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Foodservice's Race to Net Zero

How To Reduce Emissions Without Losing Customers

Executive summary

Leading operators in the foodservice industry have set ambitious goals to reduce their greenhouse gas (GHG) emissions by almost 50% on average by 2030. The majority of their GHG emissions come from food ingredients. Strategies to reduce these emissions include menu reformulation, such as switching to more plant-based options, local sourcing, food waste and packaging reductions, and sourcing lower-emission products. Together, these strategies could achieve close to a 70% reduction in total emissions. To reach their targets, it is crucial that the industry works together with the supply chain.

Foodservice Chains Are Among the Most Ambitious Target Setters

Foodservice operators have a long track record of environmental and social engagement, frequently structured around the three P's – Product, People, and Planet – representing food, employees and community, and the environment.

In recent years, such engagement has evolved from being 'nice to have' to becoming a license to operate. There is mounting pressure from consumers, NGOs, and investors to provide healthier food, a fairer working environment, greater support to communities, less waste, and generally more sustainable practices. The risk of negative brand reputation is particularly high in foodservice compared to other industries. After all, no consumer wants to learn that their indulgence has come at the expense of others. Regulation, such as the single-use plastic ban in the EU, has also become a key change driver. And for certain segments, such as contract catering, sustainability requirements imposed by customers are also on the rise.

Depending on the location and type of menu, each operator may have different priorities and face different challenges – animal welfare may be more relevant for some, deforestation for others. But for all large operators, the subject that has gained the most traction recently is climate change. Evidence of climate change's increasing importance in the industry is the growing number of companies that have joined the Science Based Targets initiative (SBTi): Of the 26 caterers and restaurant, bar, and café operators that are part of the initiative as of May 2022, 22 signed in 2021.

Most have set a greenhouse gas (GHG) reduction target for 2030. On average, the goal is to reduce GHG emissions, including Scope 3 value chain emissions, by 44% compared to their respective base year (learn more about the difference between Scope 1, 2, and 3 emissions in Rabobank's report [Deadline 2030: Slashing Value Chain GHG Emissions by a Third](#)). Notably, these targets are, on average, more ambitious than those set by processed food companies or food retailers, who are aiming for a 33% average reduction by 2030. Table 1 provides an overview of the SBTi targets set by foodservice corporations to date.

Table 1: Scope 3 reduction targets by foodservice operators

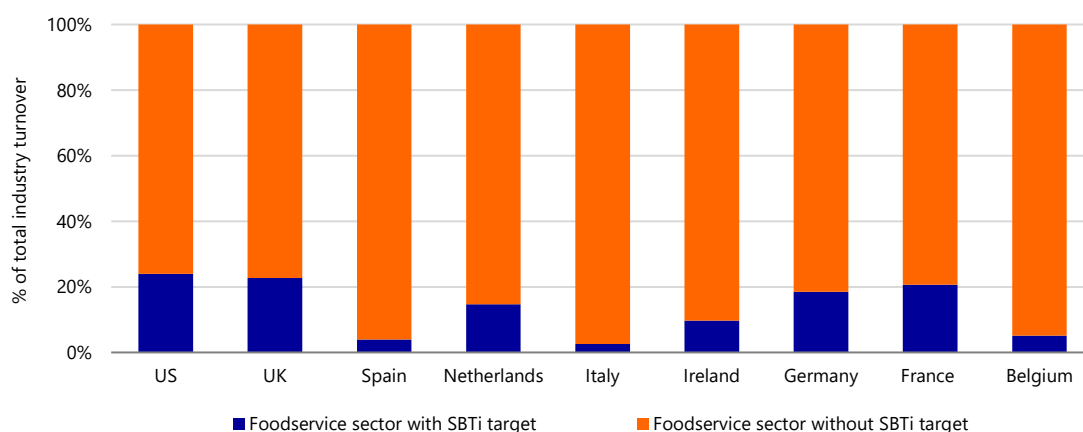
<i>Foodservice chain</i>	<i>Targeted Scope 3 reduction</i>	<i>Base year</i>	<i>Target year</i>	<i>Net zero?</i>	<i>Included Scope 3 categories</i>
McDonald's	31%	2015	2030	Yes	Per metric ton of food and packaging
Starbucks	50%	2019	2030	No	
Yum! Brands	46%	2019	2030	Yes	Per restaurant and per metric ton of beef, poultry, dairy, and packaging
Chipotle	50%	2019	2030	No	
Nando's UK	42%	2019	2030	No	Scope 3 emissions per meal
Restaurant Brands International	50%	2019	2030	Yes	Per metric ton of food and per franchise restaurant
BKUK Group Ltd	41%	2019	2030	Yes	Purchased goods and services, capital goods, upstream transportation and distribution, waste generated in operations and franchises
Sodexo	34%	2017	2025	No	
Compass Group UK & Ireland	69%	2019	2030	No	Purchased goods and services
Compass Group PLC	28%	2019	2030	No	Purchased goods and services

