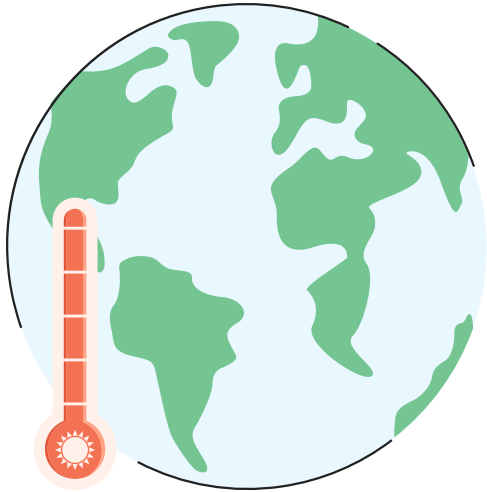




CHOOSEVEG

What Is the Significance of Earth Day?



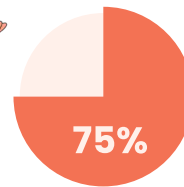
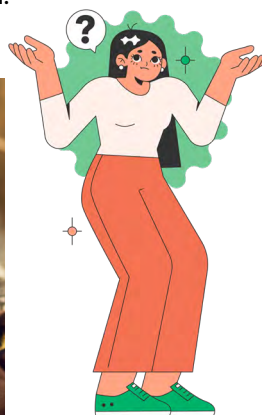
Earth Day 2024 comes at a critical time in the ongoing climate crisis.

2023 was the **hottest year on record**, with mean global temperatures for the 12-month period ending January 2024 climbing to 1.52°C above the **1850–1900 pre-industrial average**,¹ thus breaching the threshold established by the Paris Agreement in 2015.

Record-breaking wildfires in Canada burned more than 18 million hectares of land,² spreading smoke across much of the eastern United States and creating air-quality impacts that persist to this day.

Severe weather events, ranging from floods and tsunamis to heatwaves and droughts, are becoming more common. In fact, the United States experienced a record 28 **“billion-dollar”** climate disasters in 2023, nearing \$93 billion in total property damages.³

Nearly two dozen species were officially declared extinct in 2023, while thousands more species are classified as vulnerable or at risk for extinction.⁴



In the face of such calamities, individuals who want to help the environment may not know where to start. While **roughly 75% of Americans** support U.S. participation in international efforts to mitigate climate change,⁵ **nearly as many** are unclear about which initiatives are most effective in combating rising temperatures.⁶

Understandably, media coverage of the climate crisis focuses in great part on the role of the energy and oil sectors—burned fossil fuels are, after all, the leading contributor of greenhouse gas emissions globally. But polls from around the globe point to a tremendous opportunity to educate the public about another major contributor to climate change that they may not be aware of: industrial animal agriculture.⁷

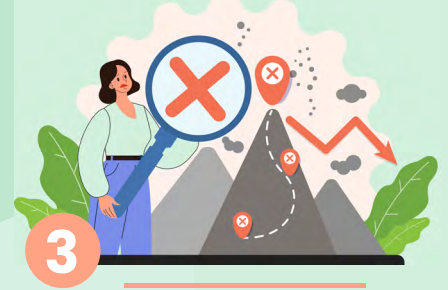
This annual Earth Day report aims to achieve these goals:



Bring attention to the **role of our food system**, specifically industrial animal agriculture, in climate change.



Highlight companies that are **promoting and enhancing their plant-based food offerings** and identify areas for growth and improvement.



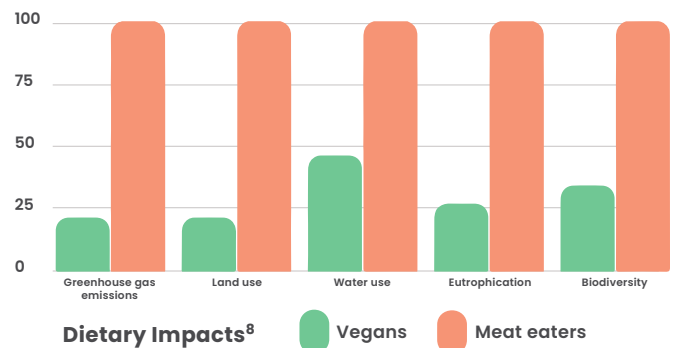
Raise awareness about companies that are **failing to make progress** toward their professed climate goals.

The more that individuals know about the planetary impacts of their food choices, the more empowered consumers they will be. Consumer awareness is the first step toward influencing companies to offer plant-forward, climate-friendly food options and holding them accountable for their role in the climate crisis. Food companies, through their purchasing decisions, hold enormous power to create positive change, or do the opposite—create more pollution, carbon and methane, food waste, and climbing temperatures.

What Is the Link Between Diet & Climate?

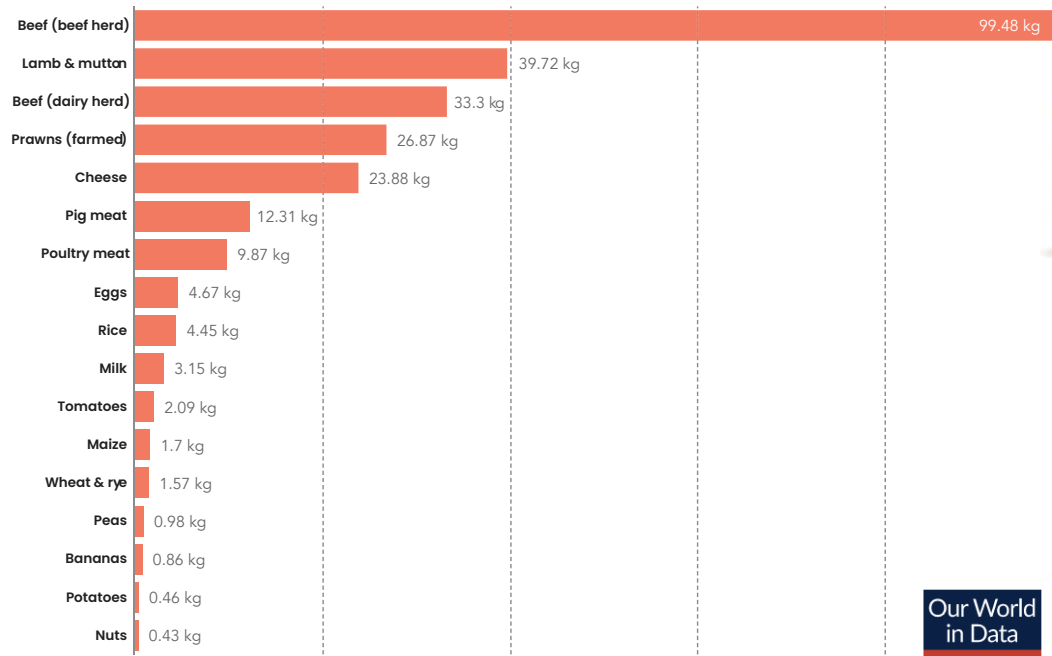
Animal agriculture is a leading contributor

to many of the world's most pressing environmental concerns. In fact, according to the [United Nations](#), animal agriculture is responsible for 14.5% of human-caused global greenhouse gas emissions each year. Plant-based menu items are eco-friendly options for the growing number of climate-conscious consumers.



