PLATING UP PROGRESS **BRIEFING**

What are UK food companies doing to support the transition away from industrial meat?

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ABOUT PLATING UP PROGRESS

Plating Up Progress is a project run in the UK by The Food Foundation. It aims to demonstrate how sustainability and health metrics can and should be used to assess the UK food industry's progress in transitioning to healthy, just, and sustainable food systems. The project has two objectives:

1. to build consensus on metrics and reporting mechanisms; and
2. to engage stakeholders to advance the uptake of those metrics and track progress in the industry.

EXECUTIVE SUMMARY

- To tackle the climate crisis and meet the UK's net zero target there needs to be a reduction in the production and consumption of animal-based foods, as well as a concurrent shift towards more plant foods such as vegetables and pulses.
- The Food Foundation's *Plating Up Progress* benchmark tracks UK retail and food service progress towards healthy and sustainable food systems. As the Plating Up Progress benchmark is intended to provide a holistic view of sustainability and health performance for investors and businesses, we align with existing benchmarks and disclosure mechanisms wherever possible, including WBA, CDP, ATNI and FAIRR.
- Increasing levels of high-density industrial livestock farming has contributed to lower animal welfare standards, the overuse of antibiotics, and an increased risk of zoonotic pathogens spreading.
- Shifting diets to include less animal-based proteins and more plant-based foods is likely to result in positive health outcomes for populations, particularly in high-income countries where meat intake levels are high.
- Plating Up Progress analysis tracks disclosure and target setting across 20 metrics. In this briefing we have focused on the three metrics in the benchmark that track the transition towards less and better meat, finding patchy and inconsistent data reported.
- Across all three metrics, data and targets set by the 27 major UK food retail and service companies assessed are lacking. Although retailers are currently leading the way in the scope and extent of their reporting compared to the out of home sector, the methodologies used differ from company to company, and no company currently has a target for reducing sales of animal-based food.

INTRODUCTION

The global food and agriculture system is a major producer of greenhouse gas emissions (GHGEs), contributing 20-30% of total GHGEs[1]. Between 1968 and 2018 the industrialisation of the livestock sector increased global meat production by 470%[2]. Globally, 77% of agricultural land is used to graze animals or to produce crops to feed to animals[1]. Approximately 15% of global anthropogenic GHGEs come from livestock production (about 3% is due to dairy production), of which 40% are due to beef and dairy farming[3].

In the UK, emissions from the food system accounts for 19% of our domestic GHGEs (closer to 30% when emissions from imported food and feed are included)[1]. The Government has committed in law to achieve net zero carbon emissions by 2050[4]. 5% of total UK emissions can be attributed to livestock, with almost half (48%) of all UK methane emissions coming from livestock farming[5]. While domestic GHGEs associated with livestock are lower than the global average, the UK spends £5.8 billion on meat imports, with beef accounting for almost half of total meat imports[6]. This means there are environmental impacts of the meat we eat in the UK that are externalised. As a result, we know that in high income countries like the UK, reducing the amount of meat and dairy we eat can help to reduce both UK and global GHGEs, as well as other negative impacts on the environment. Additionally, there are potential co-benefits in terms of health outcomes if meat is replaced by nutritious foods like vegetables and pulses. High consumption of meat (particularly red and processed meat) is associated with an increased risk of several non-communicable diseases including cancer and type two diabetes[7].

The independent National Food Strategy for England recommended a 30% reduction in UK meat consumption in order to meet climate and health goals.

Beyond the direct environmental impact of livestock production, the development of intensive, industrial farming methods has also led to concerns around animal welfare. As well as increasing concern from consumers around animal welfare practices[8], good animal welfare practice is also of relevance for determining food traceability, food quality, and ensuring that the risk of zoonotic diseases is reduced.

WHAT IS INDUSTRIAL LIVESTOCK PRODUCTION?

Industrial livestock production is the large-scale, intensive farming of live animals for mass production of food and by-products. Animals are often raised in close confinement and subject to the overuse of antibiotics to promote growth, which can cause resistance to bacteria and as such become a significant risk to human health[9]. Industrial livestock production practices are also a major cause of environmental destruction and a contributor to anthropogenic GHGEs, as outlined below.

