ESG Insights 2021

Climate change

Associated British Foods plc

Why it is important

Climate change, with its associated risks and opportunities, is not a new issue. It has long been important to us and our stakeholders. Although we have not previously completed formal scenario analysis, taking action to address the effect of climate change impacts has been embedded into our businesses as part of normal commercial decision-making. Primark's longstanding Sustainable Cotton Programme and the assessment of drought risk to the wheat supply in our Australian bakery business are just two examples.

It is not a separate and parallel discipline; it is already part of the ordinary course of business and we are working to understand and improve this further.

Our businesses and supply chains operate in many areas subject to climate risks and opportunities as we transition to a lower-carbon world. Our success depends on mitigating these risks and making the most of the opportunities.

However, we are aware how important it is for governments, the finance sector, society, and businesses including ABF to increase the speed and scale of their actions if collectively we are all to help deliver the objectives of the Paris Agreement.

Our commitments

We support policies that are aligned with the goals of the 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.

ABF business/segment	Commitment	Alignment to external/internal initiatives
Twinings	Carbon neutral from bush to shelf in tea and herbal infusions by 2030	
AB Sugar	30% reduction in end-to-end supply chain water and CO_2 footprints by 2030	AB Sugar Global Mind, Local Champions strategy
AB Agri	Net zero in own operations by 2030	
Primark	50% reduction in greenhouse gas (GHG) emissions across Primark value chain by 2030	Primark Cares UNFCCC Fashion Industry Charter for Climate Action
GWF	20% reduction of Scope 1 and 2 emissions per tonne of production by 2020 (baseline 2010/11) 2020 target met. New target in development	Australian Food and Grocery Council's Sustainability Commitment

Our approach

Our businesses are facing into the challenge of climate change in four ways:

1. Improving our understanding and responses to climate-related risks and opportunities
2. Reducing our own GHG emissions (Scope 1 and 2 GHG emissions)
3. Supporting our suppliers and partners to reduce their GHG emissions (Scope 3 GHG emissions)
4. Providing products that help others reduce their GHG emissions

Climate change presents various economic, business and social risks which will affect our businesses in the short, medium and long term. The Board as a whole is responsible for our overall Group risk management and agreeing our principal risks. Climate-related risks are already included in that framework.

In 2021 we began engaging formally with each business in respect of the Task Force on Climate-related Financial Disclosure (TCFD), building on existing awareness of and action being taken on climate change issues. This will continue in the coming year when reporting in line with TCFD becomes mandatory for ABF and thereafter annually.

We are currently reviewing the governance of climate-related risks and opportunities to ensure the Board is enabled to fully consider these while setting our strategy and overseeing major decisions. In addition, we are mapping the information already collected around the Group to determine what we can use to meet TCFD disclosure requirements.

Climate change is a principal risk to the Group which has the potential to impact our businesses to varying degrees in the short, medium and long term. We face both physical and transition risks from the effects of climate change on our businesses. Physical risks include extreme weather and water scarcity which have the potential to impact the availability, quality and price of key raw materials and commodities. Potential transition risks associated with the move to a low-carbon economy include changes in consumer preferences, carbon pricing and developments in policy and regulation.

Climate-related risks and opportunities extend far beyond normal strategic planning cycles. To better understand how the potential long-term effects of climate change could impact our business, this year we began scenario analysis, engaging the support of third-party experts.

We have identified Primark, AB Sugar and Twinings Ovaltine as the businesses with the most material climate-related risks and opportunities. This year, these three businesses comprise in aggregate 73% of adjusted operating profit, 69% of Scope 1 and 2 emissions and 97% of water usage.

This year, we also performed a high-level exercise to establish an overview of our groupwide Scope 3 emissions. These same three businesses comprised a significant proportion of those emissions and specifically for Primark, their Scope 3 emissions were calculated, disclosed, and assured.

We focused initial scenario analysis efforts on AB Sugar and cotton in Primark's supply chain as the two most significant areas with climate change risks already identified. In the coming year, we will carry out scenario analysis for Twinings Ovaltine and the non-cotton elements of the Primark business. In addition to focusing on these three divisions, scenario analysis will be undertaken on other climate risks and opportunities which are judged material.

The scenarios considered for AB Sugar and Primark cotton align with the Paris Agreement on Climate Change to limit global temperature increases to well below 2°C, and ideally no more than 1.5°C above pre-industrial levels.

