participated in a three-year Water and Productivity Project (WAPRO) in Punjab, Pakistan, which promotes the standards of the UN Sustainable Rice Platform (UNSRP), of which Westmill was a founding participant and board member. WAPRO partners Helvetas and Galaxy Rice provide training in SRP techniques and has trained 800 basmati rice farmers since 2018 with the aim to reach 1,200 by 2025. In 2021, Westmill purchased 6,500 tonnes of the sustainable rice and plans to increase the proportion of rice it sources through the project in future years, with the project extended to 2025.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Risk 5

Where in the value chain does the risk driver occur?
Upstream

Risk type & Primary climate-related risk driver

Chronic physical	Changing precipitation patterns and types (rain, hail, snow/ice)

Primary potential financial impact
Decreased revenues due to reduced production capacity

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Climate impact on cotton yields - The key climate-related physical risks for cotton production are extreme temperatures, heavy rainfall and the timing and duration of the monsoon season. Our work on climate change scenarios to 2030 shows that the effects on cotton yields are minimal (analysis focused on Primark Sustainable Cotton Programme locations in India and Pakistan which represent some 97% of Primark's Primark Sustainable Cotton Programme). The outcomes range from virtually no impact to a reduction of some 4%.
These projections are well within the bounds of the year-on-year yield variations that we have already experienced, and even then the capability is in place to work with smallholders to mitigate these effects. For example, training helps farmers make better seed selections and understand planting patterns to maximise yields.
In 2050, the yield impact is projected to decline by 14% under RCP8.5 and 4% under RCP2.6, before mitigating actions.
Based on yield uplifts we have seen historically, the majority of this impact would be offset by sourcing all cotton from sustainable or recycled programmes.
Scenarios assessed RCP2.6/RCP8.5

Time horizon
Long-term

Likelihood
Unknown

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Determining the potential impact of climate risks is challenging due to their significant time horizon and inherent difficulty in accurate quantification.
Medium term impacts judged not to be significant once mitigating actions are considered. As such, the impact has not been quantified financially.

Cost of response to risk

Description of response and explanation of cost calculation
Currently 40% of Primark's cotton clothing sales (units) contain cotton that is organic, recycled or is sourced from Primark's Sustainable Cotton Programme (PSCP). Cotton sourced through our PSCP is grown using farming methods with lower environmental impact such as reducing water, chemical pesticide and chemical fertiliser use.
Switching to more sustainable cotton is assumed to lead to a 14% increase in yields in line with the results Primark's 2013-2019 study of the yields(kg/acre) of Indian PSCP farmers compared to control farmers. As of August 2022, some 252,800 farmers have received training in our Sustainable Cotton Programme.
Future mitigating actions;
• Increase the proportion of cotton which is grown through more sustainable cotton programmes so that all cotton clothing sales contain cotton that is organic, recycled or sourced from Primark's Sustainable Cotton Programme by 2027.
• Use more resilient cotton varieties and recycled/new fibres.
• Increase farmers trained in Primark's Sustainable Cotton Programme to 275,000 by the end of 2023.

Comment
Key analysis and assumptions
• Analysis focused on PSCP locations in India and Pakistan which represent some 97% of Primark's PSCP programme as of the end of 2022.
• USDA's EPIC crop model was used to assess the climate impact on cotton yields compared to 2021. This analysis did not take account of mitigating actions.
• Cotton impacts such as extreme temperatures, heavy rainfall, and timing of the onset of the monsoon were assessed.
• The above was supplemented by a high-level study of climate impacts on global cotton yields. This highlighted new territories that might be suitable for cotton in the future.
• Switching to more sustainable cotton is assumed to lead to an average 14% increase in yields in line with the results of Primark's 2013-2019 study of the yields (kg/acre) of Indian PSCP farmers compared with control farmers.
• Our calculations assume that no additional costs are passed on to customers through increased prices.
• Percentage yield impacts reflect changes in annual cotton yields for an average year, based on the median projected changes from the different climate models. While these yield impacts may include some consideration of extreme events in a given year (partly represented by the uncertainty span of the 25th to 75th percentile), the

magnitude of impact associated with individual events, and the frequency of such extreme events, is not directly represented by an annual average. Additional analysis was undertaken to evaluate the potential impact of increased frequency of heavy rain events on cotton yields, to further support mitigation and adaptation.

For further details please see our Climate-related Financial Disclosures (TCFD) on pages 83-93 of our Annual Report 2022.

Identifier
Risk 2

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Chronic physical	Temperature variability

Primary potential financial impact
Decreased revenues due to reduced production capacity

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Impact of climate on Illovo's sugar yields (Eswatini, Malawi, Mozambique, South Africa, Tanzania, Zambia) - The climate impact on sugar yields is projected to be different in each country within Illovo. In 2030 USDA's EPIC crop model indicates a range of impacts which vary by country, from no change to a 10% decline in sugar yields.
In 2050 it indicates a range of impact from a 5% yield gain, predominantly as a consequence of carbon fertilisation where crops benefit from a higher concentration of CO_2, to a 29% decline in sugar yields. The Potsdam Institute for Climate Impact Research's Lund-Potsdam- Jena managed Land (LPJmL) crop model projected increased sugar yields in 2030 and 2050 across all countries.

Time horizon
Medium-term

Likelihood
Unknown

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Determining the potential impact of climate risks is challenging due to their significant time horizon and inherent difficulty in accurate quantification.
Medium term impacts judged not to be significant once mitigating actions are considered. As such, the impact has not been quantified financially.

Cost of response to risk

Description of response and explanation of cost calculation
Illovo is already managing the impacts of climate change, particularly significant weather volatility. Looking ahead we expect weather to become even more unpredictable along with a higher risk of drought and wildfires.
Two established crop models have been used to assess climate impacts in 2030 and 2050 before mitigations.
These give widely different results. Potsdam's LPJmL model predicts yields will increase significantly while the EPIC model predicts yields are likely to decline, with average country yield changes ranging from 0 to -10% in 2030 to +5% to -29% in 2050. However, even conservatively taking the outputs from the EPIC model, impacts net of mitigations are not significant for the Group. Mitigating actions are already well underway including implementing enhanced farm practices and irrigation programmes.
Current mitigations actions include:
• Illovo already experiences and manages significant climate variability so its responses to weather events are well developed.
• Improving irrigation efficiency to reduce the risk of drought, including investing in drip irrigation and river defences to reduce storm damage.
Future mitigating actions include:
• Increase the frequency of replanting sugar cane which results in higher yields.
• Use of more drought-resilient crop varieties.
• Potential for pricing pass-through to customers, if required, to offset any increased costs.

Comment
Key analysis and assumptions:
• Yield impacts quoted are compared to 2021. The analysis did not take account of mitigating actions.
• Two crop models were used to assess climate impacts on yield. This was supplemented by an analysis of how climate change will impact drought conditions in southern Africa.
• Numbers quoted are median projected results.
• Climate impacts on countries within the Illovo group were considered individually.
• Our calculations assume that no additional costs are passed on to customers through increased prices.

For further details please see our Climate-related Financial Disclosures (TCFD) on pages 83-93 of our Annual Report 2022.

Identifier
Risk 6

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Chronic physical	Temperature variability

Primary potential financial impact
Decreased revenues due to reduced production capacity

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Climate impact on tea yields - Tea is sourced by Twinings from third party suppliers in multiple tea regions. The crop model projects that changing chronic climate change should have a positive impact on tea yields in 2030 and 2050 across all tea growing regions assessed. However, due to the crop model's under-representation of acute climate risks, these gains could be limited by the impacts of extreme temperatures, heavy rainfall and droughts, which are expected to increase in both frequency and magnitude, particularly in the long term. The company has experience in dealing with volatility in regional tea yields as a result of weather events and has developed deep knowledge of the world's tea growing regions. This capability ensures there is a degree of flexibility in the origin of tea purchased and that master blending expertise can be used to produce tea to a high and consistent standard year after year. There are some single origin blends that would be harder to source if a particular region had a negative climate-related impact, but they are not material to the business.

Time horizon
Long-term

Likelihood
Unknown

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Determining the potential impact of climate risks is challenging due to their significant time horizon and inherent difficulty in accurate quantification.
Medium term impacts judged not to be significant once mitigating actions are considered. As such, the impact has not been quantified financially.

Cost of response to risk

Description of response and explanation of cost calculation
Currently, Twinings sourcing capability coupled with its blending capability enables the business to manage localised yield issues.
In the future, Twinings will continue to focus on enhancing farming practices, particularly irrigation. Also, tea is a profitable crop that, after some higher-than-average start-up costs, can be harvested for decades. There should be incentive to replant in new regions if climate changes locally.

Comment
Scenarios assessed: RCP8.5. Given impacts were assessed as low under RCP8.5, the worst case RCP scenario, impacts under other RCP scenarios were not assessed.
Key analysis and assumptions
• Yield impacts are compared to 2021. The analysis did not take account of mitigating actions.
• Fourteen tea growing regions, within six countries, were selected for analysis based on current sourcing volumes, uniqueness of tea produced and significance of the regions at a global level.
• Tea growing regions assessed made up around three quarters of Twinings' sourced tea in 2021/2022.
• Potsdam's LPJmL crop model was used to assess impacts supplemented by third-party research on individual climate effects on tea yields.

For further details please see our Climate-related Financial Disclosures (TCFD) on pages 83-93 of our Annual Report 2022.

Identifier
Risk 7

Where in the value chain does the risk driver occur?
Upstream

Risk type & Primary climate-related risk driver

Acute physical	Flood (coastal, fluvial, pluvial, groundwater)

Primary potential financial impact
Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Impact of flooding risk on Primark's third-party manufacturers - Many of our suppliers' factories are located in the greater Dhaka region. This is a low-lying, densely populated area on the Ganges Delta that is exposed to both coastal and river flooding. We estimate that flood risk will increase minimally by 2030 with a more marked increase by 2050. In 2050, under RCP8.5 and considering a 100-year return period, it is projected that less than 3% of Primark's global orders would be exposed to a severe coastal flooding event, while less than 6% of Primark's global orders would be exposed to a severe river flooding event.

A proportion of Primark's third-party factories in China are at risk of being disrupted by flooding. This risk only changes minimally by 2030 and 2050. Given the geographical spread of Primark's third-party factories in China, the river flood impacts disclosed above would require a number of rivers across China to flood simultaneously.
The analysis we have undertaken in Bangladesh and China has identified the individual sites at higher risk from flooding. Mitigating actions are currently being explored.

Time horizon
Long-term

Likelihood
Unknown

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Determining the potential impact of climate risks is challenging due to their significant time horizon and inherent difficulty in accurate quantification.
Medium term impacts judged not to be significant once mitigating actions are considered. As such, the impact has not been quantified financially.

Cost of response to risk

Description of response and explanation of cost calculation
Current mitigations actions:
• The majority of Primark's Bangladesh suppliers are located in areas of Dhaka which are less susceptible to flooding.
• The local Dhaka community regularly deals with flooding and has adapted processes to mitigate its impacts.
• Primark's Sourcing Strategy has existed for two years with a focus on geographical diversification for sourcing product, creating a more balanced global footprint and developing risk mitigation strategies to increase flexibility and agility when unexpected events occur.

Future mitigating actions:
• Primark will consider flood risk as part of its Structural Integrity programme and is currently developing a pilot to test an approach in Bangladesh.
• Bangladesh's National Determined Contribution plan includes a focus on infrastructure and risk management.
• Primark will continue to consider how best to diversify the sourcing of product in line with its Sourcing Strategy.

Comment
Key analysis and assumptions:
• Coastal and river flooding impacts considered.
• Factories supplying some 98% of orders in Bangladesh and 66% of orders from China evaluated. The results from the 66% of Chinese orders assessed were extrapolated across all Chinese orders to derive an overall impact.
• Key export consolidation and freight centres also reviewed along with ports in Bangladesh.
• The World Resource Institute's Aqueduct Flood Hazard Maps tool used to assess the impact of flooding. The analysis did not consider mitigating actions.
• Factories assumed to be significantly impacted if flood heights are greater than 0.5m. At this flood height factories assumed to have serious and sustained flood impacts.
• Impacts calculated as a proportion of Primark's current total global orders based on the estimated retail value of orders purchased.

For further details please see our Climate-related Financial Disclosures (TCFD) on pages 83-93 of our Annual Report 2022.

Identifier
Risk 3

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation	Carbon pricing mechanisms

Primary potential financial impact
Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Impact of carbon pricing mechanisms on AB Sugar - Carbon prices are likely to increase as governments take action to decarbonise. AB Sugar represents some 65% of ABF's Scope 1 and 2 emissions. AB Sugar has developed a detailed plan to reduce absolute Scope 1 and 2 carbon emissions by 30% by 2030, from a 2017/18 baseline, through a range of fuel substitution and energy-efficiency programmes that are both affordable and commercially attractive with an estimated average ROI above 15%. Beyond that, technologies exist, but are as yet not commercially viable, to reach net zero emissions.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
0

Potential financial impact figure – maximum (currency)
48000000

Explanation of financial impact figure
Impacts are based on carbon prices assumed in IEA's hypothetical scenarios. The NZE and SDS scenarios assume a significant increase in global carbon prices.

Cost of response to risk

Description of response and explanation of cost calculation
AB Sugar has a detailed plan to achieve its 30% absolute reduction, which it manages through its robust profit improvement system. Some 12% reduction has already been delivered against its 2017/18 baseline of carbon emissions.
Potential carbon tax impacts are small when considering the size and scale of the business. AB Sugar continually manage inflationary pressures. In the event that carbon prices were to increase or be applied to goods that are currently not in scope, these would be managed and offset as required as with any other cost input.

Comment
Scenarios assessed: International Energy Agency's Net Zero Emissions by 2050 Scenario ('NZE'), Sustainable Development Scenario ('SDS') and Stated Policies Scenario ('STEPS').
Key analysis and assumptions:
•Sugar is not within the initial scope of the EU's proposed Cross Border Adjustment Mechanism ('CBAM'). Implementation of CBAMs by 2030 has therefore not been assumed in this analysis.
• Carbon prices are based on the three IEA scenarios: STEPS, SDS and NZE. The lowest number quoted is based on IEA's STEPS scenario. The highest number quoted is based on IEA's NZE. Carbon prices are quoted in US dollars in the scenarios. They have been translated into sterling based on average exchange.
• The scenarios assume the implementation of new and/or more stringent carbon prices on carbon emissions within the sugar value chains in multiple countries.
• Carbon taxes applied to Scope 1 and 2 emissions for AB Sugar. This represents some 65% of ABF's Scope 1 and 2 emissions.
• No growth assumed.
• Results assume delivery of AB Sugar's carbon commitments.
• No significant reduction in Emission Trading Scheme Allowances assumed.
•Our calculations assume that additional costs are not passed on to customers through price changes.

For further details please see our Climate-related Financial Disclosures (TCFD) on pages 83-93 of our Annual Report 2022.

Identifier
Risk 9

Where in the value chain does the risk driver occur?
Downstream

Risk type & Primary climate-related risk driver

Emerging regulation	Carbon pricing mechanisms

Primary potential financial impact
Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Impact of carbon pricing mechanisms on Primark - Primark has significant Scope 3 upstream emissions with Scope 1 and 2 emissions contributing less than 2% of Primark's total emissions. Primark has quantified its Scope 3 emissions for the last four years and has a detailed calculation methodology, aligned to the Greenhouse Gas Protocol.
The impact of Primark's carbon footprint is compounded by hypothetical carbon taxes on Scope 3 upstream emissions. There is the potential for an increase in carbon prices as countries align policy with Nationally Determined Contributions and emissions reduction trajectories. It is also possible in the shorter term that governments will seek to offset the impacts of any such increase through allowances and transition reliefs in light of macroeconomic pressure on all businesses.
Primark's decarbonisation programme is managed as an integral part of the Primark Cares strategy and there is a worked-up plan to reduce absolute emissions by 50% by 2030 and mitigate the company against significant potential exposure to increased carbon taxation. The plan focuses on its top five sourcing markets and seeks to support suppliers to implement energy efficient measures and switch to renewable sources. The plan does not assume the purchase of offsets. Actions are already underway to reduce Scope 3 emissions in the Primark supply chain.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
55000000

Potential financial impact figure – maximum (currency)

155000000

Explanation of financial impact figure
Impacts are based on carbon prices assumed in IEA's hypothetical scenarios. The NZE and SDS scenarios assume a significant increase in global carbon prices.

Cost of response to risk

Description of response and explanation of cost calculation
Primark has a fully worked-up plan to achieve a significant reduction in supplier emissions by the end of the decade and is aligned with the UNFCCC Fashion Industry Charter goal of net zero emissions across all three Scopes by 2050.
Primark is continually managing inflationary pressures. In the event that carbon prices were to increase or be applied to goods that are currently not in scope, these would be managed and offset as required as with any other cost input.

Comment
Scenarios assessed: International Energy Agency's Net Zero Emissions by 2050 Scenario ('NZE'), Sustainable Development Scenario ('SDS') and Stated Policies Scenario ('STEPS').
Key analysis and assumptions:
•Apparel is not within the initial scope of the EU's proposed Cross Border Adjustment Mechanism ('CBAM'). Implementation of CBAMs by 2030 has therefore not been assumed in this analysis.
• Carbon prices are based on the three IEA scenarios: STEPS, SDS and NZE. The lowest number quoted is based on IEA's STEPS scenario. The highest number quoted is based on IEA's NZE. Carbon prices are quoted in US dollars in the scenarios. They have been translated into sterling based on average exchange.
• The scenarios assume the implementation of new and/or more stringent carbon prices on carbon emissions within the textiles value chains in multiple countries.
• Carbon taxes applied to Scope 1, 2 and upstream Scope 3 emissions for Primark.
• Results assume delivery of Primark's carbon commitments.
• No significant reduction in Emission Trading Scheme Allowances assumed.
•Our calculations assume that additional costs are not passed on to customers through price changes.

For further details please see our Climate-related Financial Disclosures (TCFD) on pages 83-93 of our Annual Report 2022.

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Opp1

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Products and services

Primary climate-related opportunity driver
Development and/or expansion of low emission goods and services

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
Our businesses have expanded into climate-change driven products which maximise commercial opportunities as well as replace GHG emissions from fossil fuel use through the generation of renewables.
Bioethanol is a co-product of our sugar beet processing operations and provides an additional income stream for our sugar businesses. As one of the UK's leading agri-processors with an interest in innovative new technology, British Sugar began production of bioethanol in September 2007. At British Sugar's Wissington site, the first plant to manufacture bioethanol in the UK, the sugar biorefinery produces 55,000 tonnes of bioethanol annually from the residual sugar syrup products from sugar beet processing. The Wissington factory is managed under the AB Sugar operating company with its separate Profit and Loss and organisational governance processes.
The UK Government set itself a target of 10% of transport fuel to come from renewable sources by 2020. This was to comply with a legally binding EU target to source 15% of energy from renewables. British Sugar has been working to achieve the mandated E10 fuel requirements and the Wissington factory is currently producing biofuels to help meet market demand and realise this opportunity.

The legislated E10 fuel requirements have resulted in an increased demand for biofuel in the UK market and accordingly, British Sugar investigates all possible opportunities to supply that demand.

Time horizon
Medium-term

Likelihood
Virtually certain

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The impact has not been quantified financially.

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation
Market trends for biofuels are monitored by analysts within AB Sugar who look for potential opportunities, for example, where operations currently exist and where operations could exist and where required production capacity will be increased. Strategic and commercial decisions are taken at the highest level so that AB Sugar is in a position to deliver commercial and market benefits.

Producing biofuels at Wissington is one example of British Sugar realising an opportunity and meeting market demands.
There are no additional costs incurred to deliver the current biofuels to the market from the Wissington factory; however, there would be additional costs to produce bioethanol at another facility. This would be costed as part of AB Sugar's capital projects approval process.

Comment

Identifier
Opp2

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Products and services

Primary climate-related opportunity driver
Development and/or expansion of low emission goods and services

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
Carbon enablement has been integral to our businesses for many years and a key focus for investment and innovation. Many of our businesses, like Vivergo, are advantageously positioned to supply products and services to help customers and companies reduce their emissions.

Vivergo, part of AB Sugar, is a bioethanol producer and the UK's largest single source supplier of animal feed.

ABF first invested in Vivergo, which produces bioethanol, around 10 years ago, when the use of E10 petrol (fuel with up to 10% bioethanol content) was first emerging in Europe. Today, blending bioethanol with petrol to reduce vehicle emissions is a key aspect of many governments' GHG reduction strategies.

Vivergo shows that entrepreneurial thinking and investment in new technologies can build businesses that contribute to environmental goals.
Given growing concerns about energy security, Vivergo also provides the opportunity for the UK to have a significant domestic energy source.

Time horizon
Medium-term

Likelihood
Virtually certain

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The impact has not been quantified financially.

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation
Vivergo has invested to expand its operations, creating the largest bioethanol plant in the UK – capable of processing around 1 million tonnes of UK feed wheat, grown for animal consumption and not for use in food.
One of Vivergo's main co-products from production of bioethanol is protein for animal feed, so at peak capacity it will be the largest single-source animal feed supplier in the UK.
At full capacity, Vivergo would produce an estimated 420 million litres of bioethanol annually. When blended with petrol to E10 standards this will reduce total UK vehicle emissions by around 500,000 tonnes of CO_2e every year.
ABF takes into account the interplay between commercial decisions and government policies and aims, for example with the reopening of the Vivergo bioethanol plant assisting with the country reaching its climate change goals. The UK Department for Transport announced in February 2021 that it had increased the mandated inclusion levels of renewable ethanol from a nominal 5% inclusion, E5, up to a nominal 10% inclusion, E10.

Comment

Identifier
Opp5

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Resource efficiency

Primary climate-related opportunity driver
Use of more efficient production and distribution processes

Primary potential financial impact
Reduced direct costs

Company-specific description
Increased efficiency within our own businesses has long been a focus and identified as a major opportunity. Not only does this make commercial sense but will help to drive down emissions across our operations. We
continuously seek efficiency opportunities across our operations and will engage with suppliers and other partners to consider implementing activities at scale.

For example, since 1980 British Sugar has halved the energy required to produce a tonne of sugar and continues to invest in energy efficiency programmes. Our businesses today remain focused on finding ways to produce more from less energy, which can help reduce GHG emissions and reduce costs.

Another example from our sugar business is the optimization of renewable energy derived from natural biomass products in southern Africa.

Time horizon
Medium-term

Likelihood
Very likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The impact has not been quantified financially.

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation
British Sugar has around 12 significant projects in place, across four sites, which are set to reduce the company's GHG emissions by more than 40,000 tonnes a year. Around 40% of these reductions will come from process optimisation, around 30% from energy efficiency measures and the remaining 30% from switching from coal to gas.

Comment

Identifier
Opp6

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Products and services

Primary climate-related opportunity driver
Development of new products or services through R&D and innovation

Primary potential financial impact
Increased revenues through access to new and emerging markets

Company-specific description
The sustainable impact of enzymes (carbon enablement) has been identified as a major opportunity and it is a key focus for investment and innovation. Some of our products and services include enzymes which support carbon reduction.
AB Enzymes is an industrial biotech company that specialises in the development of enzymes used by companies in multiple industries for various applications. Enzymes have the potential to avert significant quantities of carbon and can also be used to
reduce energy, water and waste, while improving quality. For example AB Enzymes supplies enzymes which:
• enable clothes to be washed at lower temperatures reducing energy consumption;
• reduce temperatures required to biopolish cotton textiles; and
• reduce the energy, raw materials and chemical additives required whilst achieving better end-product quality in the paper industry.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The impact has not been quantified financially.

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation
AB Enzymes has developed a number of innovative products that enable emissions reductions with no impact on product performance. One example is a product helping cotton manufacturers. In the final stages of cotton production, the fabric goes through a process known as 'bio-polishing' which cleans the surface and removes fluff. For many years, that process involved immersing the fabric in water heated to 50°C.
AB Enzymes provides manufacturers with an alternative that is more energy efficient. The process involves the use of cold cellulase enzymes to achieve the same bio-polishing quality in water heated to only 30°C. This reduces energy consumption by around 350 kWh for every tonne of fabric processed.
This potential saving is particularly significant given that the main countries in which these textiles are processed are China, India and Pakistan – all still heavily reliant on coal to run power stations. Consequently, the gains from this enzyme-based process could translate into a large reduction in GHG emissions.

