



MAX climate analysis 2020

June 2021

Contact information:

Kaj Török, MAX, kaj.torok@max.se

Marie Köster, MAX, marie.koster@max.se

Isabelle Marklund, MAX, isabelle.marklund@max.se

Frida Sjödin, MAX, frida.sjodin@max.se

Peter Wrenfelt, U&We, peter.wrenfelt@uandwe.se

Håkan Emilsson, U&We, hakan.emilsson@uandwe.se

Katrin Dahlgren, U&We, katrin.dahlgren@uandwe.se

Ellinor Eke, U&We, ellinor.eke@uandwe.se

Johanna Grant, ZeroMission, johanna.grant@zeromission.se

Content

Summary	3
Introduction	4
Overview	4
MAX Climate targets	5
Participants	5
Method	6
Functional unit	7
The scope of the study	7
Data collection and data quality	7
Boundaries in time	14
Greenhouse gases	14
Land Use Change (LUC)	15
Sensitivity analysis	15
Interpretation of results and limitations	16
Third-party review	16
Results	17
Beef	23
Greenhouse gases	23
Climate impact “own” operations	24
Climate impact per country	28
Climate impact per restaurant	29
Carbon Offsetting Process	30
Background	30
MAX’s carbon offsetting 2020	30
About the Plan Vivo standard	31
Description of the carbon offset process	32
Actors and concepts	32
CLIPOP criteria for Climate Positive	34
CLIPOP Criteria for products/services	34
Criteria for products 2020	35
MAX comments on the criteria	36
References	37
AUDITOR’S LIMITED ASSURANCE REPORT ON MAX BURGERS AB'S GREENHOUSE GAS REPORTING	40

Summary

In 2019 MAX received the UN Global Climate Action Award. We keep on striving to be a global role model for climate action because the biggest thing we can do is to inspire others to do more. Every year since 2008 we have published the world's, as far as we are aware of, most comprehensive climate analysis in the restaurant industry. The purpose of the analysis is to help us measure, reduce and capture emissions. It also forms the basis for the climate labelling on our menu where every product is labelled with its carbon footprint.

Measure

In 2020 total climate impact was approximately 147 thousand tonnes CO₂e for all countries (Sweden, Denmark, Norway, Poland and Egypt). The 2020 assessment shows that 50 percent of the total value chain emissions comes from beef. Fossil carbon dioxide in beef production is less than 51 percent of the beef's total climate impact. This means that a reduction of fossil fuel use will not suffice for minimizing our climate impact. A reduction of methane and nitrous oxide emissions is also necessary.

Reduce

Our absolute emissions have increased over the years since the MAX operations have grown rapidly, e.g. restaurants have tripled from 56 in 2007 to 166 restaurants in 2020. However, 2020 has been an exception to this due to the Covid-19 pandemic. More importantly MAX Climate impact per krona which has decreased with 24 percent from 53 g CO₂e per krona in 2013 to 40 in 2020. However, our most important reduction target is to reduce our climate impact per sold meal because it relates to how we help society reduce its total emissions - people will eat irrespective if they do it at MAX or not.

	2013	2018	2019	2020	Difference
Turnover (MAX group, million SEK)	1 875	3 460	3 847	3 641	- 5 %
Total climate impact (thousand tonnes of CO ₂ e)	99	150	158	147	- 7 %
Climate impact per krona (g CO ₂ e per SEK)	53	43	41	40	- 2 %

Capture

Since 2008 we have planted approximately 2.9 million native trees in small-scale systems that capture carbon dioxide as they grow. Carbon is captured through tree planting by smallhold family farmers in Africa and South America. These programmes also reduce pressure on natural forests, contributes to decreased poverty, increased food security, decreased soil erosion and drought and increases local climate adaptation.



Third party verification of the analysis

We want to be sure our climate calculations are performed in a correct and relevant way. Therefore, since 2017 we have commissioned EY to conduct a third part limited assurance of our analysis, that we follow international standards e.g. Greenhouse Gas Protocol, ISO 14021 for climate neutral, ISO 14067 and the CLIPOP.ORG criteria from climate positive products. We passed this verification also in 2020.

Introduction

During the spring of 2021, MAX Burgers AB, in collaboration with U&We, a consultancy for sustainability-driven business development, has performed a new climate assessment of MAX's operations. Calculations are based on internal data and data from our suppliers, emission factors from recognized databases and scientific articles, and published studies on the climate impact of food.

This analysis is reviewed and updated annually. The purpose of the analysis is to help us measure, reduce and capture emissions. It also forms the basis for the climate labelling on our menu.

This report declares methodological decisions and climate impact from MAX's operations, including those of our suppliers.

Overview

Climate assessment standard	ISO 14067 Carbon footprint of products ¹ GHG Protocol Corporate Accounting and Reporting Standard, Scope 2 Guidance and Corporate Value Chain (Scope 3) Standard.
Period	January 1 st , 2020 – December 31 st , 2020
Base year	2013 is used as base year since the data quality was substantially improved compared to measurements between 2008 and 2012. Since the beginning of the climate calculations, MAX Burgers and U&We have worked according to the principle of recalculating historic emissions in accordance with methodological changes. If changes are made that impact results to an extent that would be visible in diagrams on historic comparisons, we recalculate historic emissions to make it educational and comparable over time.
Description of operations	MAX is a chain of restaurants and close to 50 million guests annually.
Organisational boundary	MAX Burgers AB with subsidiaries and all franchisees. The entire operations of the company, including upstream and downstream emissions related to purchased goods and products sold. MAX's entire operations, 166 restaurants in five countries (Sweden, Norway, Denmark, Poland and Egypt), 84 percent of which are directly owned by MAX and the remainder are franchisees. Products sold in retail stores are not included.

¹ EY's limited assurance is based on the five accounting principles of the GHG Protocol Corporate Accounting and Reporting Standard (2006)



Basis for scope	All emissions in scope 1, 2 and 3, based on the operational control consolidation approach, as defined in GHG Protocol Corporate standard.
Responsible at MAX Burgers	Kaj Török, Chief Sustainability Officer
Method of validation	The climate assessment is made according to GHG Protocol and the carbon footprint of the products according to ISO 14067. The audit company EY has performed a limited assurance of whether the calculations fulfil the GHG Protocols corporate standard, ISO 14021 and CLIPOP criteria.

MAX Climate targets

The purpose of the analysis is to help us measure, reduce and capture emissions. It also forms the basis for the climate labelling on our menu and for our claim to have a climate positive menu in accordance with the 2020 [CLIPOP.Org's criteria](#) for climate positive products.

We are calculating absolute emissions in tonnes. We also measure indicators like relative emissions per krona, per restaurant, per country and per meal.

Our short-term reduction targets for 2020 is to keep reducing our carbon footprint per earned krona.

Our long-term reduction target is to reduce our climate impact per sold meal to 0,5 kg CO₂e in 2050. This relates to how we help society reduce its total emissions - people will eat irrespective if they do it at MAX or not. This target is in line with WWF Sweden's carbon criteria for their "One Planet Plate" (OPP). Exactly how performance against this target will be calculated is currently under revision to make it simpler to calculate. However, during 2019 it was estimated to be 1,9 kg CO₂e. That means we need to reduce our climate impact for an average meal with 75 % to 2050 which translates into a 4 % annual reduction.

Another concrete target for the year 2020 is to live up to the requirements for carbon neutral products in the standard ISO 14021:2017 on environmental claims.

EY's limited assurance is performed in accordance with ISAE 3410 and is based on the five accounting principles of the GHG Protocol Accounting and Reporting Standard (2006) against the GHG Protocol Corporate Standard, Scope 2 Guidance and Corporate Value Chain (scope 3) Standard as well as ISO 14021 and CLIPOP criteria.

Participants

From MAX, Marie Köster, Isabelle Marklund, Frida Sjödin, and Kaj Török have participated, together with further internal data providers for various activity areas.



From U&We, Peter Wrenfelt, Håkan Emilsson, Katrin Dahlgren, and Ellinor Eke have participated. An overwhelming part of our suppliers have responded to questions about their climate related activities, including their inputs and transports.

A special thanks to everyone who has assisted us in producing the information that made this analysis possible.

Method

The starting point in ISO 14021:2017 Environmental labels and declarations – Self-declared environmental claims (Type II environmental labelling) set the product in focus. The standard refers to ISO 14067 for the quantification of climate impact, which, in turn, refers to sector/product category Product Category Rules (PCR) for detailed guidance on boundaries, cut-off rules and other methodological issues.

We follow the PCR Basic Module for Accommodation, food and beverage services, which in and of itself cannot be used in place of a proper PCR, but which in this case has been used as guidance for, primarily, delimitations of the lifecycle.

Aggregated annual climate impact is analysed based on the international Greenhouse Gas Protocol (GHG Protocol). Impact data for the products and their ingredients is researched and updated regularly as science on the climate impact of agriculture develops. Energy conversions are made based on publicly available conversion factors.

Activity data is based on information from invoices, suppliers, and internal statistics. Internal data and data from the supply chain in most cases cover January 1st to December 31st, 2020. Deviations from this are commented on in the results section of this report.

Lifecycle analyses, research studies, and similar sources that go into the analysis of food and other materials have different study restrictions and conditions. There might be differences in system delimitations, which data are in focus of the study, GWP values used for methane and nitrous oxide etcetera. This can affect comparability and generalisability of results.

For obvious reasons, studies published are limited by the calculation methods that the science community are currently in agreement of, which means that significant factors might be partly or entirely missing in studies that are not recently published. Examples are the inclusion of potential land-use change (LUC) caused by e.g. deforestation or soil carbon sequestration.

The current state of knowledge is relatively good regarding the climate impact of fossil fuels, while there are uncertainties regarding emissions from biological



systems (agriculture and rearing). There are also uncertainties regarding the climate impact of air travel, which is assessed to be somewhere between 1.6 and 4.2 times its emissions of carbon dioxide. It is water vapour and nitric oxide that have a potential climate impact at high altitudes. In this study we have used an RFI factor of two times the emissions.

Research on agriculture and its climate impact is often based on studies of isolated cases or farms where results are specific for the farms in question. Differences between farms can be significant since both farming methods and farm and soil conditions vary.

We have evaluated potential emission factors for each ingredient category and selected a value based on specific conditions in terms of supplier, country of production, raw material composition etcetera. To the extent that transports from farm to gate were included in selected values, these have been subtracted where possible and added to the aggregated transport calculation. Furthermore, emissions up to and including packing after slaughter have been included for animal products.

