FUEL US DON'T FOOL US

MANUFACTURERS

#3 How far can we trust the food giants with planetary health?

BITE BACK

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FOREWORDS

"Seeing big food companies use misleading claims about sustainability really upsets me. They are actively misleading so many people. They are coming up with new ways of telling some element of the truth, but they are not telling the full story and hiding the truth from the public. We are endangering ourselves by not protecting the planet. We do not want to make the issue any worse. And at the same time the futures of nearly 1 in 3 children is at risk from food related ill health. That is too much. The health of people and the planet should not be allowed to get worse."

Anna, 17

"Activists like Greta Thunberg have empowered me and other young people to share ideas and be more open to conversations about planetary health. It's a youth-led movement and this issue matters to us. I did an internship where I learned about circular food systems which taught me about how this issue is systemic. We're always being told that 'sustainability' is something WE have to do – 'just recycle'. But while big food companies are pumping out these messages, they're also pumping out millions of tonnes of methane."

Reuben, 18

"Children's health and planetary health naturally go together. And big food companies are hurting both. Everyone deserves access to food that is good for them and for the planet. But this isn't how it is. Big food companies make big profits but they don't feel the biggest impact of the climate crisis – people living in poorer areas suffer the most. Big businesses need to take responsibility."

Edda, 15

EXECUTIVE SUMMARY

The flood of unhealthy, ultra-processed food that is damaging our health is also harming the planet. One in three children aged 2-15 are at risk of having their futures affected by food related illness. At the same time, the global food system is the second biggest contributor to climate change behind the energy industry,[1] and is responsible for almost a third of all greenhouse gas (GHG) emissions.[2]

Transforming our food system to one that is healthy, sustainable and just would bring significant benefits to both people and our planet. Tackling our food environments would address food related ill-health, especially amongst young people from the lowest income backgrounds, at the same time as reducing climate emissions.

The biggest, most successful food and drink manufacturers play a key role in shaping our food environment. Our previous reports have shown that the majority of the top 10 businesses selling food in the UK are reliant on selling unhealthy food. After looking at their impact on child health in our previous reports, we wanted to understand their impact on planetary health.

1 The National Food Strategy: The Plan. (2021).
2 Crippa, M., Solazzo, E., Guizzardi, D., et al. (2021). Food Systems Are Responsible for a Third of Global Anthropogenic GHG Emissions. Nature Food, 2(3), pp.198–209

Here's what our investigation uncovered:

TOTAL EMISSIONS

The top 10 global food and drink manufacturers operating in the UK have a significant impact on planetary health – collectively, their 2022 global GHG emissions were 477 million tonnes of carbon dioxide equivalent (tCO2e).

This is more than the whole of the UK's emissions during the same year which were 426 million tCO2e.[3]

This is also more than the international aviation industry's 2022 emissions which were also 426 million tCO2e.[4]

TARGETS

Each business has set short-term targets to reduce emissions by 2030 but many of these targets are not ambitious enough to limit global warming to +1.5°C and achieve net zero by 2050. This is what countries have committed to as the necessary emissions targets under the Paris Agreement under the UNFCCC.[5]

Only four of the businesses have a specific commitment to reach net zero emissions by 2050 that is validated by the Science Based Target Initiative (SBTi) – Danone, Mars, Mondelez and Nestlé.

Most of the businesses have climate commitments that come somewhat close to meeting Bite Back's ask of a 50% reduction in total emissions by 2030. But 3 of the businesses' reduction targets are far less ambitious – Coca-Cola (25%), Kellogg (24.2%) and Mondelez (31.2%).

3 Crippa, M., Guizzardi, D., Pagani, F., et al. (2023). GHG emissions of all world countries. Publications Office of the European Union, Luxembourg.
4 Ibid
5 United Nations Framework Convention on Climate Change

PROGRESS

Few businesses are on track to meet their own targets and some are even moving in the wrong direction.

7 out of 10 businesses are not on track to meet their own targets. But even the businesses who do appear to be making progress against their own targets are not necessarily examples of success.

3 out of 10 businesses actually **increased** annual emissions in 2022 compared to the year they set their reduction target (base year) — Ferrero, Kraft Heinz and PepsiCo. In addition, Mondelez and Kellogg only slightly reduced their annual emissions between their base year and 2022, by 0.7% and 1%, respectively.

TRANSPARENCY

Data on climate commitments and emissions reduction progress is complicated and more standardised reporting is needed. But the majority of businesses transparently disclosed the data needed for this analysis.

We were unable to analyse data from Ferrero and Unilever in a consistent way as they did not disclose sufficient data to the Carbon Disclosure Project.

Most GHG emissions from the food sector are attributed to Forest, Land and Agriculture (FLAG). Guidance on reporting FLAG emissions is relatively new but five of the businesses have already included FLAG emissions in their climate targets – Danone, Mars, Mondelez, Nestlé and Unilever.

Ultimately, children's health and planetary health are paying the price of a broken and unjust food system - and the burden is disproportionately felt by the most vulnerable in our society. But with stronger action and more accountability, food and drink manufacturers have the opportunity to change this.

RECOMMENDATIONS

Since 2015, the UK has committed to the Paris Agreement - a legally binding international treaty on climate change, with a goal to limit global temperature increases to no more than 1.5 degrees Celsius (1.5°C) above pre-industrial levels.[6] In line with these efforts, the UK Government is committed to achieving net zero emissions by 2050, which means that the amount of greenhouse gas (GHG) emissions released into the environment will be equal to the emissions removed.[7] The UK has made progress in reducing emissions across the whole economy by more than 30% since 2008 but emissions from food have fallen at less than half this rate in the same amount of time, mainly due to a lack of progress in reducing emissions from agriculture.[8] Urgent action is needed across the food sector to achieve these goals.

Bite Back has set out actions that we believe all food businesses should meet if they are serious about protecting planetary health.

ACTIONS FOR FOOD BUSINESSES:

Set near and long-term 1.5°C-aligned targets[9] validated as science-based by the SBTi[10] for all greenhouse gases and including scope 3 emissions[11] that are up-to-date, and more specifically to:

- Commit to cutting total emissions by 50% by 2030[12]
- Commit to reaching net zero no later than 2050

Publish transparent reporting on progress towards achieving these targets.

ACTIONS FOR GOVERNMENT:

Mandate businesses to report publicly and consistently on sales of unhealthy food and drinks and sustainability metrics on an annual basis.

Food businesses and the Government hold the levers of change and need to take action NOW if they want to be on the right side of history.

6 United Nations (2015). The Paris Agreement. United Nations Climate Change. Available at: https://unfccc.int/process-and-meetings/the-paris-agreement.
7 UK Parliament (2023). The UK's plans and progress to reach net zero by 2050. House of Commons Library.
8 The National Food Strategy: The Plan. (2021).
9 Near-term targets should have a target year 5-10 years from the date the target was submitted to the SBTi and long-term targets should have a target year of 2050 or sooner.
10 The Science Based Target Initiative (SBTi) is a global initiative that provides a consistent framework for businesses to set targets based on the latest science, and provides validation that an adequate reduction plan is in place.
11 The GHG Protocol defines emissions across three scopes - see box on p13.
12 While the SBTi does not require companies to commit to reducing their total emissions by 50% by 2030 for validation, Bite Back has included this ask to account for mounting criticism that SBTi standards contain gaps that may weaken the credibility of corporate commitments.

INTRODUCTION

Bite Back is a youth activist movement challenging a food system that has been set up to fool us all; one that is largely reliant on the production, marketing and sales of nutrient poor, ultra-processed food and drinks that are bad for our health. Right now, nearly one in three children aged 2-15 are at risk of having their future blighted by food related illness. But that’s not the only problem. Our broken food system is also having a devastating impact on our planet’s health.