Source: SBTi

Another handful of foodservice chains has committed to setting targets within the next two years. Among them are Nando's Australia, Panera Bread, Revolution Bars Group, KFC UK & Ireland, Wendy's, Domino's, and WSH UK & Ireland. Their greatest challenge will be setting their Scope 3 reduction targets.

For some countries, like the US and the UK, the number of foodservice operators setting SBTi targets represents more than 20% of the total sector by revenue (see Figure 1).

Figure 1: Foodservice operators with SBTi targets as share of total industry sales

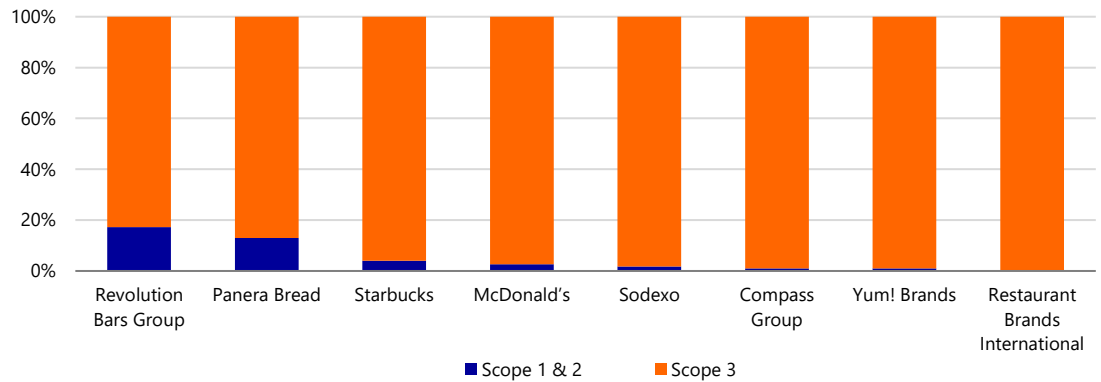


Source: Euromonitor, SBTi, Rabobank 2022

The Majority of Emissions Come From Purchased Goods

Just like for food retailers and packaged food manufacturers, the greatest challenge for foodservice operators is reducing Scope 3 emissions, which represent over 90% of total emissions for most large foodservice chains.

Figure 2: CO2 emissions by type for selected restaurant groups

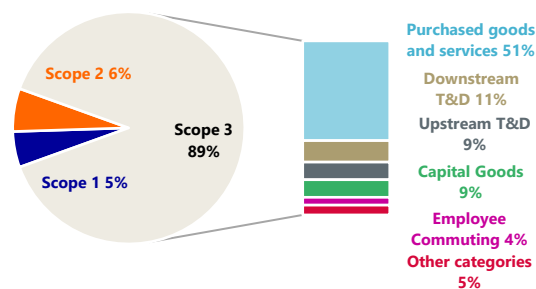


Source: SBTi, Rabobank 2022

At the restaurant level, just over 50% of Scope 3 emissions come from purchased goods and services, in particular from food and beverages, followed by packaging. Transportation and distribution come at a distant second, representing 20% of the total on average.