AB Enzymes is also helping detergent manufacturers to produce their products in a more energy efficient way.
The addition of specialist enzymes produced by the business enables clothes to be washed at 30°C just as effectively as at 40°C. This reduces electricity consumption by around 260 kWh per 1,000 washes.

Comment

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

Climate transition plan
Yes, we have a climate transition plan which aligns with a 1.5°C world

Publicly available climate transition plan
No

Mechanism by which feedback is collected from shareholders on your climate transition plan
We have a different feedback mechanism in place

Description of feedback mechanism
When we refer to having a transition plan, this is currently for Primark and AB Sugar.

The Director of Legal Services and Company Secretary and the Group Corporate Responsibility Director hold one-to-one stakeholder meetings, including those with investors. These meetings provide an opportunity to discuss and collect feedback on climate-related issues.

Also, we hold ESG investor events that are intended to develop into a deeper ongoing engagement with stakeholders so that feedback from those stakeholders can continue to be factored into our decision-making.

Primark's emissions reduction plan was referenced during our last ABF's ESG Investor briefings, held in May 2022, during which there were opportunities for feedback during the Q&A session.
In 2021 Primark, through its Primark Cares Strategy, committed to halve carbon emissions across its value chain by 2030, this is aligned with a 1.5°C world. In Primark's financial year 2018/2019, 6.4 million tonnes of CO2e were produced and Primark is committed to reduce to this 3.2million tonnes of CO2e by 2030. This aligns with the renewed commitment under the United Nations Framework Convention on Climate Change (UNFCCC) Fashion Industry Charter for Climate Action.

AB Sugar and Primark will make its Transition Plan publicly available as part of ABF's wider annual disclosure for FY22/23.

Frequency of feedback collection
More frequently than annually

Attach any relevant documents which detail your climate transition plan (optional)

Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world and any plans to develop one in the future
<Not Applicable>

Explain why climate-related risks and opportunities have not influenced your strategy
<Not Applicable>

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	Yes, qualitative and quantitative	<Not Applicable>	<Not Applicable>

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios: IEA NZE 2050	Business division	<Not Applicable>	We decided to undertake a detailed assessment of climate risks and opportunities focusing on AB Sugar, Primark and Twinings which account for 81% of the adjusted operating profit for the Group and some 70% of the Group's total Scope 1 and Scope 2 emissions. We used our third-party experts, South Pole, to advise us on, and then carry out, scenario analysis. While many scenario models and techniques are advanced, we recognise that knowledge in this area is growing and we should expect models and pathways to evolve with time. Models also have limitations, and there are certain areas which are challenging to model, such as the frequency and severity of extreme weather events. However, our businesses are still able to consider how they would mitigate or adapt to such events. Additionally, in certain situations different models can project contrasting results. In these situations, we have considered how different outcomes would impact our businesses. The International Energy Agency's (IEA) scenarios have been used to assess transition impacts with each scenario built on a set of assumptions on how the energy system might evolve. Each scenario has a different temperature outcome. We used scenarios covering 1.5˚C, <2˚C and <3˚C.
Transition scenarios: IEA SDS	Business division	<Not Applicable>	We decided to undertake a detailed assessment of climate risks and opportunities focusing on AB Sugar, Primark and Twinings which account for 81% of the adjusted operating profit for the Group and some 70% of the Group's total Scope 1 and Scope 2 emissions. We used our third-party experts, South Pole, to advise us on, and then carry out, scenario analysis. While many scenario models and techniques are advanced, we recognise that knowledge in this area is growing and we should expect models and pathways to evolve with time. Models also have limitations, and there are certain areas which are challenging to model, such as the frequency and severity of extreme weather events. However, our businesses are still able to consider how they would mitigate or adapt to such events. Additionally, in certain situations different models can project contrasting results. In these situations, we have considered how different outcomes would impact our businesses. The International Energy Agency's (IEA) scenarios have been used to assess transition impacts with each scenario built on a set of assumptions on how the energy system might evolve. Each scenario has a different temperature outcome. We used scenarios covering 1.5˚C, <2˚C and <3˚C.
Transition scenarios: IEA STEPS (previously IEA NPS)	Business division	<Not Applicable>	We decided to undertake a detailed assessment of climate risks and opportunities focusing on AB Sugar, Primark and Twinings which account for 81% of the adjusted operating profit for the Group and some 70% of the Group's total Scope 1 and Scope 2 emissions. We used our third-party experts, South Pole, to advise us on, and then carry out, scenario analysis. While many scenario models and techniques are advanced, we recognise that knowledge in this area is growing and we should expect models and pathways to evolve with time. Models also have limitations, and there are certain areas which are challenging to model, such as the frequency and severity of extreme weather events. However, our businesses are still able to consider how they would mitigate or adapt to such events. Additionally, in certain situations different models can project contrasting results. In these situations, we have considered how different outcomes would impact our businesses. The International Energy Agency's (IEA) scenarios have been used to assess transition impacts with each scenario built on a set of assumptions on how the energy system might evolve. Each scenario has a different temperature outcome. We used scenarios covering 1.5˚C, <2˚C and <3˚C.
Physical climate scenarios: RCP 2.6	Business division	<Not Applicable>	We decided to undertake a detailed assessment of climate risks and opportunities focusing on AB Sugar, Primark and Twinings which account for 81% of the adjusted operating profit for the Group and some 70% of the Group's total Scope 1 and Scope 2 emissions. We used our third-party experts, South Pole, to advise us on, and then carry out, scenario analysis. While many scenario models and techniques are advanced, we recognise that knowledge in this area is growing and we should expect models and pathways to evolve with time. Models also have limitations, and there are certain areas which are challenging to model, such as the frequency and severity of extreme weather events. However, our businesses are still able to consider how they would mitigate or adapt to such events. Additionally, in certain situations different models can project contrasting results. In these situations, we have considered how different outcomes would impact our businesses. We used the Intergovernmental Panel on Climate Change's (IPCC) Representative Concentration Pathways (RCP) to assess physical climate risk. RCPs are commonly used by climate scientists to assess physical climate risk, with each pathway representing a different greenhouse gas concentration trajectory which can then be translated into global warming impacts. We used climate data from the World Climate Research Programmes Coupled Model Intercomparison Project – Phase 5 (CMIP 5 adjusted for spatial resolution and bias corrected) to do this translation. RCPs feed into climate, crop and flood models. In all physical risk analysis we have used the RCP8.5 scenario, which is widely considered to represent one of the worst-case climate scenarios. In addition to RCP8.5, the evaluation of physical risks has been supplemented where useful, with analysis using either RCP2.6 or RCP4.5 scenarios, depending on which climate scenario is most applicable to the risk. Our third-party experts advised us which crop models to use to assess climate change impacts on crop yields. In some cases (e.g. for cotton and tea), only one crop model was available that was deemed to be sufficiently robust to use to evaluate future climate impacts on yields. Although in these situations only one crop model was used, the analysis was based on the input of five climate models providing sensitivity to the analysis. For other crops (e.g. sugar cane, wheat and corn), multiple crop models were used.
Physical climate scenarios: RCP 4.5	Business division	<Not Applicable>	We decided to undertake a detailed assessment of climate risks and opportunities focusing on AB Sugar, Primark and Twinings which account for 81% of the adjusted operating profit for the Group and some 70% of the Group's total Scope 1 and Scope 2 emissions. We used our third-party experts, South Pole, to advise us on, and then carry out, scenario analysis. While many scenario models and techniques are advanced, we recognise that knowledge in this area is growing and we should expect models and pathways to evolve with time. Models also have limitations, and there are certain areas which are challenging to model, such as the frequency and severity of extreme weather events. However, our businesses are still able to consider how they would mitigate or adapt to such events. Additionally, in certain situations different models can project contrasting results. In these situations, we have considered how different outcomes would impact our businesses. We used the Intergovernmental Panel on Climate Change's (IPCC) Representative Concentration Pathways (RCP) to assess physical climate risk. RCPs are commonly used by climate scientists to assess physical climate risk, with each pathway representing a different greenhouse gas concentration trajectory which can then be translated into global warming impacts. We used climate data from the World Climate Research Programmes Coupled Model Intercomparison Project – Phase 5 (CMIP 5 adjusted for spatial resolution and bias corrected) to do this translation. RCPs feed into climate, crop and flood models. In all physical risk analysis we have used the RCP8.5 scenario, which is widely considered to represent one of the worst-case climate scenarios. In addition to RCP8.5, the evaluation of physical risks has been supplemented where useful, with analysis using either RCP2.6 or RCP4.5 scenarios, depending on which climate scenario is most applicable to the risk. Our third-party experts advised us which crop models to use to assess climate change impacts on crop yields. In some cases (e.g. for cotton and tea), only one crop model was available that was deemed to be sufficiently robust to use to evaluate future climate impacts on yields. Although in these situations only one crop model was used, the analysis was based on the input of five climate models providing sensitivity to the analysis. For other crops (e.g. sugar cane, wheat and corn), multiple crop models were used.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Physical climate scenarios: RCP 8.5	Business division	<Not Applicable>	We decided to undertake a detailed assessment of climate risks and opportunities focusing on AB Sugar, Primark and Twinings which account for 81% of the adjusted operating profit for the Group and some 70% of the Group's total Scope 1 and Scope 2 emissions. We used our third-party experts, South Pole, to advise us on, and then carry out, scenario analysis. While many scenario models and techniques are advanced, we recognise that knowledge in this area is growing and we should expect models and pathways to evolve with time. Models also have limitations, and there are certain areas which are challenging to model, such as the frequency and severity of extreme weather events. However, our businesses are still able to consider how they would mitigate or adapt to such events. Additionally, in certain situations different models can project contrasting results. In these situations, we have considered how different outcomes would impact our businesses. We used the Intergovernmental Panel on Climate Change's (IPCC) Representative Concentration Pathways (RCP) to assess physical climate risk. RCPs are commonly used by climate scientists to assess physical climate risk, with each pathway representing a different greenhouse gas concentration trajectory which can then be translated into global warming impacts. We used climate data from the World Climate Research Programmes Coupled Model Intercomparison Project – Phase 5 (CMIP 5 adjusted for spatial resolution and bias corrected) to do this translation. RCPs feed into climate, crop and flood models. In all physical risk analysis we have used the RCP8.5 scenario, which is widely considered to represent one of the worst-case climate scenarios with temperatures reaching some 4˚C above pre-industrial levels by 2100. This scenario projects an extreme view of physical climate change impacts. Our third-party experts advised us which crop models to use to assess climate change impacts on crop yields. In some cases (e.g. for cotton and tea), only one crop model was available that was deemed to be sufficiently robust to use to evaluate future climate impacts on yields. Although in these situations only one crop model was used, the analysis was based on the input of five climate models providing sensitivity to the analysis. For other crops (e.g. sugar cane, wheat and corn), multiple crop models were used.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

We conducted a high-level review of potential risks across the Group, and as a result, our TCFD efforts to date have been focused on AB Sugar, Primark and Twinings which account for 81% of the adjusted operating profit for the Group and some 70% of the Group's total Scope 1 and Scope 2 emissions.

We identified a range of physical risks: the impact of climate change on crop yields, flooding and workers. We also considered the transition risks, which includes such risks as impact on reputation and the risk of existing and emerging regulations, and concluded that the key transition risk for the Group is potential carbon pricing impacts in future years.

Scenario analysis was then used to assess the impact of the climate risks identified.

Results of the climate-related scenario analysis with respect to the focal questions

We have assessed the impact of climate risks and opportunities taking into consideration different scenarios including <2˚C and 4˚C scenarios to assess the resilience of the Group to climate change.
On the basis of our analysis, we believe that in the period to 2030, the risks to the Group are not material. There is less clarity in the data further out to 2050. While there may be risks that will need to be managed by mid-century, these do not appear to be sufficiently substantive to require a material change to our business model or divisional strategies within the time horizons considered. That analysis has, however, helped our businesses confirm the actions they need to take to mitigate and adapt to its risks, and to take advantage of its opportunities.
In addition, by furthering their understanding of climate change and helping them understand the relative importance of these actions compared with other business priorities, climate change risks and opportunities can be better considered within their decision- making and planning processes.
Mitigating actions are managed by the relevant business. For instance, AB Sugar considers capital projects which reduce carbon emissions within its capital decision-making process. In 2023, to describe their plans to transition to a low carbon economy, AB Sugar's transition plan will be formalised and Primark will make theirs publicly available.
We understand that strategic decision making around climate change can be complex. Decisions in this area must be taken carefully and should be flexible enough for adaptation if events or knowledge change. Care must also be taken to ensure that problems are not simply transferred elsewhere or lead to unintended social consequences.
The results of the scenario analysis, for those risks which we believe are either the most significant or of most interest to shareholders, are disclosed on pages 88 to 92 of our 2022 Annual Report and in section C2.3a of this questionnaire.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Climate change is creating commercial opportunities, supporting the growth of some businesses which are developing products or co-products such as bioethanol, and sustainability services to help customers respond to climate change such Intellync's supply chain carbon emissions service. Carbon enablement is where our products or services assist others in reducing their carbon emissions. It is integral to several of our businesses' offer to customers, and a key focus for investment and innovation. Several ABF businesses – AB Enzymes, AB Agri and AB Sugar – have enablement at the core of their purpose. They each play a role in enabling others to reduce Scope 3 emissions. For example, AB Enzymes is an industrial biotech company that specialises in the development of enzymes used by companies in multiple industries. The business has extensive research and development expertise in molecular biology and biochemistry and holds more than 625 active patents or patent applications. Enzymes are biological catalysts, found everywhere in nature, that essentially accelerate biochemical reactions. They also biodegrade rapidly, and they are a very effective alternative to petrochemical-based products. AB Enzymes has developed a number of innovative products that enable emissions reductions with no impact on product performance. One example is its product VERON® MAXIMA, which can help customers reduce food waste by keeping bread fresh for 21 days or even longer. Another example is related to British Sugar, part of AB Sugar. All of British Sugar's factories are able to generate their own heat and power through combined heat and power (CHP) plants: decarbonising electricity supply in communities through the export of power from the CHP plants. In 2016, British Sugar completed the construction of a brand new £15m Anaerobic Digestion (AD) plant as part of a new renewable energy business project at Bury St Edmunds. The plant produces energy in the form of electricity. While a small proportion is used to power the AD plant, making it self-sufficient, the majority (up to 5MW) is exported to the National Grid as clean renewable electricity. The business generates 20% of its revenue from co-products, including bioethanol sales with many having climate-related market opportunities.
Supply chain and/or value chain	Yes	As each business operates across different geographies, sources different raw materials such as cotton, wheat and sugar, and also has different product lines, they are best placed to decide when they will implement an approach towards climate change. Where climate risks and opportunities are prevalent in our businesses, particularly in agricultural activities in direct operations and supply chain, they form part of regular decision-making processes, are integrated into strategy development and are part of the group's risk management process. Throughout ABF, our supply and value chain depend on our ability to purchase and then produce goods for sale. As part of their strategy planning, ABF's businesses consider various responses including sourcing raw materials from new regions and increasing focus and investment with suppliers to build their resilience to physical climate-related risks over the short to medium term. Our businesses are continuously adapting climate-related physical risks in their sourcing strategies and engage with key suppliers to address climate issues. For example, cotton is critical to Primark, representing a significant share of the total fibre mix in garments sold by Primark. Cotton produced in the Primark's Sustainable Cotton Programme (PSCP) is grown through a unique process using CottonConnect's REEL (responsible environment enhanced livelihoods) Code. Farmers receive multi-year training to address an over dependence on chemical fertilizers and chemical pesticides in order to preserve biodiversity and help mitigate against climate change.
Investment in R&D	Yes	As part of their business planning cycle, our businesses consider material impacts from climate change. At the local level, each business considers which R&D programmes they should focus investment in to ensure they are reducing the impact of climate change on their operating model. Technical R&D centres exist at AB Mauri in Australia, the Netherlands, the USA and in the UK, and ABF Ingredients' business AB Enzymes in Finland and Germany. These centres support the technical resources of the divisions and work in collaboration with customers from around the world to bring innovations to local markets. For example, this investment reinforces AB Mauri's position as a technology-led business and market leader in bakery and yeast ingredients. As a result of its focus on innovation AB Mauri's fermentation technology also enjoys a strong position in the bio-ethanol market, a key technology for decarbonising transport. AB Enzymes has extensive research and development expertise in molecular biology and biochemistry and holds more than 625 active patents or patent applications. AB Enzymes constantly seeks to improve its products, to find new applications where use of enzymes adds value and to discover novel molecules for the benefit of its customers' products; these include cutting food waste by extending the shelf life of bread, lowering the energy consumption required for the production of paper and for washing detergents, lowering the temperature required resulting in lower energy use by customers. Our scientists and technicians in AB Enzymes' R&D function develop new and improved enzymes and proprietary technologies in order to maintain our competitive edge in innovative and high-quality products. The R&D function includes specialists in molecular biology, biochemistry, microbiology, food chemistry and biotechnology.
Operations	Yes	Besides a focus on reducing operational energy demands, our businesses continuously explore how they can integrate renewable sources of power into their energy mix to minimise reliance on fossil fuels and reduce their carbon emissions. Of the total energy consumed across the Group this year, 54% came from renewable sources mainly generated on our sites. The majority of this, at 87%, comes from bagasse, with 7% from wood, 3% from imported electricity, 2% from biogas generated on-site and 1% from imported steam This is the residual fibre that remains after the extraction of juice from the crushed stalks of sugar cane. Illovo Sugar Africa use bagasse as a fuel source for the boilers to generate steam and electricity to power their factories. The electricity is used primarily within the sugar manufacturing process to power milling, refining, and packaging processes and where possible, to provide electricity for the irrigation of agricultural estates, other business requirements, and for use within residential villages. Our Sugar businesses have continually improved energy use, efficiency and energy source over the last decade and have made significant reductions. The businesses seek to use energy efficiency, to do more with every unit of energy consumed. For example, as well as producing both core sugar products and a range of speciality sugars, the advanced sugar manufacturing sites produce more than 24 coproducts, including molasses, sugar beet pulp and bioethanol. Furthermore, they exported 862 GWh of surplus energy that had been generated on their sites to their local grids, primarily in the UK and Eswatini. Several of our businesses export significant amounts of renewable electricity to national grids. During this financial year 929 GWh of energy was exported with AB Sugar contributing 93% towards the Group total. Our agricultural and ingredients businesses exported 67 GWh which is a 22% increase compared with last year. Overall, we are approaching 1 terawatt hours per year of electricity for homes and businesses from renewable biomass sources that are a natural by-product of sugar, food and ingredients production.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Capital expenditures Capital allocation Assets Liabilities	Revenues: Our businesses consider all material risks and opportunities in their financial planning and risk management processes. From physical to reputation, the associated risks and opportunities could have an impact on revenues which is tracked at the business level. If climate change impacts our ability to produce or source the raw materials we use, there will be a direct influence on our ability to generate revenue. However, as our group consists of five segments, a substantive risk to ABF as a whole is very rare because if something impacts one business or segment, the other four will continue and it is unlikely to lead to a move in the share price of the group. Direct Costs: When existing approaches to production and supply costs increase due to the impact of climate change, this becomes a core issue to the short to medium term sustainability of our business model. There can also be reductions in operating costs as we invest in renewable energy projects that take our sites off-grid and even supply the grid with surplus energy generated on our sites. This leads directly into cost savings for the sites as they reduce their energy requirements from the national grid and being subjected to energy price fluctuations and availability. Capital expenditures / capital allocation: Our businesses are investing substantially in environmental risk management of which significant amounts were spent on energy improvement, reduction and innovation and to mitigate acute physical risks in certain regions where there have been recent experiences of floods, cyclones and heatwaves. Capital funding is made available to all our businesses where returns meet or exceed clearly defined criteria. Investment into the management and adaptation towards climate change is managed at the local level. For example, in recent years capital has been allocated for the conversion to sub-surface drip irrigation in Illovo's operations in Zambia, Eswatini and Malawi and for the upgrade to pulp press infrastructure in AB Sugar China. Our factories, estates, stores and offices are part of our asset disclosure. The impact of climate change on these ranges from the need to build or to adapt sites so they can utilise different energy sources or minimise processes which generate emissions such as wastewater management. Our businesses are increasingly seeing the benefit of anaerobic digestion and investing in plants on site. These include AB Mauri, AB Agri, AB Sugar China and British Sugar. Liabilities: Each business is responsible for the management of its liabilities. They report to the Audit Committee material liabilities that may impact the financial performance of the business and therefore factor all material risks into their financial planning cycles.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
Row 1	No, but we plan to in the next two years	<Not Applicable>

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Is this a science-based target?

No, but we anticipate setting one in the next two years

Target ambition

<Not Applicable>

Year target was set

2018

Target coverage

Business division

Scope(s)

Scope 1
Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

<Not Applicable>

Base year

2018

Base year Scope 1 emissions covered by target (metric tons CO2e)
2313564

Base year Scope 2 emissions covered by target (metric tons CO2e)
234164

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)
<Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
2547728

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
<Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
100

Target year
2030

Targeted reduction from base year (%)
30

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]
1783409.6

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
1890882

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
123602

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
2014484

Does this target cover any land-related emissions?
No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]
69.7672592992658

Target status in reporting year
Underway

Please explain target coverage and identify any exclusions
In April 2018, AB Sugar launched its 2030 commitments, as part of its Global Mind, Local Champions sustainability framework. Global Mind, Local Champions sets out AB Sugar's global principles and priorities for how to address the emerging challenges faced across our sugar value chain. The delivery of the framework is implemented on the ground by each of the AB Sugar manufacturing businesses; AB Sugar China, Azucarera, British Sugar and Illovo Sugar Africa. AB Sugar has committed to reducing its Scope 1 and 2 emissions by 30% (baseline 2018).

Plan for achieving target, and progress made to the end of the reporting year
AB Sugar has set out a clear road map for reducing emissions. It is running multiple projects to support its commitment to reduce its Scope 1 and 2 emissions by 30% by 2030. The business has already completed projects that have reduced its Scope 1 and 2 emissions by 21% against a 2018 baseline and is focused on achieving a further 9% reduction by 2030.
AB Sugar's investment plans are geared towards this goal. It can achieve a GHG emissions reduction of about 8% against the baseline with zero or low capital expenditure, meeting its 2030 target will require cumulative capital expenditure of around £100m.
This investment is guided by sound governance, investment criteria and against the backdrop of AB Sugar's typical £80-£100m annual capital expenditure. These projects equate to incremental rather than radical change.
These are all affordable, commercially viable projects, expected to achieve returns above AB Sugar's own rate of return threshold. The division is in no doubt that improving energy efficiency and reducing GHG emissions will add value.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

Target reference number
Abs 2

Is this a science-based target?
Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

Target ambition
1.5°C aligned

Year target was set
2021

Target coverage
Business division

Scope(s)
Scope 1
Scope 2
Scope 3

Scope 2 accounting method
Location-based

Scope 3 category(ies)
Category 1: Purchased goods and services
Category 2: Capital goods
Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)
Category 4: Upstream transportation and distribution
Category 5: Waste generated in operations
Category 6: Business travel

Category 11: Use of sold products
Category 12: End-of-life treatment of sold products

Base year
2019

Base year Scope 1 emissions covered by target (metric tons CO2e)
20602

Base year Scope 2 emissions covered by target (metric tons CO2e)
139841

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)
4771324

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)
123393

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)
34904

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)
506663

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)
4297

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)
10573

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)
756260

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)
38591

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)
6246005

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
6406448

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)
100

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)
100

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)
100

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)
100

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)
100

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)
100

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)
100

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)
100

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
100

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
100

Target year
2030

Targeted reduction from base year (%)
50

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]
3203224

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
20769

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
103003

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)
5410196

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)
85580

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)
24808

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
928287

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)
3288

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)
2661

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
596171

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
37542

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)
7088533

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
7212305

Does this target cover any land-related emissions?
No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]
-25.1576848824809

Target status in reporting year
Underway

Please explain target coverage and identify any exclusions
Primark's commitment covers emissions across GHG Protocol Scopes 1, 2 and 3 so includes our supply chain, which is where 88% of our carbon emissions occur. Establishing our baseline was fundamental to tracking our progress in this commitment – this is set as our financial year 2018/19. We were careful to ensure our process aligned with relevant standards and we also engaged the Carbon Trust to provide an independent review of our methodology.