We have started high-level analysis in our other businesses and in the coming year we will extend scenario modelling to understand the impact of further material climate change risks.

Scenario modelling is useful in helping us understand the potential financial impacts and opportunities of climate change on our businesses, based on plausible future outcomes.

There are many wider potential impacts, including significant opportunities, that cannot easily be identified from scenario modelling alone. For this reason, next year we also expect to include a broader look at the possible physical and transition risks and opportunities for our businesses arising from climate change, and the actions we plan to take to address them.

We have begun the process of understanding how to help each division identify and assess climate risk more formally and will disclose and expand on the risk identification process used for AB Sugar and Primark in our financial year 2022.

We know that managing climate change risk effectively and taking advantage of opportunities in transitioning to a low-carbon world means that we must develop and monitor robust plans. We also know that we must be able to adapt quickly as governments in the countries where we operate consider carbon taxes and other regulatory responses which could affect our future financial performance.

The diversity of the different businesses in our Group means that it is not appropriate to set groupwide targets for different elements of climate change risk. We will report further on this next year.

We will continue to build on our commitment to understand and monitor our impact on the climate.

Our performance

54%
of the energy we used came from renewables[1]

£34m
invested in environmental risk management

11%
reduction in Scope 1 and 2 emissions

We have reported our approach to managing climate risks and opportunities and related performance via CDP for more than ten years, and we were rated "B" for our latest annual disclosure.

We regularly review our methodologies, estimates and calculations for monitoring our carbon footprint to ensure that we align with latest protocols, that we use the best data available, and that we continually work to improve the accuracy of our reporting.

This year, 64% of all our sites have applied internationally recognised standards or obtained external certification for the quality of their environmental management systems. The standards include ISO 14001 (environmental management) and ISO 50001 (energy management). These facilities are subjected to external audits to ensure sound environmental management. In addition, other sites are working towards certification to drive improvements in their approach to environmental responsibility.

We have reported our energy consumption and emissions for 12 years through our annual reports and CDP disclosures.

In 2021, our total energy use was 21,990 GWhΔ, a 4% decrease compared with 2020. Our Sugar businesses were responsible for consuming 82% of that total, or 17,950 GWhΔ, which is a 5% decrease compared with the prior year. Of their total energy use, 65% was from renewable sources in the year. 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 co-products, including molasses, sugar beet pulp and bioethanol. Furthermore, they exported 855 GWh Δ 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 89%, comes from bagasse. 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 wood, biogas and other sugar cane-related trash biomass. We report our use of renewable energy as biogenic carbon emissions (previously reported as out of scope emissions).

For our greenhouse gas data, we report Scopes 1, 2 and 3-transport emissions. This year Primark also report Scope 3 emissions (see Methodologies pages 7 and 9). This enables us to analyse the emissions over which we have direct control as well as those generated in our supply chain. Our Scope 1 and 2 emissions (location-based), over which we have direct control, account for 80% of our total emissions; they have reduced by 11% this year to 3.16 million tonnes CO_2eΔ. These emission reductions are partly due to continued COVID-19-related disruptions and a reduction in product output. However, we note that since 2015 we have reported annual emissions reductions, and this is largely because of the commitment of our businesses to continuously improve energy efficiency across our manufacturing sites and retail stores. While emissions from own transport account for only 3% of our Scope 1 and 2 performance, this year we have achieved a notable reduction of 10% in our own transport emissions. This is partly due to reduced vehicle movements related to COVID-19 impacts on business activity, but it also reflects decisions by our businesses to move their company fleets to electric or hybrid vehicles.

In addition, we have continued to improve our accounting of emissions. This year, this includes moving the emissions from our yeast processes away from Scope 1 emissions. These are captured separately in the emissions we report for biogenic carbon as per the GHG Protocol.

For the second time, we are reporting our Scope 2 market-based emissions in addition to our Scope 2 location-based emissions. Our Scope 2 market-based emissions this year are 777,000 tonnes of CO_2e Δ compared with 783,000 tonnes last year. This data helps us, and our businesses make informed decisions on energy supply, with the aim to reduce emissions from our purchased energy.

We currently only report emissions from third-party transport movements for our Scope 3 emissions. These emissions have increased by 5% compared with 2020 to 799,000 tonnes CO_2eΔ. During 2020, many of our transport movements were limited due to the global pandemic and so this year logistics have increased to move raw materials into our factories and our products out to customers.