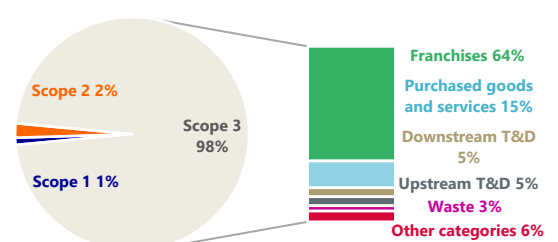
At the group level, the structure of Scope 3 emissions may be very different if individual restaurants are predominantly run by franchisees. In this case, a substantial portion of a company's emissions takes place at the franchisees. The exact proportion will depend on the company's operating structure, including factors such as the existence (or not) of centralized purchasing, in-house production units, or directly operated sites. According to their own reporting, Scope 3 emissions related to franchisees accounted for 22% of the total for Yum! Brands, 14.5% of the total in the case of RBI, and 8% for Starbucks.

Figure 3: Average CO2 emissions breakdown for a directly operated restaurant



Source: Zero Carbon Forum Roadmap, 2022

Figure 4: Average CO2 emission breakdown for operators as franchisors



Source: Zero Carbon Forum Roadmap, 2022

Reduction Strategies

The largest share of a company's emissions comes – directly or indirectly – from purchased goods and services. Thus, to make a meaningful reduction, companies need to address the emissions associated with their purchases. Largely, this means buying less, buying different products – e.g. changing menus or sourcing locally – or sticking to existing products and suppliers but making sure that their emissions decline.

According to the UK's Zero Carbon Forum, an industry-led initiative aimed at helping UK hospitality operators reach sustainability targets faster and more efficiently, by combining supplier engagement and menu changes it is possible for an average restaurant to reduce its Scope 3 emissions, including emissions from purchased goods, by around 30%. Sourcing locally can lead to a few percentage points' reduction, as well as fleet decarbonization (22%), electric vehicle use (5%), and capital goods sourcing (4%). Interestingly, the Zero Carbon Forum assumes that, on average, 31% of Scope 3 emissions will need to be offset to reach net zero.

The following emissions reduction strategies are particularly relevant for the foodservice industry.

- **Menu reformulation**, in the form of switching to lower-emission ingredients, can be one of the most effective ways to reduce emissions. These days, one of the most common ways to do this is to expand vegan and vegetarian offerings. For a more in-depth analysis of the role of plant-based foods in quick-service restaurants, see Rabobank's report [Fake It Till You Make It: Plant-based Meat Alternatives in Quick-service Restaurants](#).

There are some limitations. Expanding the number of vegan or vegetarian dishes on a menu doesn't mean that customers will order them and often these items' share of total sales remains limited. Some plant-based alternatives may also increase a company's cost base and affect margins, since consumers aren't necessarily ready to pay a premium for the vegan option. (Admittedly, other changes, such as offering more chicken than beef, may present a cost advantage.)

Whether this strategy is effective and how much it will impact total revenue and margins depends very much on a company's existing customer base. Not all foodservice formats can accommodate substantial changes without alienating clients.

Table 2: Menu reformulation case studies

<i>Wagamama</i>	<i>Starbucks</i>	<i>MAX Burgers</i>
UK restaurant chain Wagamama has shifted 50% of its menu offering to vegan or vegetarian as part of its Plant Pledge campaign. Their customer survey suggested that customers wanted vegan alternatives to their favorite meat dishes. With the help of a professional chef, Wagamama now offers vegan tuna, vegan eggs, vegan ribs, and vegan chicken katsu.	Expanding plant-based menu options is one of Starbucks's key strategies for meeting their 2030 climate goals. For example, Starbucks is offering breakfast sandwiches with meat alternatives from Impossible Foods and Beyond Meat, as well as numerous dairy alternatives. To encourage customers to choose dairy-free alternatives, Starbucks UK has announced that they come at no extra charge compared to cow's milk from 2022 onward.	MAX Burgers has set a goal of replacing half of their beef sales with another protein, be it fish, chicken, or a vegan/vegetarian option. To promote this among customers, it launched its "Green" burger menu. This was the biggest product launch since 1968 and, according to MAX Burgers, also its most profitable. The company also labels its menu with climate information to nudge consumers in the right direction.