Plan for achieving target, and progress made to the end of the reporting year
We can only reach our carbon emissions reduction target by working collaboratively with our suppliers.
It can be difficult for individual factories to engage with energy suppliers and negotiate a power purchase agreement, so we are working with RenEnergy to help our suppliers source and switch to energy from renewable sources. RenEnergy is mapping energy consumption in key strategic supplier factories so that we can identify opportunities where we could pool their purchasing power and access alternative energy options that they wouldn't otherwise have access to individually.
We have also looked carefully at our transport and logistics operations to optimise energy use, including reducing the impact of ocean freight and trialling the use of alternative fuels in trucks. Our business model demands that the majority of our shipping is done via ocean freight, therefore it is crucial that we look for ways to reduce our emissions here. Through our partner Maersk's EcoDelivery solution we will be able to replace traditional fuels with greener fuel alternatives, reducing our emissions in the shipping of our products.
Working with our suppliers to tackle emissions and reduce their carbon footprint is a key priority, however, we continue to also look carefully at the footprint of our own operations.
We're starting by reducing our demand for energy. In June 2021, we continued to scale the roll-out of an energy bureau to allow us to manage our energy remotely. It now covers more than 140 store locations in the UK. To date, this initiative has delivered in-store electricity savings of approximately 11%.
An LED initiative to fit all our stores with energy-efficient light fittings is also underway and we have completed this in 37 stores this year. The results are already significant with overall energy consumption reduced by 35-37% across these individual stores. Based on this success we have accelerated our LED programme roll out for our 2022/23 financial year to include 120+ stores.
This year, there has been an overall increase of 2.6% in carbon emissions across our value chain against our baseline financial year 2018/19. This is largely the result of the increased volume of material used to produce the products sold over that period. In the short term, this trend is likely to continue but there will be a decline once our energy programmes that are being rolled out across our supply chain begin to deliver at scale

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

Target reference number
Abs 3

Is this a science-based target?
Yes, and this target has been approved by the Science Based Targets initiative

Target ambition
1.5°C aligned

Year target was set
2021

Target coverage
Business division

Scope(s)

Scope 1
Scope 2

Scope 2 accounting method
Location-based

Scope 3 category(ies)
<Not Applicable>

Base year
2015

Base year Scope 1 emissions covered by target (metric tons CO2e)
125311

Base year Scope 2 emissions covered by target (metric tons CO2e)
95339

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)
<Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
220651

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
<Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
100

Target year
2030

Targeted reduction from base year (%)
50

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]
110325.5

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
79438

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
36106

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
115544

Does this target cover any land-related emissions?
No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]
95.2699058694499

Target status in reporting year
Underway

Please explain target coverage and identify any exclusions
Our UK Grocery businesses are targeting a 50 percent reduction across all three Scopes by 2030, against a 2015 baseline. This is aligned with the Courtauld Commitment convened by the sustainability organisation WRAP to reduce emissions.
The Courtauld Commitment 2030, of which our UK Grocery businesses are signatories, is aligned with the SBTi objective to reduce GHG emissions by 50% by 2030 across the entire UK food chain.

Plan for achieving target, and progress made to the end of the reporting year
The progress to date has been achieved by each of the UK Grocery businesses focusing on its own operations and implementing many small initiatives or projects. These practices are part of well-established continuous improvement programmes, and the current trajectory gives us confidence in meeting the target for scope 1. With scope 2, there are several solar projects in progress which coupled with grid mix improvements will ensure this target will be met.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?
No other climate-related targets

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.
Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	6	6240
Implementation commenced*	16	164721
Implemented*	7	55898
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Energy efficiency in buildings	Building Energy Management Systems (BEMS)

Estimated annual CO2e savings (metric tonnes CO2e)
15000

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
4000000

Investment required (unit currency – as specified in C0.4)
504000

Payback period
1-3 years

Estimated lifetime of the initiative
Ongoing

Comment
Primark's Energy Policy confirms Primark's commitment to reducing the impact that we have on the environment. Energy management and the continual improvement in energy performance are key pillars of this commitment. Primark identified the Building Management System (BMS) strategies in its UK & ROI stores were not configured for optimal energy efficiency. In response, Primark established an Energy Bureau responsible for implementing efficient BMS strategies and monitoring energy consumption. Primark commenced this five-year energy-saving programme in May 2021. As part of the rollout, our partners completed a site visit to a large selection of UK stores in order to optimise the operating strategy of our BMS. These stores were then connected to the central Primark Energy Bureau where energy consumption is monitored, managed and reported by our Bureau partners.
The emissions savings delivered as part of this initiative amount to approximately 11% of our electricity consumption with the figure expected to rise when gas consumption is factored in. The initiative is aligned with the Primark Cares commitments and will enable us to reduce the environmental impact of our operations.
The investment figure reported in the prior year was a one-off capital cost and does not consider the projected operational costs over the five-year programme. As per the CDP guidance, the reported annual monetary savings are the annual average savings across the programme duration.

Initiative category & Initiative type

Energy efficiency in production processes	Other, please specify (Insulating steam pipes, steam valves and condensing water pipes; Consolidating maintenance of dye vats; Improving the efficiency of wastewater heat exchange; Recovery and recycling of condensate water)

Estimated annual CO2e savings (metric tonnes CO2e)
19368

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 3 category 1: Purchased goods & services

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
485950

Investment required (unit currency – as specified in C0.4)
261199

Payback period
1-3 years

Estimated lifetime of the initiative
1-2 years

Comment
Textile manufacturing is traditionally energy, water and chemicals-intensive and as a result of high global demand, many mills operate to produce fabric or yarn for multiple customers around the world.

A dyeing mill, located in Anhui Province, China, supplies dyed yarn for a number of different Primark sock suppliers. Like many facilities of this type, it needs water,

chemicals and energy to process raw materials and create yarn. Primark worked with the Apparel Impact Institute (Aii) to run workshops to familiarise the mill management team with the Clean by Design (CbD) initiative, which provides guidance to identify, fund, scale and measure solutions for reducing environmental footprints in textile manufacturing. Following on from these workshops, the mill was assessed by Aii and supported to develop an action plan to implement improved practices across its operations. As a result of wide-ranging changes in its processes, the mill improved its environmental impact.

The investment figure provided covers the join investment made by Primark and the mill to co-fund the investigation activities and business case development performed by Aii.

Initiative category & Initiative type

Energy efficiency in production processes	Machine/equipment replacement

Estimated annual CO2e savings (metric tonnes CO2e)
11226

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
1900000

Investment required (unit currency – as specified in C0.4)
8200000

Payback period
4-10 years

Estimated lifetime of the initiative
Ongoing

Comment
At British Sugar, we ensure our factories are as efficient as possible to reduce our energy consumption and our carbon emissions. All of our factories have undergone many changes to improve performance, including optimising heat transfer technology, improving the efficiency of our pulp presses and many more initiatives focused on utilising energy in the most efficient way possible. Our pulp pressing initiatives have helped by increasing the amount of water removed from our sugar beet pulp ahead of drying. This in turn reduces the downstream energy requirements to produce our dried animal feed product.

The projects implemented in 2022 from our energy efficiency programme are on track to deliver 11,226 tCO2e, with several more projects being planned and executed for future years.

Initiative category & Initiative type

Low-carbon energy consumption	Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)
1363

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
40000

Payback period
4-10 years

Estimated lifetime of the initiative
16-20 years

Comment
In the reporting year, Twinings invested in PV solar panels installed and commissioned for its Poland factory.

Twinings ambition is to significantly reduce its environmental impact through sustainable use of energy resources and decarbonisation of its manufacturing operations. To achieve this, the Twinings operations in Poland have initiated several processes in FY21/22 which reduce electricity and natural gas intake from the grid. We have also implemented other non-financial initiatives to target energy reduction including:
• Embedding an energy saving culture – encouraging various simple behavioural changes to support building and manufacturing efficiencies,
• Commissioning energy efficiency audits conducted by external professionals from the UK to guide our plans for energy reduction opportunities,
• Reviewing our Building Management System and its potential to manage energy intake in Poland; and
• Benchmarking alternative energy source installations and the potential benefits for the environment.

The reported estimated annual CO2e savings include the energy saving culture and PV solar panel installation.

Initiative category & Initiative type

Low-carbon energy generation	Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)
141

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
18400

Investment required (unit currency – as specified in C0.4)
140704

Payback period
4-10 years

Estimated lifetime of the initiative
16-20 years

Comment
Tip Top Bakeries, part of George Weston Foods, operates 16 bakeries across Australia and New Zealand. It aims to source 50% of its electricity from renewables by 2025, by installing solar arrays at its locations and negotiating renewable energy purchasing agreements.
In Australia, the business has already completed a solar installation at its Townsville bakery and another installation at Bendigo is now completed. The 141tCO2e savings relate to the Tip Top Bendigo site.

Initiative category & Initiative type

Energy efficiency in buildings	Other, please specify (Various energy efficiency initiatives)

Estimated annual CO2e savings (metric tonnes CO2e)
6800

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

Investment required (unit currency – as specified in C0.4)

Payback period
Please select

Estimated lifetime of the initiative
11-15 years

Comment
During 2022, our UK Grocery businesses completed many new projects that will contribute to next years' energy and resultant emissions reductions. These include:
• Silverspoon Bardney site & Westmill Trafford - Heat recovery system installed on the boilers reducing gas consumption and thus CO2e emissions.
• Silverspoon Bardney site - Maintenance free steam traps, reducing steam loss during condensate separation. Reduced gas consumption leading to CO2e emission reduction.
• Silverspoon Bishop Stortford Site – Office LED lighting installed.
• AB World Food Leigh site – Removal of gas central boiler for hand wash hot water and replaced by more efficient small electric heaters.

These initiatives have contributed to an annual emission reductions in 2022 of 6,800t CO2e.

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)
2000

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

Investment required (unit currency – as specified in C0.4)
10000000

Payback period
Please select

Estimated lifetime of the initiative
16-20 years

Comment
Cutting carbon emissions is a priority for AB Mauri, and its factory in Casteggio, Italy is making progress towards the ultimate goal of full decarbonisation. In 2022, after almost five years of design, engineering and installation work carried out by the local energy and engineering team as well as around €10m of investment, Casteggio finalised one of its largest energy efficiency investments to date. Yeast, as a living organism, needs to breathe as it grows, requiring flows of air produced by energy-intensive blower machines. Casteggio has replaced a centralised fermentation air system and installed a new, state-of-the-art setup with 19 new blowers directed by intelligent control to deliver the exact pressure and air flow needed at each fermentation stage. This project has resulted in a 50% reduction in energy requirements for yeast aeration.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Financial optimization calculations	Emission reduction activities need to meet the standard business investment criteria.
Dedicated budget for energy efficiency	
Dedicated budget for low-carbon product R&D	
Dedicated budget for other emissions reduction activities	
Employee engagement	

C-AC4.4/C-FB4.4/C-PF4.4

(C-AC4.4/C-FB4.4/C-PF4.4) Do you implement agriculture or forest management practices on your own land with a climate change mitigation and/or adaptation benefit?
Yes

C-AC4.4a/C-FB4.4a/C-PF4.4a

(C-AC4.4a/C-FB4.4a/C-PF4.4a) Specify the agricultural or forest management practice(s) implemented on your own land with climate change mitigation and/or adaptation benefits and provide a corresponding emissions figure, if known.

Management practice reference number
MP4

Management practice
Low tillage and residue management

Description of management practice
Illovo Sugar implemented a reduced tillage project at Kilombero, Tanzania in 2019, and more recently, within the reporting year commenced a similar project at Nchalo, Malawi. Reduced tillage practices are frequently recommended as a way to reduce soil erosion, increase soil productivity and reduce carbon dioxide emissions.

Previously at Kilombero, the method adopted used six tillage practices while the current method uses four tillage practices. A future anticipated method will use three tillage practices with the addition of land-forming. In the reporting year, the reduced tillage for land-preparation required 26% less diesel than the previous land-preparation method.

This methodology also brings benefits to general soil structure and microbial health which in turn can reduce the reliance on large amounts of artificial fertilizers. Although the use of fertilizers will remain necessary, it can be reduced and what is used, is assimilated into the plants more efficiently.

Benefits are expected each year since 2019 implementation.

Primary climate change-related benefit
Emission reductions (mitigation)

Estimated CO2e savings (metric tons CO2e)

Please explain

Management practice reference number
MP6

Management practice
Biodiversity considerations

Description of management practice
Maintenance of pockets of natural vegetation within Illovo's estates act as refuges and ecological green corridors for indigenous fauna and flora resulting in increased biodiversity and minimisation of land use change. As an example, a 400-hectare reserve known as Nyala Park has been set aside within the Illovo Nchalo estate boundary and is maintained with species of the original flora and fauna of the Shire Valley. Illovo Ubombo Sugar manages the private Mhlosinga Nature Reserve, including the Van Eck Dam. Sitting on 1,108 hectares of land, the reserve supports game, birds, reptiles and fish.

We continue to manage and develop the areas with positive outcomes;
• The above-mentioned areas boast a rich diversity of fauna consisting of healthy populations of mammals, reptiles and birds.
• Certain areas continue to mix cattle with wildlife
• The flora encompasses grasslands, riverine bush, savannah and thornveld
• Recreational facilities are offered at some of the reserves so that staff and communities can enjoy the areas in a responsible way.

Benefits are expected each year as the Nyala Park matures.

Primary climate change-related benefit
Increase carbon sink (mitigation)

Estimated CO2e savings (metric tons CO2e)

Please explain

Management practice reference number
MP7

Management practice
Permanent soil cover (including cover crops)

Description of management practice
Cover crops used in arable rotation have demonstrated they can improve the physical structure of the soil as well as improve soil biology and chemistry (nutrients). As an example of cover cropping, Illovo Nakambala in Zambia plant sun hemp ahead of cane planting in the Autumn. This promotes organic matter, improves soil structure, enables a reduction in fertiliser usage and promotes the long-term organic matter in the soil. The impact is a higher yielding cane crop and healthier soil.

Benefits are expected each year as the cover crops are rotated.

Primary climate change-related benefit
Reduced demand for fertilizers (adaptation)

Estimated CO2e savings (metric tons CO2e)

Please explain

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?
Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation
Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon
No taxonomy used to classify product(s) or service(s) as low carbon

Type of product(s) or service(s)

Other	Other, please specify (Enzymes)

Description of product(s) or service(s)
AB Enzymes is helping detergent manufacturers to design their products (detergents) with sustainable benefits.
The addition of specialist enzymes produced by the business enables clothes to be washed at 30°C just as effectively as at 40°C. This reduces electricity consumption by around 260 kWh per 1,000 washes.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)
Yes

Methodology used to calculate avoided emissions
Other, please specify (Third party methodology)

Life cycle stage(s) covered for the low-carbon product(s) or services(s)
Use stage

Functional unit used
per 1,000 washes

Reference product/service or baseline scenario used
Enzymes in detergents make it possible to wash at even lower temperatures than is usual today. This is a hypothetical avoidance by following the one-click-down approach (wash one temperature level lower) and thereby decreasing the average washing temperature.

Life cycle stage(s) covered for the reference product/service or baseline scenario
Use stage

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
0.1

Explain your calculation of avoided emissions, including any assumptions
Our calculations focus on the potential emission savings from reduced energy consumption, an average detergent used and washing machine type with 164 washing cycles per household per year assumed in the DACH region. Use of AB Enzymes' BIOTOUCH® results in an average reduction of 13 Kelvin in washing temperatures. This equates to a reduction of 258 kWh electricity required for the use phase of washing laundry, leading to 119kg of avoided emissions per 1,000 washing cycles.

It is difficult to translate this energy efficiency gain into carbon averted at a global level because of the wide variations in the fuel mix used for power generation in different countries.
For example, in Germany, Austria and Switzerland a 260 kWh efficiency gain equates to around 119kg (examples used above) of CO2e averted. In India, where coal predominates, that same efficiency gain equates to around 230kg of CO2e averted.

Please note that the percentages reported for "%Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year" refer to AB Enzyme only and are not related to the ABF Group.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
0.05

Level of aggregation
Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon
No taxonomy used to classify product(s) or service(s) as low carbon

Type of product(s) or service(s)

Other	Other, please specify (Enzymes)

Description of product(s) or service(s)
At the final stages of cotton production, the fabric goes through a process known as 'bio-polishing' which cleans the surface and removes fluff. For many years, that process involved immersing the fabric in water heated to 50°C.
AB Enzymes provides manufacturers with an alternative that is more energy efficient. The process involves the use of cold cellulase enzymes to achieve the same bio-polishing quality in water heated to only 30°C. This reduces energy consumption by around 350 kWh for every tonne of fabric processed.
This potential saving is particularly significant given that the main countries in which these textiles are processed are China, India and Pakistan – all still heavily reliant on coal to run power stations. Consequently, the gains from this enzyme-based process could translate into a large reduction in GHG emissions.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)
Yes

Methodology used to calculate avoided emissions
Other, please specify (Internal methodology developed with a Climate Partner)

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Cradle-to-grave

Functional unit used
Per 1,000 kg bio-polished cotton

Reference product/service or baseline scenario used
As mentioned above, final stages of cotton production, the fabric goes through a process known as 'bio-polishing' which cleans the surface and removes fluff. For many years, that process involved immersing the fabric in water heated to 50°C. AB Enzymes provides manufacturers with an alternative that is more energy efficient. The process involves the use of cold cellulase enzymes to achieve the same bio-polishing quality in water heated to only 30°C.

Life cycle stage(s) covered for the reference product/service or baseline scenario
Cradle-to-grave

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
0.4

Explain your calculation of avoided emissions, including any assumptions
Our calculations focus on potential emission savings achieved by using enzymes to lower the process temperature by 20°C, resulting in a reduction of energy by 350 kWh/t (from electricity for hot water preparation).
Calculation done for South-East Asia.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
0.02

Level of aggregation
Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon
No taxonomy used to classify product(s) or service(s) as low carbon

Type of product(s) or service(s)

Biofuels	Bioethanol

Description of product(s) or service(s)
ABF first invested in Vivergo, which produces bioethanol, around 10 years ago, when the use of E10 petrol (fuel with up to 10% bioethanol content) was first emerging in Europe. Today, blending bioethanol with petrol to reduce vehicle emissions is a key aspect of many governments' GHG reduction strategies.
Vivergo has invested to expand its operations, creating the largest bioethanol plant in the UK – capable of processing around 1 million tonnes of UK feed wheat, grown for animal consumption and not for use in food.
One of Vivergo's main co-products from production of bioethanol is protein for animal feed, so at peak capacity it will be the largest single-source animal feed supplier in the UK.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)
Yes

Methodology used to calculate avoided emissions
Other, please specify (Internal methodology)

Life cycle stage(s) covered for the low-carbon product(s) or services(s)
Use stage

Functional unit used
CO2 emissions from cars

Reference product/service or baseline scenario used
At full capacity, Vivergo would produce an estimated 420 million litres of bioethanol annually.

Life cycle stage(s) covered for the reference product/service or baseline scenario
Use stage

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
500000

Explain your calculation of avoided emissions, including any assumptions
When blended with petrol to E10 standards this will reduce total UK vehicle emissions by around 500,000 tonnes of CO2e every year.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
0.3

Level of aggregation
Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon
No taxonomy used to classify product(s) or service(s) as low carbon

Type of product(s) or service(s)

Biofuels	Anaerobic digestor

Description of product(s) or service(s)
AB Agri built its first Anaerobic Digestion (AD) plant. Anaerobic digestion (AD) is the breakdown of organic matter without oxygen to produce flammable gases. These gasses can be burnt in an engine to produce heat and electricity, or cleaned up and used in the same way as natural gas, to heat our homes and cook our food. The plant can take 60,000t of blended food and green waste per annum. It is a gas to grid plant, enabling methane to be injected directly into the gas network for maximum carbon efficiency. The plant processes the majority of organic waste produced by the AB Agri plants in the UK, and organic waste produced by other UK based ABF businesses. All of the gas produced by the AD plant is directed straight to the National Grid and equates to 80% of the usage of the ABN mills, part of the AB Agri business.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)
No

Methodology used to calculate avoided emissions
<Not Applicable>

Life cycle stage(s) covered for the low-carbon product(s) or services(s)
<Not Applicable>

Functional unit used
<Not Applicable>

Reference product/service or baseline scenario used
<Not Applicable>

Life cycle stage(s) covered for the reference product/service or baseline scenario
<Not Applicable>

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
<Not Applicable>

Explain your calculation of avoided emissions, including any assumptions
<Not Applicable>

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
0.01

Level of aggregation
Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon
No taxonomy used to classify product(s) or service(s) as low carbon

Type of product(s) or service(s)

Power	Other, please specify (Renewable energy - bagasse)

Description of product(s) or service(s)
Bagasse, a dry, fibrous co-product from sugar cane, provides a substantial renewable energy source for combined heat and power (CHP), replacing fossil fuel sources such as coal and reducing greenhouse gas emissions.

Electricity is exported by three AB Sugar sites including Ubombo, eSwatini. Ubombo has a license granted by the eSwatini Energy Regulatory Authority (EERA) to supply power to the country's national grid through energy generation at the mill. The site supplies approximately 5% of the electricity capacity of the national grid. The sale of this clean renewable energy has directly enabled the Swaziland Electricity Company (SEC) to reduce its scope 1 emissions and consequently, its customers' scope 2 emissions. Power exported to the Swaziland Electricity Company (SEC), the sole supplier of electricity to the country, has been consistently above the Power Purchase Agreement (PPA) obligations since commissioning.

Revenue generated from low-carbon product(s) reported below refers to the revenue generated by our Illovo sugar businesses in eSwatini.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)
No

Methodology used to calculate avoided emissions
<Not Applicable>

Life cycle stage(s) covered for the low-carbon product(s) or services(s)
<Not Applicable>

Functional unit used
<Not Applicable>

Reference product/service or baseline scenario used
<Not Applicable>

Life cycle stage(s) covered for the reference product/service or baseline scenario
<Not Applicable>

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
<Not Applicable>

Explain your calculation of avoided emissions, including any assumptions
<Not Applicable>

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
0.02

Level of aggregation
Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon
No taxonomy used to classify product(s) or service(s) as low carbon

Type of product(s) or service(s)

Biofuels	Bioethanol

Description of product(s) or service(s)
Bioethanol is a co-product of our sugar beet processing operations and provides an additional income stream for our sugar businesses. As one of the UK's leading agri-processors with an interest in innovative new technology, British Sugar began production of bioethanol in September 2007. At British Sugar's Wissington site, the first plant to manufacture bioethanol in the UK, the sugar biorefinery produces 55,000 tonnes of bioethanol annually from the residual sugar syrup products from sugar beet processing. The Wissington factory is managed under the AB Sugar operating company with its separate Profit and Loss and organisational governance processes.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)
No

Methodology used to calculate avoided emissions
<Not Applicable>

Life cycle stage(s) covered for the low-carbon product(s) or services(s)
<Not Applicable>

Functional unit used
<Not Applicable>

Reference product/service or baseline scenario used
<Not Applicable>

Life cycle stage(s) covered for the reference product/service or baseline scenario
<Not Applicable>

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
<Not Applicable>

Explain your calculation of avoided emissions, including any assumptions
<Not Applicable>

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
0.4

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?
No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?
No

Name of organization(s) acquired, divested from, or merged with
<Not Applicable>

Details of structural change(s), including completion dates
<Not Applicable>

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	No	<Not Applicable>

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start
August 1 2017

Base year end
July 31 2018

Base year emissions (metric tons CO2e)
3227870

Comment

Scope 2 (location-based)

Base year start
August 1 2017

Base year end
July 31 2018

Base year emissions (metric tons CO2e)
925045

Comment

Scope 2 (market-based)

Base year start
August 1 2019

Base year end
July 31 2020

Base year emissions (metric tons CO2e)
782555

Comment

Scope 3 category 1: Purchased goods and services

Base year start
August 1 2018

Base year end
July 31 2019

Base year emissions (metric tons CO2e)
4771324

Comment
Primark completed a baseline scope 3 inventory for the 2019 reporting year, with their calculation methodology independently verified by The Carbon Trust, which included emissions for purchased goods and services.