This year, Primark are disclosing their Scope 3 emissions, which includes the emissions from third-party transport. As such, we have removed these Primark-specific emissions from our GHG emissions table reported in our 2021 Annual Report and Accounts and Responsibility Update so that we do not double-count our transport data.

1 The renewable energy is mainly generated on our sites from biogenic sources.

Our performance *continued*

Highlights

- GWF exceeded their 20% by 2020 GHG (Scopes 1 and 2) reduction target.
- Primark committed to halve their carbon footprint by 2030 and signed up to the SBTi.
- Twinings became carbon neutral in their UK operations.
- Vivergo Fuels site in Hull will reopen following an announcement by the UK's Department for Transport that E10 petrol (a cleaner, greener fuel) will be introduced at pumps up and down the country from September. The biogenic fuel produced by Vivergo Fuels will help cut transport CO_2 emissions equivalent to taking 260,000 cars off the road per year.
- AB Agri are a member of the Global Feed LCA Institute and helped to build the Global Feed Database, which can be used to evaluate the environmental impact of feed produced around the world. They used this database to assess and formulate their products, and as part of their membership they will work across their industry to encourage consistency and transparency in how this data is generated and used.
- A partnership between our AB Vista and Intellync Sustain businesses helped our customers gain robust insight into their carbon emissions, enabling more responsible decisions and reduction in their impact.
- Our Intellync Sustain business also developed the world's first on-farm carbon footprint assessment tool, delivering data insights to inform improvement strategies. They have completed thousands of farm-level carbon footprints and currently support a range of retailers and food processors in their efforts to reduce Scope 3 emissions.
- AB Enzyme's products helped to improve the efficiency of laundry detergent, allowing consumers to save energy by washing their clothes at a lower temperature and reducing GHG emissions.

Total GHG emissions – Scopes 1 and 2

'000 tonnes CO_2e

2017	2018	2019	2020	**2021**
4,243	4,153	3,993	3,555	**3,161Δ**

GHG emissions – Scopes 1 and 2 by business segment

'000 tonnes CO_2e

	2018	2019	2020	**2021**
Grocery	541	543	495	**492Δ**
Sugar	2,548	2,397	2,055	**1,999Δ**
Agriculture	85	91	85	**83Δ**
Ingredients	816	801	787	**468Δ**
Retail	164	160	134	**118Δ**

GHG emissions – by scope

'000 tonnes CO_2e

	2017	2018	2019	2020	**2021**
Scope 1	3,217	3,228	3,162	2,797	**2,450Δ**
Scope 2	1026	925	831	758	**711Δ**
Scope 3	814	813	753	764	**799Δ**
Biogenic carbon	3,652	3,711	3,962	4,045	**4,208**

GHG emissions intensity against revenue – Scopes 1 and 2

'000 tonnes CO_2e per £m

2017	2018	2019	2020	**2021**
276	266	252	256	**228**

Our performance *continued*

GHG emissions – Scopes 1, 2 and 3 by business segment

'000 tonnes CO_2e

	2018	2019	2020	**2021**
Grocery				
Scope 1	278	283	242	**274Δ**
Scope 2	63	261	252	**218Δ**
Scope 3	140	125	153	**190Δ**
Biogenic emissions	0.22	0.23	0.24	**6.79**
Sugar				
Scope 1	2,314	2,255	1,942	**1,883Δ**
Scope 2	234	142	112	**117Δ**
Scope 3	238	218	238	**263Δ**
Biogenic emissions	3,711	3,960	4,040	**3,875**
Agriculture				
Scope 1	55	56	51	**51Δ**
Scope 2	30	35	34	**32Δ**
Scope 3	100	91	89	**84Δ**
Biogenic emissions	0.00	0.12	0.02	**0.05**
Ingredients				
Scope 1	562	548	541	**222Δ**
Scope 2	253	253	246	**246Δ**
Scope 3	72	74	80	**85Δ**
Biogenic emissions	0.02	2	5	**326**
Retail				
Scope 1	19	21	20	**20Δ**
Scope 2	145	140	114	**99Δ**
Scope 3 (Indirect emissions from use of third-party transport)	263	255	204	**177Δ**
Scope 3 (Indirect emissions from extended inventory)	–	–	–	**4,606Δ**
Biogenic emissions	0.00	0.00	0.00	**0.00**

