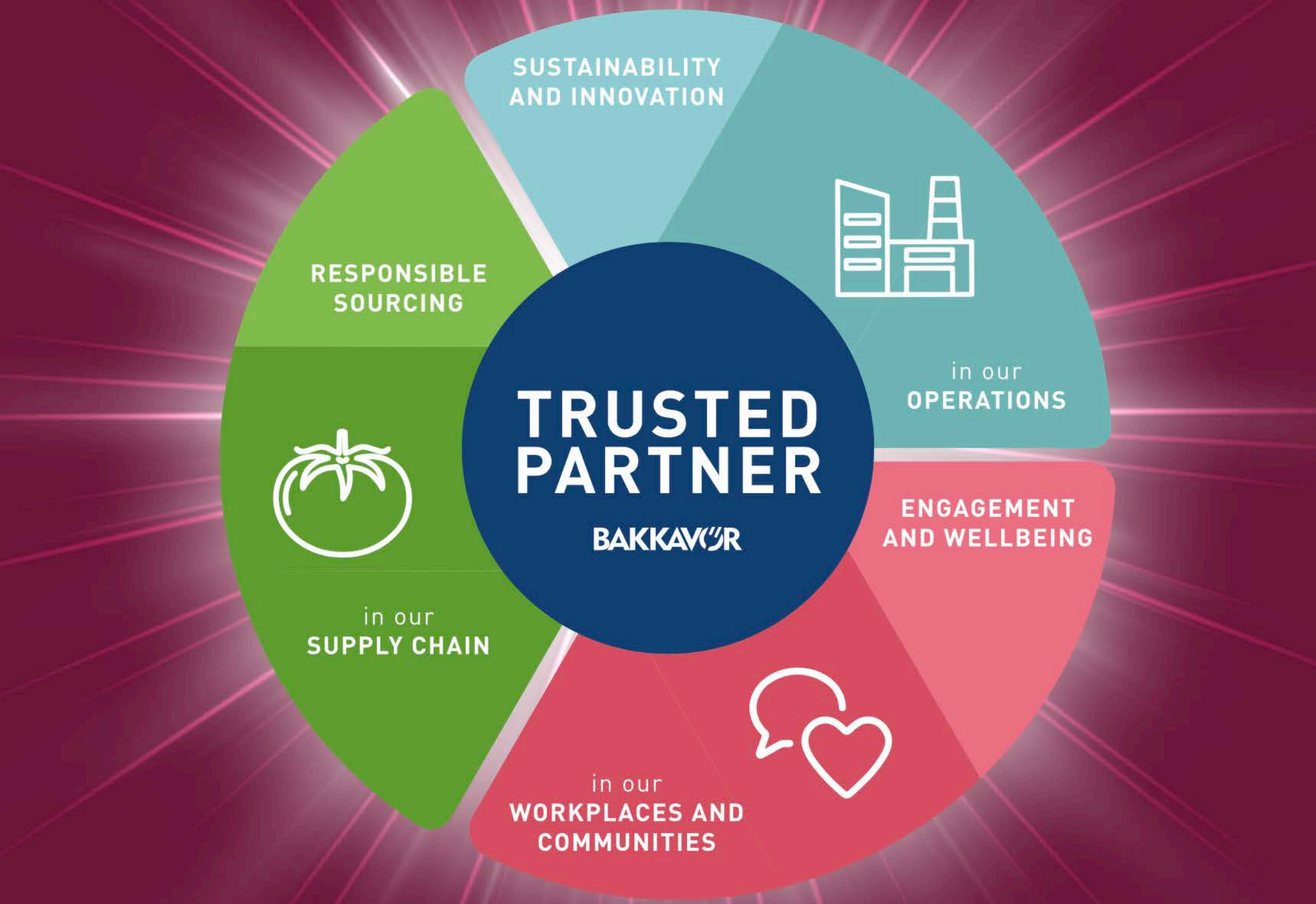
BAKKAVÖR



ESG fact sheet

Sustainable Product Development

Resource Efficiency, Emissions and Net Zero

Climate change is a major issue facing our company, the entire food system and wider society. At Bakkavor, we recognise that we have impacts on the environment and that we have a part to play in reversing the climate emergency and working towards a low carbon economy. That's why in 2021, we formalised our commitment to reaching Net Zero across our UK, US and China operations by 2040, supporting the outcomes of the Paris Agreement and the objective to limit global warming to well below 2°c and aiming for 1.5°c. We set ourselves this target to galvanise the business around the imperative to act and support the food industry in leading on this issue.

Climate change is connected to multiple sustainability and ESG issues including environmentally sustainable sourcing, food waste, packaging and of course, resource efficiency and emissions.

Our targets and commitments:

- Net Zero across our Group operations by 2040.
- Reduce our emissions per £m revenue year on year (intensity ratio)

Our approach

As a manufacturing company, reducing our own footprint through continually upgrading our manufacturing technologies in order to be more resource efficient has always been a business priority. During 2021, we started to develop our 'roadmap' to support our Net Zero target. This roadmap will continue to be developed and updated throughout 2022 and beyond. We will also strengthen it with additional interim targets that we will report progress against to hold ourselves and business accountable.

Our Net Zero roadmap follows IGD's recommendations and is based around five elements:

In practice, this means that we pursue energy efficiency and reduce consumption as far as possible in our manufacturing operations and a review of our recent activities and progress is laid out below.

In addition, we ensure through our focus on Sustainable Product Development, that we respond to the demand for low carbon diets. Through our Responsible Sourcing pillar of Trusted Partner, we engage our suppliers on climate and environmental issues through our Supplier Code of Conduct and engagement tools.

Climate change is incorporated in our business's principal risk 'Climate change and sustainability', recognising the increasing importance of climate change to the Group which means that it must be considered at Board level through the Audit and Risk Committee. For more information around our governance and risk assessment associated with climate change, see our report to the recommendations of the Taskforce for Climate-Related Financial Disclosures (TCFD) in our 2021 Annual Report.

Reducing our Carbon Footprint

We have measured and reported our Scope 1 and 2 carbon emissions for the Group, including the US and China businesses as well as the UK since 2018 in our Annual Reports using the GHG Protocol.

The majority of our scope 1 and 2 carbon emissions come from energy required for refrigeration and cooking processes and to power our factories. Therefore, optimising this use without compromising on safety is our focus.

The majority of the Group's energy consumption is in the UK (84.5%), therefore our energy efficiency actions and innovations are focused here. A central component of our Net Zero roadmap, our energy efficiency policy and strategy, for managing energy consumption and carbon emissions continue to be refined in line with the UK Government Industrial Decarbonisation and Energy Efficiency Roadmaps to 2050. This is steered by the audits and subsequent recommendations of the Energy Savings Opportunities Scheme ("ESOS") audits. These findings, such as LED lighting, compressed air, hot water and steam systems and refrigeration control techniques, form part of our ongoing pipeline of site-upgrade projects and have a positive impact on our carbon emissions, as well as business costs and efficiency.

Bakkavor have active programmes to reduce energy consumption and associated carbon emissions. Energy performance of sites is closely monitored, with all eligible UK manufacturing sites operating under Climate Change Agreements. A number of projects have been implemented or are planned across the business to improve energy efficiency and reduce carbon. These have been compiled into a carbon tracker tool which is reviewed and updated on a regular basis and forms a key element of our carbon reduction plan. Specific actions undertaken include:

- Maintaining a compressed air leak detection programme which is estimated to have resulted in significant energy and carbon savings
- Improvement to the insulation levels across our hot water and steam distribution systems
- Installation of LED light fittings across twenty-three sites
- Undertaking regular steam trap surveys, improving the efficiency of steam systems

In March 2020, we completed a £455 million refinancing of our bank facilities agreement which includes a margin adjustment linked to our UK business's performance on reducing GHG emissions and reduction in food waste. As interim carbon reduction targets on our Net Zero roadmap are set, Bakkavor will review the potential linking of performance to incentives and remuneration for future years.

Progress in 2021

Despite increased production levels, our focus on energy efficiency improvements is helping to reduce our climate impact, as our Group net (market based) carbon emissions decreased by 4.1% compared to 2020 and our gross (location based) emissions also decreased by 6.1%. This is driven in particular by technological efficiency products focused on energy across our UK sites. For example, our UK reduced emissions in 2021 are down by 14.2% in 2021 compared to 2020, a reduction of 18,974 tCO2e.

This is also reflected in a reduction of 10% in the Group's intensity ratio (92.6 tCO2e per £m revenue) compared to 2020, indicating that we have begun to decouple revenue growth from emissions increases. Bakkavor UK's emissions intensity ratio also decreased by 16% to 71.81 from 85.1 in 2020.

Total energy consumption in the UK decreased by 9% compared to 2020 – a reduction of 51,403 MWh. This has been driven by continued progress in our ongoing capital investment plan to upgrade our refrigeration systems away from using fluorinated ('F') gases to lower carbon natural gas and/or CO2 systems. We also implemented several energy efficiency projects across our sites, including compressed air, hot water and steam systems, and we continued to convert lighting to more efficient LEDs, which when complete in 2022 will reduce energy from lighting by approximately 8,000MWh – around 55%. This has had the impact of reducing scope 2 emissions (from purchased electricity and cooling) in the UK by 10.9% - equivalent to 5,384 tCO2e. Further upgrades are part of our ongoing pipeline for 2022.

Since 2017, our UK electricity supply has been sourced through a renewable supply contract, and comprised 85% of our gross UK Scope 2 emissions in 2021.

Energy consumption of our US business comprises 8% of the Group's total. We have several ongoing site-specific programmes to challenge and reduce refrigeration demand, and assess gas efficiency. Our facilities in China contribute 7% of Group energy consumption in 2021. General energy efficiency upgrades are being considered as part of our ongoing maintenance, refurbishment and capital expenditure programmes.
We achieved our commitment to understand our business's exposure to climate risks a year early by conducting scenario analysis for our Group operations and aspects of our supply chain. For more information, see our TCFD disclosure in our 2021 Annual Report.

Scope 3 carbon emissions

Additionally, in 2021 we started to analyse and quantify our Scope 3 emissions in more detail in our UK business. Scope 3 indirect emissions are those associated with the operation of the business that are not under our direct control. These can range from the production of raw materials, transport of goods to site, disposal of waste, manufacturing of packaging, staff commuting and business travel, as well as downstream use and disposal of our products by retailers and consumers. These are known to be significant contributors to organisations' overall carbon footprint but especially difficult to quantify, due to lack of primary data availability and being outside of direct control.

Despite this, in starting to quantify our baseline Scope 3 footprint, it develops a 'hot spot' analysis of our upstream and downstream climate influence and is helping to inform action plans in how we work with our direct suppliers and identify priority raw materials for action.

Our baseline assessment looked at data from 2020, with some proxies being taken from 2019 for categories such as business travel due to being a more representative year. Based on this, and recognising current data limitations that rely on secondary data sources and carbon factors, Scope 3 emissions (996,092 tCO2e) account for 88% of our total carbon footprint. The vast majority of these (92.8%) originate from category 1 – purchased goods and services which for our business is the emissions associated with our use of ingredients and raw materials. Our first priority is to reduce these emissions through engaging in our supply chain as part of our responsible sourcing workstream, ahead of setting targets, until such time as more accurate data is available.

Group Greenhouse Gas Emissions (for the period 1 January 2021 – 31 December 2021)

We report our greenhouse gas emissions annually in accordance with statutory requirements and using the 'GHG Protocol Corporate Accounting and Reporting Standard'. We also report to CDP.

The tables below show 2021 and prior years' annual data for GHG emissions for the Group and our UK business (Bakkavor Foods Limited). The Group and UK data in prior years has been restated, as during the year we identified the use of an incorrect conversion factor being applied which overstated our Scope 1 emissions. In addition, some Scope 2 values have been amended to reflect more accurate billing statements. This has resulted in Group net carbon emissions for 2020 being 132,163 tCO2e rather than 154,241 tCO2e as previously reported and likewise for 2019 and 2018 as shown below.

In 2021 we saw a 6.1% reduction in our gross (location-based) carbon footprint (Scope 1 and 2), and a 4.1% decrease in our net (market-based) carbon footprint. In addition, the carbon efficiency of our production has improved as our intensity ratio (gross emissions per £million reported revenue) reduced by 10.0% to 92.6 tCO2e/£m reported revenue. In the UK, gross emissions reduced by 14.2% and the intensity ratio decreased 15.6% to 71.8 tCO2e/£m reported revenue.

	Emissions (tCO2e)				
Bakkavor Group	2021	Change	2020	2019	2018
Scope 1: Emissions from combustion of fuel and operation of facilities					
UK	70,336	-16.2%	83,926	88,521	84,044
US	11,264	-22.4%	14,515	9,226	5,957
China	17,754	110.9%	8,418	7,066	7,017
Total Scope 1 emissions	99,354	-7.0%	106,858	104,813	97,017
Scope 2: Emissions from purchased electricity and cooling					
UK	44,012	-10.9%	49,396	57,741	66,484
US	6,495	-14.4%	7,583	6,685	5,319
China	23,375	12.9%	20,708	19,668	15,842
Total Scope 2 emissions (location based)	73,881	-4.9%	77,687	84,094	87,646
Green tariff	37,544	-12.7%	43,007	50,431	56,900
Total Scope 2 emissions (market based)	36,337	4.8%	34,680	33,663	30,745
Total gross emissions	**173,235**	**-6.1%**	**184,545**	**188,907**	**184,663**
Total market-based emissions	**135,691**	**-4.1%**	**141,538**	**138,476**	**127,763**
Group intensity ratio (gross tCO2e/£m turnover)	92.6	-10.0%	102.9	100.2	99.5

Water

As a food manufacturer, a consistent and adequate supply of fresh water is critical to our business operations. For example for hygiene purposes, and in food preparation and cooking processes. 100% of our sites have fully functioning, safely managed water, sanitation and hygiene (WASH) services for all workers. This is vital for our safe operating food hygiene standards and is incorporated into our Group health, safety and environment policies.

Our commitment:

- Work towards optimising operational water intensity per tonne of product, whilst maintaining product quality and integrity, reporting internally on a monthly basis through the environmental tracker (year-on-year).

Our approach

We have used the WRI Aqueduct tool to assess water stress across our sites as it also aligns with other reporting mechanisms (TCFD, SASB). In order to conduct this assessment, we used baseline water stress and baseline water depletion as key indicators. Water stressed basins (categorised in the WRI tool as 'High' 40-80%, or 'Extremely High' >80%) and those at risk from water depletion (categorised in the WRI tool as 'High' 50-75%) were identified. It was found that 6 of our UK sites (around the Thames 1 basin), 1 of our US sites (California), and 3 of our China sites (Beijing, Xianyang, Head Office) are currently within basins considered to be at risk of high water stress. For all regions, we used locational data of our facilities (postcode/ latitude longitude) as data entry points to the WRI tool as the exact withdrawal source data is not currently known for all sites. We consider this to be an appropriate proxy. We have calculated % of water withdrawn from areas of water stress using the following formula (volume withdrawn from Bakkavor facilities in water stress areas/total volume withdrawn by the Bakkavor Group) x100.

To date, we have not experienced detrimental impacts due to water availability at these or other sites, however, we have set ourselves a commitment to optimise operational water intensity per tonne of product (whilst maintaining product quality and integrity) by monitoring usage and exploring machinery upgrades that increase efficiency.

Progress in 2021

We improved our UK Environmental Management System, which included risk management standards, guidance and tools. This system covers a number of environmental indicators including water consumption and treatment. This has led to a significant improvement in understanding of compliance at site level and has resulted in a stepped change in our environmental audit scores through 2021. We have begun a review of our environmental training material around our key risks, supporting our learning and development team, and this will continue into 2022.

As we are in the process of upgrading our water tracking and measurement procedures, water consumption data is not yet available for 2021. We reported our consumption and management of water through CDP's water questionnaire, which can be found at www.cdp.net.