The following sub-categories are included for Primark's data:
a) Good for resale - fibres and other materials.
b) Goods for resale - cut and sew data which is account for emissions from processing of raw materials into final products.
c) Goods for resale - other non-textile products related to the extraction of raw materials through to product finishing for footwear, footwear accessories and health & beauty.
d) Goods and services not for resale which are necessary for business operations such as IT and business services.
e) Packaging - the emissions account for the procurement of packaging materials for finished textile and non-textile Primark products.
f) Water use - the consumption of water at sites operated by Primark including stores, offices and distribution centres.

UK Government GHG Conversion Factors for Company Reporting (DEFRA) 2018 factors were applied and supplemented by specific emission factors for the type of activity.

Scope 3 category 2: Capital goods

Base year start
August 1 2018

Base year end
July 31 2019

Base year emissions (metric tons CO2e)
123393

Comment
Primark completed significant work on identifying its material scope 3 emissions with their calculation methodology independently verified by The Carbon Trust, which included emissions for capital goods. The 2020/21 figures were assured by EY. A full scope 3 inventory has yet to be conducted for other ABF businesses and therefore data reported here is just for the Retail division (Primark).

Capital goods are those which enable the business to operate and which have an extended product life. The data deals with emissions relating to the construction, refit and refurbishment of Primark's stores including fixtures and fittings.

Emission factors are sourced from the UK Government's GHG Conversion Factors for Company Reporting (DEFRA) 2018.

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start
August 1 2018

Base year end
July 31 2019

Base year emissions (metric tons CO2e)
34904

Comment
Primark completed a baseline scope 3 inventory for the 2019 reporting year, with their calculation methodology independently verified by The Carbon Trust, which included emissions from fuel-and-energy-related activities.

Scope 3 category 4: Upstream transportation and distribution

Base year start
August 1 2018

Base year end
July 31 2019

Base year emissions (metric tons CO2e)
506663

Comment
Primark completed a baseline scope 3 inventory for the 2019 reporting year, with their calculation methodology independently verified by The Carbon Trust. The data supplied by Primark covers emissions from its distribution network from country of origin to distribution centre, and distribution centre to store.

Scope 3 category 5: Waste generated in operations

Base year start
August 1 2018

Base year end
July 31 2019

Base year emissions (metric tons CO2e)
4297

Comment
Primark completed a baseline scope 3 inventory for the 2019 reporting year, with their calculation methodology independently verified by The Carbon Trust, which included emissions from waste.

Scope 3 category 6: Business travel

Base year start
August 1 2018

Base year end
July 31 2019

Base year emissions (metric tons CO2e)
10573

Comment
Primark completed a baseline scope 3 inventory for the 2019 reporting year, with their calculation methodology independently verified by The Carbon Trust which includes emissions from business travel.

Primark maintains a complex global supply chain, managed from head offices in the UK and Ireland. There is office space within the Islip UK distribution centre and in-country teams working from locations in China and Bangladesh. Employees are often required to move between these sites and those of Primark's suppliers.
This category includes the emissions from air and rail travel and other travel related emissions. The UK Government's GHG Conversion Factors for Company Reporting (DEFRA) were applied to calculate the emissions.

Scope 3 category 7: Employee commuting

Base year start
August 1 2018

Base year end
July 31 2019

Base year emissions (metric tons CO2e)
0

Comment
Not relevant.

Scope 3 category 8: Upstream leased assets

Base year start
August 1 2018

Base year end
July 31 2019

Base year emissions (metric tons CO2e)
0

Comment
Not relevant.

Scope 3 category 9: Downstream transportation and distribution

Base year start
August 1 2018

Base year end
July 31 2019

Base year emissions (metric tons CO2e)
0

Comment
For Primark, this category is not applicable as Primark operates stores in which they are directly paying for the transportation of these goods and do not have downstream transportation through wholesalers.

Scope 3 category 10: Processing of sold products

Base year start
August 1 2018

Base year end
July 31 2019

Base year emissions (metric tons CO2e)
0

Comment
Not relevant.

Scope 3 category 11: Use of sold products

Base year start
August 1 2018

Base year end
July 31 2019

Base year emissions (metric tons CO2e)
756260

Comment
Primark completed a baseline scope 3 inventory for the 2019 reporting year, with their calculation methodology independently verified by The Carbon Trust which includes emissions from the use of sold products, from the point of sale to the point of disposal.

Primark calculate the emissions from the products they sell within the following product 'use phases':
a) Wearing
b) Washing
c) Drying
d) Ironing

Scope 3 category 12: End of life treatment of sold products

Base year start
August 1 2018

Base year end
July 31 2019

Base year emissions (metric tons CO2e)
38591

Comment
Primark completed a baseline scope 3 inventory for the 2019 reporting year, with their calculation methodology independently verified by The Carbon Trust which includes emissions from the end-of-life treatment of sold products, such as recycling or waste to energy processes. Primark also include emissions from the disposal of its brown paper bags used by customers.

Emission factors are sourced from the UK Government's GHG Conversion Factors for Company Reporting (DEFRA).

Scope 3 category 13: Downstream leased assets

Base year start
August 1 2018

Base year end
July 31 2019

Base year emissions (metric tons CO2e)
0

Comment
Not relevant.

Scope 3 category 14: Franchises

Base year start
August 1 2018

Base year end
July 31 2019

Base year emissions (metric tons CO2e)
0

Comment
Not relevant.

Scope 3 category 15: Investments

Base year start
August 1 2018

Base year end
July 31 2019

Base year emissions (metric tons CO2e)
0

Comment
Not relevant.

Scope 3: Other (upstream)

Base year start
August 1 2018

Base year end
July 31 2019

Base year emissions (metric tons CO2e)
0

Comment
Not relevant.

Scope 3: Other (downstream)

Base year start
August 1 2018

Base year end
July 31 2019

Base year emissions (metric tons CO2e)
0

Comment
Not relevant.

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

Defra Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance, 2019
IEA CO2 Emissions from Fuel Combustion
IPCC Guidelines for National Greenhouse Gas Inventories, 2006
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
The Greenhouse Gas Protocol Agricultural Guidance: Interpreting the Corporate Accounting and Reporting Standard for the Agricultural Sector
The Greenhouse Gas Protocol: Scope 2 Guidance

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
2408430

Start date
August 1 2021

End date
July 31 2022

Comment
This year we report a 2% reduction of our scope 1 emissions compared with 2021. Of our total scope 1 emissions, 2,336,776 tCO2e were for the combustion of fuel and operation of facilities and 71,654 tCO2e were for the on-site generation and use of renewables.

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)
2449570

Start date
August 1 2020

End date
July 31 2021

Comment
In 2021 we reported a 12% reduction of our scope 1 emissions compared with 2020. This reduction was primarily driven by the movement of our yeast processes away from scope 1 emissions. The 332,513 tCO2e emissions are captured separately in the emissions we report for biogenic carbon as per the GHG Protocol.

Of our total scope 1 emissions, 2,369,574 tCO2e were for the combustion of fuel and operation of facilities and 79,996 tCO2e were for the on-site generation and use of renewables.

Past year 2

Gross global Scope 1 emissions (metric tons CO2e)
2796993

Start date
August 1 2019

End date
July 31 2020

Comment
In 2020 we reported a 12% reduction of our scope 1 emissions compared with 2019. Of our total scope 1 emissions 2,719,336 tCO2e were for the combustion of fuel and operation of facilities and 77,656 tCO2e were for the on-site generation and use of renewables.

Past year 3

Gross global Scope 1 emissions (metric tons CO2e)
3162449

Start date
August 1 2018

End date
July 31 2019

Comment
Of our total 2019 scope 1 emissions, 3,087,676 tCO2e for the combustion of fuel and operation of facilities and 74,773 tCO2e for the generation and use of renewables.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based
We are reporting a Scope 2, location-based figure

Scope 2, market-based
We are reporting a Scope 2, market-based figure

Comment
This is our fourth year reporting our market-based scope 2 emissions and continue to work with our businesses to develop a structured approach which can be evidenced. The first step has been to ascertain what information we can gather from the various energy suppliers across our global operations. This has had different levels of success depending on geography and the ability of suppliers to provide the requested information. We were able to map 26% of our market-based emissions from supplier sources this year and, as we continue to work with our energy suppliers, we aim to increase this figure and therefore the accuracy of our scope 2 market-based disclosure. AIB and GreenE residual mix emission factors were used where supplier factors were not available. Outside of Europe and the USA, national or regional grid averages were applied where supplier factors were not available.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based
698978

Scope 2, market-based (if applicable)
720065

Start date
August 1 2021

End date
July 31 2022

Comment
This year we report a 2% reduction in our scope 2 location-based emissions compared with 2021 emissions of 711,372 tCO2e.

Past year 1

Scope 2, location-based
711372

Scope 2, market-based (if applicable)
777236

Start date
August 1 2020

End date
July 31 2021

Comment
In 2021 we reported a 6% reduction in our scope 2 location-based emissions compared with 2020 emissions of 758,195 tCO2e.

Past year 2

Scope 2, location-based
758195

Scope 2, market-based (if applicable)
782555

Start date
August 1 2019

End date
July 31 2020

Comment
In 2020 we reported a 9% reduction of our scope 2 location-based emissions compared with 2019 emissions of 830,562 tCO2e.

Past year 3

Scope 2, location-based
830562

Scope 2, market-based (if applicable)
844405

Start date
August 1 2018

End date
July 31 2019

Comment
In 2019, we conducted a pilot exercise to calculate our scope 2 market-based and reported them in CDP.

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?
No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
5410196

Emissions calculation methodology
Hybrid method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
12

Please explain
Primark completed significant work on identifying its material scope 3 emissions with their calculation methodology independently verified by The Carbon Trust, which included emissions for purchased goods and services. The 2021/22 figures were assured by EY. A full scope 3 inventory has yet to be conducted for other ABF businesses and therefore data reported here is just for the Retail division (Primark).

The following sub-categories are included for Primark's data:
a) Good for resale - fibres and other materials.
b) Goods for resale - cut and sew data which is account for emissions from processing of raw materials into final products.
c) Goods for resale - other non-textile products related to the extraction of raw materials through to product finishing for footwear, footwear accessories and health & beauty.
d) Goods and services not for resale which are necessary for business operations such as IT and business services.
e) Packaging - the emissions account for the procurement of packaging materials for finished textile and non-textile Primark products.
f) Water use - the consumption of water at sites operated by Primark including stores, offices and distribution centres.

UK Government GHG Conversion Factors for Company Reporting (DEFRA) 2021 factors were applied and supplemented by specific emission factors for the type of activity.

The "percentage of emissions calculated using data obtained from suppliers or value chain partners" corresponds to the share of Tier 1 manufacturing suppliers

Capital goods

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
85580

Emissions calculation methodology
Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Please explain
Primark completed significant work on identifying its material scope 3 emissions with their calculation methodology independently verified by The Carbon Trust, which included emissions for capital goods. The 2021/22 figures were assured by EY. A full scope 3 inventory has yet to be conducted for other ABF businesses and therefore data reported here is just for the Retail division (Primark).

Capital goods are those which enable the business to operate and which have an extended product life. The data deals with emissions relating to the construction, refit and refurbishment of Primark's stores including fixtures and fittings.

Emission factors are sourced from the UK Government's GHG Conversion Factors for Company Reporting (DEFRA) 2021.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
24808

Emissions calculation methodology
Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
Primark completed significant work on identifying its material scope 3 emissions with their calculation methodology independently verified by The Carbon Trust, which included emissions for fuel and energy related activities not included in Scope 1 or 2. The 2021/22 figures were assured by EY. A full scope 3 inventory has yet to be conducted for other ABF businesses and therefore data reported here is just for the Retail division (Primark).

Upstream transportation and distribution

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
928287

Emissions calculation methodology
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
The data supplied for Category 4: Upstream transportation and distribution activities are for the ABF group. The data supplied by Primark covers emissions from its distribution network from country of origin to distribution centre, and distribution centre to store. For the rest of ABF businesses, the data reported here includes all upstream and downstream third-party transport movements that are dedicated to moving something for us including raw materials, ingredients, packaging, processing aids, waste, part processed materials or finished product. To date, ABF has not split out the data for upstream and downstream activities. Therefore the emissions for upstream transportation are over-reported.
Our reported emissions include sea, air, road and rail transport.
Calculations are based on data provided by supply chain logistics partners, with the UK Government's GHG Conversion Factors for Company Reporting (DEFRA) applied to calculate the emissions.
Of the 928,287 tCO2e reported, 291,589 tCO2e is attributed to Primark's activities with data assured by EY. 636,698 tCO2e is attributed to the rest of the ABF group and is calculated using transport data provided by the businesses.

Waste generated in operations

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
3288

Emissions calculation methodology
Waste-type-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Please explain
Primark completed significant work on identifying its material scope 3 emissions with their calculation methodology independently verified by The Carbon Trust, which included emissions for waste generated in operations. The 2021/22 figures were assured by EY. A full scope 3 inventory has yet to be conducted for other ABF businesses and therefore data reported here is just for the Retail division (Primark).

Business travel

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
2661

Emissions calculation methodology
Spend-based method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Please explain
Primark completed significant work on identifying its material scope 3 emissions with their calculation methodology independently verified by The Carbon Trust, which included emissions for business travel. The 2021/22 figures were assured by EY. A full scope 3 inventory has yet to be conducted for other ABF businesses and therefore data reported here is just for the Retail division (Primark).

Primark maintains a complex global supply chain, managed from the head office in Dublin, Ireland. There is office space within the Islip UK distribution centre and in-country teams working from locations in China and Bangladesh. Employees are often required to move between these sites and those of Primark's suppliers.
This category includes the emissions from air and rail travel and other travel related emissions. The UK Government's GHG Conversion Factors for Company Reporting (DEFRA) were applied to calculate the emissions.

Employee commuting

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
For ABF, this category is likely to be small and not material when compared with our main emission sources. For Primark, this category is also considered out of scope as emissions are unlikely to be material in terms of its overall carbon footprint.

Upstream leased assets

Evaluation status
Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
While ABF does operate upstream leased assets, we are not reporting this source of emissions this year as we are improving the availability of data and accuracy of our calculations at the ABF level. For Primark, upstream leased assets are not included in their own inventory as emissions are considered to be immaterial.

Downstream transportation and distribution

Evaluation status
Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
For Primark, this category is not applicable as Primark operates stores in which they are directly paying for the transportation of these goods and do not have downstream transportation through wholesalers. For the rest of the ABF Group, transport and distribution data is collected but not yet split between upstream and downstream movements. Each business will have differing scopes of downstream movements depending on their relationships with distribution companies, retailers and customers, classifying the point of sale and relevant data may not be available.
For ABF, all upstream and downstream third party transportation and distribution activities are captured in Category 4: Upstream transportation and distribution until further analysis enables this data to be separated and movements can be calculated for the distribution of sold products between ABF and the consumer (with movements not paid for by ABF and in vehicles not owned by ABF).

Processing of sold products

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
While this category could be significant for ABF, we are not able to influence the emissions in relation to the processing of sold products so will not be focused on further work in this category. For Primark, this category is considered not material and is therefore out of scope for their own inventory. Primark's products are finished consumer goods with no additional processing after handover to the customer.

Use of sold products

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
596171

Emissions calculation methodology
Methodology for direct use phase emissions, please specify (Bespoke methodology, based on product type)

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Please explain
Primark completed significant work on identifying its material scope 3 emissions with their calculation methodology independently verified by The Carbon Trust, which included emissions for use of sold products. The 2021/22 figures were assured by EY. A full scope 3 inventory has yet to be conducted for other ABF businesses and therefore data reported here is just for the Retail division (Primark).

Primark calculate the emissions from the products they sell within the following product 'use phases':
a) Wearing
b) Washing
c) Drying
d) Ironing

For ABF, this category is likely to be material at the group level as a large proportion of our products such as bread and bakery foods, tea, animal feed, and bioethanol are consumed directly without further processing.

End of life treatment of sold products

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
37542

Emissions calculation methodology
Waste-type-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Please explain
Primark completed significant work on identifying its material scope 3 emissions with their calculation methodology independently verified by The Carbon Trust, which included emissions for end of life treatment of sold products. The 2021/22 figures were assured by EY. A full scope 3 inventory has yet to be conducted for other ABF businesses and therefore data reported here is just for the Retail division (Primark).

Emission factors are sourced from the UK Government's GHG Conversion Factors for Company Reporting (DEFRA).

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
For ABF, this category is likely to be small and not material when compared with our main emission sources, particularly as we do not lease out a significant amount of our assets. For Primark, this category is also considered out of scope as emissios are unlikely to be material in terms of its overall carbon footprint.

Franchises

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
We do not have franchises.

Investments

Evaluation status
Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Emissions from our joint ventures where we have 40% investment or financial control are already included in the scope of our group's emissions and therefore we are determining the boundary of the scope 3 Investments category for other associate companies or subsidiaries where there is a level of influence.

Other (upstream)

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
We are not aware of other upstream scope 3 emissions.

Other (downstream)

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
We are not aware of other downstream scope 3 emissions.

C6.5a

(C6.5a) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

Start date
August 1 2020

End date
July 31 2021

Scope 3: Purchased goods and services (metric tons CO2e)
3834886

Scope 3: Capital goods (metric tons CO2e)
106661

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)
22406

Scope 3: Upstream transportation and distribution (metric tons CO2e)
835103

Scope 3: Waste generated in operations (metric tons CO2e)
2357

Scope 3: Business travel (metric tons CO2e)
6029

Scope 3: Employee commuting (metric tons CO2e)

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)

Scope 3: Processing of sold products (metric tons CO2e)

Scope 3: Use of sold products (metric tons CO2e)
396746

Scope 3: End of life treatment of sold products (metric tons CO2e)
23481

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment
Primark completed significant work on identifying its material scope 3 emissions with their calculation methodology independently verified by The Carbon Trust. The 2020/21 figures were assured by EY. A full scope 3 inventory has yet to be conducted for other ABF businesses and therefore data reported here is just for the Retail division (Primark) excluding Category 4: Upstream transportation and distribution.

The data supplied for Category 4: Upstream transportation and distribution activities are for the ABF group. The data supplied by Primark covers emissions from its distribution network from country of origin to distribution centre, and distribution centre to store. For the rest of ABF businesses, the data reported here includes all upstream and downstream third-party transport movements that are dedicated to moving something for us including raw materials, ingredients, packaging, processing aids, waste, part processed materials or finished product. To date, ABF has not split out the data for upstream and downstream activities. Therefore the emissions for upstream transportation are over-reported.
Our reported emissions include sea, air, road and rail transport.
Calculations are based on data provided by supply chain logistics partners, with the UK Government's GHG Conversion Factors for Company Reporting (DEFRA) applied to calculate the emissions.

Past year 2

Start date
August 1 2019

End date
July 31 2020

Scope 3: Purchased goods and services (metric tons CO2e)
4265101

Scope 3: Capital goods (metric tons CO2e)
110186

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)
453399

Scope 3: Upstream transportation and distribution (metric tons CO2e)
790328

Scope 3: Waste generated in operations (metric tons CO2e)
102288

Scope 3: Business travel (metric tons CO2e)
7986

Scope 3: Employee commuting (metric tons CO2e)
68104

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)

Scope 3: Processing of sold products (metric tons CO2e)

Scope 3: Use of sold products (metric tons CO2e)
444558

Scope 3: End of life treatment of sold products (metric tons CO2e)
25641

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment
Primark completed significant work on identifying its material scope 3 emissions with their calculation methodology independently verified by The Carbon Trust.

The data supplied for Category 4: Upstream transportation and distribution activities are for the ABF group. The data supplied by Primark covers emissions from its distribution network from country of origin to distribution centre, and distribution centre to store. For the rest of ABF businesses, the data reported here includes all upstream and downstream third-party transport movements that are dedicated to moving something for us including raw materials, ingredients, packaging, processing aids, waste, part processed materials or finished product. To date, ABF has not split out the data for upstream and downstream activities. Therefore the emissions for upstream transportation are over-reported.
Our reported emissions include sea, air, road and rail transport.
Calculations are based on data provided by supply chain logistics partners, with the UK Government's GHG Conversion Factors for Company Reporting (DEFRA) applied to calculate the emissions.

The data supplied for Category 5: Waste generated in operations are for the ABF group and represent the emissions related to the disposal and treatment of the waste produced in our direct operations. This waste includes hazardous and non-hazardous wastes, waste material which is reused, recycled or recovered and wastewater. The tonnage of waste generated is assured by EY.

The data supplied for Category 7: Employee commuting are for the ABF group with calculations and assumptions made for all business segments. Primark excluded employee commuting from their inventory due to materiality. The relevance or materiality of emissions from employee commuting is also likely to be insignificant for our group and when estimated, account for less than 1% of ABF's total emissions. However, we recognise that with over 100,000 employees worldwide there is still a considerable amount of employee commuting. As we have the raw data to calculate an estimate (using employee figures, national average commuting time and country emission factors from DEFRA 2019), we have reported this data.

Past year 3

Start date
August 1 2018

End date
July 31 2019

Scope 3: Purchased goods and services (metric tons CO2e)

Scope 3: Capital goods (metric tons CO2e)

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)
508517

Scope 3: Upstream transportation and distribution (metric tons CO2e)
752761

Scope 3: Waste generated in operations (metric tons CO2e)
23188

Scope 3: Business travel (metric tons CO2e)

Scope 3: Employee commuting (metric tons CO2e)
38852

Scope 3: Upstream leased assets (metric tons CO2e)
1648

Scope 3: Downstream transportation and distribution (metric tons CO2e)

Scope 3: Processing of sold products (metric tons CO2e)

Scope 3: Use of sold products (metric tons CO2e)

Scope 3: End of life treatment of sold products (metric tons CO2e)

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment
The data supplied for scope 3 are for the ABF group.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?
Yes

C6.7a

(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row 1	3878915	This is an 8% reduction compared with the prior years' biogenic emissions. The majority of the biogenic emissions come from bagasse, the renewable fibrous residue that remains after the extraction of juice from the crushed stalks of sugar cane which is used to generate renewable energy.

C-AC6.8/C-FB6.8/C-PF6.8

(C-AC6.8/C-FB6.8/C-PF6.8) Is biogenic carbon pertaining to your direct operations relevant to your current CDP climate change disclosure?
Yes

C-AC6.8a/C-FB6.8a/C-PF6.8a

(C-AC6.8a/C-FB6.8a/C-PF6.8a) Account for biogenic carbon data pertaining to your direct operations and identify any exclusions.

CO2 emissions from land use management

Emissions (metric tons CO2)
0

Methodology
Process-based models

Please explain
We report the total emissions from our biogenic carbon within biofuel combustion (processing / manufacturing machinery) until further differentiation is made in our data.

CO2 removals from land use management

Emissions (metric tons CO2)
0

Methodology
Other, please specify (Managed and not measured)

Please explain
We apply best management practices to manage the soil and CO2 emissions on our own land, as required under relevant certification schemes. This does not involve the measurement and reporting of CO2 removals.

Sequestration during land use change

Emissions (metric tons CO2)
0

Methodology
Other, please specify (Managed and not measured)

Please explain
We apply best management practices to manage the soil, CO2 emissions and sequestration on our own land, as required under relevant certification schemes.

CO2 emissions from biofuel combustion (land machinery)

Emissions (metric tons CO2)
0

Methodology
Default emissions factors

Please explain
We collect data for fuels used in our own transport which includes land machinery and are reported in our aggregated scope 1 emissions. We do have data at the granular level for different fuel sources used in land machinery across our operations, however emissions from land machinery and processing/manufacturing machinery are not differentiated from our total biogenic carbon figure of 3,878,915 tonnes.

CO2 emissions from biofuel combustion (processing/manufacturing machinery)

Emissions (metric tons CO2)
3878915

Methodology
Default emissions factors

Please explain
These emissions relate to biogenic fuels including biomass, wood/wood waste, fuel crops and biogas used as fuels within our manufacturing operations and emissions from our yeast production processes. CO2 emissions from biofuel combustion in our processing and manufacturing are included in scope 1 emissions. Of the CO2 emissions from our biogenic carbon, 83% are emitted from the combustion of bagasse which is primarily used as a fuel source within our sugar processing and manufacturing. Therefore we report the total emissions from our biogenic carbon within this category until further differentiation is made in our data.
To note: we use IPCC 2006 guidelines to create a custom emission factor using exact sugar cane yield tonnes and hectares burnt to determine CO2 emissions for burning plant remnants on our land.