Total energy use

GWh

	2017	2018	2019	2020	**2021**
Renewable energy	11,356	11,511	12,211	12,462	**11,856Δ**
Total energy	23,817	23,216	23,566	22,877	**21,990Δ**

Renewable energy as share of total energy

	2017	2018	2019	2020	**2021**
Renewable energy %	49	50	52	55	**54**

1 The renewable energy is mainly generated on our sites from biogenic sources.

Our performance *continued*

Total energy use (GWh) – by business segment

	2018	2019	2020	**2021**
Grocery	1,605	1,649	1,490	**1,558Δ**
Sugar	18,962	19,238	18,883	**17,950Δ**
Agriculture	227	267	246	**241Δ**
Ingredients	1,883	1,836	1,779	**1,779Δ**
Retail	540	575	480	**461Δ**

Total energy use – by business segment

GWh

Grocery	7%
Sugar	82%
Agriculture	1%
Ingredients	8%
Retail	2%

Renewable energy use – by business segment

GWh/% of business segment energy use

	2018	2019	2020	**2021**
Grocery – GWh	12	12	12	**1Δ**
Grocery – %	1%	1%	1%	**0%**
Sugar – GWh	11,377	12,078	12,327	**11,744Δ**
Sugar – %	60%	63%	65%	**65%**
Agriculture – GWh	17	15	11	**13Δ**
Agriculture – %	7%	6%	4%	**6%**
Ingredients – GWh	105	105	113	**97Δ**
Ingredients – %	6%	6%	6%	**5%**
Retail – GWh	0	0	0	**0Δ**
Retail – %	0%	0%	0%	**0**

2021 energy use – by source

	Electricity	Imported steam	Natural gas	Liquid fuels	Solid fuels	Renewables
Energy – GWh	1,706Δ	205Δ	5,947Δ	358Δ	1,918Δ	11,856Δ
Energy – %	8	1	27	2	9	54

Total energy exported (GWh)

	2017	2018	2019	2020	**2021**
Grocery	0	0	0	0	**0Δ**
Sugar	842	776	920	943	**855Δ**
Agriculture	2	38	43	50	**47Δ**
Ingredients	6	10	8	9	**7Δ**
Retail	0	0	0	0	**0Δ**
Consolidated	850	825	971	1002	**910Δ**

Methodologies

Scope of reporting

Our emissions are from:

- the energy we use in our factories, offices, warehouses, distribution centres and stores (sites);
- the processes in our sites, which include bread baking, the production of yeast, bioethanol and enzymes, wastewater treatment and from electrical equipment;
- transportation of our goods and people for which we are responsible, in both owned and third-party vehicles; and
- agricultural and horticultural activities directly controlled by Associated British Foods.

Associated British Foods plc reports full GHG emissions in carbon dioxide equivalent (CO_2e) from those activities for which we are responsible from all companies over which the Group has full operational control or has 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. These include our four most material joint ventures, measured in terms of net assets: Frontier Agriculture; UNIFERM; Czarnikow; and Stratas Foods.

Due to rounding, business segment numbers presented throughout this document may not add up to precisely the Group totals reported.

Definitions of key performance indicators (KPIs)

Energy consumption: energy data is reported in line with our GHG reporting scope (see below). The total energy consumption includes energy used from electricity, natural gas, gas oil, coal, diesel, coke, anthracite, petrol, kerosene, heavy fuel oil, liquefied petroleum gas (LPG), renewable fuels and imported steam. The total is displayed as gigawatt hours (GWh) with a split between non-renewable and renewable fuels. Energy consumption is calculated using country-specific conversion factors from physical quantities to kWh to provide an accurate representation of our energy consumption.

Renewable fuel: energy that is generated from renewable sources, which include bagasse and its residue, biogas, trash and wood. The total is displayed as gigawatt hours (GWh).

How we calculate our emissions and energy use

All CO_2e emissions are reported in tonnes.

We have developed detailed reporting guidance including estimation methodologies, assumptions and calculation methodologies in line with the GHG Protocol Corporate Accounting and Reporting Standards (World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD) 2004).

Emissions have been calculated using carbon conversion factors published by the UK's Department for Business, Energy and Industrial Strategy in June 2021, other internationally recognised sources and bespoke factors based on laboratory calculations at selected locations.

Reporting our GHG emissions

Scope 1 emissions include those from:

- the use of non-renewable fuels such as natural gas and coal in boilers and dryers, as well as fugitive emissions;
- our manufacturing processes such as the fermentation process to make bioethanol, as well as the management of on-site waste water;
- directly controlled agricultural activities including growing sugar beet and sugar cane, other crop production and CO_2 emitted from horticulture; and
- owned transport.