Greenhouse Gas Emissions per Kilogram of Food Product





Emissions are measured in carbon dioxide-equivalent.⁹ This means non-CO2 gases are weighted by the amount of warming they cause over a 100-year timescale.




Our World in Data

Animal Agriculture Is Inefficient and Wasteful

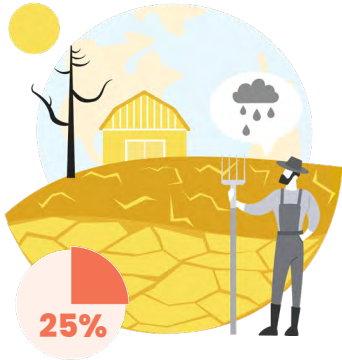
Raising animals for food is an immensely inefficient use of natural resources. Animal agriculture requires land and water to grow crops to feed animals rather than feeding humans directly. **For every 100 calories fed to animals** in the form of human-edible crops, we get only about 40 calories from milk, 22 from eggs, 12 from chicken, 10 from pork, or three from beef. Every 100 grams of grain protein fed to animals yields roughly 43 grams of protein from milk, 35 from eggs, 40 from chicken, 10 from pork, or five from beef.¹⁰

8 calories in	1 calorie out		13% caloric conversion efficiency		<p>3/4 <u>More than three-quarters of the world's soy</u> is fed to animals for meat and dairy production, while just 7% is used directly for human food products.¹¹</p>
34 calories in	1 calorie out		3% caloric conversion efficiency		
11 calories in	1 calorie out		9% caloric conversion efficiency		



80% Roughly 80% of agricultural land is used to produce meat, dairy, and eggs, but animal products provide only 37% of the global protein supply and 18% of our calories.¹²

 **Cycling calories through animals in this way is equivalent to 87%–97% food waste in production.**



Animal Agriculture **Harms Wildlife Too**

According to climate forecasts, one million plant and animal species could become **extinct by 2050**,¹³ 25% of the earth could face **extreme drought or desertification**,¹⁴ and nearly

six billion people could **lack enough drinking water**¹⁵ —if we don't act now. We can all combat climate change today by choosing plant-based foods.

Research suggests that our **consumption of animal products** is “likely the leading cause of modern species extinctions, since it is not only the major driver of deforestation but also a principle driver of land degradation, pollution, climate change, overfishing, sedimentation of coastal areas, facilitation of invasions by alien species, and loss of wild carnivores and wild herbivores.”¹⁶



Climate-Friendly Brands

In addition to a plethora of whole-food plant-based proteins, such as beans, legumes, and tofu, these innovative plant-based proteins are far more sustainable than animal-based options:

- In comparison with its quarter-pound U.S. beef counterpart, producing the original **Beyond Burger** generates **90% fewer greenhouse gas emissions and uses 99% less water, 93% less land, and 46% less energy**.¹⁷
- Compared with beef burgers, **Impossible burgers** require 96% less land and 87% less fresh water to produce, generate 89% less greenhouse gas, and cause 92% less pollution to aquatic ecosystems.¹⁸
- Miyoko's Creamery **dairy-free** alternatives generate up to **98% less greenhouse gas** than conventional dairy counterparts.
- NotCo's **NotChicken** generates 73% less greenhouse gas and uses 86% less water than chicken made from birds.¹⁹
- Plant-based chorizo from **Abbot's** emits 84% less greenhouse gas and uses 75% less water than chorizo made from pork.²⁰
- **Zero Egg** requires 93% less water, 92% less land, and 93% less energy and generates 59% fewer GHG emissions than conventional eggs.²¹

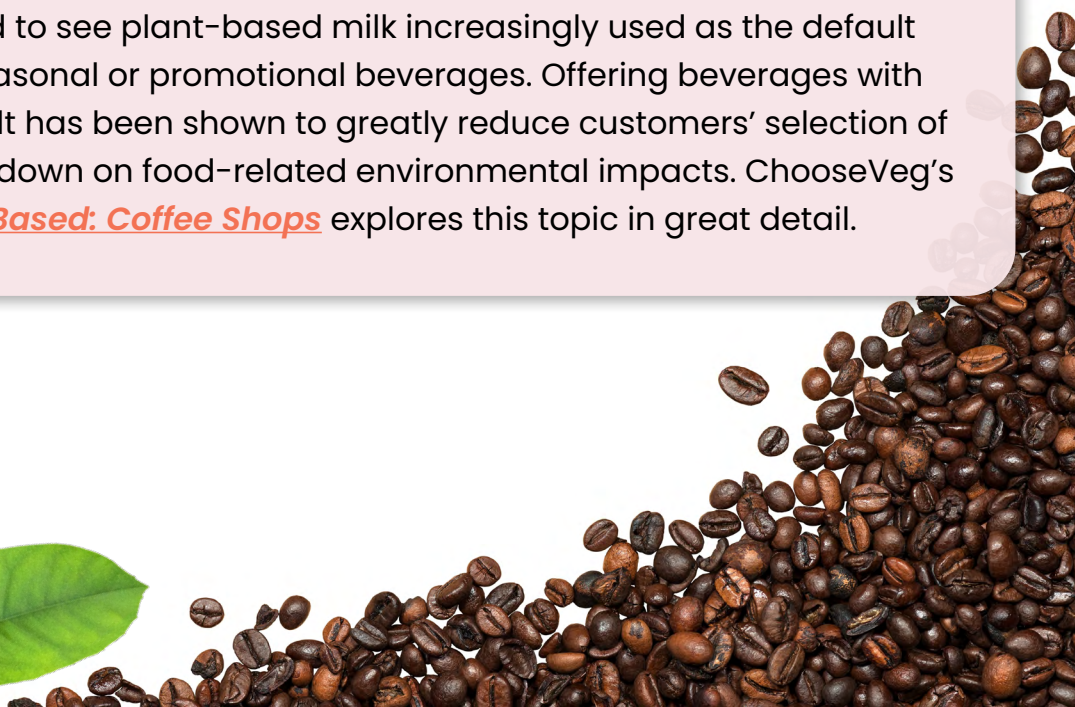




Companies of Note — Coffee Corner

The coffee brands below have added new plant-based offerings to their spring menus.