CO2 emissions from biofuel combustion (other)

Emissions (metric tons CO2)
0

Methodology
Other, please specify (Not measured separately)

Please explain
The emissions from biofuel combustion are captured and reported in our group figures.

C-AC6.9/C-FB6.9/C-PF6.9

(C-AC6.9/C-FB6.9/C-PF6.9) Do you collect or calculate greenhouse gas emissions for each commodity reported as significant to your business in C-AC0.7/FB0.7/PF0.7?

Agricultural commodities
Cotton

Do you collect or calculate GHG emissions for this commodity?
No

Reporting emissions by
<Not Applicable>

Emissions (metric tons CO2e)
<Not Applicable>

Denominator: unit of production
<Not Applicable>

Change from last reporting year
<Not Applicable>

Please explain
<Not Applicable>

Explain why you do not calculate GHG emission for this commodity and your plans to do so in the future
Primark calculates GHG emissions from cotton as part of its absolute Scope 3 emissions. However, Primark currently does not publicly disclose emissions associated with individual materials.

Agricultural commodities
Sugar

Do you collect or calculate GHG emissions for this commodity?
Yes

Reporting emissions by
Unit of production

Emissions (metric tons CO2e)
0.37

Denominator: unit of production
Metric tons

Change from last reporting year
About the same

Please explain
This year we have seen a 2% increase in our tCO2e per unit of production due to a reduction in our product tonnage for AB Sugar. To calculate this figure, we accounted for all the scope 1 and 2 emissions related to sugar production, including emissions from the manufacturing facilities. The metric tonnes of product includes co- and by-products in addition to sugar tonnage.
Our Sugar businesses report their GHG emissions data once a year to ABF using the group's environment data reporting system. From each site, data is collected from several inputs across agricultural activities (own land), transport, manufacturing process, and energy use. The site SHERQ (safety, health, environment, risk and quality) Manager is responsible for analysing, challenging and signing off the data. The SHERQ Manager also engages with the business level Finance team who conduct a review across business aggregated data before it is submitted to AB Sugar's Finance team. Additional checks are conducted for the data across AB Sugar before it is inputted to ABF's environment data system. The data provided and output emissions are assured by EY.

Explain why you do not calculate GHG emission for this commodity and your plans to do so in the future
<Not Applicable>

Agricultural commodities
Wheat

Do you collect or calculate GHG emissions for this commodity?
No

Reporting emissions by
<Not Applicable>

Emissions (metric tons CO2e)
<Not Applicable>

Denominator: unit of production
<Not Applicable>

Change from last reporting year
<Not Applicable>

Please explain
<Not Applicable>

Explain why you do not calculate GHG emission for this commodity and your plans to do so in the future
Priorities for wheat do not currently include calculating the GHG emissions from this commodity.

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure
0.000182

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
3107407

Metric denominator
unit total revenue

Metric denominator: Unit total
16997000000

Scope 2 figure used
Location-based

% change from previous year
20

Direction of change
Decreased

Reason(s) for change
Change in revenue

Please explain
The 20% decrease in tCO2e against annual revenue is driven by an 2% decrease in scopes 1 and 2 whilst total revenue has increased by 22%. Overall, the group's use of energy reduced by 4%, with 54% of the energy from renewable sources.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?
Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	2328348	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	28624	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	51458	IPCC Fifth Assessment Report (AR5 – 100 year)
SF6	0	IPCC Fifth Assessment Report (AR5 – 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO2e)
Argentina	16281
Australia	81686
Austria	2
Belgium	482
Brazil	2417
Canada	9660
Chile	2222
China	211047
Colombia	1144
Czechia	577
Denmark	32
Ecuador	2
Finland	1112
France	4352
Germany	45181
India	11754
Ireland	1922
Italy	46312
Malawi	58466
Malaysia	950
Mexico	10770
Mozambique	11615
Netherlands	1247
New Zealand	7687
Pakistan	831
Peru	576
Philippines	76
Poland	2167
Portugal	27
Switzerland	4326
Thailand	15202
Turkey	4802
United Kingdom of Great Britain and Northern Ireland	1093929
Uruguay	19
United States of America	56971
Viet Nam	1254
Zambia	75113
Sri Lanka	22
Eswatini	72000
United Republic of Tanzania	35855
South Africa	338975
Spain	179364
Singapore	0
Slovenia	0
Sweden	0
United Arab Emirates	0
Venezuela (Bolivarian Republic of)	0

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division

By activity

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
Grocery	235165
Sugar	1890882
Agriculture	50181
Ingredients	211433
Retail	20769

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Agricultural activities on our own land	159979
Processing and manufacturing in our direct operations	2172314
Transport and distribution in our control	76136

C-AC7.4/C-FB7.4/C-PF7.4

(C-AC7.4/C-FB7.4/C-PF7.4) Do you include emissions pertaining to your business activity(ies) in your direct operations as part of your global gross Scope 1 figure?

Yes

C-AC7.4a/C-FB7.4a/C-PF7.4a

(C-AC7.4a/C-FB7.4a/C-PF7.4a) Select the form(s) in which you are reporting your agricultural/forestry emissions.

Total emissions

C-AC7.4b/C-FB7.4b/C-PF7.4b

(C-AC7.4b/C-FB7.4b/C-PF7.4b) Report the Scope 1 emissions pertaining to your business activity(ies) and explain any exclusions. If applicable, disaggregate your agricultural/forestry by GHG emissions category.

Activity
Agriculture/Forestry

Emissions category
<Not Applicable>

Emissions (metric tons CO2e)
158381

Methodology
Other, please specify (We use a mix of sources for the factors for our agricultural emissions reflecting the variety of activities in this category.)

Please explain
Over 99% of our agricultural emissions are those from growing our own sugar cane and sugar beet crops and harvesting them including the burning of the cane crops to remove cane leaves just before they are harvested. We also include data for GHG emissions from intensive livestock farming activities which are due to enteric fermentation and the production on site of crops such as peas and corn for pig feed. Methodology is a mixture between IPCC Guidelines for National Greenhouse Gas Inventories – Volume 4, British Sugar carbon footprint methodology certified by The Carbon Trust, Department for Transport RTFO Guidance, Ecoinvent Emissions Factor Database.

Activity
Processing/Manufacturing

Emissions category
<Not Applicable>

Emissions (metric tons CO2e)
2172314

Methodology
Other, please specify (For the majority of manufacturing emissions we use international and national sources for factors such as DEFRA. For a minority of emissions from processing and manufacturing, we use activity specific factors which take into account local conditions.)

Please explain
For a minority of emissions from processing and manufacturing, we use production activity-specific factors that take into account local conditions. These include ethanol manufacture and bread baking.

Activity
Distribution

Emissions category
<Not Applicable>

Emissions (metric tons CO2e)
76136

Methodology
Default emissions factor

Please explain
We use DEFRA 2021 emission factors for our transport and distribution activities.

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/area/region.

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Argentina	8938	8938
Australia	113809	113809
Austria	1421	1421
Belgium	1637	1507
Brazil	14322	6300
Canada	3999	3965
Chile	2245	2245
China	134663	134663
Colombia	1461	1461
Czechia	1052	1308
Denmark	60	262
Ecuador	50	50
Finland	7456	13474
France	1862	1428
Germany	25880	19864
India	14803	14803
Ireland	8801	5442
Italy	6080	8148
Malawi	22993	22993
Malaysia	1761	1761
Mexico	19823	9054
Mozambique	1121	1121
Netherlands	11079	8815
New Zealand	3389	3389
Pakistan	859	859
Peru	1169	1169
Philippines	5	5
Poland	11901	15743
Portugal	2773	2902
Singapore	10	10
South Africa	46870	46870
Spain	19379	19158
Sri Lanka	146	146
Switzerland	577	0
United Republic of Tanzania	8176	8176
Thailand	9455	9455
Turkey	8890	8890
United Kingdom of Great Britain and Northern Ireland	90109	123887
Uruguay	4	4
United States of America	53349	61010
Venezuela (Bolivarian Republic of)	14	14
Viet Nam	10291	9024
Zambia	19621	19621
Slovenia	232	453
Eswatini	6443	6443
Sweden	1	5
United Arab Emirates	0	0

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

By activity

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Grocery	200690	219540
Sugar	123602	129295
Agriculture	28468	35089
Ingredients	243215	225171
Retail	103003	110970

C7.6c

(C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Processing and manufacturing. This includes manufacturing sites and associated distribution centres, warehouses and offices.	595975	609096
Retail stores and associated distribution centres, warehouses and offices.	103003	110970

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

No

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	8342	Decreased	0.26	We report a reduction in CO2 emissions (scope 1 and scope 2), from 3,160,942 tCO2 to 3,107,403 tCO2 between 2021 and 2022. Of the annual decrease in scope 1 and 2 emissions, 8,342 tCO2 is attributed to the change in renewable energy consumption. This is the use of wood and bagasse on-site to generate electricity for consumption as well as the consumption of self-generated energy from non-fuel renewable sources. Thus the percentage of reduction linked to change in output is (8,342/3,160,942)*100 = 0.26%. N.B: for all our calculations in this question, we use the scope 1 and scope 2 emissions reported last year to CDP (i.e. 3,160,942 tCO2) as the denominator, as recommended in the CDP guidance.
Other emissions reduction activities	55898	Decreased	2	We report a reduction in CO2 emissions (scope 1 and scope 2), from 3,160,942 tCO2 to 3,107,403 tCO2 between 2021 and 2022. Of the annual decrease in scope 1 and 2 emissions, 55,898 tCO2 is attributed to other emission reduction activities. These emissions savings are from initiatives across our business in the 2021/22 reporting year (as per C4.3b). Thus the percentage of reduction linked to change in output is (55,898/3,160,942)*100 = 2%. N.B: for all our calculations in this question, we use the scope 1 and scope 2 emissions reported last year to CDP (i.e. 3,160,942 tCO2) as the denominator, as recommended in the CDP guidance.
Divestment	0	No change	0	No change.
Acquisitions	303	Increased	0.01	We report a reduction in CO2 emissions (scope 1 and scope 2), from 3,160,942 tCO2 to 3,107,403 tCO2 between 2021 and 2022. Of the annual decrease in scope 1 and 2 emissions, 303 tCO2 is attributed to the acquisition of a business within ABF's Agriculture segment. Thus the percentage increase linked to change in output is (303/3,160,942)*100 = 0.01%. N.B: for all our calculations in this question, we use the scope 1 and scope 2 emissions reported last year to CDP (i.e. 3,160,942 tCO2) as the denominator, as recommended in the CDP guidance.
Mergers	0	No change	0	No change.
Change in output	0	No change	0	No change.
Change in methodology	0	No change	0	No change.
Change in boundary	0	No change	0	No change.
Change in physical operating conditions	0	No change	0	We recognise that climate change represents a material risk throughout our supply chains and poses challenges to some of our businesses. Many of our businesses rely on agricultural crops with complex supply chains. Long-term climate change will impact agricultural crops and workers while extreme weather events have the potential to cause disruption across value chains. In our assessment of climate-related business risks we recognise that the cumulative impacts of changes in weather and water availability could affect our operations at a Group level. However, The diversified and decentralised nature of the Group means that mitigation or adaptation strategies are considered and implemented by the Individual businesses.
Unidentified	0	No change	0	No change.
Other	0	No change	0	No change.

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	10905939	8098980	19004919
Consumption of purchased or acquired electricity	<Not Applicable>	333389	1501093	1834482
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	59539	146245	205783
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	1285	<Not Applicable>	1285
Total energy consumption	<Not Applicable>	11300151	9746318	21046470

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	No
Consumption of fuel for the generation of heat	No
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value
HHV

Total fuel MWh consumed by the organization
9859412

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
9859411

Comment
All energy from bagasse is consumed on our site for on-site energy needs, and surplus in Eswatini is exported to the national grid.

Other biomass

Heating value
HHV

Total fuel MWh consumed by the organization
236710

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
189667

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
We capture the consumption of biogas at a total group level.

Other renewable fuels (e.g. renewable hydrogen)

Heating value
HHV

Total fuel MWh consumed by the organization
809818

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
809398

Comment
We capture the consumption of wood at a total group level.

Coal

Heating value
HHV

Total fuel MWh consumed by the organization
1580220

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
12499

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
1567722

Comment
We capture the consumption of coal at a total group level.
Our sugar businesses in the UK, Eswatini and South Africa consume limited coal to fuel boilers.

Oil

Heating value
HHV

Total fuel MWh consumed by the organization
108381

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
108381

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
We capture the consumption of gas oil and heavy gas oil at a total group level.

Gas

Heating value
HHV

Total fuel MWh consumed by the organization
6052974

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
170258

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
4154363

Comment
We capture the consumption of natural gas at a total group level.

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
357404

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
63590

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
We capture the consumption of coke, diesel, kerosene, LPG, and petrol at a group level.

Total fuel

Heating value
HHV

Total fuel MWh consumed by the organization
19004919

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
734061

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
16390894

Comment
We capture the consumption of all fuels excluding feedstocks at the group level.

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	10905939	11069246	10905939	11069246
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.

Country/area of low-carbon energy consumption
Switzerland

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Hydropower (capacity unknown)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
7043

Tracking instrument used

Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute
Switzerland

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Our operations in Switzerland have purchased hydropower to cover its electricity consumption during the reporting period.

Country/area of low-carbon energy consumption
United Kingdom of Great Britain and Northern Ireland

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Biomass, wind, hydropower solar power)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
25922

Tracking instrument used
REGO

Country/area of origin (generation) of the low-carbon energy or energy attribute
United Kingdom of Great Britain and Northern Ireland

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Our operations in the UK have purchased REGOs to cover part of the electricity consumption during the reporting period.

Country/area of low-carbon energy consumption
Mexico

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
26945

Tracking instrument used
Other, please specify (We have a supplier certification under Mexican law)

Country/area of origin (generation) of the low-carbon energy or energy attribute
Mexico

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Our operations in Mexico have purchased renewable energy sourced from wind to cover part of the electricity consumption during the reporting period.

Country/area of low-carbon energy consumption
Canada

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Hydropower (capacity unknown)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
33474

Tracking instrument used

No instrument used

Country/area of origin (generation) of the low-carbon energy or energy attribute
Canada

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Our operations in Canada have purchased renewable energy sourced from hydropower to cover part of the electricity consumption during the reporting period.

Country/area of low-carbon energy consumption
Poland

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
352

Tracking instrument used
Please select

Country/area of origin (generation) of the low-carbon energy or energy attribute
Poland

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Our operations in Poland have purchased renewable energy to cover part of the electricity consumption during the reporting period.

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area
Argentina

Consumption of purchased electricity (MWh)
31036.42

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
31036.42

Country/area
Australia

Consumption of purchased electricity (MWh)
145306.31

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
145306.31

Country/area
Austria

Consumption of purchased electricity (MWh)
5595.24

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
1886.44

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
7481.68

Country/area
Belgium

Consumption of purchased electricity (MWh)
9598.54

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
9598.54

Country/area
Brazil

Consumption of purchased electricity (MWh)
57599.28

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
48662.95

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
106262.23

Country/area
Canada

Consumption of purchased electricity (MWh)
40184.72

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
40184.72

Country/area

Chile

Consumption of purchased electricity (MWh)
5060.47

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
5060.47

Country/area
China

Consumption of purchased electricity (MWh)
117871.52

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
75359.76

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
193231.28

Country/area
Colombia

Consumption of purchased electricity (MWh)
7579.99

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
7579.99

Country/area
Czechia

Consumption of purchased electricity (MWh)
2378.47

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
2378.47

Country/area
Denmark

Consumption of purchased electricity (MWh)
494.81

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
494.81

Country/area
Ecuador

Consumption of purchased electricity (MWh)
335.43

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
335.43

Country/area
Eswatini

Consumption of purchased electricity (MWh)
17977.08

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
17977.08

Country/area
Finland

Consumption of purchased electricity (MWh)
33188.88

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
23454.57

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
56643.45

Country/area
France

Consumption of purchased electricity (MWh)
32446.4

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
94.19

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
32540.59

Country/area
Germany

Consumption of purchased electricity (MWh)
71616.93

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
11855.81

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
83472.74

Country/area
India

Consumption of purchased electricity (MWh)
20386.9

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
20386.9

Country/area
Ireland

Consumption of purchased electricity (MWh)
30380.62

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
30380.62

Country/area
Italy

Consumption of purchased electricity (MWh)
23640.24

Consumption of self-generated electricity (MWh)
317.55

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
23957.79

Country/area
Malawi

Consumption of purchased electricity (MWh)
64155.85

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
64155.85

Country/area
Malaysia

Consumption of purchased electricity (MWh)
2649.22

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
2649.22

Country/area
Mexico

Consumption of purchased electricity (MWh)
49843.38

Consumption of self-generated electricity (MWh)
103.02

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
49946.4

Country/area
Mozambique

Consumption of purchased electricity (MWh)
13141.62

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
13141.62

Country/area

Netherlands

Consumption of purchased electricity (MWh)
30096.62

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
2736.92

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
32833.54

Country/area
New Zealand

Consumption of purchased electricity (MWh)
27645.08

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
27645.08

Country/area
United Kingdom of Great Britain and Northern Ireland

Consumption of purchased electricity (MWh)
465673.89

Consumption of self-generated electricity (MWh)
109.87

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
331.9

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
466115.66

Country/area
Pakistan

Consumption of purchased electricity (MWh)
2446.94

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
2446.94

Country/area
Peru

Consumption of purchased electricity (MWh)
5779.92

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
5779.92

Country/area
Philippines

Consumption of purchased electricity (MWh)
8.13

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
8.13

Country/area
Poland

Consumption of purchased electricity (MWh)
18939.63

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
60.22

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
18999.85

Country/area
Portugal

Consumption of purchased electricity (MWh)
11938.06

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
11938.06

Country/area
Singapore

Consumption of purchased electricity (MWh)
25.76

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
25.76

Country/area
Slovenia

Consumption of purchased electricity (MWh)
712.89

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
250.78

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
963.67

Country/area
South Africa

Consumption of purchased electricity (MWh)
50042.21

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
50042.21

Country/area
Spain

Consumption of purchased electricity (MWh)
100615.63

Consumption of self-generated electricity (MWh)
120.08

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
100735.71

Country/area
Sri Lanka

Consumption of purchased electricity (MWh)
239.8

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
239.8

Country/area
Sweden

Consumption of purchased electricity (MWh)
60

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
60

Country/area
Switzerland

Consumption of purchased electricity (MWh)
7043.3

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
7043.3

Country/area
United Republic of Tanzania

Consumption of purchased electricity (MWh)
20526.2

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
20526.2

Country/area
Thailand

Consumption of purchased electricity (MWh)
20310.94

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
20310.94

Country/area

Turkey

Consumption of purchased electricity (MWh)
20535.2

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
20535.2

Country/area
United Arab Emirates

Consumption of purchased electricity (MWh)
0

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
0

Country/area
Uruguay

Consumption of purchased electricity (MWh)
312.81

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
312.81

Country/area
United States of America

Consumption of purchased electricity (MWh)
133226.28

Consumption of self-generated electricity (MWh)
634.56

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
30213.96

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
164074.8

Country/area
Venezuela (Bolivarian Republic of)

Consumption of purchased electricity (MWh)
44

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
44

Country/area
Viet Nam

Consumption of purchased electricity (MWh)
12931.47

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
10875.72

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
23807.19

Country/area
Zambia

Consumption of purchased electricity (MWh)
122859.43

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
122859.43

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description
Waste

Metric value
92419

Metric numerator
Tonnes of hazardous and non-hazardous waste.

Metric denominator (intensity metric only)
N/A

% change from previous year
28

Direction of change
Decreased

Please explain
We report here total hazardous and non-hazardous waste as a climate-related metric. This year these waste streams decreased by 28% compared with the prior year in which we reported 121,078 tonnes.
In total, ABF generated 584,845 tonnes of waste in 2021/22, of which 84% was recycled, recovered or had another beneficial use.
Right across our Group we are looking for ways to use fewer resources more efficiently so that resources and their by-products are used, reused, recycled or reconstituted multiple times. The
businesses are first avoiding the creation of waste as much they can. When we do have unavoidable waste materials, we look at how these can be of benefit to our operations. This includes implementing processes to turn waste into energy sources such as using the biogas from wastewater treatment processes to feed our combined heat and power (CHP) plants or the generation of renewable energy from anaerobic digestion plants.
Our food and ingredients businesses are highly efficient at maximising the value that can be derived from the crops and raw materials they use. This makes good commercial sense. It is also aligned with best practice environmental principles, prioritising waste prevention and reuse wherever possible. We consider alternative uses for waste materials including making compost, replenishing soil and as building or packaging materials. Where appropriate we donate surplus food products to charities and community groups. Again this year, all our business segments have recycled far more waste than they have sent to landfill; the figures range from 79% in our sugar segment of total waste generated was recycled to 95% in our retail segment. These are substantial amounts of waste materials which have been segregated to fulfil a beneficial purpose when reused or recovered.

Description
Energy usage

Metric value
21046469

Metric numerator
MWh

Metric denominator (intensity metric only)
N/A

% change from previous year
4

Direction of change
Decreased

Please explain
As energy use is one of our main environmental impacts and is a significant cost coupled with fluctuations in the price of fuels, it remains a key focus for the effective management of our businesses. They explore changes to their energy mix and ways of generating their own energy, and a number have invested in combined heat and power plants (CHP) and cycle gas turbines. Of the total energy consumed this year, 54% came from renewable sources, a proportion which has increased incrementally over the last five years.

In 2022, our total energy consumption was 21,046 GWh, a 4% decrease compared with 2021. Our Sugar businesses were responsible for consuming 81% of that total, or 17,110 GWh, which
is a 5% decrease compared with the prior year. Of their total energy consumed in the year, 63% was from renewable sources. Our Sugar businesses have continually improved energy use over the last decade and have made significant reductions in energy used. The businesses continue to seek energy efficiencies and to do more with every unit of energy consumed. For example, as well as producing both core sugar products and a range of speciality sugars, the advanced sugar manufacturing sites produce more than 24 coproducts including molasses, animal feed and bioethanol.
Furthermore, they exported 862 GWh of surplus energy generated on their sites to their local grids or other organisations.

Of the total energy consumed across the Group this year, 54% came from renewable sources mainly generated on our sites. The majority of this, at 87%, comes from bagasse, with 7% from wood, 3% from imported electricity, 2% from biogas generated on-site and 1% from imported steam. This is the residual fibre that remains after the extraction of juice from the crushed stalks of sugar cane. Illovo Sugar Africa have a very efficient system of using the bagasse to generate steam and electricity to power their factories. The other sources of renewable energy that we report are the on-site use of wood, biogas and solar and purchased renewable energy from national grids.

Illovo has recently formed an Energy Forum working group where experts from across the Illovo group come together to look at efficiency, reduction and energy plans. This co-ordination, strategy sharing and community of practice Forum has identified water stewardship, improving energy efficiencies and air quality as key focus areas.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
ABF Responsibility Report 2022.pdf.downloadasset.pdf

Page/ section reference
56-57

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach
Scope 2 location-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
ABF Responsibility Report 2022.pdf.downloadasset.pdf

Page/ section reference
56-57

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

Scope 2 approach
Scope 2 market-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
ABF Responsibility Report 2022.pdf.downloadasset.pdf

Page/ section reference
55-56

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category
Scope 3: Upstream transportation and distribution

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
ABF Responsibility Report 2022.pdf.downloadasset.pdf

Page/section reference
55-56
This cover ABF Scope 3 emissions from transport operations carried out by third-parties under our direction and for which we are responsible

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Purchased goods and services
Scope 3: Capital goods
Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
Scope 3: Upstream transportation and distribution
Scope 3: Waste generated in operations
Scope 3: Business travel
Scope 3: Use of sold products
Scope 3: End-of-life treatment of sold products

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
ABF Responsibility Report 2022.pdf.downloadasset.pdf

Page/section reference
55-56
This cover Primark Scope 3 emissions (Business segment specific)

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?
No, we do not verify any other climate-related information reported in our CDP disclosure

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?
Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

EU ETS
South Africa carbon tax
UK ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

EU ETS

% of Scope 1 emissions covered by the ETS
9

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
68378

Allowances purchased
144615

Verified Scope 1 emissions in metric tons CO2e
212993

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment

UK ETS

% of Scope 1 emissions covered by the ETS
29

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
330609

Allowances purchased
375653

Verified Scope 1 emissions in metric tons CO2e
706262

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment

C11.1c

(C11.1c) Complete the following table for each of the tax systems you are regulated by.