This briefing outlines the health, environmental and animal welfare impacts of meat production and why high-income countries, including the UK, need to shift towards less and better meat. It focuses on the industry's commitments to supporting the UK population to consume less and better meat using data from three metrics within the Plating Up Progress benchmark that track animal welfare practice, antibiotic use, and a sales shift towards plant-based food. It also provides an overview of the progress being made towards this goal by major UK-operating businesses within the food retail, foodservice and restaurant chain sectors, and provides key recommendations for businesses, investors and policymakers to help drive progress in this area.

WHAT IS THE LESS AND BETTER MEAT APPROACH?

Eating Better describes less and better meat as the 'phasing out of industrial livestock farming and scaling up of agroecological and regenerative practices where famers work to restore and enhance nature, boosting soil fertility and protect precious water resources.' Reducing the numbers of livestock so animals can roam freely can reduce the need to rely on imported feed. The less and better meat approach also refers to reduced consumption of meat while simultaneously shifting towards more natural farming methods which are better for farm animals, human health and the environment[10]. While there are ongoing debates around how best to define 'better' meat, and less meat will look different for different groups within the UK, the less and better meat approach can be a useful framing for looking at how changes in how we produce and consume animal protein fits into the wider shifts needed for more healthy and sustainable diets.

ENVIRONMENTAL IMPACTS

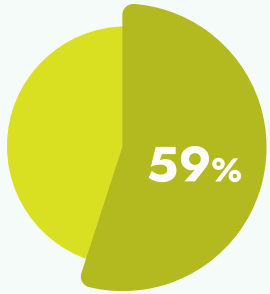
Industrial agriculture drives three-quarters of deforestation worldwide, with beef, soya and palm oil accounting for **59%** of this total[11]. This includes grazing land as well as land for animal feed, mainly soya. The UK imports the vast majority of its soya from South America – in 2018, this figure stood at **61%**[12]. Over **90%** of imported soya is used for animal feed, whereas only **10%** is used for food and just **20-30%** is certified to standards that require it not to be farmed on recently cleared lands[13].

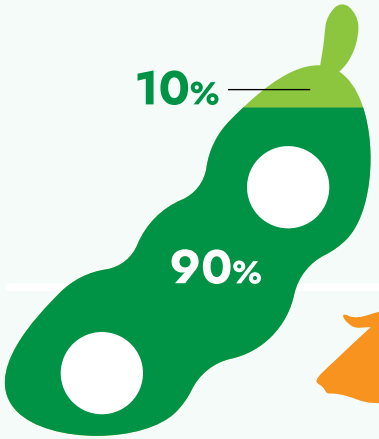
Emissions associated with land use change and on-farm practices are significantly higher for animal products than plant products, even those animal products produced using more sustainable production practices (**Figure 1***). Globally, producing a kilogram of beef steak and lamb emits 130 and 54 kilograms of GHGEs respectively on average. By way of contrast, producing a kilogram of beans and apples emits 1.3 and 0.5 kilograms of GHGEs respectively[14].

**The data used in figure 1 are from a paper published in 2018 and so likely now slightly out of date, although they represent the best available data on GHGEs*

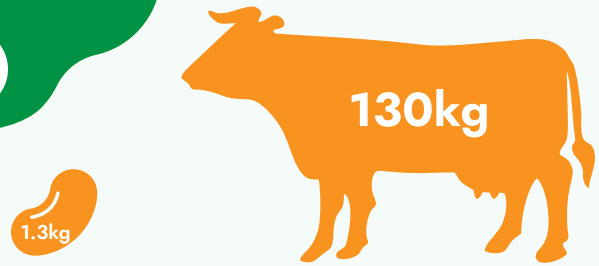
Meat production has a much higher resource requirement than plant-based food production; raising **livestock takes up nearly 80% of global agricultural land yet produces less than 20% of the world's supply of calories**[15]. Livestock production also accounts for over a quarter of humanity's "water footprint"[16]. In the UK, **85%** of farmland is used for rearing and feeding livestock (NFS, 2021, p.109). Current global meat production levels are incompatible with climate mitigation and adaptation targets. Furthermore, high levels of meat consumption in higher-income countries perpetuates the narrative that more land is needed to produce increasingly more food – land that could be used to capture carbon or restore nature. However, it is estimated that if more edible crops were consumed by humans instead of being fed to livestock, enough extra calories would be available to feed an additional 4 billion people globally[17]. Staying within climate targets will require a shift in diets (mainly in high-income countries) from animal-based foods to more vegetables, pulses, nuts and whole grains thus significantly reducing the demands on livestock production[18]. The Climate Change Committee has said we must reduce the amount of meat we eat by **20–50%** in order for the UK to reach net zero by 2050[1].

Three-quarters of deforestation worldwide comes from industrial agriculture with beef, soya and palm oil accounting for 59% of this total, worldwide



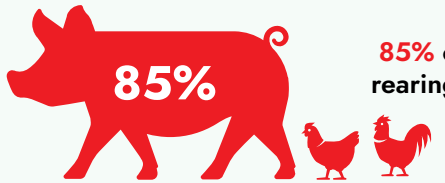


90% of imported soya is used for animal food and only 10% is used for food



1.3 kilograms of GHGEs emitted on average globally when producing a kilogram of beans

130 kilograms of GHGEs is emitted on average globally when producing a kilogram of beef steak



85% of farmland is used for rearing and feeding livestock in the UK

Land Use Change — Aboveground changes in biomass from deforestation and belowground changes in soil carbon

Farm — Methane emissions from cows, methane from rice, emissions from fertilizers, manure and farm machinery

Animal Feed — On-farm emissions from crop production and its processing into feed for livestock

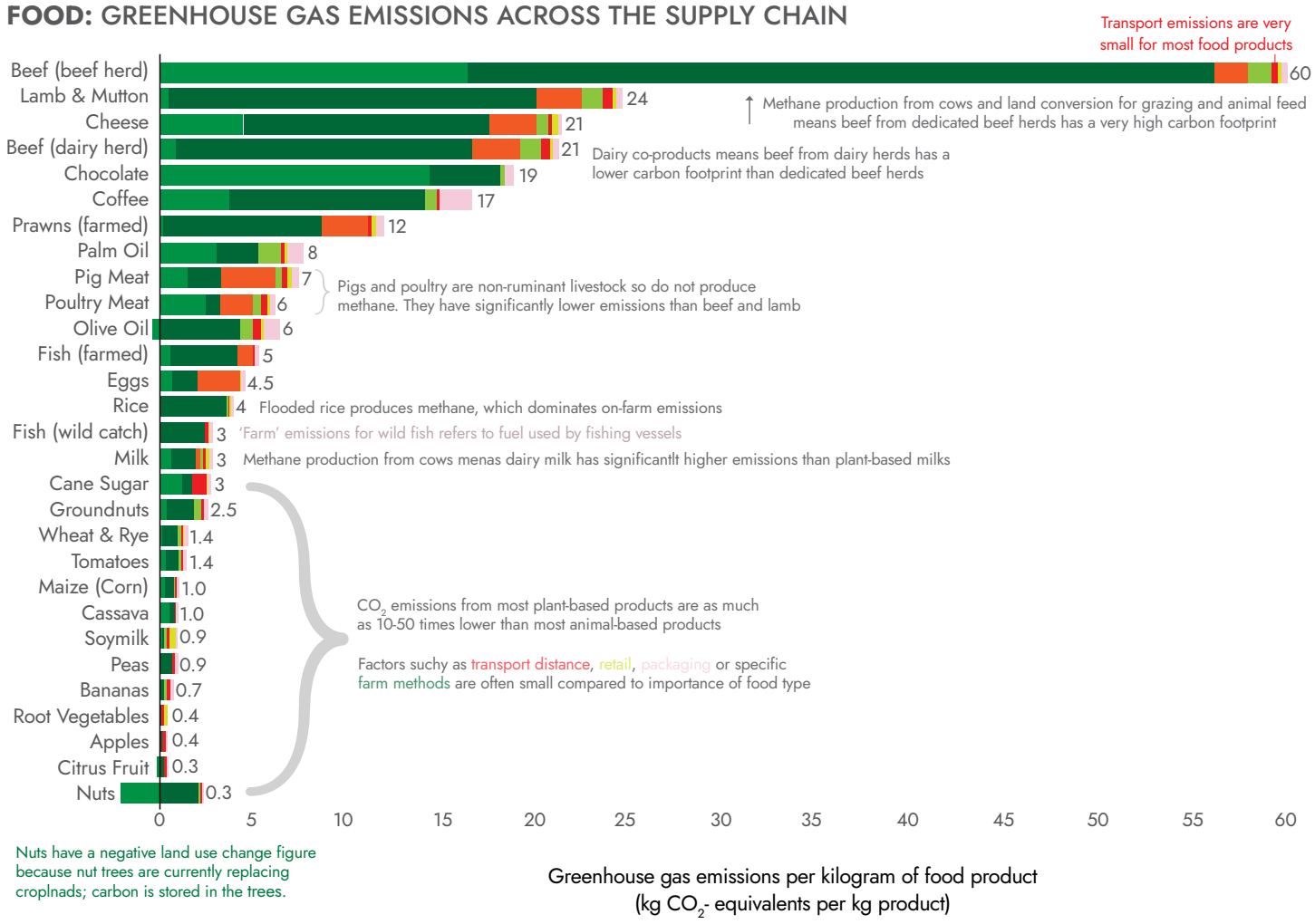
Processing — Emissions from energy use in the process of converting raw agricultural products into final food items

Transport — Emissions from energy use in the transport of food items in-country and internationally

Retail — Emissions from energy use in refrigeration and other retail processes

Packaging — Emissions from the production of packaging materials, material transport and end-of-life disposal

FIGURE 1: Greenhouse gas emissions per kg of food product at all stages of the supply chain



SOURCE: OUR WORLD IN DATA, BASED ON POORE AND NEMECEK (2018).

HEALTH IMPACTS

The over consumption of meat can also have negative effects on human health. Research shows that excessive meat consumption, which predominantly occurs in high-income countries, is associated with obesity and other diet-related diseases such as cardiovascular disease, type 2 diabetes and certain cancers. The risk of these chronic diseases is greater in those who consume red and/or processed meats; however, other studies indicate a high risk associated with fresh as well as processed meats[7]. For example, a UK Biobank study found that higher consumption of unprocessed meat, processed meat, and poultry meat was associated with higher risk of several diet-related diseases[19].

Industrial livestock farming also has indirect effects on human health. Widespread use of antibiotics to promote growth and prevent diseases is a practice that contributes to the development of antibiotic resistant bacteria which can reduce the effectiveness of antibiotics in treating human infections. Higher density of livestock on land close to, or on previously wild land, increases the risk of zoonotic diseases that can spread between animals and humans. For example, zoonotic diseases such as swine flu, bird flu and COVID-19, are likely to have originated on factory farms and have caused devastating human health impacts[2].

Industrial livestock production has significant impacts on animals, often compromising their welfare. Confinement and overcrowding mean that animals are typically raised in small spaces such as cages. Environments such as this can lead to stress injuries and the quick spread of disease. This leads to issues including:

- **Health issues:** intensive farming practices can make animals more susceptible to various health problems. A high density of animals within a limited space can increase the spread of parasitic infections and respiratory diseases. Furthermore, the use of growth-promoting antibiotics can lead to unintended health consequences such as organ failure, weakened and broken bones, and antibiotic resistance.
- **Poor environmental enrichment:** a lack of opportunity for animals to engage in their natural behaviours can limit mental stimulation which can lead to boredom, frustration and behavioural issues.
- **Physical alterations:** some mutilation practices are performed on animals to maximise productivity such as tail docking in pigs and beak trimming in poultry. These practices can cause pain and distress to the animals if not performed properly[20,21].

It is worth highlighting that animals who are raised in a 'free range' condition are not necessarily free of animal welfare issues. A UK study comparing different types of housing for chickens indicated low welfare rates across all housing types, including free range and conventional cage methods, presenting a challenging ethical dilemma[22].

THE PLATING UP PROGRESS BENCHMARK

The Food Foundation's *Plating Up Progress* project provides an overview of the progress made by major UK-operating businesses within the food retail and foodservice sectors across key themes relating to the transition to a healthy and sustainable food system.

The benchmark includes three indicators which assess progress being made by companies to transition away from animal foods towards plant-based ones and improve welfare practices, including tracking and monitoring the following:

- Does the company have a target for, and report on, a **% shift in protein procurement or sales that come from animal vs plant-based protein sources**.
- What is the company's *Business Benchmark on Farm Animal Welfare* (BBFAW) tier position, or does the company have a target for the **% of animal products certified to higher animal welfare standards?** BBFAW measures and benchmarks companies globally on farm animal welfare management, policy commitments, disclosure and performance.
- Does the company have a target for, and report on, **zero supply chain use of antibiotics as a prophylactic or growth promoter and to reduce the total use of antibiotics classified as "medically important antimicrobials"**?

Below we present an overview of how 27 major UK food retail and service businesses are performing against these three metrics, according to publicly available data.

KEY No policies or target | Target or data | Policy or acknowledgement | Target & data

TABLE 1: IS THE OUT OF HOME SECTOR DISCLOSING THE % OF THEIR ANIMAL VS PROTEIN SALES, ANIMAL WELFARE STANDARDS AND USE OF ANTIBIOTICS?

Company	McDonalds	KFC	Dominos Pizza	Greggs	SSP	Burger King	Compass Group	Sodexo	Aramark	ISS	Elior	Mitchells & Butlers	Wether-spoons	The Restaurant Group	Whitbread	Nandos
Sales of animal protein vs plant-based proteins	Target or data	Target or data	Target or data	Target or data	Policy or acknowledgement	Policy or acknowledgement	Policy or acknowledgement	Policy or acknowledgement	Policy or acknowledgement	Target or data	Policy or acknowledgement	Target or data	No policies or target	Target or data	Policy or acknowledgement	Target or data
BBFAW tier position or % of animal products certified to high animal welfare standards	Target or data	Target or data	Target or data	Policy or acknowledgement	Target or data	Target or data	Target or data	Target or data	Target or data	Target or data	Target or data	Target or data	Target or data	Target or data	Target or data	Target or data
Zero supply chain use of antibiotics as a prophylactic or growth promoter	Policy or acknowledgement	Policy or acknowledgement	Target or data	Target or data	Target or data	Policy or acknowledgement	Target or data	Target or data	Policy or acknowledgement	Target or data	Target or data	Target or data	Policy or acknowledgement	Target or data	Policy or acknowledgement	Target or data

TABLE 2: IS THE RETAIL SECTOR DISCLOSING THE % OF THEIR ANIMAL VS PROTEIN SALES, ANIMAL WELFARE STANDARDS AND USE OF ANTIBIOTICS?

Company	Aldi	Asda	Coop	Iceland	Lidl	M&S	Morrisons	Ocado	Sainsbury's	Tesco	Waitrose
Sales of animal protein vs plant-based proteins	Target or data	Policy or acknowledgement	Target or data	Target or data	Target or data	Policy or acknowledgement	Policy or acknowledgement	Policy or acknowledgement	Policy or acknowledgement	Policy or acknowledgement	Target or data
BBFAW tier position or % of animal products certified to high animal welfare standards	Target or data	Target or data	Policy or acknowledgement	Target or data	Target or data	Target & data	Policy or acknowledgement	Target or data	Policy or acknowledgement	Policy or acknowledgement	Target & data
Zero supply chain use of antibiotics as a prophylactic or growth promoter	Policy or acknowledgement	Policy or acknowledgement	Policy or acknowledgement	Target or data	Policy or acknowledgement	Target & data	Policy or acknowledgement	Target or data	Target & data	Target & data	Policy or acknowledgement

SHIFTING FOOD SALES FROM ANIMAL-BASED TO PLANT-BASED FOODS

Of the 27 companies assessed, none have targets for reducing sales of animal-based food (**Table 1 and 2**). The retail sector has made more progress, with two supermarkets reporting on their sales ratio of animal protein vs plant-based protein (Sainsbury's and Tesco). However, they are not using the same methodology. Out of home sector commitments focus on increasing the percentage of plant-based dishes on menus. Currently there are no companies from the out of home sector that have set a target or commitment to disclose sales-based or procurement data in their animal and plant-based proteins.