The results of this analysis is a consequence of the current state of knowledge, which means that corrections will be needed over time when knowledge improves and becomes more reliable. Even if there are uncertainties in some areas, we believe it is better to use what there is, and make regular updates, rather than waiting for certainties.

Functional unit

The result of the analysis is related to the turnover of the company. The intention is to be able to track MAX's climate intensity as the company grows and gains market share. Climate impact per krona is expressed as gram CO₂e per SEK.

The scope of the study

The climate analysis encompasses MAX's operations where the organisation has operational control, as it is defined in the GHG Protocol. The countries/markets included are Sweden, Denmark, Norway, Poland, and Egypt. The calculations include all business operated through MAX's restaurants (own operations and franchise). Products sold in retail under the MAX brand are not included.

Data collection and data quality

Nearly all supplier and producer data are based on actual data reported by suppliers and producers on their own operations, transports, and transport of their suppliers in turn. Estimates have been made to adjust for some apparently

erroneously reported data. Climate impact of primary production has been calculated based on scientific studies and available emission factors on the raw materials in question.

The quality of data determines the quality of the final analysis. Most suppliers have reported data for more than ten years and quality has improved significantly over time. The data that MAX has delivered to U&We, and on which the analysis is based, are described in table 1.

Table 1. Description of data used in the analysis

Activity area	Description
Business travel	<p>Distances travelled have been estimated based on mileage allowance for company cars and private cars used for business purposes. Based on costs for taxi, rental cars, and hotels and average prices in different countries, distances and number of nights have been estimated. Data has been reported for Sweden, Norway, and Poland since that is where MAX has its own restaurants and office employees. Data on car usage in Denmark and Egypt have been extrapolated based on turnover and costs in Sweden. For Denmark and Egypt, we have assumed that there are no hotel nights, since there are no office employees travelling.</p> <p>Business travel by train has been estimated based on costs for train travel in Sweden, Norway, and Poland.</p> <p>Information on air travel during 2020 was collected through a survey to office employees in Sweden and Poland, and ten selected restaurants in Sweden and Norway. The results have then been extrapolated to represent all office employees and all restaurants in Sweden and Norway</p>
Construction	<p>Information on construction of new restaurants and major remodelling of restaurants in 2020, material use for 130-houses (the most common of MAX's stand-alone restaurants) and hard surfaces outdoors, and specifications of materials indoors have been reported by MAX's construction department. Kitchen appliances and furniture were not included. The use of construction electricity has also been reported and included.</p>
District heating	<p>District heating has been reported by 58 of the restaurants in Sweden and one restaurant in Norway. For the remaining restaurants in Sweden, we have assumed them to be heated with district heating, and the consumption has been estimated as an average of the consumption reported by the other restaurants. This assumption has also been used for the restaurants in other countries except for Egypt, where we assume the restaurants are not heated. Two restaurants in Sweden have also reported district cooling. For the offices there are no available data on heating usage. An average number of 110 kWh/m², from the Energy Authority (2017) has been used to estimate heating data based on floor area.</p>
Electricity	<p>Specific information on electricity use for all of MAX's own restaurants in Sweden, Poland and Norway, based on electricity meters. Specific</p>

Activity area	Description
	<p>information also for franchise restaurants in Norway and at Arlanda and Landvetter in Sweden. Estimates based on energy survey in 2019 for franchise at Liseberg in Sweden. Estimate based on Swedish restaurants for franchise in Egypt (specific data lacking). Specific information on the head office in Luleå and the office in Poland, estimate based on Luleå usage per square meter for Stockholm office. Certificates showing that electricity is of renewable origin have been collected for all of MAX's own restaurants, franchise in Denmark and for franchise in at the airports in Sweden. Franchise restaurants in Norway have not been able to produce certificates showing renewable origins, and the climate impact of their electricity usage has been calculated using residual factors. For Egypt the grid-mix factor has been used, since there is no market for contractual instruments for electricity in the country.</p>
Food	<p>The climate impact of food has been calculated based on grouping ingredients into approximately 60 categories. Data on volumes have been reported by suppliers. Data on primary production, packaging, production site, transports and distances, and processing energy use were reported by producers and suppliers. The data was collected through web-based or excel-based surveys to producers and suppliers.</p>
Guest travel	<p>The guests' travels to and from restaurants were surveyed in 2018, for the data collection process of the 2017 annual climate assessment. Interviews were performed at a selection of ten restaurants in Sweden. The interviews covered questions on travel mode, the number of people travelling together, age, fuels in cars, and other private vehicles, distances and purpose of the trip (visiting MAX or other purpose). For year 2020 no new survey was carried out. The previous results were adjusted based on changes in turnover.</p>
Guest waste	<p>Handling of the waste from guests who take their food and packaging away from the restaurant has been estimated based on interviews with guests at a selection of restaurants. The interview study was carried out in the spring of 2018, for the 2017 climate assessment. The results have subsequently been used and adjusted in line with changes in turnover each year. The guests interviewed have described to what extent they sort their waste for recycling.</p>
Home delivery	<p>Information on number of orders, total distance driven, and the share of cars, mopeds, bikes and other types of transport was collected from Foodora, Wolt, Bolt, Glodny, Uber Eats, Glovo and Pyszne.</p>
Inbound transports	<p>Transports of raw materials to producers and transports from distributors to MAX are reported by external data providers. Transports from producer to distributor are estimated based on an average distance.</p>
Marketing	<p>Data on marketing on social media, TV commercials, and outdoor lighted signs were reported by MAX's supplier. Climate impact from the use of print and material for outdoor advertising, and energy for transmission and streaming advertising through social media and TV have been included in the analysis.</p>

Activity area	Description
Office equipment	Purchase of computers and electronics for office employees has been included based on quantities per model and lifecycle analyses from producers.
Operations	Data on operation to use for KPI analysis, turnover, number of restaurants and number of employees were reported by HQ.
Packaging and consumables	Packaging and consumables were reported by suppliers. Data on materials, volumes (weight), producer, energy use, and transports of materials have been collected through web-based and/or excel-based surveys to producers and suppliers. The data on packaging includes both consumer packaging used in restaurants and packaging for the products delivered to MAX.
Pension provisions	MAX's economy department provided information on total pension provisions invested during the year and information on which funds provisions were placed in. The potential climate impact of investments was analysed based on average climate impact of funds from the asset manager where the majority of MAX portfolio is invested.
Staff commuting	Staff commuting was investigated for the assessment of 2017 operations, through a web-based survey to staff at a selection of ten restaurants in Sweden. The survey was answered by a total of 138 people. For 2020 no new survey was performed the previous results were adjusted for changes in turnover.
Waste	<p>Supplier's reported volumes of waste collected from 117 Swedish restaurants, with the exception of sorted waste for incineration reported for 43 Swedish restaurants. The remaining restaurants' waste volumes estimated based on an average volume per restaurant, and waste in other countries were extrapolated based on the Swedish data and share of total turnover.</p> <p>Unsorted waste is incinerated with energy recovery, and the sorted fractions are to a large extent recycled. Used frying oil becomes raw material for biogas production.</p> <p>Regarding waste for energy recovery, the climate impact has been allocated to MAX, while the climate from material recovery is allocated to the next lifecycle (not included in MAX's impact). Transport of waste has been added based on assumptions of an average transport distance.</p>

The calculations aim at fulfilling the requirements for carbon neutral products in ISO 14021, and at being able to communicate climate positive products through additional carbon offsets by following the CLIPOP.Org's criteria. A division of data on the markets Sweden/Denmark, Norway and Poland has been delivered by most suppliers. Transport calculations for packaging still need completing with models for some distances.

Given expansion onto new geographic markets in recent years, a clarification



on whether all raw materials and transports are included in producer and supplier data is necessary, and an assessment of how the potential climate impact of operations on these new markets is best analysed. Some steps were taken towards separating raw material flows between countries in the 2014 assessment. Since 2015, suppliers and producers have to a significant extent been able to report data separately for Sweden/Denmark, Norway, and Poland, respectively. The potential climate impact of food raw materials in Norway has been calculated separately, while Denmark's data has been reported together with Sweden's. Organisationally and based on size it is logical to report Sweden and Denmark together.

During 2020, 166 restaurants have been open at some point during the year. 164 of these were open at the end of the year (Table 1). One restaurant in Ystad closed during the year. The franchise restaurants at Landvetter and Liseberg closed temporarily during the year due to the pandemic, they plan to open again during 2021. Some of the restaurants in Egypt have only been open parts of the year, and River Walk have closed permanently. During the year six new restaurants opened in Sweden, and two in Poland.

Table 2. The number of restaurants open at the end of 2020, divided on franchise, and owned by Max².

Country	Owned by Max	Franchise	Total
Sweden	126	7*	133
Denmark	0	4	4
Norway	5	2	7
Poland	10 (11)	0	10
Egypt	0	10	10
Total	141	22	164

* four of these were temporarily closed

All data from producers in web-based surveys have been quality assured based on data from previous assessments, KPI's on energy use per tonne product, distances in relation to production location etcetera. Delivered volumes were, in most cases, reported by both producers and suppliers³. The comparison facilitates finding errors and increases precision. When needed, questions have been put to data providers at the companies in question. Where volumes differ between producer and supplier, supplier volumes are used since they are more accurate for consumption during the year. A separate log is kept for the quality assurance process.

² The 11th restaurant in Poland was not officially open yet but was about to open. Please note that there were 166 restaurants open in total during the year, but two of these have closed during the year.

³ Suppliers in this case refers to distributors, and producers are the companies that manufacture products and/or supply them to the distributors.

Allocation

The major emission sources are purchased raw materials for the products we sell. Climate impact calculations for those raw materials use emission factors in published lifecycle analyses with an allocation made specifically for each study – economic, mass or system expansion. Regarding energy use in producer processes the producers themselves reported on energy use specifically for the article in question or an allocation of aggregated energy use on mass throughout their production.

Boundaries

The organisational boundary results from the operational control principle in GHG Protocol.

Criteria for the lifecycle scope and boundaries of the products are based on ISO 14067, Carbon footprint of products, and the indications on boundary criteria there are in the PCR Basic Module there is for Accommodation, food and beverage services. The GHG Protocols corporate standard is another reference.