South Africa carbon tax

Period start date
January 1 2022

Period end date
December 31 2022

% of total Scope 1 emissions covered by tax
2

Total cost of tax paid
336447

Comment

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Our strategy for compliance is to:

1 - Meet compliance levels for all appropriate environmental legislation and other requirements relating to our activities. Our site-level environmental managers and finance teams collaborate to ensure compliance with national or regional tax price schemes.

2 - Continually improve our environmental performance through a process of monitoring, measuring and reviewing our environmental impacts. For energy, we utilise energy more efficiently to reduce the use of fossil fuels and the production of associated greenhouse gas emissions. Where financially or operationally viable, our businesses will change to less carbon-intensive fuels for manufacturing and transportation.
3 - Maximise the efficient use of our raw materials and minimise waste generation through promotion of re-use and recycling.

4 - Include environmental regulation tracking as part of the group-wide environmental compliance and risk management audit programme. This is a rolling site-level audit programme conducted by an independent third-party provider. Where there is a risk of regulatory non-compliance, the finding is reported to ABF's HSE team and progress towards closure of the finding is monitored.

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?
Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits canceled by your organization in the reporting year.

Project type
Energy efficiency: households

Type of mitigation activity
Emissions reduction

Project description
Twinings works with Climate Impact Partners to support two kind of offsetting projects related to the supply chains where it operates: 1- increase access to clean ethanol cookstoves in Kenya and 2- Hydropower promotion in Yunnan river as part of Climate Impact Renewable energies portfolio. These projects, help Twinings to offset its carbon emissions while delivering benefits to local communities. Additionally, Twinings is on the process of purchasing (cancellation letter already submitted) 3,149 from another efficient cookstove project verified by CDM standard also in Kenya.

Twinings is on its way to making all its tea and herbal infusion carbon neutral for bush to shelf by 2030.

9,461 tonnes of credits have been purchased, 6,312 already cancelled via Climate Impact Partners. for the remaining 3,149 the cancellation has been done on behalf of Twinings on the CDM registry.

Credits canceled by your organization from this project in the reporting year (metric tons CO2e)
9461

Purpose of cancellation
Voluntary offsetting

Are you able to report the vintage of the credits at cancellation?
Yes

Vintage of credits at cancellation
2020

Were these credits issued to or purchased by your organization?
Purchased

Credits issued by which carbon-crediting program
Other private carbon crediting program, please specify (Efficient cookstoves Gold Standard and Hydropower CDM)

Method(s) the program uses to assess additionality for this project
Other, please specify (The households or institutions use the Improved Cookstoves (ICS) which have all been certified and have passed the initial rating test according to the ICSEA Rating Test Protocol.)

Approach(es) by which the selected program requires this project to address reversal risk
Monitoring and compensation

Potential sources of leakage the selected program requires this project to have assessed
Activity-shifting
Ecological leakage

Provide details of other issues the selected program requires projects to address

Comment
The generation period for the Ethanol cookstoves is CY2019-CY2020 and for the Yunnan hydro, CY2016.

C11.3

(C11.3) Does your organization use an internal price on carbon?
Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Type of internal carbon price
Shadow price

How the price is determined
Alignment with the price of allowances under an Emissions Trading Scheme
Alignment with the price of a carbon tax

Objective(s) for implementing this internal carbon price
Drive energy efficiency

Scope(s) covered
Scope 1

Pricing approach used – spatial variance
Differentiated

Pricing approach used – temporal variance
Evolutionary

Indicate how you expect the price to change over time
ABF has not set an internal carbon price but the decentralised nature of our group means that each business is free to establish a price relevant to their decision making on carbon management. British Sugar and Azucarera have set an internal price because of existing regimes in their country of operations and due to potential changes in pricing schemes.
These businesses use internal carbon pricing as a tool to help manage risks and opportunities to operations participating in the EU ETS and UK ETS, and in anticipation of new carbon regulations. They internalise the current EU ETS market price so that there is consistency across their European operations. The use of the EU ETS price means that the price used may vary linked to market demand. Over recent years, reforms to the EU ETS means that the price of carbon allowances has moved. Our businesses have used this approach to support their efforts to plan their medium and long-term work in carbon management.

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)
68

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)
73

Business decision-making processes this internal carbon price is applied to
Capital expenditure

Mandatory enforcement of this internal carbon price within these business decision-making processes
No

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan
British Sugar and Azucarera use the internal carbon price to support medium and long-term planning within their businesses. The use of an internal carbon price drives both emission reduction strategies and, aligned with this, reduced operating costs.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?
Yes, our suppliers
Yes, our customers/clients
Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement
Engagement & incentivization (changing supplier behavior)

Details of engagement
Run an engagement campaign to educate suppliers about climate change

% of suppliers by number
15

% total procurement spend (direct and indirect)
55

% of supplier-related Scope 3 emissions as reported in C6.5
51

Rationale for the coverage of your engagement
Primark has long-standing and deep relationships with many of its suppliers. The majority have supplied the company for more than 6 years, and the longest-standing supplier has worked with Primark for more than 22 years. In October 2022, Primark held a two days in-person Partner Event with the objective of educating and informing the top 74 Tier 1 suppliers by FOB on key topics such as business growth and cost leadership, the new Click + Collect model, upcoming legislations and regulatory requirements, logistics and sourcing strategies, transparency and traceability in the supply chain, and the Primark Cares strategy in terms of 1-year update and ambition

going forward.

As part of the day 2 agenda, a specific break-out session was held to educate suppliers on Primark's Carbon Programme and highlight what their engagement will need to be to move the strategy forward. The session specifically focused on:
• The role of the Primark Cares strategy and the wider Environmental Sustainability programme to achieve Primark's decarbonisation target;
• The relevance of suppliers-related emissions in Primark's emissions inventory;
• The dual focus of the Carbon Programme for the supply chain: support factories to procure renewable energy and improve energy efficiency;
• Key case studies for both renewable energy procurement and energy efficiency pilots, to provide a sense of the economic costs and benefits of participating into such initiatives.

The session featured a Q&A with suppliers.

Impact of engagement, including measures of success
After the Event, Primark organized follow-ups with 5 suppliers representing 8% of total spend by FOB, 3 of which were Top10 suppliers by FOB. The follow-up calls established a communication channel for suppliers to showcase their current decarbonization journey and express their interest to engage in Primark's decarbonization programme targeting the supply chain.

Comment
Please note that the percentages reported for "% of suppliers by number", "% total procurement spend (direct and indirect)" and "% of supplier-related Scope 3 emissions as reported in C6.5" refer to Primark only and are not related to the ABF Group.

Primark is ABF's biggest division accounting for 45% of total Group revenues.

Type of engagement
Information collection (understanding supplier behavior)

Details of engagement
Collect GHG emissions data at least annually from suppliers

% of suppliers by number
21

% total procurement spend (direct and indirect)
74.9

% of supplier-related Scope 3 emissions as reported in C6.5
11

Rationale for the coverage of your engagement
The Higg Facility Environmental Module (Higg FEM) is a sustainability assessment tool developed by the Sustainable Apparel Coalition (SAC) that allows brands to measure and evaluate the environmental performance (including carbon emissions) of manufacturing facilities in their supply chain, year over year. Primark mandates selected facilities associated to specific suppliers to complete the Higg FEM annually. These facilities are mainly cut & sew (Tier 1) factories engaged by suppliers that represent the highest Free On Board (FOB) spend (Top 100), but also include factories in the lower tiers of the supply chain (Tier 2 and 3).

Impact of engagement, including measures of success
The rate of supplier adoption of the Higg FEM is a key measure of success for this initiative. In fact, having a high proportion of facilities completing the Higg FEM enables Primark to:
• Gather environmental data across a considerable number of different facilities in a standardized way, with the possibility to have this data verified by third-parties;
• Refine its Scope 3 emissions accounting by including more and more primary data;
• Select suppliers to engage in emissions reduction initiatives based on their current performance and improvement potential.

Comment
The figures here reported are conservative, since they only include Tier 1 facilities associated to Primark's Top 100 suppliers by FOB. In reality, there are active facilities associated to ex-Top100 suppliers who are still using the Higg FEM to disclose their emissions data. Moreover, in some regions (e.g., Bangladesh) Primark have rolled-out the Higg FEM to suppliers beyond Top100.

Please note that the percentages reported for "% of suppliers by number", "% total procurement spend (direct and indirect)" and "% of supplier-related Scope 3 emissions as reported in C6.5" refer to Primark only and are not related to the ABF Group.

Primark is ABF's biggest division accounting for 45% of total Group revenues.

Type of engagement
Innovation & collaboration (changing markets)

Details of engagement
Run a campaign to encourage innovation to reduce climate impacts on products and services

% of suppliers by number
25

% total procurement spend (direct and indirect)
25

% of supplier-related Scope 3 emissions as reported in C6.5

Rationale for the coverage of your engagement
ABF's decentralised approach to doing business allows each business to engage with its suppliers as it considers best. Engagement decisions are made locally because they are most successful when made by the people who have the best understanding of the prevailing conditions in their supply chains.
For example, Illovo Sugar Africa, part of AB Sugar, is engaging with its growers in Malawi through Phata Co-operative, a smallholder farmer-owned organisation made up of 1,130 members. Phata has been working in partnership with Agricane, an agricultural engineering and development company, to support AB sugar's growers to explore new ways to work in harmony with nature, fight climate change and secure a sustainable and profitable future.
The effects of climate change are consistently being felt in Malawi, with increased temperatures, erratic rainfall, and droughts now common in the country. All this can significantly impact agriculture. Our growers have experienced particularly challenging circumstances in recent years with Cyclone Idai (2019), Cyclone Ana (2022) and tropical storm Gombe (2022), as well as two consecutive years of drought in 2016 and 2017.
With the help of Agricane, Phata has worked to transform the land of over 500 smallholder farmers into a profitable, high-yielding and sustainable project.

With their combined space, ambition and expertise, the two organisations have helped farmers to make the most of their land, discovering and investing in innovative methods that can overcome the challenges of climate change – and ultimately securing all-year-round commercial production.
The growers have incorporated other crops into their project – from kidney beans to mangoes – which ensures food security in their community, and makes them more resilient to climate change and everyday shocks.

Impact of engagement, including measures of success
Illovo Sugar Africa is now proud to have a long-term agreement with the partnership to buy their sugar, which has helped to create a long-standing and reliable income for many, and has transformed the livelihoods of those in and around the community. In 2022, Phata Co-operative members produced 55,000 cane tons from 614 hectares.

Comment
Please note that the percentages reported for "% of suppliers by number", "% total procurement spend (direct and indirect)" refer to our Illovo sugar businesses in Malawi only and are not related to the ABF Group. The program covers around 4,000 growers that represents around 25% of Illovo Malawi grower base and about 25% of cane produced. The % of grower base has been used to estimate the "% of suppliers by number", and the % of cane produced has been used to estimate the "% total procurement spend (direct and indirect)".

Our Illovo sugar businesses in Malawi account for around 1% of total Group revenues.

Type of engagement
Engagement & incentivization (changing supplier behavior)

Details of engagement
Run an engagement campaign to educate suppliers about climate change

% of suppliers by number
0.46

% total procurement spend (direct and indirect)
2.8

% of supplier-related Scope 3 emissions as reported in C6.5

Rationale for the coverage of your engagement
In Pakistan, where Westmill Foods source basmati rice, water has become an increasingly contentious issue because agriculture uses more than 90% of the country's fresh water. Traditional rice-growing methods are particularly water-intensive and release a significant amount of GHGs into the atmosphere. Traditional rice cultivation is estimated to be responsible for 10% of the world's methane emissions.

Together with their partners, the Swiss Development Corporation (SDC), Helvetas and Galaxy Rice, Westmill Foods is encouraging positive change in the Punjab region by promoting the standards of the Sustainable Rice Platform protocol (SRP), – a multi-stakeholder partnership set up by the United Nations. Helvetas and Galaxy Rice provide training in SRP techniques, and Westmill purchases the rice produced. The training is wide-ranging and benefits both farmers and their communities. It covers the use of water-saving technologies including land laser levelling and alternate wetting and drying, as well as other interconnected topics such as pesticide management and agribusiness techniques.

Impact of engagement, including measures of success
By the end of the 2021/22 reporting year impressive results had been achieved:
• 30% reduction in water use
• 13% increase in yields
• 21% increase in net incomes
• 48% reduction in GHG emissions

After starting out with 600 farmers, there are currently 800 farmers who are now involved. The project has been expanded until 2025 to reach 1,200 farmers.

Comment
Please note that the percentages reported for "% of suppliers by number", "% total procurement spend (direct and indirect)" refer to Westmill Food only and are not related to the ABF Group.

Our Westmill Food businesses account for around 1% of total Group revenues.

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Education/information sharing	Run an engagement campaign to education customers about your climate change performance and strategy

% of customers by number

0

% of customer - related Scope 3 emissions as reported in C6.5

0

Please explain the rationale for selecting this group of customers and scope of engagement

Primark want to help customers love and wear their clothes for longer. One of the ways Primark has been working to achieve this objective is through free education workshops offered in stores and head offices, which show or remind people how to repair their clothes and give them a longer life. Mending clothes has become a lost art. However, there is a growing interest in learning new repair skills among our customers. After piloting the sessions with smaller groups during the pandemic, we started to roll the programme out more broadly in March 2022. Our workshops are led by Lecturer and Designer Lorraine Mitchell, a Primark customer, who approached us about hosting a repair workshop together. During the workshops, she shares basic hand-sewing techniques and practical repair tips and guides attendees through the hands-on sessions. Feedback from these workshops has been great and we plan to scale them up further during 2023 to cover additional markets such as France, Germany and the Netherlands.
Since anyone using Primark clothes can benefit from these workshops, they are offered for free to be accessible to as many people as possible.
Next to the in-person repair workshops, Primark hosts a series of how-to videos on its website and YouTube channel showing easy repair hacks that can help viewers extend the life of their garments.

Impact of engagement, including measures of success

Up to November 2022, Primark have run 43 sessions in stores and head offices in the UK and Republic of Ireland, offering over 500 free places to customers and colleagues. The number of workshops and places offered are the two indicators currently used to measure success for this initiative. However, Primark is exploring the potential of including additional metrics to measure the impact of customer-facing initiatives on customers' behaviour, and how that would ultimately affect emissions resulting from the use of its products.

The proportional impact on Primark's customer base and customer-based emissions is 0% as the initiative targeted a small number of customers compared to the scale of Primark as a retailer.

Type of engagement & Details of engagement

Education/information sharing	Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number

% of customer - related Scope 3 emissions as reported in C6.5

Please explain the rationale for selecting this group of customers and scope of engagement

The Courtauld Commitment is a voluntary agreement that enables collaborative action across the entire UK food network between manufacturers, retailers, and those in hospitality to help deliver reductions in greenhouse gas emissions within the UK food and drink sector. Our UK Grocery businesses are working closely with the UK retailers signed up to the Commitment that are customer of our businesses to work towards delivering the commitment.

The rationale for selecting to be a part of this initiative was due to the collaboration required between key stakeholders within the UK food and drink sector.

Impact of engagement, including measures of success

As of 2022, the signatories signed up to the Courtauld commitment have achieved a collective 12% reduction in emissions since the commitment started in 2015.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Many of our businesses have operations close to their farm suppliers with commercial relationships that go back many years. This provides a strong basis for concerted collaborative action, including training provided together with third-party experts to help farmers adopt regenerative farming practices. One such example is Frontier, formed in 2005 as a joint venture between ABF plc. and Cargill.

Frontier has a number of divisions providing additional specialist advice to growers. These include SOYL, who are a leading precision crop production service provider in the UK, and Kings, experts on conservation crops, green cover and forage crops.

Another example is the Jordan's Farm Partnership that is an initiative by Jordans, a cereal brand in from our UK Grocery business, aimed at supporting sustainable agriculture and biodiversity. It involves collaborating with farmers who share their values. form. It involves collaborations with Wildlife Trust, LEAF (Linking Environment And Farming) and the Prince's Countryside Fund. The partnership promotes environmentally friendly farming practices, habitat preservation, and soil health. It ensures that ingredients used in Jordans cereals are sourced from farms that meet specific environmental standards. Overall, the initiative focuses on sustainable farming and the conservation of nature and wildlife.

Primark were among the first signatories to commit to Textiles 2030, a collaboration and voluntary initiative led by WRAP building on the learnings and success of the SCAP 2020 initiative. The initiative aims to accelerate the textile industry's movement towards circularity and system change by limiting the impact that clothes and home textiles have on climate change in line with the Paris Agreement and the UN Fashion Industry Charter for Climate Action. Our commitment to Textiles 2030 includes sharing the ambition to create and deliver a UK-wide roadmap for circular textiles by making more durable, recyclable and re-usable products and using more recycled, circular materials.

Since 2018, Primark has been a participant in the Ellen MacArthur Foundation's Make Fashion Circular Initiative. In 2021, we joined the Foundation's network as a Partner. We support EMF's development of their "Vision of a Circular Economy for Fashion" and have ambitions to implement the key principles of circular fashion: that products are used more, made to be made again, and made from safe and recycled or renewable inputs.

Primark joined the United Nations' Fashion Charter (UNFCCC) in October 2020. The Fashion Industry Charter has eight working groups, focused on key areas and sub-targets of the charter, which are led by co-chairs from Signatory Brands and Supporting Organisations. Primark actively contribute to a number of these groups, attending regular meetings, to discuss progress and key actions.

The Twinings Sourced with Care programme is well established and focuses on improving the quality of life in communities that grow tea and herbs. Over the past year, Sourced with Care has achieved a great deal, including collaborative work with Mercy Corps in Guatemala to improve the livelihoods of smallholder farmers, while preserving trees and reducing deforestation.

Also, Twinings is a founding member of Ethical Tea Partnership and also a member of the Sustainable Spices Initiative, with specific projects and working groups aiming at reducing carbon emissions in both the tea and herbs supply chains.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?
No, but we plan to introduce climate-related requirements within the next two years

C-AC12.2/C-FB12.2/C-PF12.2

(C-AC12.2/C-FB12.2/C-PF12.2) Do you encourage your suppliers to undertake any agricultural or forest management practices with climate change mitigation and/or adaptation benefits?
Yes

C-AC12.2a/C-FB12.2a/C-PF12.2a

(C-AC12.2a/C-FB12.2a/C-PF12.2a) Specify which agricultural or forest management practices with climate change mitigation and/or adaptation benefits you encourage your suppliers to undertake and describe your role in the implementation of each practice.

Management practice reference number
MP1

Management practice
Agroforestry

Description of management practice
Through the Jordans Farm Partnership (JFP), Jordans Cereals, a brand of our Grocery business, pays 34 British farmers a premium for their oats, wheat and barley, in return for contractually committing at least 10% of their land to support biodiversity. Jordans has worked with its farmers to promote biodiversity on their land since 1985. The latest iteration of their farm sustainability standard was launched in 2016, requiring farmers to be independently audited and certified against the Linking Environment And Farming (LEAF) Marque Standard, which specifies a range of sustainable farm management practices, including the provision of biodiversity habitat aligned with the post-2020 biodiversity framework. As an enhancement to the habitat management criteria specified within the LEAF Marque standard, all farmers within the Jordans Farm Partnership are required to work directly with specialist farm advisory experts from UK based NGO 'The Wildlife Trust' to implement a bespoke wildlife management programme on their farm. During the reporting year the standards were applied on c.15,900 hectares of UK farmland, of which over 26% was managed to as habitat for wildlife biodiversity.

Farmers who operate under this scheme are contractually required to dedicate at least 10% of their land to wildlife preservation. 5% of the farmed land (roughly half of that

required under the contract) must be managed according to or equivalent to those listed in the UK Government's Countryside Stewardship Scheme (CSS) Wild Pollinator and Farm Wildlife Package (WPFWP) to provide year-round habitat (food, nest sites and shelter for insects and overwintering bird species). The remaining 5% of the 10% contractually specified should be managed according to a bespoke landscape plan with habitat regeneration initiatives specific to that farm, this activity is completed in collaboration with The Wildlife Trust farm advisors. The standard also stipulates criteria for the management of field boundaries, ponds, watercourses and woodland.

In addition, the participating farms are measured on the efficiency of their production processes and required to meet the general sustainable farm management criteria specified under the LEAF Marque, Integrated Farm Management, protocol. This includes specific provision for the management of soil quality and agrochemicals.

Your role in the implementation
Financial
Knowledge sharing
Procurement

Explanation of how you encourage implementation
Each year Jordans and the JFP partners host a farmer meeting to share best practice and discuss common challenges. A governance meeting is held twice a year with an opportunity for the partners to ensure the ongoing relevance of the partnership, identify future risks and opportunities as well as discuss topics of common interest. A quarterly tracking meeting is held between the partners to ensure farms are in compliance with the standards.

We have directly raised awareness of these environmental practices among our network of selected farmers. Furthermore, Jordans pays a contractual premium to its growers more than standard oats and the farms benefit from access to additional subsidies and grants for ecosystem services.

Climate change related benefit
Increasing resilience to climate change (adaptation)
Reduced demand for fertilizers (adaptation)
Other, please specify (Soil management and association carbon sequestration)

Comment
Jordans has surrendered its legal rights to exclusivity on the scheme for all products other than breakfast cereals, with the objective of expanding the model into other food categories.

Management practice reference number
MP2

Management practice
Knowledge sharing

Description of management practice
The South African-based World Wildlife Fund (WWF), in partnership with the Noodsberg Cane Growers Association, and supported by Illovo's South Africa Noodsberg sugar factory and refinery, was instrumental in the development of a Sustainable Sugar Cane Farm Management system for growers, termed SUSFARMS®. SUSFARMS® is a methodology which develops better farm management practices in the cane sugar industry bringing environmental, social and economic benefits. The use of SUSFARMS® sustainability methodology for evaluating agronomic practices is encouraged.

Your role in the implementation
Knowledge sharing

Explanation of how you encourage implementation
Illovo Sugar Africa, part of AB Sugar, engages with sugarcane growers on sustainable farming practices based on the SUSFARMS® methodology.

Climate change related benefit
Emissions reductions (mitigation)
Increasing resilience to climate change (adaptation)

Comment

Management practice reference number
MP6

Management practice
Biodiversity considerations

Description of management practice
Allied Mills are undertaking a Wheat Sustainability Supply Project, where a select group of farmers supplying Allied Mills adopt agricultural techniques that aim to improve soil quality and health, and include land practices that support wildlife. The project was developed in partnership with Frontier, ABF's joint venture business, and as with the Jordans Farm Partnership, the farmers receive a premium grain price in return. The project stipulates crop rotation and minimal tillage to build up organic matter within the soil and increase fertility.
In 2021 the business contracted specialist consultancy Downforce Technologies to undertake satellite image analysis of the pilot programme to establish the impact of the management trials on soil carbon sequestration.

To support the initiative, Allied Mills will be arranging mill, bakery and farm visits to facilitate the sharing of knowledge and best practice among the participating farmers. Progress will be monitored and data gathered throughout the project to identify expected improvements such as lower nitrogen use, reduced energy consumption, less water run-off and enhanced soil health. It is the intention of the business that the output from this trial is shared with key stakeholders, including UK based farm management framework providers, as part of broader efforts to reduce carbon emissions associated with future UK arable farm production.

Your role in the implementation
Financial
Knowledge sharing
Procurement

Explanation of how you encourage implementation
Farmers must establish a recognised stewardship scheme with at least 5% of farmed land managed for wildlife habitats. The project is designed to enhance the UK wheat industry's broader understanding of sustainable farm management practices. It is relatively new, and we're only in the initial stages of capturing and analysing the data. But the early indications are positive.