We're particularly excited to see plant-based milk increasingly used as the default option for companies' seasonal or promotional beverages. Offering beverages with plant-based milk by default has been shown to greatly reduce customers' selection of cows' milk, thereby cutting down on food-related environmental impacts. ChooseVeg's report [*Best of Plant-Based: Coffee Shops*](#) explores this topic in great detail.





Starbucks



Spring Launches



Starbucks' [spring menu](#) features not one but two new seasonal beverages that come with **oat milk by default**: the Iced Lavender Cream Oatmilk Matcha and the Iced Lavender Oatmilk Latte.

Additionally, [Starbucks Reserve](#) locations feature several new plant-based options: Caramel Mocha Drizzle Affogato, Whiskey Barrel-Aged Malt, and the Roastery Affogato Flight, all of which are customizable with oat-milk gelato. Reserve locations have also introduced two new plant-based Princi avocado toast varieties: Avocado Toast with Pickled Red Onions and Avocado Toast with Cherry Tomatoes.

Room for improvement: We continue to urge Starbucks to drop its plant-based milk upcharge and add substantial plant-based food options, such as a plant-based breakfast sandwich or pastries, to its permanent menus across the United States.

Does Starbucks have emission-reduction targets?

Yes. Starbucks is aiming for a 50% absolute reduction in scopes 1, 2, and 3 GHG emissions by 2030 (from fiscal year 2019).²²

Unfortunately, Starbucks' GHG emissions are currently **8% above baseline**, per the company's most recent reporting.²³ Starbucks has made some progress toward its 50% water conservation goal in fiscal year 2023, decreasing the company's total water withdrawal by 9% from 2019.²⁴

While the company cites "[expanding plant-based menu options](#)" as the first of its five focuses for achieving the emission and water-efficiency objectives above,²⁵ Starbucks leaves significant room for improvement in increasing the scope, accessibility, and promotion of its plant-based offerings.



Peet's Coffee



Spring Launches



Peet's Coffee launched several new seasonal beverages this spring that come with plant-based milk as the default: Honey Almond Matcha Latte with Almond Milk, Honey Almond Latte with Almond Milk, and Almond Cold Brew Oat Latte. Additionally, the chain has introduced its plant-based Southwest Breakfast Burrito.

During Earth Month, Peet's will also offer customers a 25% discount for a plant-based bundle (dairy-free beverage and warm plant-based food item). Loyalty members can also access a \$1 discount on the seasonal beverages.

Room for improvement: We would love to see Peet's drop the plant-based milk upcharge for its full menu.

Does Peet's have emission-reduction targets?

Yes. JDE Peet's (Peet's Coffee's parent company) aims for a **25% absolute reduction** in scopes 1 and 2 GHG emissions and a 12.5% absolute reduction in scope 3 emissions by 2030 (from 2020). As of JDE Peet's most recent reporting, the company has achieved a 21% reduction in scopes 1 and 2 emissions, as well as a 9% reduction in scope 3 emissions.²⁶





Caribou Coffee



Spring Launches



This spring, Caribou Coffee introduced its Honey Lavender Espresso Shaker, which comes with oat milk by default. This new beverage joins the company's lineup of espresso shakers, all of which come with oat milk as the default. Additionally, Caribou Coffee offers plant-based milk at no additional cost to customers using the chain's Caribou Perks app.

Room for improvement: We would love to see Caribou offer plant-based milk as the default for more of its seasonal and promotional beverages. Although the chain's spring menu also features the Iced White Mocha with Lavender Oatmilk Cold Foam, aside from the oat milk cold foam, the default option for this beverage is cows' milk.

Does Caribou Coffee have emission-reduction targets?

While Caribou Coffee has yet to set time-bound climate-related ESG targets, the company reported the following in its 2022 ESG report (published in August 2023):²⁷

In 2022, we conducted Caribou's first company-wide carbon footprint using 2021 data. As expected, Caribou's Scope 1 and 2 GHG emissions stemming from our day-to-day company operations were minor in comparison to Scope 3 emissions, which are associated with our supply chain—the largest portion attributed to green coffee production, **followed by food products (especially dairy)**. ... Scope 1 and Scope 2 emissions accounted for 15% of Caribou's emissions collectively, while 85% were Scope 3 emissions. ... Caribou Coffee has taken steps to set science based carbon reduction targets. Our next step is to determine what type of reduction target is achievable in the short run, and what our vision is for the longer term.

Furthermore, Caribou Coffee states that "**plant-based and non-dairy offerings will be a continued focus**" for the company, "not just because of guest preference" but because the company "will continue to consider the climate impact" of the products that it sources.²⁸



Companies of Note — Restaurants



Bare Burger



Spring Launches

[Armored Fresh](#) has brought oat milk cheddar cheese to 15 Bareburger locations.

This is the latest in Bareburger's lineup of plant-based offerings—Impossible burger and chicken nuggets, the "My Sunshine" sweet potato burger, the cilantro black bean burger, Blue Marble vegan coconut ice cream, and more.

Does BareBurger have climate-related ESG targets?

While Bareburger offers a wide array of plant-based menu options, the company **has yet to publish** specific climate-related ESG goals.

Smashburger



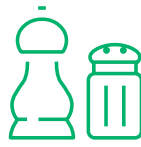
Spring Launches

After a successful trial, [Smashburger](#) has officially added jackfruit-based

jack & annie's burgers to its permanent menus nationwide. The chain also offers black bean burger patties and dairy-free milkshakes made with Eclipse ice cream.

Does Smashburger have climate-related ESG targets?

While Smashburger offers a wide array of plant-based menu options, the company **has yet to publish** specific climate-related ESG goals.



Companies of Note – Foodservice Management



Guest Services Inc.