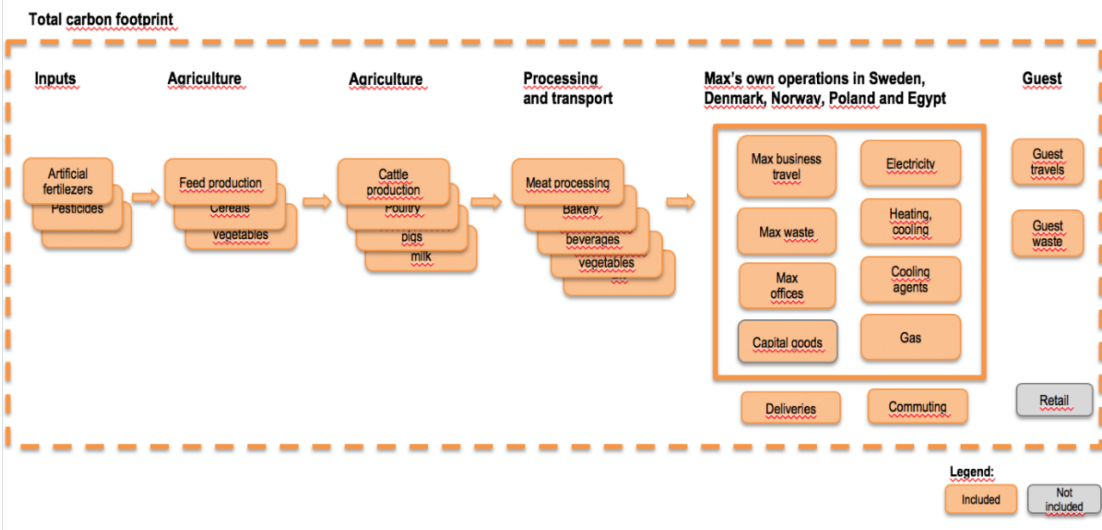


Figure 1. General system description

The main system boundaries used are set as described in the figure above, Figure 1. The food and its way from farm to the guests has been analysed and calculated, including inputs to agriculture, via growing of feed and vegetables, rearing and processing, cooking and serving, to waste handling.



Scope	Definition	Emission sources/activities included	
Scope 1	Direct GHG emissions from vehicles/premises	Natural gas for heating and/or cooking in restaurants. Refrigerant gases and leased vehicles.	
Scope 2	Indirect emissions from purchased heating and electricity from premises	Production of purchased electricity, cooling, heating for restaurants and offices.	
Scope 3 - upstream	1. Purchased goods and services	Purchased goods and services such as agricultural products, processed foods for preparation for guest consumption, purchased packaging materials, other goods and consumables for restaurants and offices, marketing and packaging for purchased goods	
	2. Capital goods	Construction and remodelling of restaurants during the year.	
	3. Other fuel- and energy-related activities	Upstream emissions from production and distribution of electricity and heating and fuel for vehicles.	
	4. Upstream transportation and distribution	Transports of purchased goods, waste etcetera.	
	5. Waste generated in operations	Treatment of waste and frying oil from restaurants and offices.	
	6. Business travel	Air travel, train travel, taxi, use of private cars for business travel, rental cars and hotels.	
	7. Employee commuting	Employee commuting on buses, car and rail to and from work.	
	8. Upstream leased assets	Leased restaurants and offices.	
	Scope 3 - downstream	9. Downstream transportation and distribution	Guest travels to and from restaurants, home deliveries.
		10. Processing of sold products	n/a
		11. Use of sold products	n/a
		12. End-of-life treatment of sold products	Waste from guests' take-away and home deliveries.
		13. Downstream leased assets	n/a
		14. Franchises	Franchisees
	15. Investments	Pension provisions	

The following activities are not included in calculations:

Emissions sources/activities not included	Motivation
Products for retail sales	MAX has limited control over production and no agreement has been made with producer regarding ambition for carbon neutrality/climate positivity for these products.
Consumption of fresh water	Production of fresh water is assessed to be less than 1 percent of total footprint (appr. 0.03%)
Furniture and capital goods in restaurants	Data is currently lacking in a format that is possible to use

Boundaries in time

From a product perspective most greenhouse gas emissions from raw materials and waste happen during a short time span. Food is in most cases fresh, shilled or frozen goods and none of MAX's products have a lifespan longer than a year. Rearing of cattle for beef is somewhat stretched out in time and the meat consumed by our guests comes from animals that in some cases were slaughtered at the age of three years, but usually earlier.

Greenhouse gases

Calculations of the most common greenhouse gases, carbon dioxide, methane and nitrous oxide are included in the calculations, as are refrigerant gases (HFCs, PFCs, halons etcetera). Emissions of biogenic carbon dioxide are included where the information was provided, in practice to produce renewable electricity and in the combustion of bio-fuels. It is our ambition to include, and report separately, more and more of biogenic carbon dioxide in line with standards. However, information on biogenic carbon dioxide is still missing in many of the sources for climate impact data used, including sources for food production.

Land-use change (LUC) was estimated and included for beef, dairy and paper-based products.

In case there is information on emissions of specific greenhouse gases in the sources, the AR5 with feedbacks (IPCC 2013) were used to calculate climate impact from emissions of specific gases. For the majority of MAX's climate impact that specification is currently lacking, and many of these studies use



AR4 for the calculation of climate impact. It is our ambition to replace the sources over time, as new data is published, and thus be able to apply AR5 to an increasing part of the calculations.

Land Use Change (LUC)

Calculations of LUC is premised on the fact that MAX's beef consumption represents an average of beef produced in Sweden, with the equivalent share of contribution to LUC through feed production. On dairy, potential contribution to LUC was estimated at 8.8 percent.

For paper-based products and packaging it was estimate that one fifth (20%) of the volume was at risk of contributing to LUC, based on main suppliers' data on the share of virgin raw materials and its origin. If the origin was given as several different countries/regions, without specifying shares, the entirety of that volume was assumed to be at risk of contributing to LUC. An estimate of the volume of pulpwood, hectares of forest and potential LUC emissions for the equivalent area.

Sensitivity analysis

Data quality is overall very good. The material part is actual data from invoices, supplier data and MAX's internal statistics. For the relatively limited part where actual data is missing, estimations were made which most likely correspond to actual climate impact or overestimates it. More conservative assumptions were used when actual conditions were uncertain.

In total the result of the analysis most likely captures more than 95 percent of total climate impact. The activities and emission sources we know have not been possible to calculate for lack of data are described in the section on boundaries. Aggregated, those areas are assessed to amount to well below one percent of total emissions.

A determining factor for results is the climate impact of primary production of beef for our restaurants. If the lifecycle values used were for instance 20 percent higher or lower it would affect total results by ± 10 percent.

The criteria for lifecycle analysis of climate impact do not take into consideration all actual climate impact, in case the science community is not sufficiently in agreement on how certain process are to be calculated and understood. Soil carbon sequestration, the release of biogenic emissions and how climate change affects the ability of ecosystems to handle future greenhouse gas emissions (feedbacks) are some such areas. How these areas would affect results, if calculation models were more developed, is difficult to assess. Given the current state of knowledge we assess the calculated climate impact of beef to be likely.



If AR5 with feedbacks had been applied throughout the calculations, our assessment is that this could have increased MAX's climate impact by 8 to 10 percent. It is primarily on animal products this impact is of significance since AR5 brings higher GWP values for methane and nitrous oxide. Read more on page 14 under section Greenhouse gases.

Guests' travels influence results significantly. A difficult part of the assessment is how much of these travels that ought to be allocated to MAX. There are usually several reasons for one trip. Our mission is to make it easier for our guests which is why the restaurant usually just facilitates the main purpose, rather than being a purpose in and of itself. Of the total kilometres that are allocated to MAX, two thirds represent those that have MAX as their primary travel purpose, and one third represent those that have another primary purpose for traveling. If we were to increase the kilometres allocated to MAX by 20 percent, for those with MAX as their primary purpose for traveling and decrease kilometres by 20 percent for those with a different primary purpose, total results would increase by 0.2 percent. If the detour (exit distance) were twice as long for those traveling further than 2 kilometres, the results would increase by 0.6 percent. The share of guests that have MAX as their primary destination are likely lower.

Interpretation of results and limitations

The results reflect MAX's operations from inputs into agriculture, farming and rearing of cattle, to the consumption of burgers in restaurants/take-away with its waste and travels. The calculation of a restaurant chain's lifecycle is far more complex than a lifecycle analysis of a few individual products. The results are specific to MAX and our suppliers and guests and not directly applicable to other restaurant operations.

Third-party review

MAX commissioned EY to do a limited assurance of this climate assessment. For further information see the independent auditor's report in a later chapter.



Results

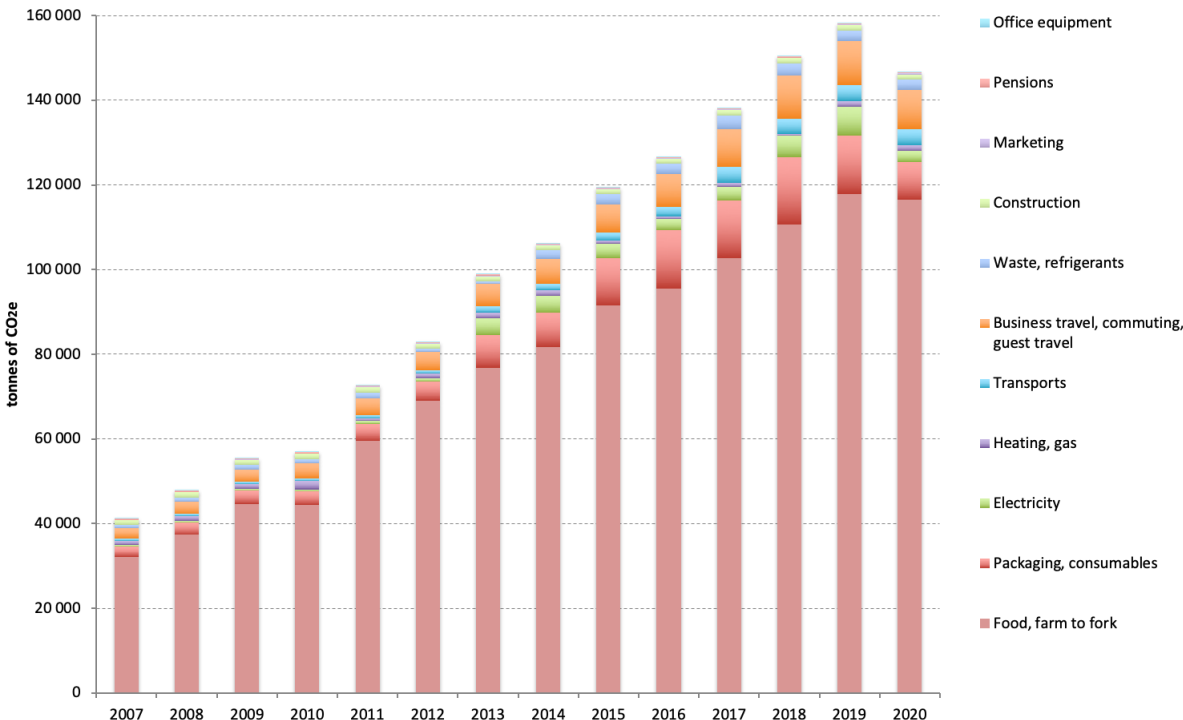


Figure 2 MAX's climate footprint from a lifecycle perspective, i.e. from primary production of feed, rearing of cattle to cooking in restaurants and further on to the guest travels and waste handling.⁴

MAX total climate impact (tonnes CO₂e)⁵ increased between 2007 and 2020, primarily due to a significant increase in operational growth. Restaurants have tripled, from 56 to 166 restaurants. In 2020 total climate impact was 146 708 tonnes CO₂e for all countries (Sweden, Denmark, Norway, Poland and Egypt). Turnover decreased in 2020 by 5.3 percent compared to the previous year, and total climate impact decreased by 7.1 percent.