Climate change related benefit
Increasing resilience to climate change (adaptation)
Increase carbon sink (mitigation)

Reduced demand for fertilizers (adaptation)
Reduced demand for pesticides (adaptation)

Comment

Management practice reference number
MP7

Management practice
Fertilizer management

Description of management practice
Primark's Sustainable Cotton Programme trains smallholder farmers to help them reduce their use of water, chemical pesticides and chemical fertilisers, while helping to improve their livelihoods through lower input costs and higher yields. It operates in India, Pakistan and Bangladesh.

Primark developed the programme and launched the first pilot in India in 2013 in collaboration with agronomic experts, Cotton Connect, and the grassroots organisation, the Self-Employed Women's Association, with the aim of reducing its impact on the environment, improving the livelihoods of farmers and changing the way the business sources its cotton.

Up to the end of August 2022, Primark has successfully trained 252,800 farmers in more sustainable farming methods across India, Bangladesh and Pakistan (the number includes farmers that are currently being trained and those that have completed training under the programme). Cotton farmers receive multi-year training to address an over dependence on chemical fertilizers and pesticides, in order to reduce the environmental impact of their cotton farming. Equipping smallholder farmers with the knowledge and means to grow cotton using more sustainable farming methods has also resulted in improved cotton yields.

On average, farmers in the programme use 42% less chemical pesticides and 26% less chemical fertilisers and 10% less water per acre, with a 14% increase in yield and growth in profits of 205%. Percentages are in comparison to control farmers. Average results from the Primark Sustainable Cotton Programme in India, 2013-2019, based on results from 6,274 programme farmers and 363 control farmers over the same period.

After introducing the cotton from our PSCP into our popular nightwear range in 2017, it is now used across all major product categories and departments, including menswear, womenswear, kidswear and homeware.

Your role in the implementation
Knowledge sharing

Explanation of how you encourage implementation
We have directly raised awareness of sustainable agricultural practices among our network of farmers enrolled in PSCP.
In 2022, 40% of our cotton clothing units sold contained cotton that was either organic, recycled or sourced from our PSCP, up from 27% at the launch of Primark Cares. The programme has enabled us to increase the amount of sustainable cotton available for our products, while also creating a more transparent cotton supply chain. Today we are on track to reach our commitment of increasing the total number of farmers in the PSCP to 275,000 by the end of 2023.

Climate change related benefit
Reduced demand for fertilizers (adaptation)
Reduced demand for pesticides (adaptation)

Comment

Management practice reference number
MP8

Management practice
Reforestation

Description of management practice
Our Grocery business, Jordans, helps finance a partnership with local NGO CIPCA (Bolivian Centre for Research and Promotion of Small farmers) to support the Brazil nut supply chain in the area around Riberalta, Bolivia. Brazil nuts can only be wild harvested from the Amazon rainforest, as Brazil trees are entirely dependent upon forest pollinators to fruit. The crop provides a valuable income to the local community and plays an important role in conserving the Amazon rainforest in Bolivia. Through the programme, essential forest conservation was undertaken including the planting of 47,500 Brazil nut saplings across an area, previously estimated to cover 121,000 hectares of forest.

Your role in the implementation
Financial
Knowledge sharing

Explanation of how you encourage implementation
By working with CIPCA we create tree nurseries, facilitate trail clean ups, provide health education and training around how to keep Brazil nut trees and their forests healthy. This is part of a broader initiative to make the Amazon Rainforest economically viable and prevent deforestation.

Climate change related benefit
Increase carbon sink (mitigation)

Comment

Management practice reference number
MP10

Management practice
Crop rotation

Description of management practice
Cover crops used in arable rotation have demonstrated they can improve the physical structure of the soil as well as improve soil biology and chemistry (nutrients). Sugar beet is an essential crop for many farmers and often plays a vital role in soil and crop health in arable farm rotation. Sugar beet acts as a 'break' crop in the rotation, meaning it provides a break or a rest from the more intensively farmed cereal crops that dominate most arable rotations. Having sugar beet as a break crop also reduces the need for pesticides. Sugar beet provides a large amount of organic material returned to the soil by the tops of the sugar beet after harvesting, and it also helps build up soil carbon and organic matter reserves - an essential part to the healthy functioning of the soil and ecosystem.

Your role in the implementation

Knowledge sharing
Operational

Explanation of how you encourage implementation

Climate change related benefit
Reduced demand for pesticides (adaptation)

Comment

Management practice reference number
MP5

Management practice
Rice management

Description of management practice
Our UK Grocery business Westmill Foods has participated in a three-year Water and Productivity Project (WAPRO) in Punjab, Pakistan, which promotes the standards of the UN Sustainable Rice Platform (UNSRP), of which Westmill was a founding participant and board member.

WAPRO partners Helvetas and Galaxy Rice provide training in SRP techniques and has trained 800 basmati rice farmers since 2018 with the aim to reach 1,200 by 2025. In 2021, Westmill purchased 6,500 tonnes of the sustainable rice and plans to increase the proportion of rice it sources through the project in future years, with the project extended to 2025.

By the end of the 2021/22 reporting year impressive results had been achieved:
• 30% reduction in water use
• 13% increase in yields
• 21% increase in net incomes
• 48% reduction in GHG emissions

Your role in the implementation
Financial
Operational
Procurement

Explanation of how you encourage implementation
Westmill Foods encourages implementation by providing funding for the training, by collaborating with the partners and by purchasing sustainable rice. These initiatives ensure that rice growing becomes more sustainable and profitable for farmers.

Climate change related benefit
Emissions reductions (mitigation)
Increasing resilience to climate change (adaptation)

Comment

C-AC12.2b/C-FB12.2b/C-PF12.2b

(C-AC12.2b/C-FB12.2b/C-PF12.2b) Do you collect information from your suppliers about the outcomes of any implemented agricultural/forest management practices you have encouraged?
Yes

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate
Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?
Yes

Attach commitment or position statement(s)
Please see page 83 of our 2022 Annual Report.
ABF Annual Report 2022.pdf.downloadasset.pdf

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan
ABF is both diversified and decentralised. We wholly support policies that are aligned with the goals of the 2015 Paris Climate Agreement to limit the rise in global temperatures to well below 2˚C above pre-industrial levels, and to pursue efforts to limit the temperature increase even further to 1.5˚C. We are successful because we trust the people who run our businesses. Close to their markets, they use their knowledge, skills and judgement to serve their customers. The Group provides a framework of expectations and engages with our business leaders, but it doesn't dictate the specific agendas or methods used by the businesses, which operate within unique markets where solutions to complex sustainability issues may vary. Our Group Company Secretary acts as a focal point for corporate governance and corporate responsibility communications. This role regularly liaises with Corporate Responsibility, Public Relations and other advocacy-related roles within the businesses to ensure alignment. This happens when required and through a formal annual reporting process whereby the businesses provide information on their internal activities, work with their value chain and any public policy activities related to a range of corporate responsibility issues including water stewardship. Any public policy engagement conducted by the businesses must be approved at a senior level. The businesses review engagement activities to ensure they are aware of current and future legislation that will impact their value chains. Policy engagement covers energy, waste, water and other issues that the businesses and the group as a whole consider to represent a risk or an opportunity. Engagement activities are reviewed at least annually to ensure alignment with group strategy and the policy landscape.

Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate
<Not Applicable>

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate
<Not Applicable>

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association
Other, please specify (COFALEC – Confederation of European Yeast Producers)

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
COFALEC is the confederation of yeast producers that represents the EU yeast industry in Europe. With 33 factories scattered through the European Union, one million tons of yeast produce each year and more than 30% of the production exported outside Europe, the yeast industry is an important player of the European food industry. Yeast producers have shown a long commitment to preserving the environment and sustaining natural habitats. It was one of the very first bio-technology industries and COFALEC members have actively embraced cutting-edge technologies to develop new methods of water, energy and waste management.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
No, we have not evaluated

Trade association
Other, please specify (FEDIMA - Federation of European Manufacturers and Suppliers of Ingredients to the Bakery, Confectionery and Patisseries Industries)

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
AB Mauri is a member of FEDIMA and supports their sustainability strategy. AB Mauri has been a member of the sustainability committee since April 2022 and helps inform their work through participation in quarterly sustainability committee meetings and completion of regular sustainability survey.

Fedima is the European trade association representing the bakery, patisserie and confectionery ingredients' manufacturers. Fedima's mission is to shape a favourable environment to ensure a sustainable and an innovative bakery industry. Fedima's vision is to be the European bakery ingredient platform to support and grow the bread and pastry market. The companies represented by Fedima provide a wide range of products to bakers, pastry and chocolate designers, as well as confectionery producers. Fedima's Sustainability Committee, of which AB Mauri has been a member since April 2022, is composed of experts delegated from the companies and national associations. ABM has been a member of the sustainability committee since April 2022 and helps inform their work through participation in quarterly sustainability committee meetings and completion of sustainability surveys.
FEDIMA's Sustainability Committee serves as a platform to share ideas and best practices on sustainability. It is tasked with evaluating and monitoring the actions and commitments undertaken by the industry. It identifies the sustainability concepts and scope within Fedima with the view to act as a responsible bakery ingredients industry, and meet the Sustainable Development Goals set out by the United Nations in 2015. It also builds out common positions and commitments on policy issues related to

sustainability and identifies long term project(s) that can be carried out under Fedima's leadership in order to bring sustainable change to the industry. Since its first gathering in January 2020, the Sustainability Committee is working in synergy with other Fedima bodies, national associations, and European actors like FoodDrinkEurope, with the help of the Secretariat.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
No, we have not evaluated

Trade association
Other, please specify (British Retail Consortium (BRC))

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
In the UK, Primark is a member of the British Retail Consortium (BRC). BRC campaigns for the retail industry and engages with government on matters relevant to the sector. Primark is a signatory to the BRC's Climate Action Roadmap, the retail industry's commitment to deliver net zero in their own operations and the products they sell by 2040.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)
110000

Describe the aim of your organization's funding
To promote the story of retail in the UK, help shape debates and influence policy on issues that are important to the sector, including climate change and climate action.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (Irish Business and Employers Confederation (Ibec) and Retail Ireland)

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
In the Republic of Ireland, where Primark is headquartered, we are a member of the Irish Business and Employers Confederation (Ibec) and Retail Ireland. Retail Ireland provide a public affairs service on policy developments at Irish and EU level. Primark works with the trade association on submissions to public consultations.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)
123000

Describe the aim of your organization's funding
To represent the sectors and Primark's interests to Government, media and all other stakeholders. Provision of professional services relating to EHS, employee relations and employment law

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (EuroCommerce)

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
Primark is a member of EuroCommerce, the principal European organisation representing the retail and wholesale sector. EuroCommerce advises members of key legislative files at EU level, providing information, updates and access to policymakers. Primark is also a member of the Policy Hub in Amsterdam, which works with the apparel and footwear industry on policies that accelerate circular practices.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)
42000

Describe the aim of your organization's funding
To further Primark's understanding of EU legislative files and provide a conduit for influencing policy, including climate-related policy.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (ADE – Association of Decentralised Energy)

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
The work of the ADE includes:
• advocacy - being at the forefront of influencing energy, planning and procurement policy
• raising awareness - building understanding through communications, events, training and the production of relevant policy and market research
• promoting best practice and collaboration - working with our members and a wide range of relevant stakeholders to help drive improvement and innovation across the sector
• enhancing and maintaining the reputation of the sector - through advocacy, promotion and adoption of best practice.
AB Sugar are members of the working groups. We add influence and give 'real-life' examples as the association works towards its objectives.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)
15000

Describe the aim of your organization's funding
To support the drive to the decarbonisation of heat, championing the role of industry in the green transition and pushing for UK homes, places of work and public services to be energy efficient and smart. Only by getting users engaged and investing in energy efficiency, low carbon heat and providing smart flexibility will the UK truly be able to decarbonise its energy system. For this to happen, energy must work for the user.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (ePURE (European Bioethanol T.A.))

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
ePURE represents and supports companies that produce renewable ethanol in the EU for all end-uses, i.e. fuel, potable and industrial uses. ePURE also represents companies that have an interest in ethanol production. An ABF representative is a Director on the Board of ePURE, and adds influence as the association works towards its objectives.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)
100000

Describe the aim of your organization's funding
AB Sugar is working with ePURE with the aim to represent a unified EU Bioethanol industry voice, and our interests as a members to the EU institutions, industry stakeholders, the media and general public.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (Food and Drink Federation (FDF))

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
Members are committed to FDF's 'Ambition 2025': leading on collaborative transformations within the food and drink supply chain that enhance productivity and deliver environmental and social benefits to ensure safe, nutritious, affordable and sustainable food for all. The climate change ambition is to achieve a 55% absolute reduction in CO2 emissions by 2025 against the 1990 baseline. FDF members are committed to the Sustainability: Ambition 2025 which launched recently as a guide for members to sustainably manage their footprint and supply chain.

An ABF representative attends the Climate Change and Energy Working Group so has the responsibility to engage with the group in the direction of the overall policy of the FDF. This group has engaged with the government ahead of the proposed changes in the replacement of the 2050 Decarbonisation Roadmap for example, as well as providing UK industry position input into the EU Commission in its revision of the Best Available Techniques Reference Document (BRef) covering the Food, Drink & Milk Industries. An ABF representative attends the Sustainability Group so has the responsibility to steer the group in the direction of the overall policy of the FDF.

This organisation gives AB Sugar access to unrivalled policy insight on a range of topics and expertise affecting food and drink manufacturing across the UK. Our core strength is our deep understanding of industry issues.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (The South African Sugar Association (SASA))

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

Support research through SASRI (South African Sugar Research Institute) focused on empowering the sugar industry to respond to climate change impacts. Working with the mandated government departments, such as the Department of Energy and the National Treasury, to support industry diversification into renewable energy; both electrical co-generation from bagasse and bioethanol production from molasses. Support the avoidance of GHG emissions through the promotion of electricity from bagasse-based cogeneration and bioethanol, thereby supporting the South African government's biofuel industry strategy and mandatory blending requirements. Illovo has one member on the board of SASA. Illovo and SASA are aligned in their positions on climate change legislation. Through SASA led discussion, Illovo has participated in the carbon tax process headed by the National Treasury and together have provided policy submissions.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
No, we have not evaluated

Trade association
Sustainable Agriculture Initiative Platform (SAIP)

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
The SAI Platform brings together over 120 member companies and organisations leading the way in sustainable agriculture worldwide. Our members' goal is to ensure that the agricultural commodities and ingredients they use are supplied from sustainable sources. Our members share a commitment to developing sustainable agriculture in a pre-competitive environment. AB Sugar is a member of the SAI and sits on the Executive Committee.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)
35714

Describe the aim of your organization's funding
The funding figure referred to includes AB Sugar's membership fees to the SAI, as well as funding the SAI Platform's Regenerative Agriculture Programme.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication
In mainstream reports

Status
Complete

Attach the document
ABF Annual Report 2022.pdf.downloadasset.pdf
ABF Responsibility Report 2022.pdf.downloadasset.pdf

Page/Section reference
CR Report: p. 27-32
Annual Report: p. 83 - 93

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment
We have incorporated in our annual report our reporting on the Task Force on Climate-related Financial Disclosures framework (TCFD). We have engaged with the spirit as well as the letter of the scenario planning that is central to TCFD.

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	Fashion Charter for Climate Action Race to Zero Campaign Science Based Targets Network (SBTN) Sustainable Agriculture Initiative (SAI) Task Force on Nature-related Financial Disclosures (TNFD)	AB Sugar has committed to setting a near-term science-based emission reduction target in consultation with The Science Based Targets initiative (SBTi). Also Primark has committed to set science-based targets through the Science Based Targets Initiative (SBTi). We are monitoring development of the new biodiversity framework proposed by the Taskforce on Nature-related Financial Disclosures and the UN Global Biodiversity Framework under discussion at the UN Biodiversity Conference of Parties (COP 15) taking place in Canada in December 2022. We believe there is already a good degree of alignment between our approach and the basic principles of those two draft frameworks. As a signatory of the Fashion Charter for Climate Action, Primark is also taking part in the Race to Zero Campaign. In 2020, Primark became a signatory to the Fashion Industry Charter for Climate Action, a collaborative initiative from the United Nations Framework Convention on Climate Change (UNFCCC). Primark welcomed the adoption of a more stringent target by the Charter during COP26 in 2021, to support the Paris Agreement ambition of limiting the global temperature rise to 1.5 degrees Celsius above pre-industrial levels, which also aligns with our Primark Cares carbon emissions target. AB Sugar sits on the executive committee of the Sustainable Agriculture Initiative (SAI) Platform, which aims to ensure that agricultural commodities and ingredients are supplied from sustainable sources. This global food and drink industry platform develops sustainable agriculture solutions in the industry supply chain.

C13. Other land management impacts

C-AC13.1/C-FB13.1/C-PF13.1

(C-AC13.1/C-FB13.1/C-PF13.1) Do you know if any of the management practices implemented on your own land disclosed in C-AC4.4a/C-FB4.4a/C-PF4.4a have other impacts besides climate change mitigation/adaptation?

Yes

C-AC13.1a/C-FB13.1a/C-PF13.1a

(C-AC13.1a/C-FB13.1a/C-PF13.1a) Provide details on those management practices that have other impacts besides climate change mitigation/adaptation and on your management response.

Management practice reference number
MP4

Overall effect
Positive

Which of the following has been impacted?
Soil

Description of impact
Illovo Sugar implemented a reduced tillage project at Kilombero, Tanzania in 2019, and has recently commenced a similar project at Nchalo, Malawi. Reduced tillage practices are frequently recommended as a way to reduce soil erosion and increase soil productivity.

Previously at Kilombero, the method adopted used six tillage practices while the current method uses four tillage practices. A future anticipated method will use three tillage practices with the addition of land-forming.

This methodology will also bring about benefits to general soil structure and microbial health which in turn can reduce the reliance on large amounts of artificial fertilizers. Although the use of fertilizers will remain necessary, it can be reduced and what is used, is assimilated into the plants better and more efficiently.

Have you implemented any response(s) to these impacts?
No

Description of the response(s)
We have not implemented any response as we did not identify any negative impacts caused by this management practice.

Management practice reference number
MP6

Overall effect
Positive

Which of the following has been impacted?
Biodiversity

Description of impact
Maintenance of pockets of natural vegetation within Illovo's estates act as refuges and ecological green corridors for indigenous fauna and flora resulting in increased biodiversity and minimisation of land use change. As an example, a 400-hectare reserve known as Nyala Park has been set aside within the Illovo Nchalo estate boundary and is maintained with species of the original flora and fauna of the Shire Valley. Illovo Ubombo Sugar manages the private Mhlosinga Nature Reserve, including the Van Eck Dam. Sitting on 1,108 hectares of land, the reserve supports game, birds, reptiles and fish.

We continue to manage and develop the areas with positive outcomes;
• The above-mentioned areas boast a rich diversity of fauna consisting of healthy populations of mammals, reptiles and birds.
• Certain areas continue to mix cattle with wildlife
• The flora encompasses grasslands, riverine bush, savannah and thornveld
• Recreational facilities are offered at some of the reserves so that staff and communities can enjoy the areas in a responsible way.

Have you implemented any response(s) to these impacts?
No

Description of the response(s)
We have not implemented any response as we did not identify any negative impacts caused by this management practice.

Management practice reference number
MP7

Overall effect
Positive

Which of the following has been impacted?
Soil

Description of impact
Cover cropping in Illovo Nakambala in Zambia plant sun hemp ahead of cane planting in the Autumn. This promotes organic matter, improves soil structure, enables a reduction in fertiliser usage and promotes the long-term organic matter in the soil. The impact is a higher yielding cane crop and healthier soil.

Have you implemented any response(s) to these impacts?
Yes

Description of the response(s)
We have not implemented any response as we did not identify any negative impacts caused by this management practice.

C-AC13.2/C-FB13.2/C-PF13.2

(C-AC13.2/C-FB13.2/C-PF13.2) Do you know if any of the management practices mentioned in C-AC12.2a/C-FB12.2a/C-PF12.2a that were implemented by your suppliers have other impacts besides climate change mitigation/adaptation?
Yes

C-AC13.2a/C-FB13.2a/C-PF13.2a

(C-AC13.2a/C-FB13.2a/C-PF13.2a) Provide details of those management practices implemented by your suppliers that have other impacts besides climate change mitigation/adaptation.

Management practice reference number
MP1

Overall effect
Positive

Which of the following has been impacted?
Biodiversity
Soil
Water
Yield

Description of impacts
Jordans Cereals, a brand of our Grocery business, was one of the first brands in the UK to differentiate on the basis of its values and has supported wildlife in its UK farm supply chain since 1985.
The Jordans Farm Partnership (JFP) was created in 2016 and represents a unique collaboration between The Wildlife Trusts, Linking Environment and Farming (LEAF), The Prince's Countryside Fund and 34 British farms supplying oats, wheat and barley. Each farm has contractually committed at least 10% of their land to supporting biodiversity, half of which is aimed at attracting pollinators through wildflower areas. The farmers are also required to cut hedges only once every two years to protect nesting habitats, essential shelter and food sources, such as wild berries.

In 2022, farmers growing oats for Jordans Cereals provided more than 4,200 hectares of land for farmland wildlife including barn owls, brown hares, bats and vital pollinating insects like bees. These are some of the wild places they have created or maintained:
- 756ha (PY 897ha) woodland
- 155ha (PY 120ha) ponds
- 760km (PY 722ha) hedgerows to grow and spill over which, as well as providing shelter, deliver a wonderful source of nectar and pollen when the hedgerows are flowering
- 550ha (PY476ha) flower rich field margins to help provide reliable and abundant supplies of pollen and nectar
- 147km (PY 138km) waterways

Managing land for bees and pollinators can also help support a whole host of other wildlife. By recreating habitat and connecting areas of habitats on their farms with the wider countryside, the farmers in the JFP are helping establish a mix of connected habitats.

Have any response to these impacts been implemented?
Yes

Description of the response(s)
Contracted farmers within the Jordans Farm Partnership are paid a premium for their grain. In return, they agree to manage at least 10% of their land for the benefit of wildlife.
At the end of FY2022 that proportion was an average of 17% of the total farmland managed under the Partnership of around 15,000 hectares. That's a total farm area equivalent to around 7% of the total UK farmland used to grow oats.
Jordans Cereals has taken a similar approach in the almond industry in California. It supports the Seeds for Bees programme, which provides wildflower seeds for ground cover in almond orchards. The ground cover provides forage for pollinators and boosts soil health along with water infiltration to improve crop resilience.
Jordans Cereals' contribution to the programme provides ground cover equivalent to the total area of orchards required to supply its almonds that are used in their products.

Management practice reference number
MP2

Overall effect
Positive

Which of the following has been impacted?
Biodiversity
Soil
Water
Yield

Description of impacts
SUSFARMS® which originated in South Africa is a methodology which develops better farm management practices in the cane sugar industry bringing environmental, social and economic benefits. SUSFARMS® is a farming system designed to encourage sustainable sugarcane production through the implementation of better management practices (BMPs). These BMPs are designed to reduce negative impacts on the environment, comply with legislation, maintain a high level of social responsibility and assist in ensuring financial sustainability. More than 400 commercial farmers have committed to the implementation of SUSFARMS® and the programme has received widespread industry and government support.

Have any response to these impacts been implemented?
No

Description of the response(s)
We have not implemented any response as we did not identify any negative impacts.

Management practice reference number
MP6

Overall effect
Positive

Which of the following has been impacted?
Biodiversity
Soil

Description of impacts
Allied Mills are undertaking a Wheat Sustainability Supply Project, where a select group of farmers supplying Allied Mills adopt agricultural techniques that improve soil quality and health, and land practices that support wildlife. The project was developed in partnership with Frontier, ABF's joint venture business, and as with the Jordans Farm Partnership, the farmers receive a premium grain price in return. The project stipulates crop rotation and minimal tillage to build up organic matter within the soil and

increase fertility.
Farmers must establish a recognised stewardship scheme with at least 5% of farmed land managed for wildlife habitats. The project is designed to enhance the UK wheat industry's broader understanding of sustainable farm management practices.

Have any response to these impacts been implemented?
No

Description of the response(s)
We have not implemented any response as we did not identify any negative impacts.