New Policy

Prominent foodservice management company Guest Services Inc. has published a landmark [plant-based](#)

[menu goal](#): “In an effort to commit to more environmentally friendly food and beverage practices, Guest Services established a goal that **40% of meals/entrees on our menus will be plant-based** by 2028 and we will **reduce the purchases of animal protein by 5%** by the year 2027.”²⁹

Does Guest Services have emission-reduction targets?

While Guest Services has **not yet established** a time-bound, quantifiable climate-related ESG target, the company’s commendable new policy is a tremendous step toward greater sustainability and reduced food-related GHG emissions.

Sodexo

New Policy



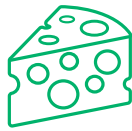
After the successful trial of its DefaultVeg strategy (in collaboration with the Better Food Foundation and Food for Climate League), [Sodexo](#) has announced plans to significantly expand its plant-

based default program to nearly 400 college and university campuses nationwide.³⁰ In its initial pilot study, Sodexo observed that presenting plant-based options as the default greatly increased their selection frequency and thereby reduced food-related environmental impacts. The company’s expanded program will bring plant-based defaults to roughly one million students daily.

Does Sodexo have emission-reduction targets?

Yes. Sodexo aims to reach net-zero GHG emissions by 2040 (from 2017) and reduce scopes 1, 2, and 3 emissions by 35% by 2025 (from 2017). In [A Better Tomorrow. 2023 Sustainability and Corporate Social Responsibility Report](#), the company reports a 48% reduction in scopes 1 and 2 emissions, as well as a 30% reduction in scope 3 emissions, for fiscal year 2023.³¹

“Half of Sodexo’s carbon emissions come from our supply chain,” the company states, “primarily from commodities such as **meat and dairy products**, palm oil and paper, which also drive deforestation.”³²



Companies of Note — Product Launches



Kraft Heinz



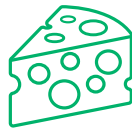
Spring Launches

After the launch of its much-lauded plant-based mac and cheese, [The Kraft Heinz Not Company](#) has introduced the first-ever plant-based Oscar Mayer hot dogs and sausages.

Does Kraft Heinz have emission-reduction targets?

Yes. Kraft Heinz aims to achieve **net-zero** GHG emissions by 2050 (from 2021) and a **50% reduction** in scopes 1, 2, and 3 emissions by 2030 (from 2021).³³





Companies of Note — Unilever



Spring Launches



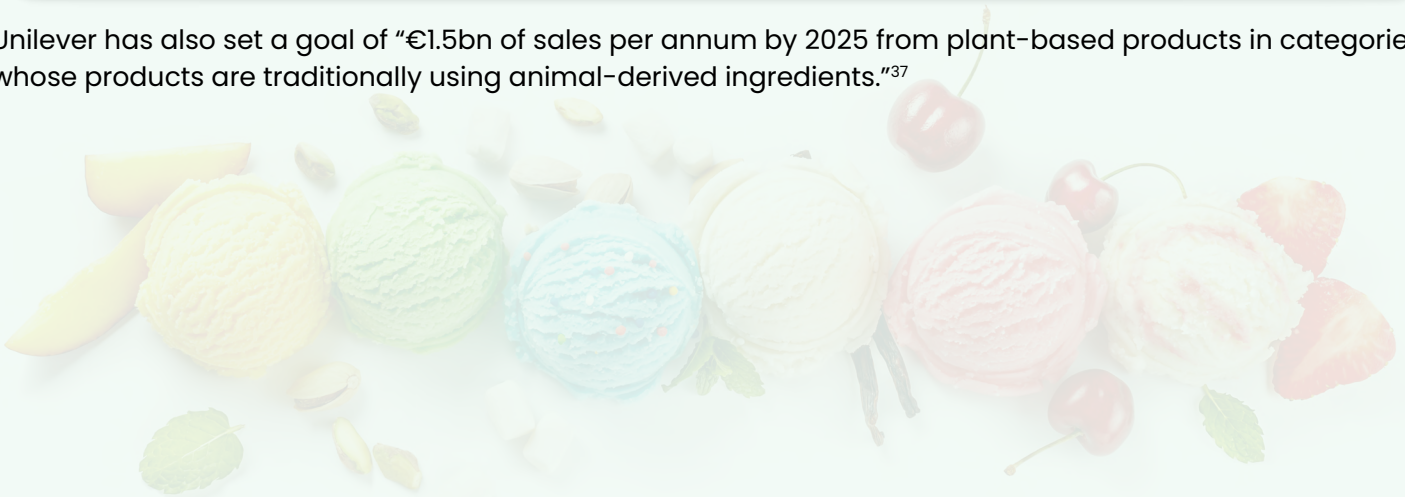
Unilever has collaborated with precision-fermentation dairy company [Perfect Day](#) to develop its new Breyers lactose-free chocolate ice cream. By producing whey protein from precision fermentation, Perfect Day's process cuts blue water consumption by up to 99%, greenhouse gas emissions by up to 97%, and nonrenewable energy use by up to 60% compared with traditional dairy production.³⁴

Does Unilever have emission-reduction goals?

Yes. Unilever aims to achieve net-zero GHG emissions by 2039 (from 2015). In 2023, the company reported a 74% reduction in scopes 1 and 2 emissions (from 2015).³⁵

Additionally, the company's "full-value-chain" scopes 1, 2, and 3 **GHG emissions dropped** by 3% on a per-consumer-use basis from 2022 and by 21% from 2010.³⁶

Unilever has also set a goal of "€1.5bn of sales per annum by 2025 from plant-based products in categories whose products are traditionally using animal-derived ingredients."³⁷





Climate Talk, **Not Enough Action?**

The following companies have climate-related ESG goals but are **not taking steps** to launch, promote, or incentivize plant-based menu choices this spring.



sweetgreen

In 2017, sweetgreen committed to carbon neutrality by 2027. The chain's 2022 ESG report shows, however, that the company's total carbon emissions increased by roughly 26% between 2021 and 2022.³⁸ Notably, food-related scope 3 emissions rose by about 35%.³⁹ The chain continues to roll out high-emitting animal products, such as steak, which it trialed in early 2024, so the company's path toward carbon neutrality is unclear.



Recommendations: sweetgreen could make progress toward its sustainability goals by **innovating the menu to be plant-based by default**. The majority of sweetgreen's menu choices come with chicken as the default option, and the specials often include chicken. Six of the chain's seven bowls and seven of its eight salads come with animal products as the default, as of current writing. Rather than moving toward a more plant-based, sustainable menu, sweetgreen has been expanding animal-protein offerings, as with the steak rollout. Presenting plant-based proteins as the default choice is likely to increase the customer-selection frequency of these more climate-friendly options and decrease overall food-related environmental impact.



Chipotle



Chipotle **aims to reduce its scopes 1, 2, and 3 emissions by 50% by 2030** (from 2019). While the company has reduced its scopes 1 and 2 emissions by 13% since 2019, its scope 3 emissions, which constitute 95% of the company's total emissions, have risen steadily each year and are now 26% above baseline.⁴⁰ The chain recently returned chicken al pastor to its menu, expanding its range of animal products rather than offering new plant-based innovations. This is at a time when a recent undercover investigation revealed **shocking cruelty** in the company's chicken supply chain.



Recommendations: Chipotle could better reduce its carbon footprint by adding innovative and more sustainable plant-based proteins to its permanent menu and exploring ways to promote and incentivize customer selection of these more climate-friendly choices.





Panera



Panera has set an ambitious goal to be **climate positive by 2050**. The company has also worked for years with the World Resources Institute on the institute's Coolfood program to identify lower-carbon entrees on the company's menu and label them with the program's low-carbon certification badge. While Panera achieved a 27.6% reduction in total GHG emissions between 2019 and 2020, the company's total emissions have steadily crept back up each year since and now sit at just 12.7% below baseline.⁴¹

Furthermore, news of a 2024 menu revamp heavy on meat and dairy—featuring dishes like bacon mac and cheese, the Chicken Bacon Rancher, and ciabatta cheesesteak—calls into question the company's plans to prioritize sustainable plant-based dishes.



Recommendations: Panera could better progress toward its climate-positive goal by offering more options that are fully plant-based by default and adding innovative and sustainable plant-based proteins and dairy alternatives to its menu. The company's own "[Eating Vegan](#)" web page reveals the extremely limited selection of plant-based items currently offered by the chain, most of which require a customer to request the omission of animal products and cannot be made with plant-based protein instead. Also worth noting is that of the 22 meals currently listed on Panera's [climate-friendly menu](#) (which includes dishes with ham, cheese, and tuna), only one—steel cut oatmeal with strawberries and pecans—is fully plant-based.



Make **Your Food Choices Matter** This Earth Day

Even modest decreases in meat and dairy consumption can greatly reduce an individual's environmental impact. Consider the following easy recipe swaps and their corresponding decreases in CO2e:

- Black beans' carbon footprint is **96.7%** lower than ground beef's. Try beans instead of beef for your next batch of chili.
- Vegan cheese's carbon footprint is **80.4%** lower than that of cheese made with cows' milk. Make your next bowl of mac n cheese plant-based!
- Tofu's carbon footprint is **65%** lower than chicken's. Experiment with fried tofu instead of fried chicken on your next sandwich.
- Tempeh's carbon footprint is **91.2%** lower than bacon's. Consider tempeh bacon for your next BLT!
- Plant-based eggs boast a carbon footprint **98%** lower than that of chicken eggs. Try a plant-based omelet at your next brunch!
- Oat milk's carbon footprint is **85%** lower than that of cows' milk. Swap cows' milk for plant-based milk in your next smoothie.

Learn more about including plant-based meals in your week with ChooseVeg's [How to Eat Veg](#) guide.



If you are a company that wants to explore creating sustainable plant-based menus, contact us at [ChooseVeg](#).



Appendix

Starbucks:

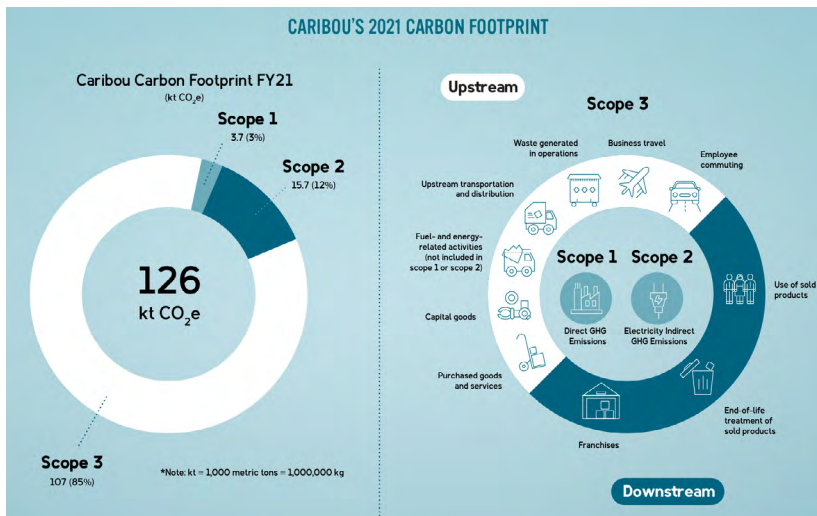
2030 Goals

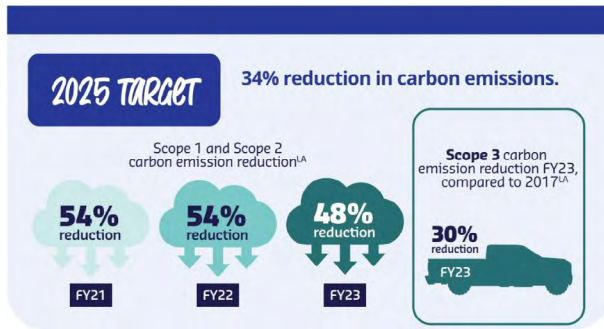
CLIMATE	FY23	FY22
Goal: 50% absolute reduction in scope 1, 2 and 3 greenhouse (GHG) emissions representing all of Starbucks direct operations and value chain by 2030.		
% change in total emissions from FY19 baseline	8%	9%
<i>In March 2021, Starbucks GHG reduction goal was validated as science-based by the SBTi, which confirmed our target is aligned with a 1.5 degree Celsius pathway.</i>		
WATER		
Goal: 50% of water withdrawals will be conserved or replenished across Starbucks direct operations, stores, packaging and agricultural supply chain, prioritizing action in high-risk water basins while supporting watershed health, ecosystem resilience and water equity by 2030.		
% change in total water withdrawal from FY19 baseline	-9%	-9%
\$ to support new and ongoing water stewardship projects (\$ millions)	>1.1	<2
<i>In August 2021, we announced an expanded water target increasing the projected water conserved or replenished and catalyzing holistic watershed health improvements in high risk basins. In 2022, Starbucks began a water replenishment program, funding eight projects in eight global priority watersheds.</i>		

Peet's Coffee:

MINIMISING FOOTPRINT		TARGET
Reduce absolute scope 1 & 2 GHG emissions by 25% by 2030 (vs 2020)	-21%	-25%
Reduce absolute scope 3 GHG emissions by 12.5% by 2030 (vs 2020)	-9%	-12.5%
100% of our packaging designed to be reusable, recyclable or compostable by 2030	79%	100%
18% water intensity reduction per ton of production by 2030	-1.4%	-18%
Maintain waste-to-landfill under 1%	1.1%	1%

Caribou Coffee:





We aim for **33%** Plant-Based Planned Menus by 2025.

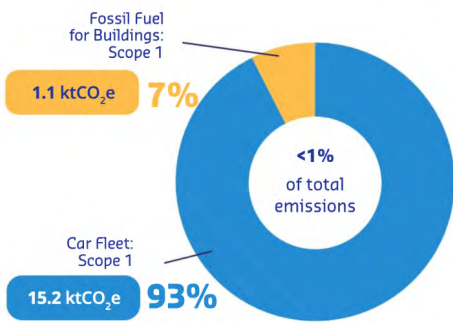
This year, 25%* of our planned menus are plant-based.

* as of Fall 2023 in the U.S.



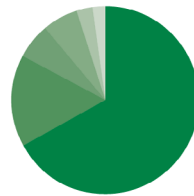
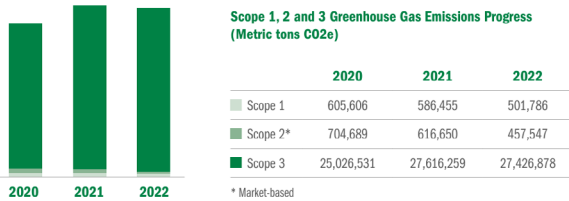
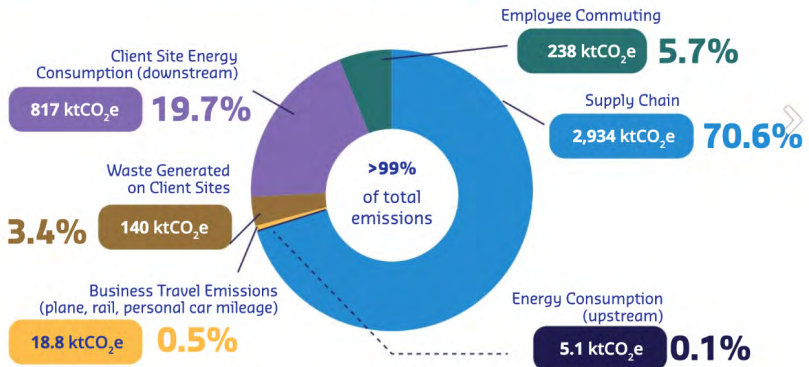
Our Direct Greenhouse Gas Emissions Scope 1 and 2

48% absolute reduction between 2017 and 2023^{1A}



Our Indirect Greenhouse Gas Emissions Scope 3

30% absolute reduction between 2017 and 2023^{1A}

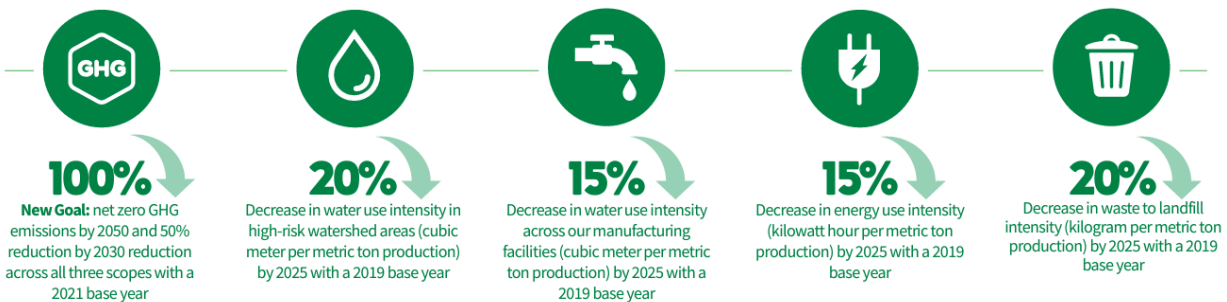


2022 Scope 3 Emissions Breakdown (Metric tons CO₂e)

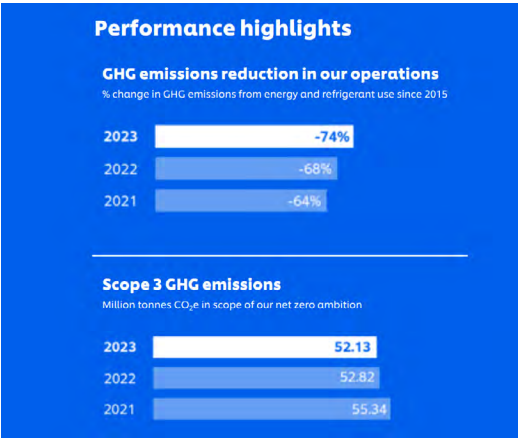
Scope 3 Category	2022
Purchased Goods & Services	18,204,280
Upstream Transportation & Distribution	4,274,540
Downstream Transportation & Distribution	1,515,217
Use of Sold Products	1,993,377
End-of-Life Treatment of Sold Products	844,525



Kraft Heinz is committed to reducing its operational environmental footprint. We have prioritized projects across our global manufacturing network in the areas of water conservation, energy use and greenhouse gas emissions (GHGs), waste reduction, and packaging.