Data for 2020 was collected through web-based questionnaires for all suppliers and a database, which continues to simplify data collection. It provides a comparatively complete and full material from producers. It has increased quality and certainty in the material.

⁴ In 2008 no calculation was made; 2007 results were adjusted in line with turnover.
⁵ A lifecycle perspective, from framing of feed and rearing of cattle till cooking in restaurants and further on to the guests travels and waste handling.



The purchase of beef has decreased with 9 percent compared to previous year. The explanation is partly a successful drive to introduce a wide range of lacto-ovo vegetarian and entirely plant-based options. Transports and business travel only make up approximately 3 percent. But most importantly in 2020 we had a Covid-19 pandemic that reduced sales.

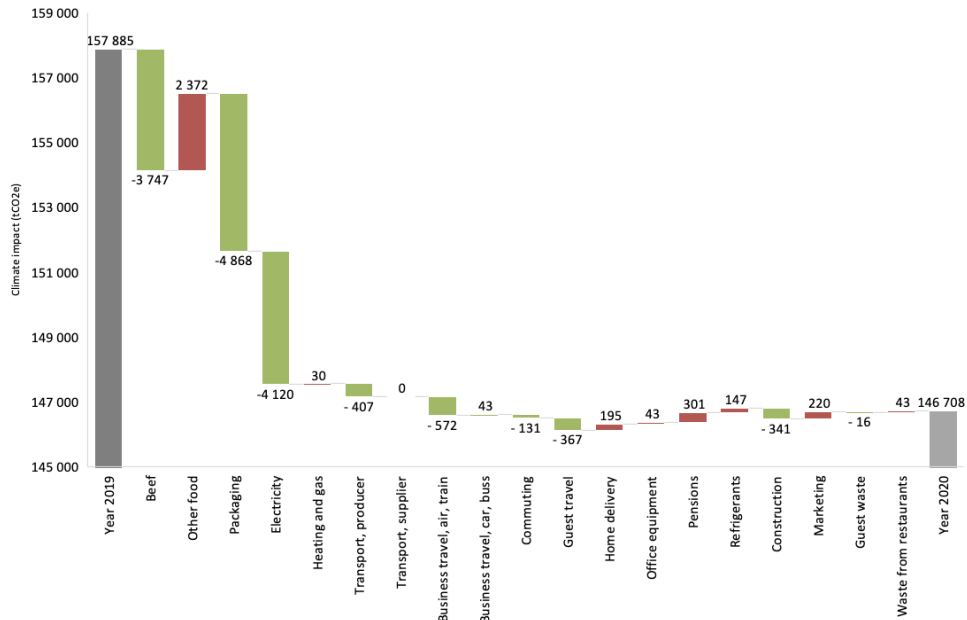


Figure 3 The difference in impact per category from 2019 to 2020

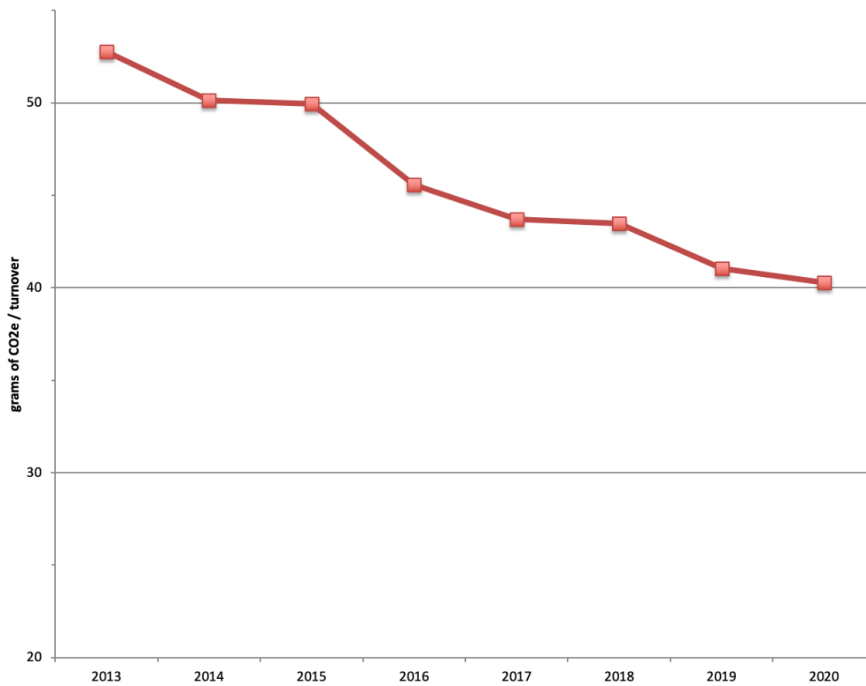


Figure 4 MAX's Climate impact in gram CO₂e from farm to fork and back again, per SEK between 2013 and 2020.⁶

⁶ For historic emissions for 2007-2017, GWP values according to AR4 were consistently applied and the same system boundaries as in 2020. The recalculation was made to ensure comparability.



Over the years our absolute emissions have increased as guests and number of restaurants have increased. During 2020 though our total emissions decreased by 7 percent and our emissions per Swedish krona (SEK) decreased by approximately 2 percent compared to previous year.

	2013	2018	2019	2020	Difference
Turnover (MAX group, million SEK)	1 875	3 460	3 847	3 641	- 5 %
Total climate impact (tonnes of CO ₂ e)	98 876	150 346	158 247	146 708	- 7 %
Climate impact per krona (g CO ₂ e per SEK)	53	43	41	40	- 2 %

Since 2013, climate impact has been decoupled from turnover, see figure 5.

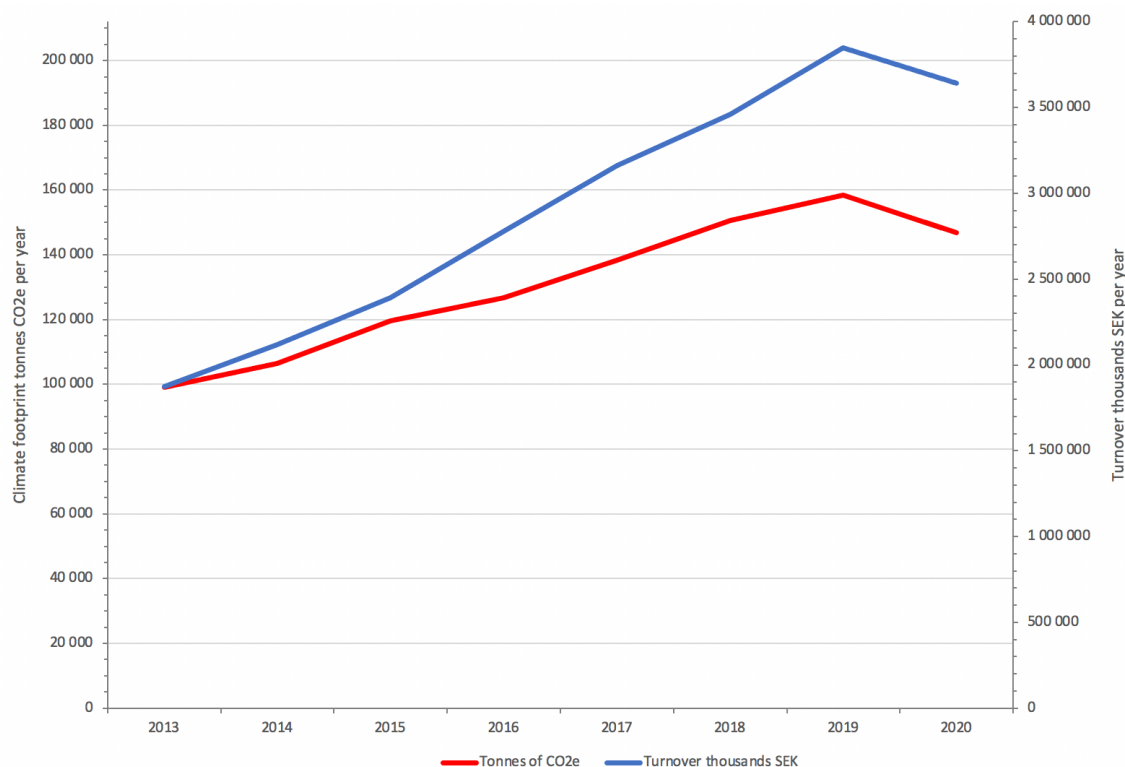


Figure 5 Decoupling of climate impact and economic growth. MAX's climate impact (tonnes CO₂e) in relation to MAX's turnover (thousand SEK) year 2013 - 2020.

We work on reducing our emissions in line with the UN target of keeping temperature change below 1.5 degrees. To do so, we assess that our climate impact needs to decrease by 4.5 percent per average meal, per year (with a scope more in line with the WWF OPP One Planet Plate initiative). The goal is



to reach the OPP goal of 0.5 kg CO₂e per meal not later than by 2050.

In 2019 MAX received the UN Global Climate Action Award. We keep on striving to be a global role model for climate action because the biggest thing we can do is to inspire others to do more. Every year since 2018 we have published the worlds, as far as we are aware of, most comprehensive climate analysis in the restaurant industry. The purpose of the analysis is to help us measure, reduce and capture emissions. It also forms the basis for the climate labelling on our menu where every product is labelled with its carbon footprint.