Management practice reference number
MP7

Overall effect
Positive

Which of the following has been impacted?
Biodiversity
Yield

Description of impacts
Primark's Sustainable Cotton Programme trains smallholder farmers to help them reduce their use of water, chemical pesticides and fertilisers, while helping to improve their livelihoods (through lower input costs and higher yields) in India, Pakistan and Bangladesh.

Primark developed the programme and launched the first pilot in India in 2013 in collaboration with agronomic experts, Cotton Connect, and the grassroots organisation, the Self-Employed Women's Association, with the aim of reducing its impact on the environment, improving the livelihoods of farmers and changing the way the business sources its cotton.

Up to the end of August 2022, Primark has successfully trained 252,800 farmers in more sustainable farming methods across India, Bangladesh and Pakistan (the number includes farmers that are currently being trained and those that have completed training under the programme). Cotton farmers are trained over three years to address an over dependence on chemical fertilizers and pesticides in order to preserve the biodiversity and reduce the environmental impact of their cotton farming. Equipping smallholder farmers with the knowledge and means to grow cotton using more sustainable farming methods has also resulted in improved cotton yields.

On average, farmers in the programme use 40% less chemical pesticides and fertilisers and 10% less water used by acre, with a 14% increase in yield and growth in profits by 200%. Percentages are in comparison to control farmers. Average results from the Primark Sustainable Cotton Programme in India, 2013-2019, based on results from 6,274 programme farmers and 363 control farmers over the same period.

We have directly raised awareness of sustainable agricultural practices among our network of enrolled farmers.
In 2022, 40% of our cotton clothing units sold contained cotton that was either organic, recycled or sourced from our PSCP, up from 27% at the launch of Primark Cares. The programme has enabled us to increase the amount of sustainable cotton available for our products, while also creating a more transparent cotton supply chain. Today we are on track to reach our commitment of increasing the total number of farmers in the PSCP to 275,000 by the end of 2023. We project this will increase the volume of cotton from our programme by around 60%.

Have any response to these impacts been implemented?
No

Description of the response(s)
We have not implemented any response as we did not identify any negative impacts.

Management practice reference number
MP8

Overall effect
Positive

Which of the following has been impacted?
Biodiversity
Yield

Description of impacts
Our Grocery business, Jordans, helps finance a partnership with local NGO CIPCA (Bolivian Centre for Research and Promotion of Small farmers) to support the Brazil nut supply chain in the area around Riberalta, Bolivia. Brazil nuts can only be wild harvested from the Amazon rainforest, as Brazil trees are entirely dependent upon forest pollinators to fruit. The crop provides a valuable income to the local community and plays a role in conserving the Amazon rainforest in Bolivia. Through the programme, essential forest conservation was undertaken including the planting of 35,000 Brazil nut saplings across an area of 121,000 hectares of forest.
By working with CIPCA we create tree nurseries, facilitate trail clean ups, provide health education and training around how to keep Brazil nut trees and their forests healthy. This is part of a broader initiative to make the Amazon Rainforest economically viable and prevent deforestation.

Have any response to these impacts been implemented?
No

Description of the response(s)
We have not implemented any response as we did not identify any negative impacts.

Management practice reference number
MP10

Overall effect
Positive

Which of the following has been impacted?
Soil

Description of impacts
Cover crops used in arable rotation have demonstrated they can improve the physical structure of the soil as well as improve soil biology and chemistry (nutrients). Sugar beet is an essential crop for many AB sugar farmers and often plays a vital role in soil and crop health in arable farm rotation. Sugar beet acts as a 'break' crop in the

rotation, meaning it provides a break or a rest from the more intensively farmed cereal crops that dominate most arable rotations. Having sugar beet as a break crop also reduces the need for pesticides. Sugar beet provides a large amount of organic material returned to the soil by the tops of the sugar beet after harvesting, and it also helps build up soil carbon and organic matter reserves - an essential part to the healthy functioning of the soil and ecosystem.

Have any response to these impacts been implemented?
No

Description of the response(s)
We have not implemented any response as we did not identify any negative impacts.

Management practice reference number
MP5

Overall effect
Positive

Which of the following has been impacted?
Water
Yield

Description of impacts
Our UK Grocery business Westmill Foods has participated in a three-year Water and Productivity Project (WAPRO) in Punjab, Pakistan, which promotes the standards of the UN Sustainable Rice Platform (UNSRP), of which Westmill was a founding participant and board member.

WAPRO partners Helvetas and Galaxy Rice provide training in SRP techniques and has trained 800 basmati rice farmers since 2018 with the aim to reach 1,200 by 2025. In 2021, Westmill purchased 6,500 tonnes of the sustainable rice and plans to increase the proportion of rice it sources through the project in future years, with the project extended to 2025.

By the end of the 2021/22 reporting year impressive results had been achieved:
• 30% reduction in water use
• 13% increase in yields
• 21% increase in net incomes
• 48% reduction in GHG emissions

Have any response to these impacts been implemented?
No

Description of the response(s)

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity	Scope of board-level oversight
Row 1	Yes, executive management-level responsibility	ABF's commitment to best practice in biodiversity is fundamental to our long-term existence as a company. Our Group Director of Corporate Responsibility and Director of Legal Services and Company Secretary have executive management-level responsibility for biodiversity-related issues within ABF. Our ambition is to strengthen the resilience and efficiency of our agricultural supply chains to ensure that crop yields and quality meet consumer need. And, in parallel, we seek wherever possible to sustain the local habitats and ecosystems that are essential for ABF today, and in the future too. We're closely following the development of the new biodiversity framework proposed by the Taskforce on Nature Related Financial Disclosures. We're also tracking the progress of the UN Global Biodiversity Framework under discussion.	<Not Applicable>

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	No, but we plan to do so within the next 2 years	<Not Applicable>	<Not Applicable>

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment
No, but we plan to within the next two years

Value chain stage(s) covered
<Not Applicable>

Portfolio activity
<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity
<Not Applicable>

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)
<Not Applicable>

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment
No, but we plan to within the next two years

Value chain stage(s) covered
<Not Applicable>

Portfolio activity
<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity
<Not Applicable>

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)
<Not Applicable>

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year?
Not assessed

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Land/water management Education & awareness Law & policy

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	State and benefit indicators

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Impacts on biodiversity Biodiversity strategy	See p. 22-25 ABF Responsibility Report 2022.pdf.downloadasset.pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Director of Legal Services and Company Secretary who reviews all ESG aspects.	Other C-Suite Officer

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

Associated British Foods (ABF) is a diversified international food, ingredients and retail group with revenues of £17.0bn, 132,000 employees and operations in 53 countries across Europe, Africa, the Americas, Asia and Australia. Our purpose is to provide safe, nutritious, affordable food and clothing that is great value for money. With the breadth of our business, our brands and global reach, ABF aims to consistently deliver value to its stakeholders.

We operate a devolved operating model across our five business segments of Grocery, Sugar, Agriculture, Ingredients and Retail and believe the best way to create enduring value involves setting objectives from the bottom up rather than the top down. The Group, or corporate centre, provides a framework for sharing of ideas and best practice. The Group is in constant dialogue with the people who run our businesses, giving our corporate leaders a detailed understanding of their material opportunities and risks and enabling us to collaborate when making material decisions. This accountability is highly motivating for our strong local management teams, encouraging an entrepreneurial approach that drives innovative business thinking.

Grocery comprises brands with leading positions in markets across the globe, including Twinings, Ovaltine, Patak's, Kingsmill, Jordans, Tip Top, Yumi's and Mazola. Our grocery businesses pursue independent strategies appropriate to their particular market position and business requirements. Twinings Ovaltine, Acetum, Jordans Dorset Ryvita and AB World Foods have had considerable success extending their reach into new and emerging markets whilst some are focused on developing brands in their core domestic markets.

AB Sugar is a leading producer of sugar and sugar-derived co-products in Africa, the UK, Spain and north east China. We are a world-leading sugar business that employs 35,000 people and operates 27 plants in 10 countries, with the capacity to produce some 4.5 million tonnes of sugar. Our sugar-making plants are highly efficient 'bio-refineries' that enable us to produce a range of products maximising the value from every root of sugar beet and every stick of sugar cane. Our products include sugar, animal feed, biofuels and speciality products, sold into industry sectors including food and drink, fuels, pharmaceuticals, industrials, agriculture, horticulture, power and energy. We are also a largescale renewable power generator for both our own use and for export into national power infrastructure.

AB Agri is a leading international agri-food business operating across the supply chain, producing and marketing animal feed, nutrition and technology-based products. With an expert understanding of agriculture and animal nutrition, our philosophy is to improve feed production in order that nutritious and affordable food is produced safely and responsibly. Across the agricultural supply chain, our products, data insights and technological innovations enable our customers to produce and process high-yielding, safe and nutritious food in a responsible way, using fewer chemicals and antibiotics, preserving natural resources and creating less waste and lower emissions. Employing more than 3,000 people around the world, we sell products into 86 countries and continue to grow our global operations.

Our **Ingredients** businesses are leaders in yeast and bakery ingredients and supply specialty ingredients to the food, nutrition, feed and pharmaceutical industries. Ingredients comprises two specialty businesses, AB Mauri and ABF Ingredients. AB Mauri has a global presence in bakers' yeast with significant market positions in the Americas, Europe and Asia. We are a technology leader in bakery ingredients, supplying bread improvers, dough conditioners and bakery mixes to industrial and craft bakers across the globe. ABF Ingredients is a global leader in specialty ingredients, offering innovative, differentiated and value-added products to the food, nutrition, pharmaceutical, animal feed and industrial sectors.

Primark is a leading international retailer with over 17.5 million sq ft of selling space across more than 410 stores in 15 countries. Our product range offers something for everyone from great quality essentials to stand-out style across womenswear, menswear and kidswear, plus beauty, homeware, accessories and exciting licensed ranges created in partnership with some of the biggest names in food, entertainment and sports. We want to make more sustainable fashion affordable for everyone. We are committed to ensuring that by 2030 all our clothes will be made from recycled or more sustainably sourced materials and carbon emissions halved across the entire value chain.

ABF reports on data from countries where we have direct manufacturing, processing, retail operations and offices.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	16997000000

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Requesting member
Teva Pharmaceuticals

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
2408430

Uncertainty (±%)
5

Major sources of emissions
ABF's scope 1 emissions are mainly from the energy we generate, agriculture, owned transport and the on-site treatment of wastewater. Also included are the emissions from our production processes such as bread baking and ethanol production.

Verified
Yes

Allocation method
Other, please specify (We are providing ABF group level data and therefore no allocation of emissions.)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We are providing ABF group level data and therefore no assumptions are made regarding the allocation of data or identification of GHG source.

Requesting member
Teva Pharmaceuticals

Scope of emissions
Scope 2

Scope 2 accounting method
Location-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
698978

Uncertainty (±%)
5

Major sources of emissions
ABF's scope 2 emissions are mainly from imported electricity consumption.

Verified
Yes

Allocation method

Other, please specify (We are providing ABF group level data and therefore no allocation of emissions.)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We are providing ABF group level data and therefore no assumptions are made regarding the allocation of data or identification of GHG source.

Requesting member
Fashion Industry Charter for Climate Action (FICCA)

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Business unit (subsidiary company)

Allocation level detail
Scope 1 emissions for Primark.

Emissions in metric tonnes of CO2e
20769

Uncertainty (±%)
5

Major sources of emissions
The main source of scope 1 emissions for Primark are on-site energy and owned transport.

Verified
Yes

Allocation method
Other, please specify (Reporting business-unit level data for Primark)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Primark has completed a scope 1 inventory for the reporting year, assured by EY and therefore no assumptions are made regarding the identification of GHG source.

Requesting member
Fashion Industry Charter for Climate Action (FICCA)

Scope of emissions
Scope 2

Scope 2 accounting method
Location-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Business unit (subsidiary company)

Allocation level detail
Scope 2 emissions for Primark

Emissions in metric tonnes of CO2e
103003

Uncertainty (±%)
5

Major sources of emissions
Primark's scope 2 emissions are mainly from imported electricity consumption.

Verified
Yes

Allocation method
Other, please specify (Reporting business-unit level data for Primark)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Primark has completed a scope 2 inventory for the reporting year, assured by EY and therefore no assumptions are made regarding the identification of GHG source.

Requesting member
Fashion Industry Charter for Climate Action (FICCA)

Scope of emissions
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
Category 1: Purchased goods and services
Category 2: Capital goods
Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)
Category 4: Upstream transportation and distribution
Category 5: Waste generated in operations
Category 6: Business travel
Category 11: Use of sold products
Category 12: End-of-life treatment of sold products

Allocation level
Business unit (subsidiary company)

Allocation level detail
Scope 3 emissions for Primark

Emissions in metric tonnes of CO2e
6451835

Uncertainty (±%)
5

Major sources of emissions
Primark's scope 3 emissions are mainly from purchased goods and services.

Verified
Yes

Allocation method
Other, please specify (Reporting business-unit level data for Primark)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Primark has completed a scope 3 inventory for the reporting year, assured by EY and therefore no assumptions are made regarding the identification of GHG source.

Requesting member
FIRMENICH SA

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
2408430

Uncertainty (±%)
5

Major sources of emissions
ABF's scope 1 emissions are mainly from the energy we generate, agriculture, owned transport and the on-site treatment of wastewater. Also included are the emissions from our production processes such as bread baking and ethanol production.

Verified
Yes

Allocation method
Other, please specify (We are providing ABF group level data and therefore no allocation of emissions.)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We are providing ABF group level data and therefore no assumptions are made regarding the allocation of data or identification of GHG source.

Requesting member
FIRMENICH SA

Scope of emissions
Scope 2

Scope 2 accounting method
Location-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
698978

Uncertainty (±%)
5

Major sources of emissions
ABF's scope 2 emissions are mainly from imported electricity consumption.

Verified
Yes

Allocation method
Other, please specify (We are providing ABF group level data and therefore no allocation of emissions.)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We are providing ABF group level data and therefore no assumptions are made regarding the allocation of data or identification of GHG source.

Requesting member
Kellogg Company

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
2408430

Uncertainty (±%)
5

Major sources of emissions
ABF's scope 1 emissions are mainly from the energy we generate, agriculture, owned transport and the on-site treatment of wastewater. Also included are the emissions from our production processes such as bread baking and ethanol production.

Verified
Yes

Allocation method
Other, please specify (We are providing ABF group level data and therefore no allocation of emissions.)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We are providing ABF group level data and therefore no assumptions are made regarding the allocation of data or identification of GHG source.

Requesting member
Kellogg Company

Scope of emissions
Scope 2

Scope 2 accounting method
Location-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
698978

Uncertainty (±%)
5

Major sources of emissions
ABF's scope 2 emissions are mainly from imported electricity consumption.

Verified
Yes

Allocation method
Other, please specify (We are providing ABF group level data and therefore no allocation of emissions.)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We are providing ABF group level data and therefore no assumptions are made regarding the allocation of data or identification of GHG source.

Requesting member
Wal Mart de Mexico

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
2408430

Uncertainty (±%)
5

Major sources of emissions
ABF's scope 1 emissions are mainly from the energy we generate, agriculture, owned transport and the on-site treatment of wastewater. Also included are the emissions from our production processes such as bread baking and ethanol production.

Verified
Yes

Allocation method
Other, please specify (We are providing ABF group level data and therefore no allocation of emissions.)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We are providing ABF group level data and therefore no assumptions are made regarding the allocation of data or identification of GHG source.

Requesting member
Wal Mart de Mexico

Scope of emissions
Scope 2

Scope 2 accounting method
Location-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
698978

Uncertainty (±%)
5

Major sources of emissions
ABF's scope 2 emissions are mainly from imported electricity consumption.

Verified
Yes

Allocation method
Other, please specify (We are providing ABF group level data and therefore no allocation of emissions.)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We are providing ABF group level data and therefore no assumptions are made regarding the allocation of data or identification of GHG source.

Requesting member
J Sainsbury Plc

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
2408430

Uncertainty (±%)
5

Major sources of emissions
ABF's scope 1 emissions are mainly from the energy we generate, agriculture, owned transport and the on-site treatment of wastewater. Also included are the emissions from our production processes such as bread baking and ethanol production.

Verified
Yes

Allocation method
Other, please specify (We are providing ABF group level data and therefore no allocation of emissions.)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We are providing ABF group level data and therefore no assumptions are made regarding the allocation of data or identification of GHG source.

Requesting member
J Sainsbury Plc

Scope of emissions
Scope 2

Scope 2 accounting method
Location-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
698978

Uncertainty (±%)
5

Major sources of emissions
ABF's scope 2 emissions are mainly from imported electricity consumption.

Verified
Yes

Allocation method
Other, please specify (We are providing ABF group level data and therefore no allocation of emissions.)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We are providing ABF group level data and therefore no assumptions are made regarding the allocation of data or identification of GHG source.

Requesting member
International Flavors & Fragrances Inc.

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Business unit (subsidiary company)

Allocation level detail
Scope 1 emissions for British Sugar

Emissions in metric tonnes of CO2e
868110

Uncertainty (±%)
5

Major sources of emissions
The main sources of scope 1 emissions for British Sugar are on-site energy and on-site wastewater treatment.

Verified
Yes

Allocation method
Other, please specify (Reporting business-unit level data for British Sugar)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We are providing business unit level data for British Sugar and therefore an allocation method has not been required.

Requesting member
International Flavors & Fragrances Inc.

Scope of emissions
Scope 2

Scope 2 accounting method
Location-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Business unit (subsidiary company)

Allocation level detail
Scope 2 emissions for British Sugar

Emissions in metric tonnes of CO2e
3759

Uncertainty (±%)
5

Major sources of emissions
British Sugar's scope 2 emissions are mainly from imported electricity consumption.

Verified
Yes

Allocation method
Other, please specify (Reporting business-unit level data for British Sugar)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied

Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We are providing business unit level data for British Sugar and therefore an allocation method has not been required.

Requesting member
PepsiCo, Inc.

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Business unit (subsidiary company)

Allocation level detail
Scope 1 emissions for Azucarera

Emissions in metric tonnes of CO2e
175978

Uncertainty (±%)
5

Major sources of emissions
The main sources of scope 1 emissions for Azucarera are on-site energy and on-site wastewater treatment.

Verified
Yes

Allocation method
Other, please specify (Reporting business-unit level data for Azucarera)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We are providing business unit level data for Azucarera and therefore an allocation method has not been required.

Requesting member
PepsiCo, Inc.

Scope of emissions
Scope 2

Scope 2 accounting method
Location-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Business unit (subsidiary company)

Allocation level detail
Scope 2 emissions for Azucarera

Emissions in metric tonnes of CO2e
2503

Uncertainty (±%)
5

Major sources of emissions
Azucarera's scope 2 emissions are mainly from imported electricity consumption.

Verified
Yes

Allocation method
Other, please specify (Reporting business-unit level data for Azucarera)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We are providing business unit level data for Azucarera and therefore an allocation method has not been required.

Requesting member
PepsiCo, Inc.

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Business unit (subsidiary company)

Allocation level detail
Scope 1 emissions for British Sugar

Emissions in metric tonnes of CO2e
868110

Uncertainty (±%)
5

Major sources of emissions
The main sources of scope 1 emissions for British Sugar are on-site energy and on-site wastewater treatment.

Verified
Yes

Allocation method
Other, please specify (Reporting business-unit level data for British Sugar)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We are providing business unit level data for British Sugar and therefore an allocation method has not been required.

Requesting member
PepsiCo, Inc.

Scope of emissions
Scope 2

Scope 2 accounting method
Location-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Business unit (subsidiary company)

Allocation level detail
Scope 2 emissions for British Sugar

Emissions in metric tonnes of CO2e
3759

Uncertainty (±%)
5

Major sources of emissions
British Sugar's scope 2 emissions are mainly from imported electricity consumption.

Verified
Yes

Allocation method
Other, please specify (Reporting business-unit level data for British Sugar)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We are providing business unit level data for British Sugar and therefore an allocation method has not been required.

Requesting member
The Coca-Cola Company

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Business unit (subsidiary company)

Allocation level detail
Scope 1 emissions for Azucarera

Emissions in metric tonnes of CO2e
175978

Uncertainty (±%)
5

Major sources of emissions
The main sources of scope 1 emissions for Azucarera are on-site energy and on-site wastewater treatment.

Verified
Yes

Allocation method
Other, please specify (Reporting business-unit level data for Azucarera)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We are providing business unit level data for Azucarera and therefore an allocation method has not been required.

Requesting member
The Coca-Cola Company

Scope of emissions
Scope 2

Scope 2 accounting method
Location-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Business unit (subsidiary company)

Allocation level detail
Scope 2 emissions for Azucarera

Emissions in metric tonnes of CO2e
2503

Uncertainty (±%)
5

Major sources of emissions
Azucarera's scope 2 emissions are mainly from imported electricity consumption.

Verified
Yes

Allocation method
Other, please specify (Reporting business-unit level data for Azucarera)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We are providing business unit level data for Azucarera and therefore an allocation method has not been required.

Requesting member
The Coca-Cola Company

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Business unit (subsidiary company)

Allocation level detail
Scope 1 emissions for British Sugar

Emissions in metric tonnes of CO2e
868110

Uncertainty (±%)
5

Major sources of emissions
The main sources of scope 1 emissions for British Sugar are on-site energy and on-site wastewater treatment.

Verified
Yes

Allocation method
Other, please specify (Reporting business-unit level data for British Sugar)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We are providing business unit level data for British Sugar and therefore an allocation method has not been required.

Requesting member
The Coca-Cola Company

Scope of emissions
Scope 2

Scope 2 accounting method
Location-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Business unit (subsidiary company)

Allocation level detail
Scope 2 emissions for British Sugar

Emissions in metric tonnes of CO2e
3759

Uncertainty (±%)
5

Major sources of emissions
British Sugar's scope 2 emissions are mainly from imported electricity consumption.

Verified
Yes

Allocation method
Other, please specify (Reporting business-unit level data for British Sugar)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We are providing business unit level data for British Sugar and therefore an allocation method has not been required.

Requesting member
The Coca-Cola Company

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Business unit (subsidiary company)

Allocation level detail
Scope 1 emissions for Illovo

Emissions in metric tonnes of CO2e
592024

Uncertainty (±%)
5

Major sources of emissions
The main sources of scope 1 emissions for Illovo are on-site energy and from agricultural activities.

Verified
Yes

Allocation method
Other, please specify (Reporting business-unit level data for Illovo)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We are providing business unit level data for Illovo and therefore an allocation method has not been required.

Requesting member
The Coca-Cola Company

Scope of emissions
Scope 2

Scope 2 accounting method
Location-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Business unit (subsidiary company)

Allocation level detail
Scope 2 emissions for Illovo

Emissions in metric tonnes of CO2e
105223

Uncertainty (±%)
5

Major sources of emissions
Illovo's scope 2 emissions are mainly from imported electricity consumption.

Verified
Yes

Allocation method
Other, please specify (Reporting business-unit level data for Illovo)

Market value or quantity of goods/services supplied to the requesting member

Unit for market value or quantity of goods/services supplied
Please select

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We are providing business unit level data for Illovo and therefore an allocation method has not been required.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

ABF's scope 1 and scope 2 emissions are reported in our 2022 Annual Report and Accounts page 13, Responsibility Update page 28 and ESG Insights 2022 Climate Change page 6. Within our ESG Insights Climate Change, we provide further detailed data at the business segment level on page 5.

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Diversity of product lines makes accurately accounting for each product/product line cost ineffective	Some of our businesses and sites are able to allocate emissions to different customers. In these cases, they work with their customers to identify the relevant emissions and provide information which is considered valuable to the commercial relationship. To conduct this approach across all of the group's businesses, customers, geographies and product lines would be very costly and therefore it is managed on a case-by-case basis depending on the nature of the commercial relationship. For example, British Sugar completes an annual Carbon Footprint Analysis with Carbon Trust.

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?
No

SC1.4b

(SC1.4b) Explain why you do not plan to develop capabilities to allocate emissions to your customers.

Where required as part of our relationship with specific customers, our businesses have invested in building the capability to allocate emissions to these customers. Allocating emissions to other product lines or customers would be viable if it is considered to have value to the commercial relationship.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

No, I am not providing data

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms