



SALADSTOP!

SaladStop!'s Carbon Footprint Methodology

Objectives

The SaladStop! Sustainability team has completed an assessment to estimate the carbon footprint of all salad bar offerings in Singapore. SaladStop! has spent the last 11 years sharing a more conscious way of eating. We believe that food should not only be delicious and nourishing for our bodies, it should also promote the wellbeing of the environment. Our commitment to label our entire salad bar will make us Asia's first restaurant business to do so. By sharing carbon information, we can provide a convenient and simple opportunity for customers to make more planet-friendly food choices. In partnership with Singapore-based green-tech firm Handprint, customers will also be provided the option to go 'climate positive' on their order.

This page provides details with regard to the methodology, limitations and assumptions of our study. As well as our partnership with Handprint.

Methodology

Being based in Singapore, we found the Temasek-commissioned ['Environmental Impact of Key Food Items in Singapore'](#) report by Deloitte and A*STAR to be the most reliable. With close reference to the report, we categorised our main product ingredients into the following categories: vegetables, fruits, fish, chicken, pork, eggs, plant-based meat and rice.

For additional ingredients that did not fit into these categories and were not found in the aforementioned report, information was obtained from secondary sources online. For example, the report ['Meat Eater's Guide to Climate Change + Health'](#) by the Environmental Working Group and in partnership with CleanMetrics Corporation, allowed us to understand the categories of cheese, bread, pasta, seeds and nuts.

We have considered the portion weight of each item from our basic and premium ingredients menu to calculate the carbon footprint. As such, the carbon footprint information is relative to the individual serving size.

Measurement Unit (CO₂e)

SaladStop!'s carbon information will reflect the total estimated carbon dioxide equivalent (CO₂e) associated with the production of an ingredient. A CO₂e is a unit of measurement that reflects emissions from all different greenhouse gases (GHG) as a single number. This is done by measuring emissions from various GHG based on their global warming potential (GWP). Then converting the amounts of other greenhouse gases to the equivalent amount of carbon dioxide with the same warming ([OECD, 2013](#)). The best-known GHG is carbon dioxide (CO₂), but methane (NH₄) is 84 times more potent than CO₂ in the first ten years, after which it tapers out, such that the CO₂e of 1kg of NH₄ is 28kg of CO₂ ([Climate Change Connection, 2020](#)).

Limitations

Due to the limited availability of secondary resources and the differential methodologies to calculate the carbon footprint of food globally, findings for all of our ingredients are to be understood as estimates. We have used research papers that apply the same parameters and methods where possible, to ensure consistency.

We could only find one report studying the carbon footprint of food for the Singapore context, and relied heavily upon it. However, due to the scope of food studied in that report, we looked to reports from other countries for additional data. In such cases, carbon emissions from the transportation stage have been estimated as per the transport method utilised by our suppliers.

The current estimates include greenhouse gas emissions generated from agricultural production and transportation for each salad bar ingredient. Excluded from the calculations, however, are packaging operations, cooking methods and facilities, and activity (e.g. wastage) at the consumer stage. In addition, details for dressings have been disregarded due to the complexity of ingredients (e.g. minute quantities), which may have reduced the accuracy of ultimate findings.

Additional Assumptions

1. For ingredients we were unable to find the exact carbon footprint of, we used proxy ingredients. These serve as close approximations. For example, as bacon is the only pork offering on our menu, we used the carbon footprint of imported pork in Singapore from the 'Environmental Impact of Key Food Items in Singapore' report. Similarly, unable to source information on our soba noodles, we referred to the ingredient of buckwheat flour in lieu.

2. At SaladStop! we offer both Beyond Meat and our made-in-house plant-based patties. The carbon information for both was determined using the 'plant-based meat' category in the 'Environmental Impact of Key Food Items in Singapore' report, which refers explicitly to Beyond Meat.
3. The 'Environmental Impact of Key Food Items in Singapore' report categorises the carbon footprint of vegetables, fish and eggs into local and imported. It does not offer the same geographical breakdown for imported items based on distance. As recommended in the report, we assume that all items produced outside of Singapore fall under the imported category, regardless of distance.

Potential Revisions

SaladStop! will periodically review and adjust carbon footprint estimates to reflect changes in sourcing (e.g. place of origin), portion sizes or menu offerings (e.g. new ingredients).

Partnership with Handprint

Our partnership with Handprint makes positive environmental action easy and effective. To go 'climate positive' means to go beyond carbon offsetting. The option compensates for the greenhouse gas emissions required to produce a SaladStop! order and removes additional CO₂ from the atmosphere. We can now track the SaladStop! community's impact through Handprint's real-time satellite image recognition and blockchain technology.

Handprint is an innovative technology company that is connecting businesses like ours to causes we believe in. We have chosen to support a mangrove reforestation project in East Java in Situbondo. Mangroves absorb between 4-10 times more carbon than rainforests and temperate forests, and they grow in coastal lands that are typically not suitable for agriculture. In addition, mangroves create green shields that protect coastal communities against natural disasters such as cyclones, typhoons and even tsunamis. They also provide a natural biome within which sustainable fisheries and crab farming activities emerge. The support of this project thus reaches far beyond CO₂ absorption. It also supports biodiversity, local livelihoods and protects disadvantaged communities against the risk created by climate change.

The project is run by Yagasu, one of the most experienced mangrove reforestation NGOs in the world. Yagasu will plant about 3000 trees per hectare in the region. As the forest grows, each hectare will store about 900 additional tons of CO₂. To ensure local communities are being paid for at least two decades to protect the forest, Handprint puts aside a part of this CO₂ absorption, to be sold in carbon markets, as a conservation fund. The rest is used to reverse the negative effects of our food production and distribution.