Our health and wellbeing is inextricably linked to the health of our planet. As Bite Back steps up its challenge to a food system that’s rigged against our health, the more we increasingly recognise the current food environment as a critical link between human and planetary health. The global food system is currently set up to value the quantity of food produced over its quality. The resulting mass-production of unhealthy, ultra-processed food is reliant on practices that are harmful to the environment. This includes the release of huge amounts of GHG emissions and the destruction of natural ecosystems.

The effects are not equally felt across society. The risk of food related illness is higher among those living in our lowest income areas, some ethnic minority groups and disabled communities.[13] In the UK, healthier foods are more expensive, with healthy food costing on average, double per calorie compared to less healthy options.[14] Globally, destructive food production practices negatively affect communities in low- and middle-income countries who are already feeling the disproportionate impacts of climate change — these countries who have historically contributed the least to GHG emissions are also the hardest hit and least able to cope.[15]

But it doesn’t have to be this way. With action, our food system can be transformed into a fair one that protects both people and the planet.

In 2024, Bite Back started an investigation of the 10 biggest global food and drink businesses operating in the UK:[16] Coca-Cola; Danone; Ferrero; Kellogg; Kraft Heinz; Mars; Mondelez; Nestlé; PepsiCo and Unilever. We found that the majority are reliant on selling unhealthy products in the UK and target children with their marketing. This is clearly bad news for children’s health. But what impact are they having on the planet’s health?

These businesses make loud claims about their sustainability commitments, but the language of climate and emissions can be complex and confusing. Many of their products and marketing include promises of being climate-friendly. But how much can we trust them? We know that marketing and claims on packaging can often mislead us into thinking products are healthier than they are. Is the same true with green promises?

In partnership with two independent environmental analysts, we reviewed the climate commitments of the top 10 global food and drink manufacturers to see how ambitious they really are, and if their actions actually match their words.

13 UK Parliament (2022). Postnote - Diet-Related Health Inequalities No. 686.
14 The Food Foundation (2023). The Broken Plate 2023.

15 IPCC Working Group II (2022). Climate Change 2022: Impacts, Adaptation and Vulnerability.
16 Bite Back (2024). Fuel us, don’t fool us: Are food giants rigging the system against children’s health? (Manufacturers).

> Every young person has the right to a healthy future, and a healthy environment around them. Sustainability and food go hand in hand.

Estel, 17

THE FOOD SYSTEM AND PLANETARY HEALTH

The global food system is the second biggest contributor to climate change, second only to the energy industry, and is the single biggest contributor to biodiversity loss, deforestation, drought, freshwater and plastic pollution and the destruction of aquatic wildlife.[17] Globally, it is responsible for 30% of GHG emissions, mainly carbon dioxide (CO2), methane (CH4) and nitrous oxide (N2O).[18] The stats are similar for the UK, where the food sector contributes to almost 20% of all our emissions,[19] (but this increases when emissions from imported food are included).[20] Every stage of food production releases GHG: carbon dioxide from clearing land to plant crops, methane produced by rice paddies and livestock, and nitrous oxide from the use of chemical fertilisers and plastic packaging, are just a few examples.

Within the food system, agriculture and land use account for the most emissions by far, estimated to be responsible for more than 70% of all food related emissions.[21] Processing, packaging, marketing, transport, retail, storage, cooking and waste disposal all contribute emissions as well, but comparatively much less. In terms of planetary health impact, what we eat matters much more than where it comes from.

PLANETARY IMPACT OF TOP SELLING FOOD AND DRINK CATEGORIES

While raising livestock releases the most GHG emissions per kilogram of food product,[22] the mass production of packaged food and drinks make a significant contribution to emissions owing to the high volume of products sold. Precious planetary resources that could be used to produce nutritious and affordable food are instead being used to make food that is not part of the UK's Eatwell Guide. Our previous research with the University of Oxford identified the top selling packaged food and drink categories from the top 10 manufacturers operating in the UK. In 2022, UK sales of these products from the 10 businesses were worth £11.12 billion.[23] What does this mean for planetary health?

CHOCOLATE

Most of the world's cocoa is produced in West Africa – in Côte d'Ivoire, cocoa farming and deforestation have been associated with a significant loss of primate populations in national parks and forest reserves.[24] Additional harm to the environment comes from the production of ingredients including dairy, sugar and palm oil.

SAVOURY SNACKS

Many of the savoury snacks that big food manufacturers mass-produce are reliant on staple crops including wheat, vegetable oil and sugar, which encourage harmful monocropping practices that threaten biodiversity (and nutrient diversity). Plastic packaging also results in pollution with many of the top 10 food and drink manufacturers also recognised as the top global plastic polluters.[25]

SOFT DRINKS

Intensive sugar production is damaging to our soils and relies on pesticides, which pollute water sources and release GHG emissions.[26] The production of soft drinks is also water-intensive and beverage manufacturers have been reported to operate in already water-stressed areas.[27]

ICE CREAM

Harm to planetary health from ice cream comes mainly from its supply chain and the intensive production of its ingredients — dairy, sugar, chocolate and palm oil, for example.

17 The National Food Strategy: The Plan. (2021).
18 Ibid
19 Ibid
20 WRAP (2021). UK Food System GHG: Emissions Total UK food & drink consumption footprint and pathway to a 50% reduction by 2030.
21 Crippa, M., Solazzo, E., Guizzardi, D., et al. (2021). Food Systems Are Responsible for a Third of Global Anthropogenic GHG Emissions.
22 Ibid
23 Bite Back (2024). Fuel us, don't fool us: Are food giants rigging the system against children's health? (Manufacturers).
24 Bitty, E.A., Bi, S.G., Bene, J-C.K., et al. (2015). Cocoa Farming and Primate Extirpation Inside Cote D'ivoire's Protected Areas. Tropical Conservation Science, 8(1):95-113.
25 Break Free From Plastic (2023). Brand Audit 2023 Report.
26 Feed Back (2023). Sugar pollution: Curbing sugar supply for health and the environment.
27 Yacine Sanogho, M'Ballou (2022). Nestlé and the Right to Water. The Journal of International Relations, Peace Studies, and Development, 7(1):8. Available at: https://scholarworks.arcadia.edu/agsjournal/vol7/iss1/8

A TRIPLE WIN OF A HEALTHY, SUSTAINABLE AND JUST FOOD SYSTEM

In the UK, our food system generates more than enough food to feed us, creating considerable profits for the food giants that dominate the food system. As the amount of food available per person increases and businesses find increasingly creative ways to produce, market and sell it, we end up with a food system that prioritises the amount of food produced over its quality.

The evidence is clear that in general, foods that are better for our health are also better for the environment. Research shows that a shift in population diets to align with the UK's Eatwell Guide could lower dietary GHG emissions by a third - as well as improve peoples' health.[28] To meet the UK Government's health, climate and nature commitments by 2032[29] we need a food system that supports the following changes:[30]

↑ **30% increase** in fruit and vegetable consumption
↑ **50% increase** in fibre consumption
↓ **25% reduction** in consumption of foods high in fat, sugar or salt
↓ **30% reduction** in meat consumption

Such a shift would be particularly beneficial for communities living in the UK's most deprived areas, who have less access to healthy foods than the least deprived groups and suffer disproportionately from diet-related illnesses, including type 2 diabetes and dental decay.[31]

28 Scheelbeek P, Green R, Papier K, et al. (2020). Health impacts and environmental footprints of diets that meet the Eatwell Guide recommendations: analyses of multiple UK studies. BMJ Open, 10:e037554.
29 Compared to a 2019 baseline
30 Targets from The National Food Strategy: The first three diet-related targets are based on advice from the Scientific Advisory Committee on Nutrition. A 30% reduction in meat is required to achieve the 5th Carbon budget and the 30x30 nature commitment.
31 The Food Foundation (2023). The Broken Plate 2023.

THE TOP 10 MANUFACTURERS AND THEIR IMPACT ON PLANETARY HEALTH

METHOD

Data on the top 10 businesses' climate commitments was taken from the SBTi dashboard in July 2024.[32] The following data were collected on each company:[33]

- Near-term targets for emissions reduction (by 2030, latest)
- Long-term targets for emissions reduction (i.e. net zero commitments) (by 2050, latest)
- Base year from which to measure targets (individually set by each business and different for each business.)

The SBTi allows for near-term targets to be split by scope (scope 1 & 2 emissions versus scope 3 emissions).[34] As scope 3 emissions are significantly higher than scope 1 & 2 emissions for food and drink companies, targets were combined into one overall near-term target (referred to as 'reduction target').[35] We wanted to know if this combined reduction target was equal to a reduction of total emissions by 50% by 2030. Long-term targets were considered to meet Bite Back's ask if they were validated by the SBTi.[36]

SCOPE 1 EMISSIONS	Direct GHG emissions from operations owned or controlled by the reporting company.
SCOPE 2 EMISSIONS	Indirect GHG emissions associated with the generation of purchased or acquired electricity, steam, heating or cooling consumed by the reporting company.
SCOPE 3 EMISSIONS	Indirect GHG emissions (other than those covered in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.

32 https://sciencebasedtargets.org/companies-taking-action#
33 As the only business to not submit targets to the SBTi for validation, Kraft Heinz's data was taken from its annual report.
34 As defined in the SBTi glossary: https://sciencebasedtargets.org/glossary#:~:text=The%20SBTi%20Glossary%20provides%20a,set%20ambitious%20science-based%20target 34 Formula for calculation, inclusive of all scope emissions reduction targets found in methodology section in Appendix 1.
35 Formula for calculation, inclusive of all scope emissions reduction targets found in methodology section in Appendix 1.
36 Companies are considered 'committed' to net zero targets when they commit to setting targets with the SBTi. However, they have 24 months to develop and submit targets for validation from the date they make this commitment. Therefore, companies who are 'committed' are not considered to have a validated science-based net zero target and therefore do not meet Bite Back's ask.

Annual emissions data were collected from the Carbon Disclosure Project (CDP), where available, to analyse whether or not companies were on track to meet their targets.[37] Businesses set their own base year from which to measure progress – the time period between base and reporting year therefore varies by business.

First, the 'actual reduction' in annual total emissions between the base year and 2022 was calculated. This rate was then compared to a theoretical 'expected reduction', in other words how much a company should have reduced its annual emissions by 2022 if on-track to meeting its reduction target.

For example, if a company committed to reducing its total emissions by 50% between 2015 and 2030 (reduction target), by 2022 its annual emissions should be 23% less than its emissions from 2015 (expected reduction). If the company had reduced its annual emissions by less (actual reduction) or even increased emissions by 2022, it would be considered off-track.

Finally, the emissions intensity for each company was calculated (tCO2e/£k revenue)[38] to complement total emissions figures.

The analysis in this report is reliant on information published by businesses and available in the public domain. We considered the SBTi and CDP as the most credible sources where standardised information should be published to ensure transparency.

Our analysis does not account for targets specific to Forest, Land and Agriculture (FLAG) emissions because the guidance regarding FLAG emissions is relatively new and not all companies have the relevant data yet, so reporting is inconsistent. However, it represents a large proportion of global emissions that have largely been ignored[39] and will therefore be considered in future research reports. Five of the businesses (Danone, Mars, Mondelez, Nestlé and Unilever) already include FLAG emissions in their climate targets.

A full methodology with all limitations and data source references are included in Appendix 1. Businesses were given the opportunity to provide a written response to our research - where commentary has been provided by the business, this is outlined in Appendix 2.

Reduction target (%)	The overall near-term target set by each business for total emissions reduction, inclusive of scopes 1, 2 and 3 between its base year emissions and 2030 emissions.
Actual reduction (%)	The rate of reduction between a business's total base year emissions and its total emissions from 2022.
Expected reduction (%)	The rate of reduction we would expect of a company by 2022 from its total base year emissions, if on track to meeting its reduction target by 2030.

37 Ferrero International SA did not complete a CDP report and Unilever did not disclose its baseline emissions to the CDP, so simplified carbon footprints were estimated from their latest sustainability reports.
38 Revenue figures taken from company annual reports. Mars and Ferrero are private companies and do not disclose their annual revenue so we could therefore not calculate their emissions intensity.
39 SBTi (2022). The SBTi's FLAG Guidance https://sciencebasedtargets.org/blog/the-sbtis-flag-guidance-a-groundbreaking-moment-for-addressing-land-related-emissions

FINDINGS

TOTAL EMISSIONS

Collectively, the total global emissions of the top 10 food and drink manufacturers was roughly 477 million tCO2e in 2022 — this is more than the UK which emitted 426 million tCO2e in the same year.[40] It also dwarfs the international aviation industry, which similarly emitted 426 million tCO2e in 2022.[41]

Table 1: Businesses' total emissions in 2022[42]

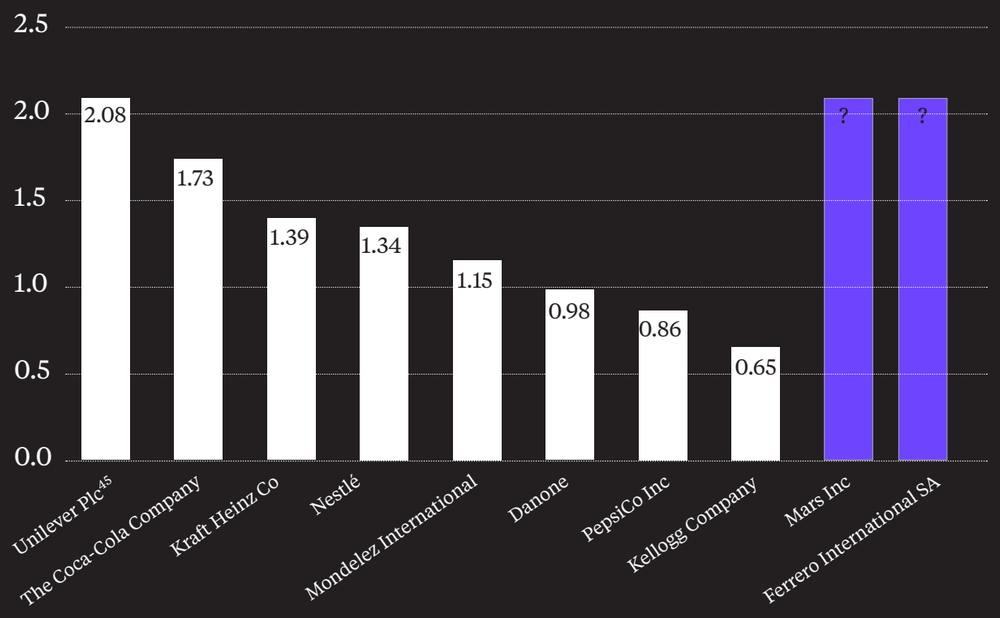
Business	Total Emissions (tCO2e)*
Nestlé	112,827,500
Unilever Plc	111,170,000
PepsiCo Inc	61,408,435
The Coca-Cola Company	61,343,212
Kraft Heinz Co	30,444,505
Mars Inc	30,376,629
Mondelez International Inc	29,908,831
Danone	24,206,665
Kellogg Company	8,191,136
Ferrero International SA	7,318,171
Top 10 total emissions	**477,195,084**
UK emissions	**426,562,000**
International aviation industry emissions	**425,964,000**

*Not all of the emissions will be attributed to food and drink production as some businesses have broader portfolios.

40 Crippa, M., Guizzardi, D., Pagani, F., et al. (2023). GHG emissions of all world countries. Publications Office of the European Union, Luxembourg.
41 Ibid.
42 Ferrero and Unilever disclosed GHG emissions by FY 2021-2022.

It is not possible to compare businesses' total emissions, as larger businesses often have a larger volume of emissions. One way to compare the planetary impact of different businesses, and track their progress over time, is to look at their emissions intensity - this metric divides total emissions by revenue (or another relevant business output) to provide a score that assesses a company's carbon footprint relative to its size. A lower score suggests a relatively lower planetary impact.[43]

Figure 1: Ranking by emissions intensity using data from 2022[44]



TARGETS

Each of the top 10 businesses have set climate commitments for emissions reduction. However these vary significantly in terms of ambition. Just four of the businesses have net zero targets that are validated by the SBTi — Danone, Mars, Mondelez and Nestlé. The majority of businesses also do not have a target to halve their emissions by 2030 (which is a key progress marker to reaching net zero by 2050).

43 Gruitt, Ben (2023). Total Emissions vs. Carbon Intensity. www.sustain.life/blog/total-emissions-carbon-intensity.
44 Ferrero and Mars are private companies and therefore do not disclose their annual sales revenue. Without this data, we were unable to determine their emissions intensity.
45 Unilever disclosed its GHG emissions by FY 2021-2022 so the emissions intensity was calculated using the sales revenue reported at the end of 2022 and at the end of 2021. The emissions intensity using the 2021 sales revenue was 2.52 tCO2e/£kGBP (revenue of £44,069 in millions) so we can assume that the 2022 emissions intensity score falls between 2.08 and 2.52 tCO2e/£kGP

PROGRESS

While 7 out of 10 businesses have reduced annual emissions since their base year, only 3 appear to be on track (or close to being on track) to meet their 2030 target. Of the remaining businesses, 4 seem to be significantly off track and 3 have **increased** their annual emissions in the time period analysed — Ferrero, Kraft Heinz and PepsiCo. Our analysis suggests that the majority of businesses need to accelerate their emissions reductions to meet their own targets (which vary in level of ambition) and significantly speed up progress to ensure sufficient action to achieve net zero by 2050. At this point, businesses' actions do not appear to match their words.

Figure 2: Actual reduction vs. expected reduction

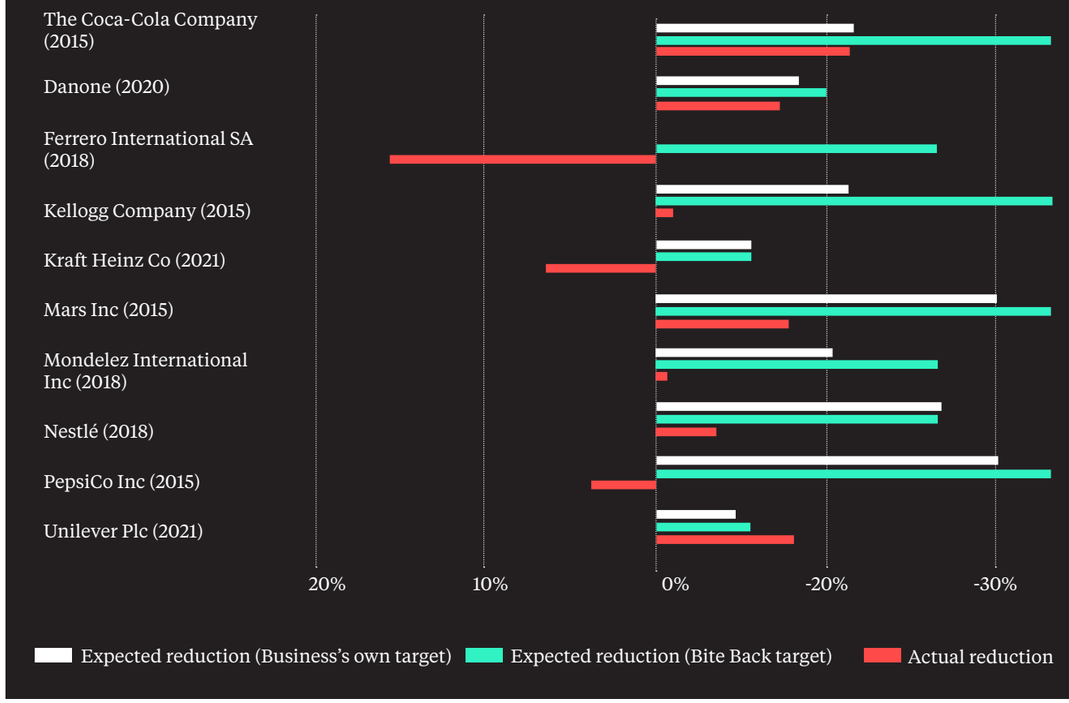


Figure 2 is a visual representation of how each business's commitments stack up against Bite Back's ask to cut total emissions in half by 2030 – the white line shows how much we estimate a business should have reduced its annual emissions by 2022 according to its own targets compared to the green line, which shows the expected reduction if on track to cutting emissions in half by 2030 (Bite Back's ask). Clearly, some businesses' reduction targets are closer to a 50% reduction than others.

The red line represents the actual reduction – in other words, the percentage by which a business has reduced its 2022 emissions from its base year. In the case of Ferrero, Kraft Heinz and PepsiCo, we see an increase, not a decrease of annual emissions. In some cases, a business may be close to reaching its own target (for example, Coca-Cola) but actually quite far from reducing emissions to the level needed to suggest sufficient progress to net zero. Whereas Danone, for example, seems to be roughly on track to meeting its own and Bite Back's target.

Table 2: Actual reduction vs. expected reduction data

Business	Base year	Expected reduction by 2022 (Business's own target)	Expected reduction by 2022 (Bite Back's target)	Actual reduction by 2022
The Coca-Cola Company	2015	-11.7%	-23.3%	-11.4%
Danone	2020	-8.4%	-10.0%	-7.3%
Ferrero International SA	2018	N/A	-16.7%	**15.8% increase**
Kellogg Company	2015	-11.3%	-23.3%	-1.0%
Kraft Heinz Co	2021	-5.6%	-5.6%	**6.6% increase**
Mars Inc	2015	-20.1%	-23.3%	-7.8%
Mondelez International Inc	2018	-10.4%	-16.7%	-0.7%
Nestlé	2018	-16.8%	-16.7%	-3.6%
PepsiCo Inc	2015	-20.2%	-23.3%	**3.9% increase**
Unilever Plc	2021	-4.7%	-5.6%	-8.2%

TRANSPARENCY

Businesses should be accountable for making the progress they claim. This means data needs to be reported and shared transparently. This is not always the case. Our research identified Ferrero and Unilever in particular to lack transparency — they did not publish easily accessible data needed to measure progress toward their targets so emissions data had to be taken from their annual reports, significantly weakening the credibility of these specific findings.

FOCUS ON THE TOP 10 BUSINESSES

THE COCA-COLA COMPANY

Total global emissions in 2022: 61,343,212 tCO2e
Emissions intensity: 1.73 tCO2e/£k revenue
Baseline emissions (year): 69,245,283 tCO2e (2015)

Set a science-based target to cut total emissions by 50% by 2030?	No
Set a science-based target to reach net zero no later than 2050?	No
Expected reduction from base year to 2022	-11.7%
Actual reduction from base year to 2022	-11.4%

Coca-Cola has a reduction target to reduce total scope 1, 2 and 3 GHG emissions by 25% by 2030 from a base year of 2015. This is not ambitious enough to meet Bite Back's ask of reducing total emissions by 50% by 2030. Coca-Cola has also not set a science-based net zero target.

Based on the CDP data disclosed by Coca-Cola, we calculated an actual reduction in its total emissions by 11.4% between 2015-2022 annual emissions. Our analysis estimates that it should have reduced its annual emissions by 11.7% in this time, if on track to meet its 2030 reduction target. Although this indicates that Coca-Cola is close to reaching its own set target, this is highly unambitious. Coca-Cola is far behind achieving Bite Back's ask of a 50% reduction by 2030.

Overall, Coca-Cola transparently disclosed the data necessary for our analysis.

DANONE

Total global emissions in 2022: 24,206,665 tCO2e
Emissions intensity: 0.98 tCO2e/£k revenue
Baseline emissions (year): 26,126,912 tCO2e (2020)

Set a science-based target to cut total emissions by 50% by 2030?	No
Set a science-based target to reach net zero no later than 2050?	Yes
Expected reduction from base year to 2022	-8.4%
Actual reduction from base year to 2022	-7.3%

Danone has validated near-term targets for a 46.3% reduction in scope 1 & 2 emissions, and a 42% reduction in scope 3 emissions by 2030 from a base year of 2020. This results in a reduction target of 42.2%, which is close to Bite Back's ask for a 50% reduction by 2030. Danone has also set a target to reach net zero emissions by 2050 and included a target for methane emissions reduction, as well as committed to increasing its share of plant-based products – this is a positive for planetary health.

Based on the CDP data disclosed by Danone, we calculated an actual reduction in its total emissions by 7.3% between 2020-2022 annual emissions. Our analysis estimates that Danone should have reduced its annual emissions by 8.4% in this time, if on track to meet its 2030 target. This indicates the business is close to meeting its 2030 reduction target, ensuring progress to reaching net zero by 2050.

Overall, Danone transparently disclosed the data necessary for our analysis.

Danone has set specific FLAG emissions reduction targets, which are not accounted for in our analysis. We note that our estimated reduction target of 42.2% is higher than Danone's own estimated reduction target.[46] Therefore, our expected reduction of 8.4% may be an overestimation.

46 See Appendix 2 for Danone's response.

FERRERO INTERNATIONAL SA

Total global emissions in FY 2021-2022: 7,318,171 tCO2e
Emissions intensity: N/A
Baseline emissions (year): 6,320,367 tCO2e (FY 2017-2018)

Set a science-based target to cut total emissions by 50% by 2030?	No
Set a science-based target to reach net zero no later than 2050?	No
Expected reduction from base year to 2022	N/A
Actual reduction from base year to 2022	15.8% **increase**

Ferrero set a near-term target to reduce its scope 1 & 2 emissions by 50% by 2030 from a base of FY 2017-2018. However, it has not set a target for total emissions reduction for scope 3 emissions – its target is instead based on emissions intensity. Therefore, a reduction target could not be determined. Ferrero has also not set a science-based net zero target.

Emissions data disclosed by Ferrero in its 2022 Sustainability Report shows that it actually **increased** annual emissions by 15.8% between 2018-2022. Without a reduction target it was impossible to calculate an expected reduction. However, we can say with certainty that Ferrero is not on track as its annual emissions have increased significantly in the period of analysis.

Overall, Ferrero did not transparently disclose the data necessary for our analysis.

Because Ferrero does not disclose its emissions data to the CDP, findings should be interpreted with caution. The CDP is the current global gold standard for transparent and standardised climate reporting. Therefore, any data extracted from individual company reports may not be of the same level of reliability.

KELLOGG COMPANY

Total global emissions in 2022: 8,191,136 tCO2e
Emissions intensity: 0.65 tCO2e/£k revenue
Baseline emissions (year): 8,271,105 tCO2e (2015)

Set a science-based target to cut total emissions by 50% by 2030?	No
Set a science-based target to reach net zero no later than 2050?	No
Expected reduction from base year to 2022	-11.3%
Actual reduction from base year to 2022	-1%

Kellogg has validated near-term targets for a reduction of scope 1 & 2 emissions by 47% and scope 3 emissions by only 20% by 2030 from a base year of 2015. This results in an overall reduction target of 24.2% which is much less ambitious than Bite Back's ask to cut emissions in half by 2030. Kellogg has publicly committed to a net zero target however this has not been validated by the SBTi.

Based on CDP data disclosed by Kellogg, we calculated an actual reduction of 1% between 2015-2022 annual emissions. However, our analysis estimates that it should have reduced its annual emissions by 11.3% in this time, if on track to meet its reduction target. This indicates Kellogg needs to accelerate progress to meet its 2030 goals and ensure it is on track to reaching net zero by 2050, as it has committed to.

Overall, Kellogg transparently disclosed the data necessary for our analysis.

KRAFT HEINZ CO

Total global emissions in 2022: 30,444,505 tCO2e
Emissions intensity: 1.39 tCO2e/£k revenue
Baseline emissions (year): 28,554,992 tCO2e (2021)

Set a science-based target to cut total emissions by 50% by 2030?	No
Set a science-based target to reach net zero no later than 2050?	No
Expected reduction from base year to 2022	-5.6%
Actual reduction from base year to 2022	6.6% **increase**

Kraft Heinz's near and long-term targets meet Bite Back's asks to cut total emissions in half by 2030 from a base year of 2021 and achieve net zero by 2050. However, Kraft Heinz has not submitted these targets to the SBTi for validation.

Based on CDP data disclosed by Kraft Heinz, we calculated that it actually **increased** its annual emissions by 6.6% between 2021-2022. Our analysis estimates that it should have reduced its annual emissions by 5.6% in this time, if on track to meet its 2030 target of a 50% reduction. Not only is Kraft Heinz not on track to fulfilling its climate commitments, it is moving in the wrong direction.

Kraft Heinz has not obtained target validation by the SBTi thus making its climate commitments less credible, but overall discloses its data transparently.

The total emissions from 2022 which were disclosed to the CDP differ from those reported in the Kraft Heinz Company's 2023 ESG report. Kraft Heinz will share an update on progress in its next CDP submission.

MARS INC

Total global emissions in 2022: 30,376,629 tCO2e
Emissions intensity: N/A
Baseline emissions (year): 32,935,140 tCO2e (2015)

Set a science-based target to cut total emissions by 50% by 2030?	No
Set a science-based target to reach net zero no later than 2050?	Yes
Expected reduction from base year to 2022	-20.1%
Actual reduction from base year to 2022	-7.8%

Mars has validated near-term targets to reduce scope 1 & 2 emissions by 63% and scope 3 emissions by 42% by 2030 from a base year of 2015. This results in an overall reduction target of 43.1% which is close to Bite Back's ask to reduce emissions 50% by 2030. Mars has also set a target to reach net zero by 2050.

Based on CDP data disclosed by Mars, we calculated an actual reduction of 7.8% between 2015-2022 annual emissions. However, our analysis estimates that it should have reduced its annual emissions by 20.1% in this time, if on track to meet its 2030 target. This indicates Mars is far behind and needs to accelerate progress to meet its 2030 reduction target, ensuring it is on track to reaching net zero by 2050, as it has committed to.

Overall, Mars transparently disclosed the data necessary for our analysis.

Mars has set specific FLAG emissions reduction targets, which are not accounted for in our analysis.

MONDELEZ INTERNATIONAL INC

Total global emissions in 2022: 29,908,831 tCO2e
Emissions intensity: 1.15 tCO2e/£k revenue
Baseline emissions (year): 30,121,286 tCO2e (2018)

Set a science-based target to cut total emissions by 50% by 2030?	No
Set a science-based target to reach net zero no later than 2050?	Yes
Expected reduction from base year to 2022	-10.4%
Actual reduction from base year to 2022	-0.7%

Mondelez has validated near-term targets to reduce scope 1 & 2 emissions by 50.4% and scope 3 emissions by 30% by 2030 from a base year of 2018. This results in an overall reduction target of 31.2% by 2030, which does not meet Bite Back's ask to reduce emissions 50% by 2030. Mondelez has set a target to reach net zero by 2050.