Source: Company information

- **Food waste reduction** can majorly contribute to the absolute reduction of Scope 3 emissions. According to a 2016 study by ReFED, contract caterers and commercial foodservice operators represent more than 25% of all food waste in the US by weight. A better prediction of the food that will be sold means more accurate purchasing and preparation, reducing the quantity of ingredients that needs to be bought, transported, and cooked. This, in turn, lowers the carbon footprint of the business. It also means lower costs. Artificial intelligence and demand data can

help to optimize purchasing and production planning and even special offers that minimize unsold food. But existing technology goes even further: It can analyze food left on the plate, identify overproduction, flag food approaching its expiration date in the refrigerator, suggest ideal portions, or propose ways to repurpose food at risk of going waste. An example is Unilever's Wise Up On Waste, a free app for small restaurants that helps them analyze and reduce waste.

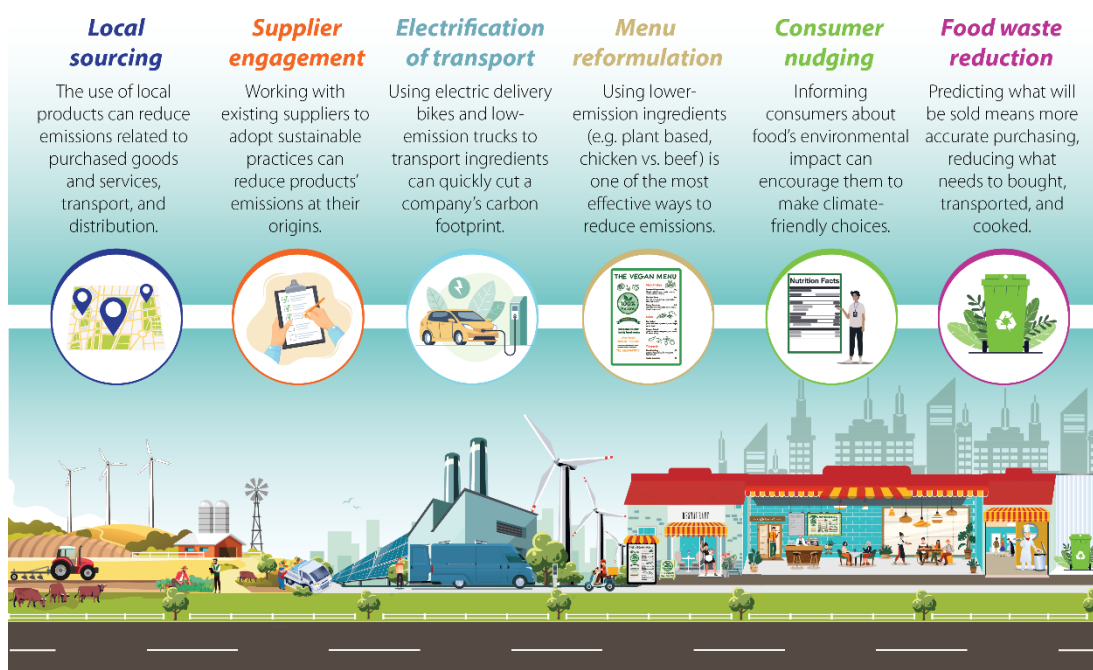
- **Switching to lower-emission ingredients** is another strategy. Using ingredients coming from regenerative farms can help bring down total emissions without drastic menu changes. But finding a suitable supplier may be a challenge. Operators can also look for a 'better' alternative to a purchased product by **engaging with existing suppliers** to improve products at their origins. McDonald's, one of the largest off-takers of beef, has set up an extensive sustainable agriculture and beef program for its suppliers. As they source the majority of their beef from ten countries, McDonald's prioritized engaging with suppliers on sustainability programs, and deforestation-free supply chains in those areas. Starbucks has its in-house program C.A.F.E., where it works directly with farmers on improving the supply of more sustainable coffee.

In both examples, the corporates are major buyers of specific products. Size may help, but smaller operators have also embraced cooperation with suppliers to improve sustainability. This is the case for UK-based restaurant chain Honest Burgers, which has totally changed the way it is sourcing beef. Honest Burgers works directly with farmers that practice regenerative agriculture, meaning the animals graze in open pasture and are regularly rotated to fresh pasture. The chain buys the entire cow from these farmers and distributes the parts that they don't need to partner restaurants. Their aim is to switch to 100% regenerative beef by 2024.

Long-term strategic engagement and goal alignment with suppliers is highly effective, but it can lead to higher purchasing prices, depending on changes in yield and the costs suppliers incur when making the required changes.

- **Local sourcing** can lead to a reduction in purchased goods and services emissions, but also to lower transport and distribution-related emissions. However, local doesn't necessarily mean lower emissions. It will depend on the production system used locally versus those used elsewhere (e.g. greenhouse versus arable production, water utilization). A thorough analysis is needed. Nevertheless, the use of local products in foodservice is increasingly common as it also has a positive impact on a company's engagement with and support of the local community. It can even be mandatory, as is the case in some contract catering services.
- **Consumer nudging** is not easy, but operators are trying. Chipotle, for example, launched its Real Foodprint initiative in 2020. This is a partnership with HowGood (a sustainability database) and it compares Chipotle's food ingredients with their conventional counterparts based on factors including CO2 emissions, water use, soil health, and antibiotic use. Customers can find this information in the Chipotle App and on Chipotle.com.
- Lastly, to reduce emissions coming from transportation and distribution, the **electrification of transport** can have a big impact on a foodservice operator's carbon footprint. Using less fossil fuel for transport contributes immediately to a company meeting its reduction targets, whether it's using electric bikes for delivery or low-emission trucks to move ingredients to the restaurant. Here too, cooperation with logistics and external delivery providers is crucial to enable such changes.

Six Foodservice Scope 3 Strategies



Source: Rabobank 2022

Why there is no standard blueprint for how foodservice businesses can reach net zero

Foodservice operators are seeking the right strategy to reduce emissions without losing profit margins. For each company, the solution very much depends on the customer being served. Menu reformulation, such as switching to more plant-based ingredients, might work very well for some restaurants. For others, it could drive away demand if it does not resonate well with the existing customer base; does not attract a sufficient number of new customers; or triggers price increases that alienate some existing clients.

Other players may succeed in reducing emissions by engaging with existing suppliers, working together in the reduction of emissions at products' origins.

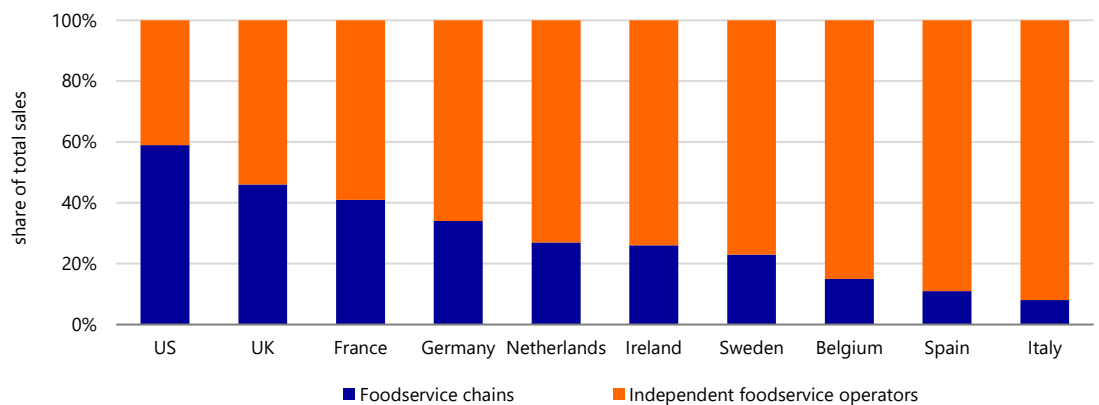
Therefore, it is crucial that foodservice operators have a good understanding of their customer base and its attitude toward sustainability and also know the price elasticity of their offering.