Unilever:



Innovative products and services opportunities	
Opportunity	Capitalisation of opportunity
<p>Growth in plant-based or lab-grown foods</p> <p>This could increase rapidly in the coming years. As people become more environmentally conscious and there is regulation on land use, we could see a rise in plant-based diets away from animal-based protein.</p> <p>Timeframe: Short term to long term</p>	<p>Actions:</p> <p>We're capitalising on innovative product and service opportunities by offering a range of vegan and vegetarian products.</p> <p>Key targets:</p> <ul style="list-style-type: none"> €1.5 billion of sales per annum from plant-based products in categories whose products are traditionally using animal-derived ingredients by 2025

Sweetgreen:

DIRECT EMISSIONS		
	2022 (tCO ₂ e)	2021 (tCO ₂ e)
Scope 1: Natural Gas & Refrigerants		
Description: Emissions from natural gas or refrigerants in our restaurants and offices.		
Restaurants	12,717	5,514
Offices	20	10

INDIRECT EMISSIONS		
	2022 (tCO ₂ e)	2021 (tCO ₂ e)
Scope 2: Electricity (100% clean energy purchased in 2021 & 2022)		
Description: Emissions from electricity consumption. We currently purchase 100% clean energy for all operations. Hence, our electricity doesn't generate greenhouse gas emissions (GHG).		
Restaurants	0	0
Offices	0	0

INDIRECT EMISSIONS		
	2022 (tCO ₂ e)	2021 (tCO ₂ e)
Scope 3: Upstream & Downstream Emissions		
Description: Upstream emissions from goods & services purchased from suppliers, plus downstream emissions related to our operations.		
Restaurant Buildings & Operations	39,820	40,186
Food Production	46,548	34,473
Employee Commutes & Work From Home	12,067	7,806
Transportation of Ingredients & Products	11,489	7,069
Packaging Production & End-of-Life	5,242	5,172
Goods & Services Purchased	3,566	3,962
Marketing Spend	1,030	1,302
Office Utilities & Services	1,374	1,078
Business Travel	1,401	765
Cloud Computing Services	98	108

Chipotle:

GREENHOUSE GAS EMISSIONS ¹	2022	2021	2020	2019
SCOPE 1 AND 2 GHG EMISSIONS (MTCO2E) ^{1,2}				
LOCATION-BASED	272,611	257,756	246,505	245,980
MARKET-BASED ³	206,737	263,883	262,271	238,407
CHANGE IN SCOPE 1 AND 2 GHG EMISSIONS FROM 2019 BASELINE (MARKET-BASED)	-13%	11%	10%	0%
GROSS QUANTITY OF DIRECT (SCOPE 1) GHG EMISSIONS (MTCO2E)	131,178	126,374	118,296	116,629
QUANTITY OF SCOPE 1 BIOGENIC CO2 EMISSIONS (MTCO2E)	0	0	0	0
GROSS QUANTITY OF INDIRECT (SCOPE 2) GHG EMISSIONS (MTCO2E)				
SCOPE 2 TOTAL (LOCATION-BASED)	141,433	131,382	128,209	129,351
SCOPE 2 TOTAL (MARKET-BASED)	144,287	137,509	143,975	121,778
CHANGE IN SCOPE 3 GHG EMISSIONS FROM 2019 BASELINE ^{4,5,6}	26%	11%	3%	
QUANTITY OF GROSS OTHER INDIRECT (SCOPE 3) GHG EMISSIONS BY GHG PROTOCOL CATEGORY (MTCO2E)	4,591,429	4,046,188	3,744,342	3,632,699
1 – PGS	3,937,199	3,474,511	3,253,376	3,197,665
2 – CAPITAL GOODS	156,156	130,097	94,098	95,985
3 – FUEL AND ENERGY-RELATED ACTIVITIES	30,986	29,038	23,323	22,252
4 – UPSTREAM TRANSPORTATION AND DISTRIBUTION ⁷	107,494	100,434	91,046	86,712
5 – WASTE GENERATED IN OPERATIONS	129,131	97,239	96,669	70,172
6 – BUSINESS TRAVEL	8,445	4,221	2,922	9,464
7 – EMPLOYEE COMMUTING	143,132	133,886	119,282	113,089
9 – DOWNSTREAM TRANSPORTATION AND DISTRIBUTION	38,723	41,517	35,675	11,271
12 – END-OF-LIFE TREATMENT OF SOLD PRODUCTS	40,163	35,245	27,951	26,089

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OUR ENVIRONMENT

GREENHOUSE GAS EMISSIONS (MT CO₂e)

	2019	2020	2021*	2022
Scope 1	107,730	87,272	89,742	96,741
Stationary	68,317	51,382	54,075	59,462
Mobile	39,414	35,889	35,668	37,279
Scope 2				
Location-Based	174,627	143,141	126,773	122,041
Market-Based	—	—	135,270	126,579
Total Scope 1 + Scope 2 (Market-Based)	—	—	225,013	223,320
Scope 3	2,135,307	1,519,466	1,782,166	1,885,305
Purchased goods and services	66%	61%	66%	60%
Capital goods	8%	5%	5%	6%
Fuel and energy-related activities	3%	3%	3%	2%
Upstream transport	<1%	5%	4%	3%
Waste generated in operations	<1%	1%	1%	1%
Business travel	<1%	<1%	<1%	<1%
Employee commuting	<1%	1%	1%	1%
Downstream transport	8%	8%	8%	7%
EoL of sold products	<1%	1%	1%	1%
Franchises	12%	14%	11%	9%
Total, Scope 1, 2, 3	2,417,664	1,749,879	1,998,681	2,108,625

Totals may not sum due to rounding.

* Our 2021 Scope 2 figures now include the Market-Based approach. Our 2022 Scope 3 breakdown reflects use of updated/new emissions factors.

** Our 2022 Scope 3 figures reflect incorporation of land use change following the Science Based Targets initiative's publication of guidance for Forest, Land and Agriculture sector targets.