Illustration 1 The comprehensive climate analysis enables MAX to label our menu with a carbon footprint for every product.

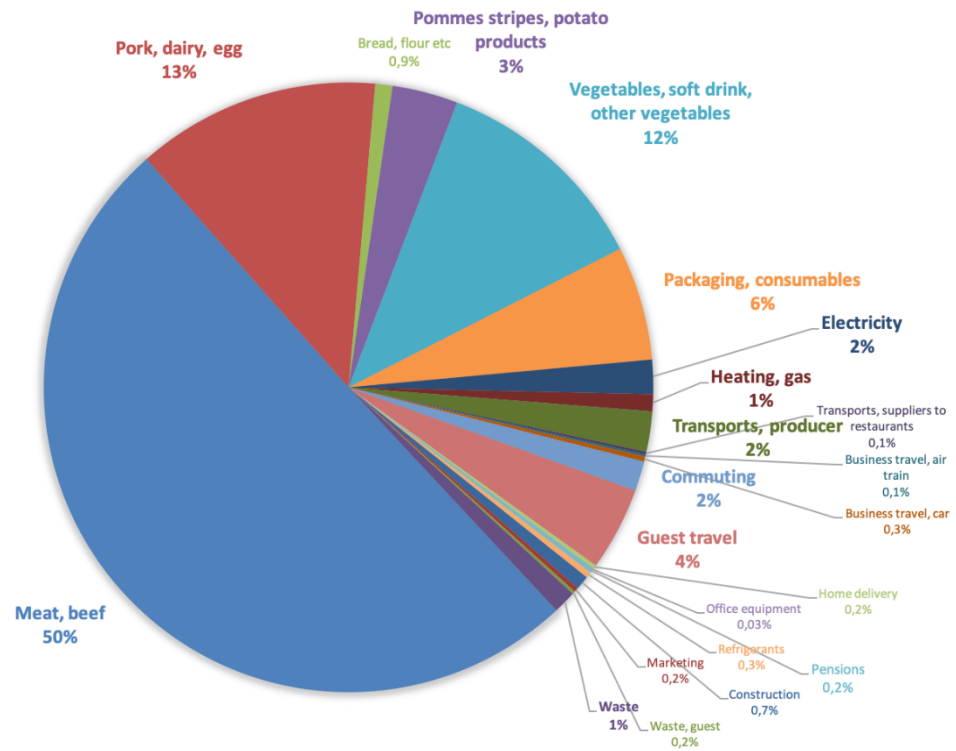


Figure 6 MAX's climate impact for the entire lifecycle, distributed on different ingredients and activities for 2020 (tonnes CO₂e).

In food production it is primarily carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O) that make up the potential contribution to climate change. The animal part, especially ruminants, account for a significant part of climate emissions. Methane is released as cows ruminate and from manure. Loss of nitrogen as nitrous oxide is proportionate to the total nitrogen flow of the production.

The analysis shows that beef production is the primary contributor to MAX's climate impact. Approximately 50 percent of total climate impact is from beef production which is one percent more than the previous year.



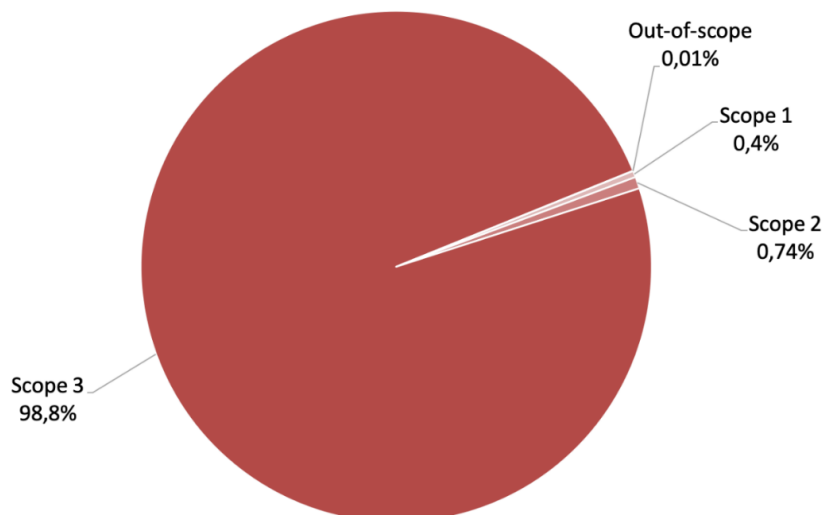


Figure 7 MAX's climate impact per scope 1, 2 and 3 for 2020 (tonnes CO₂e).

	Total climate impact per scope and category (tCO ₂ e)	2013 ⁷	2019	2020
1	Direct GHG emissions from vehicles and facilities under MAX's control		558	603
2	GHG emissions from consumption of electricity and district heating in buildings under MAX's control (market-based method)		3 924	1 084
2	GHG emissions from consumption of electricity and district heating in buildings under MAX's control (location-based method)		3 603	5 329
3	Other indirect emissions			
	Purchasing of goods and services		131 836	125 813
	Capital goods		1 411	1 070
	Activities related to fuel and energy production, not included in scope 1 or 2.		1 609	961
	Transport and distribution (upstream)		3 747	3 340
	Waste generated in operations		1 736	1 756
	Business travel		908	406
	Staff commuting		2 455	2 324
	Leased assets (upstream)		-	-
	Transport and distribution (downstream)		7 002	6 851
	Processing of sold products		-	-
	Use of sold products		-	-
	End of life of sold products		243	227
	Leased assets (downstream)		-	-
	Franchising		2 499	1 961
	Investments		319	301
	Out of scope		-	12
	Total (based on market-based method)	98 876	158 247	146 708

Table 3 MAX's climate impact per scope and categories for 2020 (tonnes CO₂e).

⁷ For the base year 2013 the total climate emissions were not reported per scope. A specific calculation will be made next year for further transparency in the reporting.

The decrease during 2020 depends on the pandemic which has caused decreased sales on all markets but also a continuous change in the customer choice thanks to our menu with green burgers. A counteracting development is the increase in the sales of double burgers. During this year we have also broaden our calculation with pensions and office equipment and even though both our total climate impact as well as climate impact per thousand SEK has decreased.

MAX's climate impact is 146 708 tonnes CO₂e, calculated according to the market-based method in accordance with GHG Protocol Scope 2 Guidance. The market-based method takes market instruments into account for electricity (e.g., guarantees of origin (GO)) and thus allows for differentiating results on renewable electricity production. Location-based calculations is a reference scenario of what the impact would be if there were no market instruments for attributes. MAX's climate impact in scope 2 would be 5 329 tonnes CO₂e in the location-based reference scenario (1 084 tonnes CO₂e calculated with market-based method). Generally, we have chosen to report results according to the market-based method since MAX operates where such a market for electricity attributes exists.

Beef

No ingredient has a higher climate impact than beef. Production up until farm gate make up as much as 95 percent of the climate impact of beef, the rest being slaughter, transports, packing etcetera. Some of the more important reasons for the climate impact of beef are:

- Slow growth of beef cattle (not efficient feed conversion).
- Anaerobe digestion (methane, primarily from burping).
- Production of nitrogen fertilizers and field work in the growing of feed

Methane (CH₄) is the dominant greenhouse gas in the beef lifecycle. It makes up approximately half of the total impact in conventional systems. Second largest is nitrous oxide (N₂O), primarily due to nitrogen rations in ley cultivation. Carbon dioxide from fossil fuels is the third largest source from beef production (in Sweden).

Greenhouse gases

Reported biogenic carbon dioxide makes up 0.01 percent of the footprint. This is partly because information on emissions of biogenic carbon is lacking in the studies used for emission intensity for different processes. There are also emissions of biogenic carbon included in some of the data reported to us by producers in web-based questionnaires on producer processes and transports, but it is not possible to separate the biogenic part from the remaining climate impact.

It's not yet possible to separate the total results on all the different greenhouse gases. Emissions of biogenic emissions, not least methane and nitrous oxide from agricultural production, are included in calculations. It's the share of the total impact that originate from specific gas that we are not yet able to report.

Climate impact “own” operations

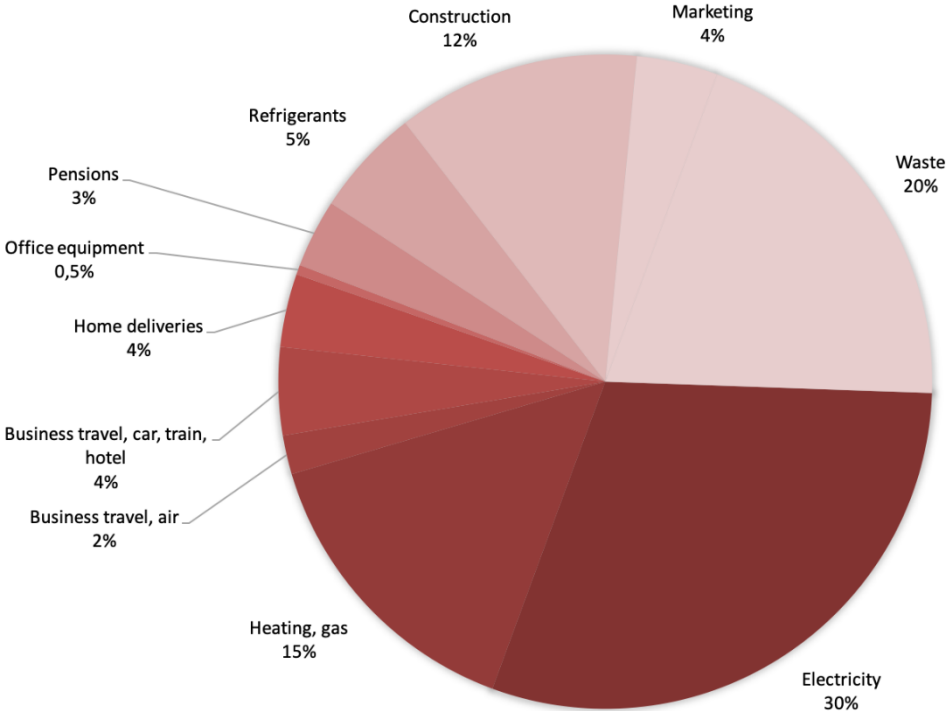


Figure 8 MAX's climate impact from “own” operations, such as electricity, heating, cooling, refrigerants, and business travel 2020 (tonnes CO₂e).

Climate impact from MAX's “own” operations is approximately 8 898 tonnes of CO₂e 2020, which amounts to six percent of total climate impact. Figure 8 above illustrates their distribution on different activities.