Scope 2 emissions are those from purchased electricity, heat or steam used on our sites. Scope 2 emissions are reported on both a location- and market-based approach in line with the GHG Scope 2 Guidance (WRI & WBCSD, 2015). Scope 2 location-based emissions reflect the average emissions intensity of grids from which the energy consumption occurs. Scope 2 market-based emissions are calculated using the emissions from the electricity that our businesses have purchased. Purchased renewable electricity, which is supported by appropriate evidence from the energy provider (i.e. renewable energy certificates, Guarantees of Origin or similar), and that meets the 'quality criteria' outlined in the GHG Protocol Scope 2 Guidance, is converted to CO_2e by applying supplier-specific emission factors. Where supplier-provided emissions factors are not available, we have applied the specific residual mix factor. Where the residual mix factor is not available, we revert to the location-based grid average emission factor.

Scope 3 emissions are those from third-party transport for the transportation or distribution of our goods or materials. The data reported only includes the combustion of fuel for vehicles. Third-party vehicles' emissions are calculated using tonnes/km of movement and the latest DEFRA emissions factors.

Methodologies *continued*

Biogenic emissions are those from the combustion or fermentation of biomass/biofuels on our sites. Within our operations, the combustion of biofuels relates to the generation and use of renewable energy on our sites, including leased sites. In the main, the renewable energy we generate comes from bagasse, the renewable plant-based fibrous residue that remains after the extraction of juice from the crushed stalks of sugar cane. This year, we reviewed our reporting of emissions generated from the fermentation of yeast, which we had previously accounted for within our Scope 1 emissions. Following the review, we concluded that emissions from the yeast processes in our factories should be excluded from Scope 1 and captured the CO_2 from this process within our biogenic emissions category from this year. Biogenic carbon refers to carbon that is contained in biomass, whereby CO_2 is emitted from the combustion of the biomass/biofuel or its fermentation.

Primark's Scope 3 emissions

Primark completed a Scope 3 inventory for 2021, which was assured by EY. The following categories are included in Primark's Scope 3 emissions data. Unless otherwise stated, the UK Government's GHG Conversion Factors for Company Reporting (DEFRA) 2021 factors were applied.

1. Purchased goods and services. DEFRA 2012, 2014 and 2021 factors were applied and supplemented by specific emission factors for the type of activity (derived from The Higg Materials Sustainability Index version 2.0).
2. Capital goods (DEFRA 2012).
3. Fuel and energy-related activities (DEFRA 2020 and 2021).
4. Upstream transportation and distribution. Emissions from Primark's upstream transportation and distribution activities include the well-to-tank lifecycle emissions (DEFRA 2021).
5. Waste generated in operations. (DEFRA 2021).
6. Business travel (DEFRA 2012, 2014 and 2021).
7. Use of sold products (DEFRA 2020 and ECOSI 2018).
8. End-of-life treatment of sold products (DEFRA 2021 and WRAP 2012).

We have removed Primark's emissions from third-party transportation from the Group's consolidated data of 799,000 tonnes CO_2e so that there is no double-counting. We are therefore reporting a Group Scope 3 figure of 621,000 tonnes of CO_2e, as Primark have accounted for this activity within their Scope 3 inventory.

Outlook

Key actions during 2021/2022

- TCFD – Groupwide climate risk and opportunity disclosure
- Scope 3 GHG materiality assessments across all divisions
- Businesses delivering against their targets

Read more about our approach

- 2020 Responsibility Update – for information about some of the ways in which we are reducing energy consumption and about our use of renewable fuels and energy.
- Environment Policy – our principles for being responsible stewards of the environment and minimising any negative impacts.

Our impact on the Sustainable Development Goals

Affordable and clean energy

Seeking to improve energy efficiency (target 7.3) through energy management systems is considered to be 'business as usual' across the Group, and several businesses procure renewable energy for their operations (target 7.2). This is derived from solar and wind power, combined heat and power plants, and energy from waste or co-products using anaerobic digestion plants.

Climate action

There are many projects that seek to mitigate our contribution to climate change and assess and improve our capacity for adaptation (target 13.3). These include process developments to reduce GHG emissions through a mix of energy efficiency, lower-carbon fuels and renewables.