Endnotes

- 1** "FAQ Chapter 1," Intergovernmental Panel on Climate Change, accessed April 2, 2024, <https://www.ipcc.ch/sr15/faq/faq-chapter-1/>.
- 2** "Tracking Canada's Extreme 2023 Fire Season," Earth Observatory, accessed April 2, 2024, <https://earthobservatory.nasa.gov/images/151985/tracking-canadas-extreme-2023-fire-season>.
- 3** Adam B. Smith, "2023: A Historic Year of U.S. Billion-Dollar Weather and Climate Disasters," Climate.gov, January 8, 2024, <https://www.climate.gov/news-features/blogs/beyond-data/2023-historic-year-us-billion-dollar-weather-and-climate-disasters>.
- 4** Mark Kaufman, "These Animals Went Extinct in 2023," Mashable, December 27, 2023, <https://mashable.com/article/extinct-species-animals-2023>.
- 5** Alec Tyson, Cary Funk, and Brian Kennedy, "What the Data Says About Americans' Views of Climate Change," Pew Research Center, August 9, 2023, <https://www.pewresearch.org/short-reads/2023/08/09/what-the-data-says-about-americans-views-of-climate-change/>.
- 6** Anay Mridul, "74% of Americans Don't Think Eating Meat & Dairy Is Linked to Climate Change—New Poll," Green Queen, August 29, 2023, <https://www.greenqueen.com.hk/americans-meat-dairy-consumption-climate-change-lnew-poll/>.
- 7** Ashley Rattenbury and Matthew B. Ruby, "Perceptions of the Benefits and Barriers to Vegetarian Diets and the Environmental Impact of Meat-Eating," *Sustainability* 15, no. 21 (November 2023): 15522.
- 8** Peter Scarborough et al., "Vegans, Vegetarians, Fish-Eaters and Meat-Eaters in the UK Show Discrepant Environmental Impacts," *Nature Food* 4 (2023): 565–74.
- 9** Hannah Ritchie, Pablo Rosado, and Max Roser, "Environmental Aspects of Food Production," Our World in Data, accessed April 16, 2024, <https://ourworldindata.org/environmental-impacts-of-food#:~:text=used%20for%20agriculture-,Food%20is%20responsible%20for%20one%2Dquarter%20of%20the%20world%27s%20emissions,transport%2C%20packaging%2C%20and%20retail>.
- 10** Emily S. Cassidy et al., "Redefining Agricultural Yields: From Tonnes to People Nourished per Hectare," *Environmental Research Letters* 8 (August 2013): 034015.
- 11** Hannah Ritchie and Max Roser, "Soy," Our World in Data, accessed September 6, 2023, [https://ourworldindata.org/soy#:~:text=More%20than%20three%2Dquarters%20\(77,biofuels%2C%20industry%20or%20vegetable%20oils](https://ourworldindata.org/soy#:~:text=More%20than%20three%2Dquarters%20(77,biofuels%2C%20industry%20or%20vegetable%20oils).
- 12** Joseph Poore and Thomas Nemecek, "Reducing Food's Environmental Impacts Through Producers and Consumers," *Science* 360, no. 6392 (June 2018): 987–92.
- 13** Jeff Tollefson, "One Million Species Face Extinction," *Nature* 569 (May 2019): 171.
- 14** Chang Eui Park et al., "Keeping Global Warming Within 1.5 °C Constrains Emergence of Aridification," *Nature Climate Change* 8 (January 2018): 71–74.
- 15** UNESCO World Water Assessment Programme, *The United Nations World Water Development Report 18: Nature-Based Solutions for Water* (Paris: UNESCO, 2018), 13.
- 16** Brian Machovina, Kenneth J. Feeley, and William J. Ripple, "Biodiversity Conservation: The Key Is Reducing Meat Consumption," *Science of the Total Environment* 536 (2015): 419–31.
- 17** Beyond Meat, "A Burger with Benefits: Beyond Meat® Releases Impact Report Quantifying the Environmental Benefits of the Beyond Burger," news release, September 26, 2018, <https://investors.beyondmeat.com/news-releases/news-release-details/burger-benefits-beyond-meatr-releases-impact-report-quantifying>.
- 18** Sofia Khan et al., "Environmental Life Cycle Analysis: Impossible Burger 2.0," Impossible Foods, accessed September 1, 2023, <https://impossiblefoods.com/sustainable-food/burger-life-cycle-assessment-2019>.

- 19 NotCo, "NotCo Ushers in a New Golden Era of Chicken with the Launch of NotChicken," news release, December 22, 2021, <https://www.businesswire.com/news/home/20211221005586/en/NotCo-Ushers-in-a-New-Golden-Era-of-Chicken-with-the-Launch-of-NotChicken%E2%84%A2>.
 - 20 Abbot's Butcher impact page, accessed September 1, 2023, <https://abbotsbutcher.com/impact>.
 - 21 "Dream Wildly," Zero Egg, accessed September 1, 2023, <https://zeroegg.com/our-mission>.
 - 22 Starbucks, *Starbucks Global Impact Report* (Seattle: Starbucks, 2024), 14.
 - 23 Starbucks, *Starbucks Global Impact Report*, 14.
 - 24 Starbucks, *Starbucks Global Impact Report*, 14.
 - 25 "Becoming Resource Positive," Starbucks, accessed April 2, 2024, <https://www.starbucks.com/responsibility/planet/>.
 - 26 JDE Peet's, *Annual Report 2023* (Amsterdam: JDE Peet's N.V., 2024), 43.
 - 27 Caribou Coffee, *Our Commitment to Good: 2022 Caribou Coffee Environmental, Social & Governance Progress Report* (Minneapolis: Caribou Coffee, 2023), 23.
 - 28 Caribou Coffee, *Our Commitment to Good*, 12.
 - 29 "Sustainability," Guest Services, accessed April 2, 2024, <https://www.guestservices.com/our-planet/sustainability/>.
 - 30 Better Food Foundation, "Sodexo Launches Massive Expansion of DefaultVeg Pilot, Making Plant-Based Meal Service a Norm at Campus Eateries Across USA," news release, March 14, 2024, <https://www.newsfile-corp.com/release/201745>.
 - 31 Sodexo, *A Better Tomorrow 2023: Sustainability and Corporate Social Responsibility Report* (Issy-les-Moulineaux, FR: Sodexo, 2023), 37.
 - 32 "Responsible Supply Chain," Sodexo, accessed April 2, 2024, <https://us.sodexo.com/corporate-responsibility/responsible-supply-chain.html#:~:text=Half%20of%20Sodexo's%20carbon%20emissions,pa-per%2C%20which%20also%20drive%20deforestation>.
 - 33 "Net Zero and Science Based Targets," Kraft Heinz, accessed April 2, 2024, <https://www.kraftheinzcompany.com/esg/renewable-electricity.html>.
 - 34 Perfect Day, "Perfect Day and Unilever Launch New Breyers Lactose-Free Chocolate," news release, February 22, 2024,
 - 35 Unilever, *Climate Transition Action Plan* (London: Unilever, 2024), 15.
 - 36 Unilever, *Realising Our Full Potential: Unilever Annual Report and Accounts* (London: Unilever, 2024), 43.
 - 37 "Plant-Based Foods," Unilever, accessed April 2, 2024, <https://www.unilever.com/planet-and-society/positive-nutrition/plant-based-foods/>.
 - 38 Sweetgreen, *2022 Impact Report* (Los Angeles: Sweetgreen Inc., 2023), 19.
 - 39 Sweetgreen, *2022 Impact Report*, 19.
 - 40 Chipotle, *Cultivate a Better World: 2022 Sustainability Report* (Newport Beach, CA: Chipotle, 2023), 85.
 - 41 Panera Bread, *2022 Responsibility Update* (St. Louis, MO: Panera Bread, 2023), 6.
-