The heating for restaurants is mostly district heating.

In Sweden, Norway, Poland, and Denmark renewable electricity is used. Only restaurants in Egypt and franchisees in Norway have not explicitly sourced renewable electricity. This means that electricity leaves a limited contribution to the overall results. In Figure 9 below climate impact from electricity per restaurant is shown, in tonnes of CO₂e per restaurant. Climate impact from electricity use (market-based method) amounts to approximately 2 674 tonnes CO₂e, with MAX's own restaurants representing 868 tonnes CO₂e.



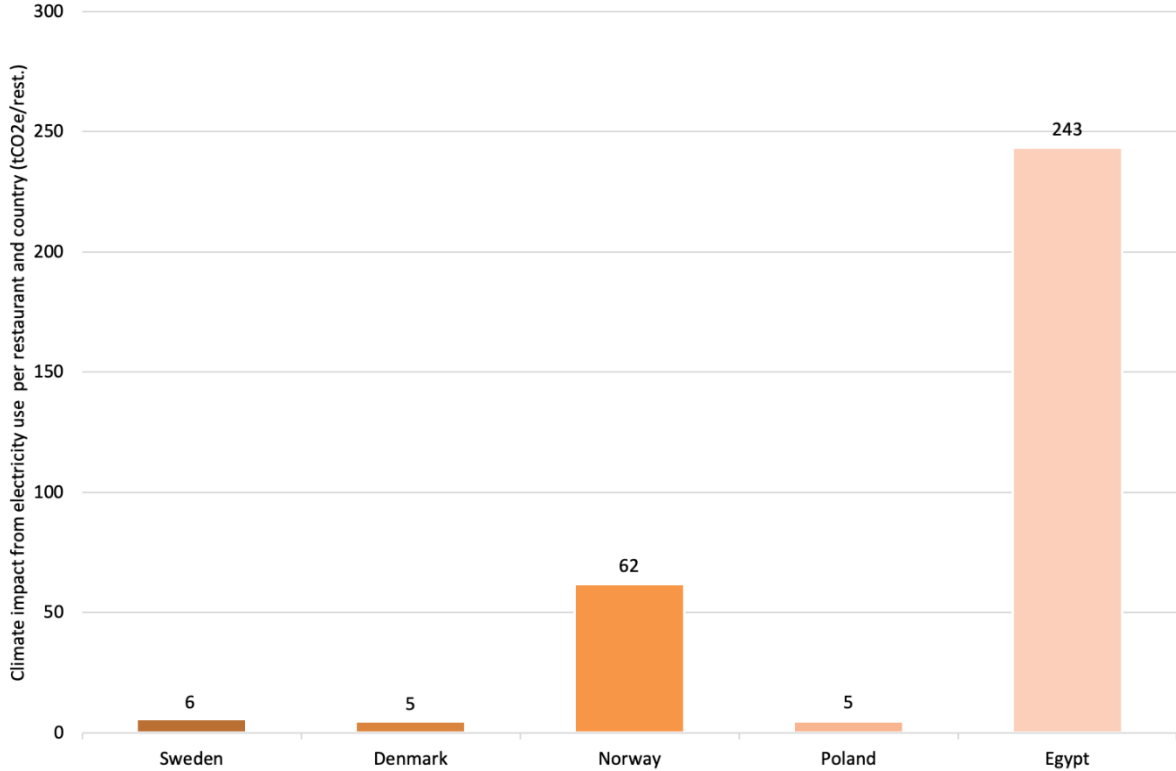


Figure 9 Climate impact from electricity use per restaurant and country 2020 (tonnes CO₂e per restaurant).

Business travel's share of climate impact has decreased in 2020 due to the Covid-19 pandemic, and now make up less than one percent of total emissions and six percent of impact from own operations. There are probably unrecorded activities here since travel statistics are not entirely reliable. The Ebba trip is a conference trip for managers and office staff and was cancelled in 2020 due to the pandemic.



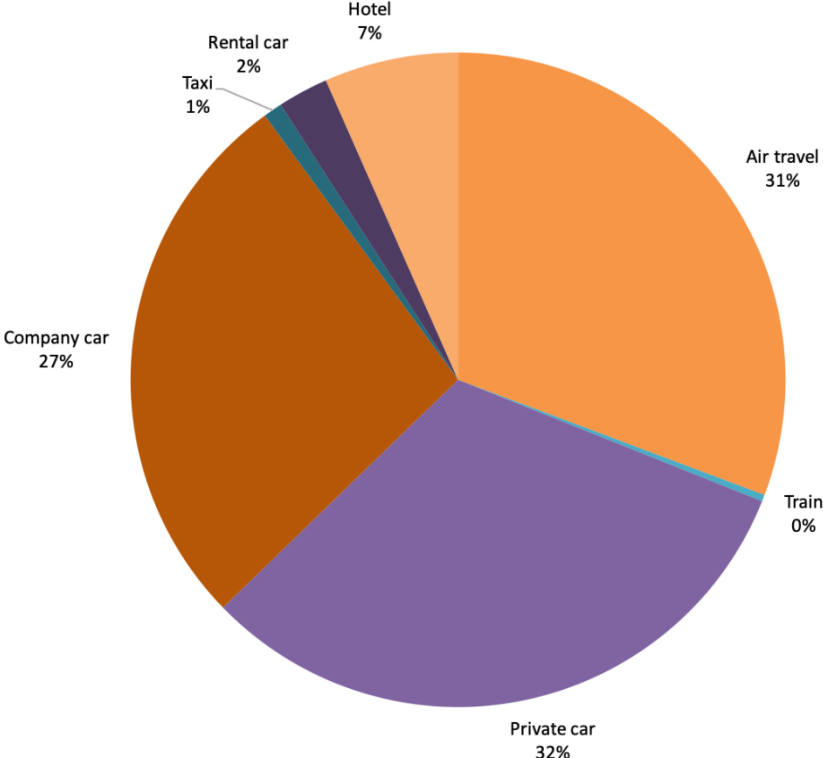


Figure 10 Climate impact from business travel 2020 per travel mode (tonnes CO₂e).

Waste handling is relatively significant, just under 20 percent of MAX's impact from own operations. A large part of waste is energy recovered which affects the results. With more renewable materials and sorting by fractions, climate impact would be decreased. A reduction in the number of tonnes of waste would achieve the same thing.



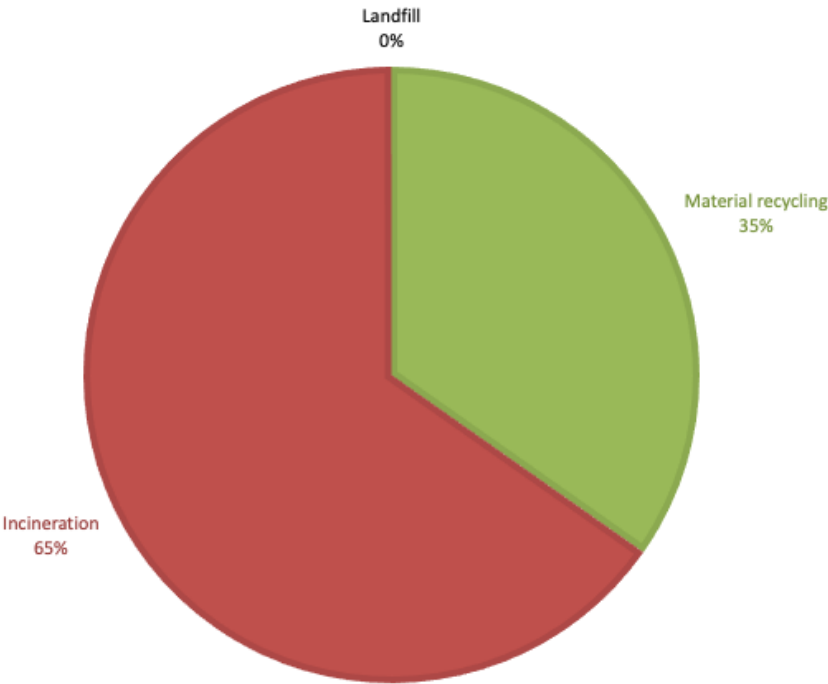


Figure 11 Waste handling at MAX restaurants in Sweden in 2020 (tonnes handled).

MAX's home deliveries have continued to increase. Restaurants that deliver orders cause a relatively limited addition to emissions of 322 tonnes CO₂e. As more and more restaurants outside the larger cities offer deliveries there have been a shift towards more cars and mopeds as modes of transport. In Sweden 13 percent of deliveries are by bike and 43 percent by car. In Norway 91 percent are delivered by bike and 8 percent by car. In Poland 35 percent are delivered by bike and 10 percent by car. Remaining deliveries are made with mopeds. For Egypt data is lacking from distributors. In Sweden full answers were provided by Uber, Foodora, Bolt, and Wolt.



Climate impact per country

Data from the Norwegian operations is increasingly complete over time. The same is true for operations in Sweden that have improved further this year. For 2020 an extra effort was made to improve data quality for Poland and Egypt. The data has continued to improve for Poland but not for Egypt. Where data is lacking impacts have been calculated based on turnover or an average per restaurant.

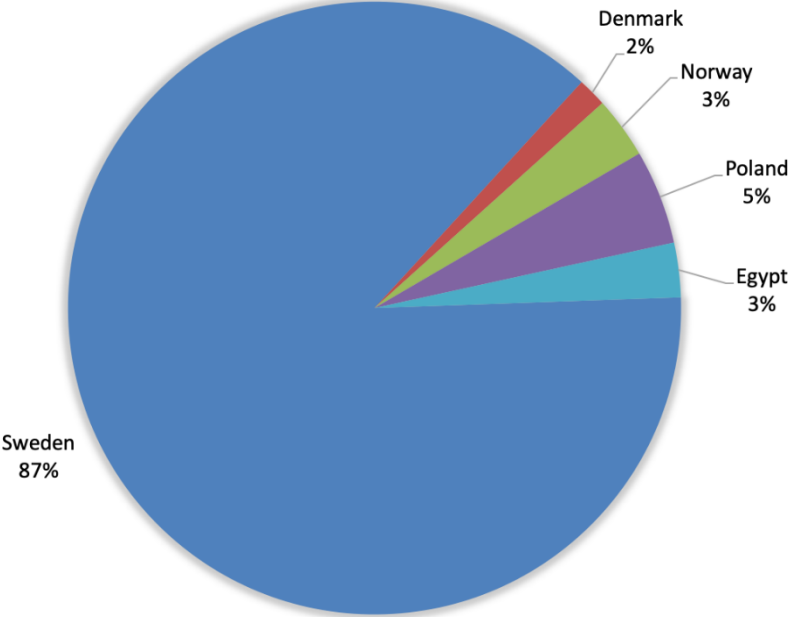


Figure 12 Distribution of emissions on all countries 2020 (tonnes CO₂e).