EATING BETTER

Eating Better's **Sourcing Better report** examines retailers' current commitments in a number of areas related to sustainable sourcing of food, with a focus on meat. They define sourcing 'better' as retailers 'working with farmers who rear fewer animals, within healthy ecosystems with more natural diets from sustainable sources, in well managed farms that deliver high standards of animal welfare. This way of farming will have better soil health and fertility for crop production, support biodiversity and reduce reliance on imported feedstocks, fertilisers and pesticides.

According to their research, retailers have not made any commitments to decrease the numbers of raised animals as a part of their strategies to reduce emissions. Furthermore, there is limited reporting on their commitments to diversify protein sales. However, a handful of retailers (Tesco, Waitrose and Marks &Spencer) do acknowledge the need for protein diversification and have committed to lower stocking densities[23].

CASE STUDIES

- Tesco was the first UK retailer to set a sales target for plant-based alternatives with a commitment to boost their sales by 300% by 2025.
- Sainsbury's report on their total protein sales tonnage of plant-based products, and as part of this they launched 'Helping Everyone Eat Better' as a way to communicate the link between planet, food and health. The campaign provided simple steps to eat better, while prioritising plant proteins and limiting red and processed meats, to improve personal and planetary health.
- The Co-operative Group introduced a commitment to price match plant-based alternatives to animal-based products, as part of their net zero action plan. Removing the disparity also removes barriers to purchase and increases the accessibility of plant-based foods.

No existing commitments across the sectors include clear targets for reducing overall sales of animal foods, nor disclosing the data that would help to track a sales shift away from animal-based to plant-based foods. Without greater transparency it is difficult to see a pathway to net zero that is not overly reliant on offsetting emissions, something that is increasingly criticised for perpetuating business as usual rather than tackling the source of the problem.

IMPROVING ANIMAL WELFARE STANDARDS

As there are existing initiatives that address specific issues relating to animal welfare such as the BBFAW Plating Up Progress uses the BBFAW results to analyse whether companies are setting targets and/or disclosing on animal welfare.

CASE STUDIES

- Waitrose have been recognised as a leader in innovation within animal welfare with their award-winning mobile app, the Qualitative Behavioural Assessment App, designed to measure the emotional wellbeing of animals to continually improve their quality of life. To date, they have trained over 1,800 welfare assessors visiting farms on how to use the app.
- In 2022, 99.97% of pigs purchased by Greggs were provided with species-specific environments intended to support welfare and enrichment and over 71% were reared without the use of sow stalls. Greggs continue to work with their suppliers to drive improved performance, for example to reduce the use of tail docking.

Only two companies are placed in tier 1 by BBFAW, meaning they have taken a leadership position on farm animal welfare. Again, both companies are in the retail sector – Waitrose and Marks & Spencer. Five companies are positioned in tier 2 and tier 3, meaning that the company has made farm animal welfare an integral part of their business strategy or established an approach yet to be effectively implemented. Of these five companies, only one is from the out of home sector – Greggs – who have climbed from tier 5 in 2014 to a tier 2 position in 2016. The remaining four are retailers – Coop, Morrison's, Tesco and Sainsbury's. They aim to achieve a tier 1 position by further improving their transparency on animal welfare standards across their supply chain, shifting towards the use of slower growing chickens, and encouraging pig farmers to move away from confinement and practices such as tail docking.

USE OF ANTIBIOTICS AND ANTIMICROBIAL RESISTANCE

Reporting on reductions in livestock antibiotics usage is inconsistent, with only three companies assessed having clear targets in place and disclosing data on zero use of antibiotics within their supply chain. All three of these companies are retailers (Marks & Spencer, Tesco and Sainsbury's). Of companies assessed in the out of home sector, only ten have policies in place to reduce the use of antibiotics, and none disclose any data or set targets.