Based on CDP data disclosed by Mondelez, we calculated an actual reduction of only 0.7% between its 2018-2022 annual emissions. However, our analysis estimates that it should have reduced its annual emissions by 10.4% in this time, if on track to meet its 2030 target. This indicates that Mondelez is not on track to fulfilling its commitments.

Overall, Mondelez transparently disclosed the data necessary for our analysis.

Mondelez has set specific FLAG emissions reduction targets, which are not accounted for in our analysis.

NESTLÉ

Total global emissions in 2022: 112,827,500 tCO2e
Emissions intensity: 1.34 tCO2e/£k revenue
Baseline emissions (year): 116,991,541 tCO2e (2018)

Set a science-based target to cut total emissions by 50% by 2030?	Yes
Set a science-based target to reach net zero no later than 2050?	Yes
Expected reduction from base year to 2022	-16.8%
Actual reduction from base year to 2022	-3.6%

Nestlé's near-term target to reduce scope 1, 2 and 3 emissions is the only science-based target among the top 10 food and beverage manufacturers in the UK to reduce total emissions by 50% (from base year 2018) by 2030. Nestlé also has a validated target to reach net zero by 2050.

Based on CDP data disclosed by Nestlé, we calculated an actual reduction of 3.6% between its 2018-2022 annual emissions. However, our analysis estimates that it should have reduced its annual emissions by 16.8% in this time, if on track to meet its 2030 target. This indicates that despite ambitious targets, Nestlé is not on track to cutting its total emissions in half by 2030 and therefore not sufficiently making progress to reaching net zero by 2050.

Overall, Nestlé transparently disclosed the data necessary for our analysis.

Nestlé has set specific FLAG emissions reduction targets, which are not accounted for in our analysis.

PEPSICO INC

Total global emissions in 2022: 61,408,435 tCO2e
Emissions intensity: 0.86 tCO2e/£k revenue
Baseline emissions (year): 59,103,824 tCO2e (2015)

Set a science-based target to cut total emissions by 50% by 2030?	No
Set a science-based target to reach net zero no later than 2050?	No
Expected reduction from base year to 2022	-20.2%
Actual reduction from base year to 2022	3.9% **increase**

PepsiCo's validated near-term targets to reduce scope 1 & 2 emissions by 75% and scope 3 emissions by 40% by 2030 result in a reduction target of 43.3% from a base year of 2015. This is close to Bite Back's ask to cut total emissions in half by 2030. PepsiCo has publicly committed to a net zero target however this has not been validated by the SBTi.

Based on CDP data disclosed by PepsiCo, we calculated that the business actually **increased** its annual emissions by 3.9% between 2015-2022. Our analysis estimates it should have reduced its annual emissions by 20.2% in this time, if on track to meet its 2030 target. This indicates that not only is PepsiCo not on track to fulfilling its climate commitments, it is moving in the wrong direction.

Overall, PepsiCo transparently disclosed the data necessary for our analysis.

UNILEVER PLC

Total global emissions in FY 2021-2022: 111,170,000 tCO2e
Emissions intensity: 2.08 tCO2e/£k revenue
Baseline emissions (year): 121,120,000 tCO2e (FY 2020-2021)

Set a science-based target to cut total emissions by 50% by 2030?	No
Set a science-based target to reach net zero no later than 2050?	No
Expected reduction from base year to 2022	-4.7%
Actual reduction from base year to 2022	-8.2%

Unilever's validated near-term targets to reduce total scope 1 & 2 emissions by 100% and scope 3 emissions by 42% by 2030 from its base year result in a reduction target of 42.4%. This is close to Bite Back's ask to cut total emissions in half by 2030. Unilever had publicly committed to a net zero target but SBTi removed this commitment from its dashboard in March 2024.

Based on data from Unilever's 2023 annual report, we calculated an actual reduction of 8.2% between its 2021-2022 annual emissions. Using this data, our analysis estimates that Unilever is ahead of its expected reduction of 4.7% by 2022 from its base year, if on track to meeting its reduction target. However, the use of data from its own report is a significant limitation of this analysis.

There is no total base year emissions data for Unilever in the 2022 CDP report. Unilever has advised it will be submitting updated data to CDP by the end of 2024. Data was extracted from its annual report in order to calculate a reduction target, an actual reduction and expected reduction. The total emissions from 2022 which were disclosed to the CDP differ significantly from those reported in Unilever's 2023 annual report and findings should therefore be interpreted with caution. The CDP is the current global gold standard for transparent and standardised climate reporting. Therefore, any data extracted from individual company reports may not be of the same level of reliability. Unilever has set specific FLAG emissions reduction targets, which are not accounted for in our analysis.

CONCLUSION

This wasn't a simple investigation. The varied impact of the food system on the planet is complicated, with multiple interconnections. The corporate language of climate is complex, which is not helped by a lack of transparency and accountability by some businesses.

But it is clear that the biggest, most successful global businesses operating in the UK need to do more. Much more. Collectively their GHG emissions are significant. They all have targets in place to reduce them, but some are a lot less ambitious than others. From our assessment of their plans and progress, we don't feel confident that the businesses are on track to meeting reduction targets that are sufficient to suggest progress toward reaching net zero emissions by 2050 and safeguarding our planet's health. Worryingly, 3 of the top 10 manufacturers actually saw an **increase** in their total annual emissions since setting their targets.

Like the rest of the world, the food industry is feeling the impacts of climate change and will face significant revenue losses if improvements are not made soon. Climate change drives crop failures and weakens global food supply chains, and these are challenging problems to solve. But a food system that values the health and sustainability of its food over the mass-production of products that are nutrient poor and ultra-processed will benefit everyone.

When food is produced on such massive scales, small changes have a huge impact. Businesses and governments can make this happen. As our recommendations laid out, businesses need to set science-based and appropriately ambitious targets to reduce their emissions but this is not enough — they need to urgently act on their commitments and transparently disclose their progress so we can hold them accountable. Governments need to step in and enforce this transparency to make sure that big food and beverage manufacturers are playing their part in protecting children's health and planetary health.

GLOSSARY OF TERMS[47]

TERM	DEFINITION
Base year	A specific year against which a company’s emissions are tracked over time.
Carbon dioxide equivalent (CO2e)	The amount of CO2 emissions that would cause the same impact or temperature change, over a set time, as an emitted amount of a GHG or a mixture of GHGs. Useful metric for calculating the carbon footprint of a product or company.
Commitment (of science-based targets)	Announcement to show intention to submit a near-term or net zero science-based emissions reduction target in accordance with SBTi standards within a specific period.
Emissions intensity	Emissions per a specific unit, for example: tCO2e/£million company revenue (i.e. carbon intensity).
Emissions reductions	Measures that companies take to prevent, reduce, or eliminate sources of GHG emissions within or beyond their value chain. Examples include reducing energy use, switching to renewable energy, and reducing chemical fertiliser use.
FLAG (Forestry, land, and agriculture) targets	A target that applies to a company’s GHG emissions from AFOLU (Agriculture, forestry, and other land use), including GHG emissions associated with land use change (LUC), emissions from land management, and biogenic removals.
Greenhouse gases (GHGs)	Gases that absorb and re-emit infrared radiation, thereby trapping it in Earth’s atmosphere and causing the greenhouse effect. The main GHGs are carbon dioxide (CO2), methane (CH4) and nitrous oxide (N2O).
Net zero emissions	Net zero emissions are achieved when emissions of GHGs to the atmosphere are balanced by removals over a specified period.
Science-based targets (SBTs)	Corporate targets to mitigate GHG emissions that are in line with what the latest climate science says is necessary to meet the goals of the Paris Agreement – to pursue efforts to limit warming to 1.5°C.
Total emissions	Amount of greenhouse gas (GHG) emissions in terms of mass of GHG or tonnes of carbon dioxide equivalent (CO2e). In contrast with emissions intensity.