Climate impact per restaurant

The diagram below shows climate impact per restaurant for 2007 - 2020.

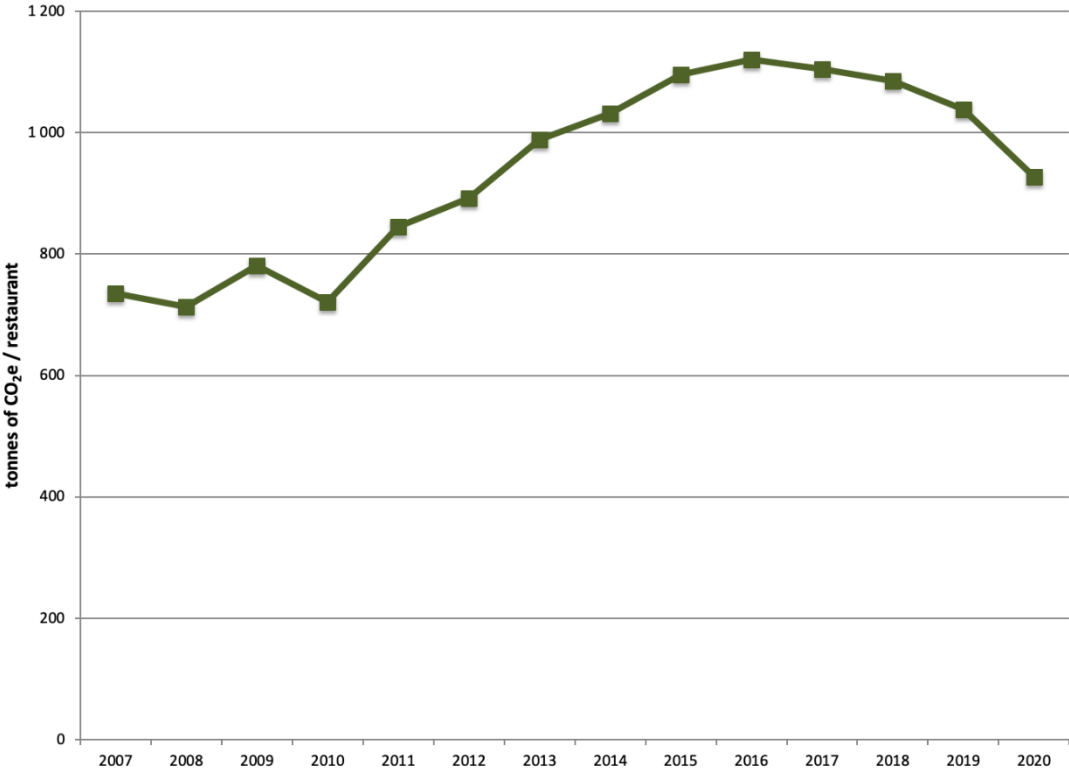


Figure 13 MAX's climate impact in tonnes of CO₂e from farm to table per restaurant for 2007 - 2020.



Carbon Offsetting Process

Background

Since 2008, MAX has been offsetting its greenhouse gas emissions for the entire business and menu, from farm to table, through ZeroMission. The Plan Vivo-certified carbon offsets are purchased in advance, based on sales prognoses. At the end of each year, when the carbon accounting is completed, the total volume of offsets is reconciled, and adjustments made if necessary.

From June 2018 guests' and staff travel to and from MAX restaurants and offices, and guests' waste have also been included in the carbon accounting, to achieve carbon neutrality in accordance with ISO 14021:2017. To go further than just carbon neutrality, MAX Burgers purchases carbon offset equal to 110 percent of their emissions each year, making them climate positive according to the CLIPOP criteria (Climate Positive Products). The CLIPOP criteria have been developed by MAX, ZeroMission and other companies making similar efforts for the climate, and with reference to existing standards for climate neutrality.

MAX's carbon offsetting 2020

This report refers to MAX's carbon offsetting for the 2020 financial year, which consisted of purchase of 165 000 Plan Vivo-certified carbon credits, based on the prognosis of the annual carbon footprint. The credits are retired in the international register IHS Markit.

Since 2020, MAX has been offsetting its carbon footprint in three Plan Vivo-certified projects: *Trees for Global Benefits* in Uganda, *Scolet'ite* ("the tree that grows") in Mexico and *CommuniTree Carbon Programme* in Nicaragua. All projects work in partnership with local smallholder farmers who plant native tree species on their farms, providing them a variety of benefits, in accordance with the Plan Vivo standard.

Figure 14 below shows how the carbon offsets have been distributed per cost center, per project and the time period of the emissions covered by the offsets.

Q1Q2 2020 MAX Burgers AB

Year	Time period	Cost center	Project	tCO ₂ e	ZM Cert.no.	Invoice number	Order no.
2020	Q1Q2	MAX Burgers AB	Uganda	43 438	ZM201818	70750	384
		MAX Burgers AB	Nicaragua	48 264	ZM201819	70750	382
		MAX Burgers AB	Mexiko	19 306	ZM201820	70750	385



Q1Q2 2020 MAX Norway AS

Year	Time period	Cost center	Project	tCO ₂ e	ZM Cert.no.	Invoice number	Order no.
2020	Q1Q2	MAX Norway	Uganda	1 562	ZM201821	70751	387, 403
		MAX Norway	Nicaragua	1 736	ZM201822	70751	386
		MAX Norway	Mexiko	694	ZM201823	70751	385

Q3Q4 2020 MAX Burgers AB

Year	Time period	Cost center	Project	tCO ₂ e	ZM Cert.no.	Invoice number	Order no.
2020	Q3Q4	MAX Burgers AB	Nicaragua	50 000	ZM191716	70602	382

Figure 14 Overview of purchased carbon offset

About the Plan Vivo standard

The Plan Vivo standard is the oldest standard on the voluntarily carbon offset market, born out of a desire to help smallholders in Chiapas, Mexico to plant trees to sequester carbon and to improve their livelihoods. Since then, the Plan Vivo model and network of stakeholders have evolved into a system that can provides environmental and social benefits to many communities around the world.

The Plan Vivo standard is based on three pillars:

- **Relieving poverty** by offering sustainable livelihoods for communities whose environments have been degraded.
- **Restoring and protecting** environments so as to help protect communities against climate change and provide a variety of sustainable development benefits.
- **Building local capacity** through the transfer of knowledge, skills and resources to developing countries.

In the process the Plan Vivo certified projects capture carbon from the atmosphere. This is monitored and turned into Plan Vivo Certificates, which can be sold by projects to help fund their operations and to expand. 60% of the income that projects received from the sale of Plan Vivo Certificates goes directly to the participants.⁸

⁸ Source: Plan Vivo

Description of the carbon offset process

Below is a description of the process, from MAX purchases of Plan Vivo carbon credits, to the payments to project participants.

1. **Reporting:** MAX reports to ZeroMission the quantity of carbon credits required to offset their annual emissions. Reports are made both in advance (a prognosis) and once the annual carbon accounting is completed.
2. **Invoicing:** ZeroMission invoices MAX for the cost of the required carbon credits and produces a unique certificate of purchase.
3. **Purchasing:** ZeroMission purchases the required quantity of carbon credits from the Plan Vivo certified projects in Uganda, Mexico and Nicaragua on behalf of MAX.
4. **Tree Planting:** Tree planting and monitoring occurs on the project sites. At the end of the year, the projects submit annual reports on their activities to the Plan Vivo Foundation.
5. **Payments to participants:** Money is transferred to the project and funded. Project participants are paid over time as they reach their set milestones.
6. **Issuance of credits:** The Plan Vivo Foundation reviews and approves the annual reports. If approved, credits are issued corresponding to the carbon sequestration that is expected to take place.
7. **Retirement of credits:** ZeroMission received and retires the purchased credits in MAX name, in the international environmental registry IHS Markit.

Actors and concepts

The process of MAX's offsetting their emissions involves several actors along a chain, all with different functions that are described below.

Ambio: The non-profit environmental organization in Mexico that runs the Scolel'Te (The Tree That Grows) project, the first and oldest project certified by Plan Vivo. URL: ambio.org.mx

CLIPOP: Clipop.org has been established to provide one clear definition of what a climate positive product is and to give consumers a single location to find products that help to leave the climate better.

CommuniTree Carbon Programme: The name of the Taking Root Plan Vivo certified project in Nicaragua. URL: <https://www.planvivo.org/communitree>



The Environmental Conservation Trust of Uganda (ECOTRUST): Local non-profit environmental organization in Uganda and which runs the Plan Vivo certified project "Trees for Global Benefits". URL: <https://ecotrust.or.ug/>

Ex-ante credits: MAX buys Plan Vivo-certified "ex-ante credits". This means that the carbon removal will occur and be verified after the credit purchase date.

IHS Markit: An international environmental register where all sold certificates from Plan Vivo are registered and retired and can be tracked. URL: <https://ihsmarkit.com/products/environmental-registry.html>

MAX Burgers: Buyer of Plan Vivo certified carbon credits

Plan Vivo Foundation: A registered, non-profit foundation in Edinburgh that reviews, certifies and monitors carbon offset projects, and issued Plan Vivo certificates. They specialize in natural climate solutions and all their projects have strong ties with local people. URL: <https://www.planvivo.org/>

The Plan Vivo Standard: A standard for carbon offset projects which focus on poverty reduction and restoration of ecosystem services. Certifies projects where trees are preserved or planted in collaboration with local people. URL: <https://www.planvivo.org/>

Taking Root: The organization that runs the Plan Vivo certified project in Nicaragua URL: <https://takingroot.org/>

Scolel'te ("The trees that grows"): The name of the Plan Vivo certified project in Mexico. URL: <https://www.planvivo.org/scolelte>

Trees for Global Benefits: The name of the Plan Vivo certified project in Uganda where MAX has offset most of its emissions since 2008. URL: <https://www.planvivo.org/trees-for-global-benefits>

ZeroMission: Swedish reseller of Plan Vivo certified carbon credits and partner of MAX Burgers since 2008 www.zeromission.se

CLIPOP criteria for Climate Positive

Since MAX 50th anniversary 14 of June 2018 MAX whole menu has turned climate positive. MAX does this by measuring the whole value chain's emissions, reducing climate footprint and offsetting 110 percent of emissions. In more detailed terms it means we are following the 2020 CLIPOP criteria for climate positive products which where:

CLIPOP Criteria for products/services

2020 v.1 - 2020409

CLIPOP defines a Climate Positive product as one for which carbon neutrality is achieved in accordance with the definition in ISO 14021:2017 or PAS 2060, with additional offsetting of at least 10% of the full carbon footprint.