Foodservice-specific hurdles for achieving GHG emission reductions

A number of factors can make it difficult for the foodservice sector to reduce its GHG emissions.

- At the industry level, **fragmentation** is a challenge. A large proportion of the industry doesn't have the scale to join SBTi. Although it doesn't mean that these operators ignore sustainability, they may have a different focus than reducing Scope 3 emissions, as their capacity to act on their value chain is more limited. Also, undertaking a personalized analysis or site-specific GHG emission reduction measurements is likely to be too expensive and require management resources that aren't available to smaller players. This is more prevalent in continental Europe where large restaurant chains are less common than in the US and the UK. However, the choice of sustainable suppliers is increasing as other players along the value chain also seek to reduce their emissions, which makes the transition easier for smaller restaurants as well.

Figure 5: Foodservice sales, chains vs. independent operators, 2021



Source: Euromonitor 2022

- For large players, **franchising** can be a hurdle. Franchisees carry the name and brand of the corporate but are different legal entities. For brand owners it is not always possible to impose far-reaching changes in ingredient sourcing or cooking appliances. Often the contracts in place limit the legal capacity of the franchisor to impose Scope 3 targets onto franchisees. In addition, some franchisees may be located in regions where achieving such targets is a challenge. Some brand owners attempt to make emissions reduction targets at a headquarters level or for a specific market rather than aim for global coverage. However, brand owners/franchisors are gradually shifting toward working with larger franchisees – platforms – that, in turn, are visible corporates with their own sustainability ambitions. This franchising landscape may facilitate cooperation and faster implementation of emission reduction strategies. (See Rabobank’s 2022 series of reports on foodservice franchising in [the US](#), [Europe](#), and [Asia](#).)
- **Consumers** might struggle to adjust to these changes, especially in the case of menu reformulation and/or corresponding price increases. Depending on the type of brand and customer base that is currently served, certain reduction strategies, as discussed above, may be more or less suitable. This is especially the case when considering, for example switching to more plant-based offerings. [According to researchers](#) at Ludwig Maximilian University, consumers tend to eat more meat when dining out compared to eating at home, as they associate meat with celebratory occasions and treating oneself.
- And, as always, **costs and margins** remain relevant. According to a recent survey published by Propel, less than 40% of the UK’s hospitality businesses are currently turning a profit. As foodservice operators come out of Covid and into an inflationary environment, survival is still a key priority for many, leaving limited budget or management capacity to undertake changes toward more sustainable practices in the short term.

Conclusion: Foodservice Looks to the Supply Chain for Changes

Foodservice operators have a long history of sustainability engagement and, as in other industries, climate change has gained relevance recently. And just like in other industries, the key challenge is reducing Scope 3 emissions. To meet their ambitious targets, foodservice operators face the same challenges manufacturers and retailers do, in addition to their own industry-specific issues.

Although not all operators have ‘officially’ committed to reducing their emissions, all industry players are aware of the reputational risk that sustainability-related malpractice represents. For that reason, smaller players are also engaging in practices that lower their Scope 3 emissions, such as menu changes and waste reduction.

Reaching emission reduction goals requires alignment with suppliers and business partners. Suppliers need to be part of the solution, whether they provide alternative products with lower emissions, invest in lower-emission vehicles, or agree to work together to encourage change along the value chain, all the way back to the farm.

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