47 As defined in the SBTi glossary: https://sciencebasedtargets.org/glossary#:~:text=The%20SBTi%20Glossary%20provides%20a,set%20ambitious%20science-based%20targets.

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APPENDIX 1: METHODOLOGY

The top 10 global food and soft drink manufacturers based on sales of packaged food and drinks in the UK were identified based on Euromonitor global sales data for 2022.[1] For the analysis in this report, data from each of the top 10 businesses were collected from publicly accessible sources that are considered to be the gold standard for climate data transparency: the Science-Based Targets Initiative (SBTi)[2] and Carbon Disclosure Project (CDP).[3] Where data was not disclosed to these sources, it was collected from businesses' own annual reports – when this is the case, it is explicitly stated in the report. The manufacturer names used in our previous two reports (Manufacturers #1 and Manufacturers #2) were taken from Euromonitor. The manufacturer names used in this report (Manufacturers #3) were taken from the SBTi dashboard.

1 Climate ambition and greenhouse gas (GHG) emissions reduction targets

Data on overall climate ambition and GHG emissions reduction targets were collected from the SBTi dashboard.[4] The following information was collected for each of the top 10 food and soft drink manufacturers:

- Near-term targets: Businesses set targets for rapid and significant cuts to emissions to limit global temperature increases to 1.5°C. According to the SBTi, these targets should be set for 5-10 years (2030 latest) from the date the original target was submitted.
- Long-term targets: Companies must cut all possible emissions, aiming to achieve net zero by 2050.
- Base year: The specific year against which a company's emissions are tracked over time, as individually set by each company.

Companies were considered aligned with Bite Back's ask when they had SBTi-validated science-based targets to cut their total emissions in half by 2030 (near-term target) and achieve net zero no later than 2050 (long-term target). Bite Back's ask goes beyond the requirements of the SBTi, to include an overall near-term target to cut total scope 1, 2 and 3 emissions in half by 2030. This is based on the guidance from leading climate experts, including the Intergovernmental Panel on Climate Change (IPCC).[5] It is a useful proxy measure to ensure that businesses are on track to achieving net zero by 2050.

[1] Euromonitor International. https://www.euromonitor.com/
[2] https://sciencebasedtargets.org/companies-taking-action
[3] https://www.cdp.net/en
[4] The SBTi is an initiative which approves corporate climate targets when they are "science-based", i.e. they commit to a reduction in GHG emissions compatible with a trajectory of temperature increase of +1.5°C or well-below +2°C by the end of the century
[5] Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change

To analyse the ambition of each company's near-term target, its scope 1&2 emissions reduction target was combined with its scope 3 emissions reduction target (data taken from the SBTi dashboard in July 2024) to calculate an overall near-term reduction target (reduction target), using the below formula:[6]

Reduction target = (total base year scope 1&2 emissions(1+scope 1&2 target)+total base year scope 3 emissions*(1+scope 3 target))/total base year emissions-1*

On the SBTi dashboard, long-term targets are classified as either 'committed', 'commitment removed' or 'targets set'. First, a business announces its commitment to develop emissions reduction targets. It then has 24 months to submit the targets for validation to the SBTi – the commitment is later removed if the target is not submitted for validation in the relevant time frame. For this reason, we only took 'targets set' to satisfy the ask of having a net zero commitment by 2050 that is validated by the SBTi.

2 Progress towards emissions reduction targets

To assess progress in meeting targets, the following data from each business's CDP report was collected to estimate its actual progress in emissions reduction from the base year to the most recent year for which data was available (2022):

- **Total base year emissions from CDP section C5**. Scope 1 and 2 (market-based) emissions were recorded as reported. Total scope 3 emissions were calculated by taking the sum of each scope 3 category reported. Scope 1, 2 and 3 emissions were then added together to determine the total base year emissions.
- **Gross global total emissions from 2022 from CDP section C6**. Scope 1 and 2 (market-based) emissions were recorded as reported. Total scope 3 emissions were calculated by taking the sum of each scope 3 category reported. Scope 1, 2 and 3 emissions were then added together to determine the gross global total emissions from 2022.

The following formula was then used to calculate the actual reduction, which is represented as the percentage change in annual emissions from the base year to 2022:

Actual reduction (%) = (total base year emissions - 2022 total emissions)/total base year emissions

This figure was then compared to a theoretical 'expected' reduction by 2022 if the rate of the reduction target was maintained, assuming a linear reduction:

[6] Our formula does not account for targets specific to Forest, Land and Agriculture (FLAG) emissions because the guidance regarding FLAG emissions is relatively new and not all companies have the relevant data yet, so reporting is inconsistent.

Expected reduction (%) = (total base year emissions - target year emissions)(2022 - base year)/(target year - base year)/total base year emissions*

Target year emissions were calculated using the following formula:

*Target year emissions = total base year emissions - (total base year emissions*target reduction)*

Example:
PepsiCo Inc. set a target to reduce total scope 1 & 2 GHG emissions by 75% and scope 3 GHG emissions by 40% by 2030, from a 2015 base year.[7] Emissions data was collected from section C5 of PepsiCo's 2023 CDP report.

	Target (% total reduction)	**Base year (2015) emissions (tCO2e)**	**Target year (2030) emissions (tCO2e)**	**Reporting year (2022) emissions (tCO2e)**
Scope 1&2	-75%	5 527 608	1 381 902 (=5 527 608*(1-75 %))	4 231 588
Scope 3	-40%	53 576 216	32 145 730 (53 576 216*(1-40 %))	57 176 847
Overall	-43.3%	59 103 824	33 527 632	61 408 435
Source	SBTi dashboard	CDP report section C5	Calculated by applying the target reduction formula	CDP report section C6

1. To obtain the reduction target, we first calculated the total target emissions by adding the 2030 target emissions of scope 1 & 2 and scope 3, resulting in 33 527 632 tCO2e.
2. Applying the formula gives us an overall reduction target of -43.3%: (5527608*(1+75%)+53576216*(1+40%))/59103824-1
3. Then the actual reduction is calculated ((59103824-61 408 435)/59 103 824= -3.9%), showing there was actually an increase in emissions of 3.9% between 2015-2022.
4. Finally, we calculate the expected reduction between 2015 and 2022 to be 20.2% suggesting that PepsiCo is not on track to meeting its reduction target, using the following formula:
((59103824-33527632)*(2022-2015)/(2030-2015)))/59103824

[7] Source: SBTi dashboard

3 Calculation of emissions intensity to allow for comparison between companies

Total emissions is the quantity of GHG emissions in terms of mass of GHG or tonnes of carbon dioxide equivalent (tCO2e). Emissions intensity is the emissions per a specific unit, for example tCO2e/£k company revenue. Calculating emissions intensity can help explain changes in emissions due to organisational activity, such as growth. This metric is often used to compare emissions performance across an industry or to track changes over time.

Gross global total emissions from 2022 as taken from CDP report section C5 and 2022 global sales revenue per company as taken from annual reports[8] were used for the below calculation:[9]

Emissions intensity = total tonnes CO2e /total sales revenue in £thousand

Business	**Year**	**2022 revenue (GBP in millions)**	**Reporting year emissions (tCO2e)**	**Emissions intensity score (tCO2e/£k)**
The Coca-Cola Company	2022	35,543 (net operating revenue)	61,343,212	1.73
Danone	2022	24,621 (net sales)	24,206,665	0.98
Kellogg Company	2022	12,658 (net sales)	8,191,136	0.65
Kraft Heinz Co	2022	21,890 (net sales)	30,444,505	1.39
Mondelez International Inc	2022	26,031 (net revenue)	29,908,831	1.15
Nestlé	2022	84,358 (sales revenue)	112,827,500	1.34
PepsiCo Inc	2022	71,403 (net revenue)	61,408,435	0.86
Unilever Plc[10]	FY 2021-2022	53,471 (total group revenue/turnover)	111,170,000	2.08

[8] There were slight differences in how revenue was reported so the exact terminology is included in the table.
[9] Mars and Ferrero are private companies and do not disclose their annual revenue so we could therefore not calculate their emissions intensity score.
[10] Unilever disclosed its GHG emissions by FY 2021-2022 so the emissions intensity was calculated using the sales revenue reported at the end of 2022 and at the end of 2021. The emissions intensity using the 2021 sales revenue was 2.52 tCO2e/£kGBP (revenue if £44,069 in millions) so we can assume that the 2022 emissions intensity score falls between 2.08 and 2.52 tCO2e/£kGP.