CASE STUDIES

- Marks & Spencer have been publishing data on their usage of antibiotics since 2017, the first supermarket to do so. Their 2022 dataset shows that their antibiotic usage is below the industry average as well as below the Responsible Use of Medicines in Agriculture Alliance's 2024 target.
- Burger King requires all their suppliers to ensure they are aligned with their animal welfare policy which includes no use of growth promoters or the routine use of antibiotics.

GAPS AND RECOMMENDATIONS

Across all three metrics, data and targets set by UK food retail and service companies are patchy and inconsistent. Although retailers are currently leading the way in the scope and extent of their reporting compared to the out of home sector, the methodologies used differ from company to company and no company currently has a target for reducing sales of animal-based food.

This briefing looks specifically at UK based retail and food service companies, but as a large proportion of the meat we eat is imported, it will be critical for businesses to look at animal rearing practices along their global supply chains and for the Government to define minimum standards for trade to include environmental, ethical and animal welfare measures.

The window of opportunity to avert a climate change disaster is closing rapidly, while levels of diet-related disease continue to climb. More action is urgently required to reorientate business practice so that a faster transition to producing and selling healthy and sustainable food is achieved.

POLICYMAKERS:

- Given the small number of major food businesses currently disclosing data on a voluntary basis, and the confusion around how to accurately define and measure such metrics, Government intervention through the Food Data Transparency Partnership (FDTP) is urgently required to ensure that it is mandatory for businesses to disclose data in an agreed and consistent format.

- Fiscal intervention could help to rebalance the relative cost of more sustainable food products (such as vegetables, pulses and plant-based alternatives) and less sustainable products (such as meat). Fiscal incentives and disincentives would be a powerful lever for encouraging sales of healthier and more sustainable products.

BUSINESSES:

- In the absence of government regulation, businesses can still give a clear signal of their commitment to support the transition towards more sustainable diets by setting SMART (Specific, Measurable, Achievable, Relevant and Time-bound) targets on the protein shift and reporting data transparently.

- The FDTP is the process through which government, industry, investors and civil society will work together towards the development of a consistent and defined set of metrics for food company data reporting requirements. Through the FDTP, businesses can publicly show their commitment for reporting by working with the Government and wider industry to ensure the right metrics and approaches are in place.

INVESTORS:

- Investor pressure on companies and voluntary agreements on metrics and reporting standards will not be enough on their own. One way to improve industry-wide disclosure and reporting on these key strategies is the introduction of mandatory requirements for businesses to report on deforestation in their supply chains, on food waste across their value chain, sales of animal-based vs plant-based proteins, and sales of fruit and vegetables (see our earlier investor briefing on **the case for mandatory food industry reporting in the UK**). As noted above, the FDTP process is a platform through which investors can advocate for consistent food industry reporting of key health and sustainability metrics.

- As well as policy-makers, investors should engage with individual companies to set expectations that net zero commitments include scope 3 emissions*, and that businesses are backing this up with strategies, policies and targets that show they are shifting their business models to align with those commitments. This includes a shift in sales away from animal-based to plant-based foods.

- Investors should also encourage companies to work to bring the costs down of more sustainable plant-based foods and to measure and report on the price differentials.

- Investors should assess the risks and opportunities of companies involved in the production and sales of animal-based foods across their value chain, and engage with those companies to encourage the production of healthy, sustainable and affordable products[24]. This includes encouraging companies and their supply chains to assess and limit their exposure to the impacts of water scarcity and quality, land use, deforestation, land degradation, biodiversity loss and climate change that are driven by animal-based food production[25].

- Industrial livestock production has significant impacts on animals, often compromising their welfare and leading to the spread of disease, including from animals to humans. Investors could consider joining FAIRR's initiative on animal welfare issues to encourage companies and their supply chains to assess and safeguard animal welfare in their production processes[26].

** Scope 3 emissions are those that are not produced by the company itself but produced further along their supply chain, for example from supplier organisations.*

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