Data table

Company	Base year	Scope 1&2 target - SBTi dashboard	Scope 3 target (SBTi dashboard)	Reduction target	Total base year emissions (tCO2e) - CDP	Total 2022 emissions (tCO2e) - CDP	Target year emissions (2030)	Expected reduction by 2022 (Business's own target)	Expected reduction by 2022 (Bite Back's target)	Actual reduction by 2022
The Coca-Cola Company	2015	25.0%	25.0%	25.0%	69,245,283	61,343,212	51,933,962	-11.7%	-23.3%	11.4%
Danone	2020	46.3%	42.0%	42.2%	26,126,912	24,206,665	15,097,142	-8.4%	-10.0%	7.3%
Ferrero International SA	2018	50.0%	N/A	N/A	6,320,367*	7,318,171*	N/A	N/A	-16.7%	15.8% INCREASE
Kellogg Company	2015	47.0%	20.0%	24.2%	8,271,105	8,191,136	6,266,442	-11.3%	-23.3%	1.0%
Kraft Heinz Co	2021	50%*	50%*	50.0%	28,554,992	30,444,505	14,277,496	-5.6%	-5.6%	6.6% INCREASE
Mars Inc	2015	63.0%	42.0%	43.1%	32,935,140	30,376,629	18,749,568	-20.1%	-23.3%	7.8%
Mondelez International Inc	2018	50.4%	30.0%	31.2%	30,121,286	29,908,831	20,720,310	-10.4%	-16.7%	0.7%
Nestlé	2018	50.4%	50.4%	50.4%	116,991,541	112,827,500	58,027,804	-16.8%	-16.7%	3.6%
PepsiCo Inc	2015	75.0%	40.0%	43.3%	59,103,824	61,408,435	33,527,632	-20.2%	-23.3%	3.9% INCREASE
Unilever Plc	2021	100.0%	42.0%	42.4%	121,120,000*	111,170,000*	69,721,800	-4.7%	-5.6%	8.2%

Indicates where analysis was done by Bite Back

All data was sourced from the SBTi/CDP for consistency. Data marked * was sourced from business' annual reports as comprehensive data was not disclosed to the SBTi/CDP.

Limitations

The analysis in this report is reliant on information published by businesses and available in the public domain. When data was not reported to the relevant public domains (SBTi and CDP), data was collected from companies’ own annual reports, which contributes to a lack of standardisation.

Businesses set their own base year from which to measure progress – the time period between base and reporting year therefore varies by business. Additionally, Ferrero and Unilever measure emissions by fiscal year whereas the rest of the businesses analysed report emissions by calendar year.

FLAG emissions and targets specific to FLAG emissions were not considered in this analysis.[11]

Expected reduction rates were based on a linear trend, assuming the overall near-term target reduction rate (reduction target); businesses may however accelerate or decelerate progress in meeting their emissions reduction targets before 2030.

The SBTi allows for certain exceptions when setting targets and the CDP therefore reports on emissions which are ‘covered by target’. We used total emissions for both base and reporting years to allow for standardisation and accounting for the fact that in terms of planetary health, total emissions are what really matters. This means that emissions data reported by individual businesses in their own reports may differ.

Our findings are based on data from 2022 as this is the year for which most recent data is available, but businesses may have made significant changes to their emissions since 2022.

Limitation specific to individual businesses

Ferrero did not disclose its emissions data to the CDP; an estimated carbon footprint was therefore calculated using Ferrero’s own data as reported in its annual report. The actual reduction was similarly calculated using this data. Additionally, Ferrero was the only business to report its scope 3 emissions reduction target in terms of emissions intensity rather than total emissions — this made the calculation of an overall near-term target (reduction target) impossible, which further prevented the calculation of its target year emissions and the expected reduction. Finally, Ferrero does not publicly report its sales revenue figures so its carbon intensity could also not be calculated. There is therefore an overall lack of transparency.

Kraft Heinz has not submitted its emissions reduction targets to the SBTi, and its commitments were therefore extracted from its website.

Mars does not publicly report its sales revenue figures so its carbon intensity could not be calculated.

[11] Our analysis does not account for Forest, Land and Agriculture (FLAG) emissions because the guidance regarding FLAG emissions is relatively new and not all companies have the relevant data yet, so reporting is inconsistent.

Unilever has different base years for scope 1&2 emissions reduction versus scope 3. This is permitted by the SBTi but the business did not report its total base year emissions in the most recently available CDP report (scope 3 emissions were reported using a base year of FY 2009/2010). To calculate a reduction target for combined scope 1, 2 and 3 emissions, we assumed a base year of FY 2020/2021 for all scope emissions. Because this data was not available in the CDP, it was extracted from Unilever’s 2023 annual report and used to calculate the reduction target, target year emissions, actual reduction and expected reduction. The gross global emissions figure from 2022 and carbon intensity figures were also determined using Unilever’s 2023 annual report; while 2023 emissions figures were available in the annual report, 2022 figures were used for consistency with the other businesses. The total emissions figures from Unilever’s annual report differ significantly from those disclosed to the CDP.

APPENDIX 2: MANUFACTURER RESPONSES

The top 10 businesses were given the opportunity to provide a written response to our research. Publishing the comments does not reflect any endorsement or support of their position from Bite Back. The following were provided:

Danone
“*Danone is committed to helping lead the transition to a low-carbon economy. Globally we were among the first companies to have a 1.5°C aligned Science Based Target approved for Forest, Land and Agriculture. We are also the first major food company to adopt a methane commitment. Our Climate Transition Plan maps a pathway to achieve these targets and our plans are well underway, from embedding regenerative agriculture with ingredient suppliers to transitioning to renewable energy in manufacturing. Working with our partners, we believe we can be successful in decarbonising while growing our business, supporting resilience and having a positive impact on the planet too.*”

PepsiCo Inc
“We continue to reduce the carbon footprint of our operations. Our published climate data for 2023 demonstrates more progress: our Scope 1 and 2 emissions reduced by 13% (a 33% reduction versus a 2015 baseline) and our total Scope 1, 2 and 3 emissions reduced by 5% (a 4% reduction versus a 2015 baseline). Tackling climate change requires systemic changes, collective actions and industry-wide investments, which we continue to drive across our value chain, and with other industry players and governments.”

No responses were provided by the following businesses:

- The Coca-Cola Company
- Ferrero International SA
- Kellogg Company
- Kraft Heinz Co
- Mars Inc
- Mondelez International Inc
- Nestlé
- Unilever Plc

THE EVIDENCE IS CLEAR, FOOD THAT IS BETTER FOR OUR HEALTH IS BETTER FOR THE ENVIRONMENT.

TOP 10 BUSINESSES AND THEIR BRANDS

PEPSICO

Nestlé

Mondelēz International

MARS

Kellogg's

Unilever

FERRERO

DANONE

Kraft Heinz

Coca-Cola

This infographic was inspired by Oxfam's Behind the Brands campaign

FUEL US DON'T FOOL US

Report 3 in Fuel Us Don't Fool Us series

Photography: David Madden