Purpose:

CLIPOP is a platform for registering Climate Positive products. For a product or service to be registered on CLIPOP the relevant company shall demonstrate that the criteria below are fulfilled.

Process:

The first step of the registration process is for companies to complete an assessment checklist and submit it to CLIPOP. The checklist can be obtained by contacting info@clipop.org. Products will initially be accepted onto the CLIPOP platform for a period of one year. If significant changes are made to a product's carbon footprint or to the volume of offsetting, then the company shall inform CLIPOP. All claims will need to be resubmitted after the first year.

For products and services that are approved for inclusion on the CLIPOP platform, the company/organisation logo and a description of the company will be added to the CLIPOP webpage.

Data storage:

The information provided will be stored on behalf of clipop.org at ZeroMission AB in Sweden and will not be shared with anyone outside ZeroMission. At any time you can contact clipop.org via email: info@clipop.org to retrieve your data or get it deleted.

For further questions or clarifications please contact info@clipop.org

Criteria for products 2020

Criteria A: All emissions, from the product's full lifecycle, shall be included in the calculation of the product carbon footprint. This is in accordance with definitions of carbon neutrality in ISO 14021:2017 and PAS 2060 (2014).

Criteria B: Carbon footprints shall be calculated in accordance with an internationally recognized standard that is acceptable for calculations for carbon neutrality (as defined in ISO 14021:2017 and PAS 2060 (2014)).

Criteria C: The organization with the Climate Positive product/s shall set long-term goals (e.g. to 2050) for emissions reductions in line with the Paris Agreement e.g. following Science-Based Targets guidelines or the Carbon Law.

Criteria D: At least 110% of the product's total footprint shall be offset ie carbon offsets equivalent to the product's total footprint plus at least 10% shall be purchased annually. Carbon offsets shall be generated by activities outside the boundaries of the product system that reduce or prevent emissions, or remove greenhouse gases.

Criteria E: All carbon offsets shall be purchased from projects that are third-party certified and the offsets shall be third-party verified and retired in an international register.

Criteria F: The carbon footprint calculations, methods and standards used, the organization's goals for emissions reductions and detailed information about the offsetting shall be made publicly available (e.g. via the organizations' website).

Criteria G: All communication about climate positivity shall be correct, transparent and specific e.g. communications shall not give the impression that the company has gone further than it has (e.g. in the number of products that are Climate Positive).

In addition:

- Companies that register products and services on the CLIPOP platform undertake not to lobby against climate-friendly policies or to lobby for the continued use of fossil fuels.
- Companies should also assess whether becoming climate positive may potentially contribute negatively towards any of the Sustainable Development Goals.

MAX comments on the criteria

We hereby attest that we as far as we are aware of live up to CLIPOPs all 2020 criteria for climate positive products.

We do not lobby against climate-friendly policies or lobby for the continued use of fossil fuels. When we can we lobby for the opposite.

We continuously assess whether becoming climate positive may potentially contribute negatively towards any of the Sustainable Development Goals. Some of those goal conflicts must be resolved over time. It is all about our theory of change. Here are three examples:

1. While sugar has a low climate impact (Goal 13 – Climate action) it may also, when overused, be unhealthy (Goal 3 - Good health and wellbeing). Therefore, MAX does not suggest increased amounts of sugar is a good climate solution.
2. While more antibiotics and smaller cages could mean a lower climate impact per animal (Goal 13 – Climate action) it may of course also lead to a human threat when antibiotics resistance increase (Goal 3 - Good health). That is why MAX has strong policies on antibiotics. E.G. We are currently the only national burger chain in Sweden that only serves Swedish beef, bacon and chicken and these have the lowest use of antibiotics in the whole EU.
3. While more planting of trees in the tropics could remove a lot of carbon (Goal 13 – Climate action) it may also lead to land grabbing and increased local inequalities (Goal 10 - Reduced Inequality). That is why MAX has a strong focus on high quality carbon credits with third party verification and strong local benefits. All credits are Plan Vivo certified and there to help fight poverty, erosion and drought.

References

- Angervall och Sonesson, 2011. SR 817. *Förenklad metod för klimat-/GWP-beräkningar av livsmedel. Slutrapport, ver 1.*
- Basset-Mens, C., Van der Werf, H.M.G., 2005. *Scenario-based environmental assessment of farming systems: The case of pig production in France.* Agriculture, Ecosystems and Environment 105, 127-144.
- Beccali et al 2010. *Life cycle assessment of Italian citrus-based products. Sensitivity Analysis and improvement scenarios.* Journal of Environmental Management 91.
- Blengini, GA och Busto, M., 2009. *The life cycle of rice: LCA of alternative agri-food chain management systems in Vercelli (Italy).* J Environ Management, 90(3):1512-22
- Carlsson-Kanyama et al 2006. *Environmental information in the food supply system.* FOI FOI-R--1903—SE
- CDP Cities 2015 *Report City of Oslo.*
- Cederberg et al., 2008. SIK-rapport Nr 777. *Utsläpp av växthusgaser i ett livscykelperspektiv för verksamheten vid livsmedelsföretaget Berte Qvarn.*
- Cederberg et al 2009. SIK Report No 793. *Greenhouse gas emissions from Swedish production of meat, milk and eggs 1990 and 2005.*
- Cederberg et al, 2011. SIK-rapport Nr 830. *Klimatavtryck av ekologiska jordbruksprodukter*
- Davis, Wallman, Sund, Emanuelsson, Cederberg, Sonesson June 2011. SR 828 *Emissions of Greenhouse Gases from Production of Horticultural Products Analysis of 17 products cultivated in Sweden.*
- Defra/DECC (2015). *UK Government conversion factors for greenhouse gas reporting.* Department of Environment Food and Rural Affairs/Department for Energy and Climate Change, London. CO₂ emissions per kWh from electricity generation using gas.
- Defra, 2017 *GOVERNMENT GHG CONVERSION FACTORS FOR COMPANY REPORTING Methodology Paper for Emission Factors - Final Report*
- Doublet et al, 2011. *Life cycle assessment of drinking Darjeeling tea. Conventional and organic Darjeeling.*
- Ecoinvent 3. Ecometrica/IEA/IPCC. Database.
- Emissionfactors.com database. <http://emissionfactors.com>
- Energiföretagen 2017. *Lokala Miljövärden 2016.*
- Energiföretagen, mail Raziyeh Khodayari, 2017-11-24 Energimarknadsinspektionen.
- Energimyndigheten, 2017. *Energistatistik för lokaler 2016 Energy statistics for non-residential premises 2016 ES 2017:5*
- European Residual Mixes 2016. *Results of the calculation of Residual Mixes for purposes of electricity disclosure in Europe for the calendar year 2016.* Association of Issuing Bodies AIB
- Fjernvarme Miljønetværk Hovedstaden, 2015
- Flysjö et al. 2008 SIK 772. *LCA-databas för konventionella fodermedel - miljöpåverkan i samband med produktion*
- Flysjö Anna 2012, *Greenhouse gas emissions in milk and dairy product chains improving the carbon footprint of dairy products*, PhD Thesis, Aarhus University.

Fogelberg SLU, 2008. *På väg mot miljöanpassade kostråd. Vetenskapligt underlag inför miljökonsekvensanalysen av Livsmedelsverkets kostråd.*

GHG Protocol, *IPCC Fifth Assessment Report*, 2014 (AR5) Gröna bilister, 2015. *Drivmedelsfakta 2015.*

IEA, 2017. Statistics. <http://www.iea.org/stats/index.asp>

IPCC, 2006. *Revised IPCC Guidelines for National Greenhouse Gas Inventories: Reference Manual.* Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge.

IPCC *Fourth Assessment report*, 2007 (AR4) IVL Handbok 2011

Kasmaprapruet, S., Paengjuntuek, W., Saikhwon, P. och Phunggrassami, H., 2009. *Life Cycle Assessment of Milled Rice Production: Case Study in Thailand.* European Journal of Scientific Research, Vol.30 No.2, pp.195- 203

Konsumentföreningen Stockholm/SIK 2004. UP 04 12975 *Jämförelse av dricksvatten - översiktlig livscykelanalys (LCA).*

Livsmedelsverket Rapport 19 2011. *Klimatpåverkan i kylkedjan - från livsmedelsindustri till konsument.* Katarina Nilsson, SIK och Ulla Lindberg, SP. LRF 2002. LCA sju livsmedel

MAX Burger AB, 2018. Interna datalämnare samt leverantörer.

Meisterling, K., Samaras, C & Schweizer, V (2009). *Decisions to reduce greenhouse gases from agriculture and product transport: LCA case study of organic and conventional wheat.* Journal of Cleaner Production, 17(2), 222- 230.

Mila i Canals et al 2007. *The role of seasonality in lettuce consumption: a case study of environmental and social aspects.* Int J Life Cycle Assess (2009) 14:381–391

Miljöfordon.se <http://www.miljofordon.se/fordon/miljopaverkan/sa-raknar-vi-miljopaverkan>

Mogensen et al 2015. *Greenhouse gas emissions from beef production systems in Denmark and Sweden.* Livestock Science 174 (2015) 126–143.

Muntligt av producent. Produktion av mineralvatten.

Naturvårdsverket, 2015. *Emissionsfaktorer och värmevärdet växthusgaser och luftföroreningar 2015.*

Naturvårdsverket 2016. Emissionsfaktorer Klimat 2016.

Naturvårdsverket. <https://www.naturvardsverket.se/upload/stod-i-miljoarbetet/vagledning/miljoledning/rev-emissionsfaktorer-for-koldioxidutslapp-o-metadata.pdf>

Nemecek, T., Weiler, K., Plassmann, K., Schnetzer, J., Gaillard, G., Jefferies, D., García-Suárez, T., King, H., Milà i Canals, L. Estimation of the variability in global warming potential of worldwide crop production using a modular extrapolation approach. Journal of Cleaner Production 31, 106- 117.

Network for Transport Measures, NTM, 2018. NTM Calc.

Persson, 2017. Den globala avskogningen. I går, i dag och i morgon. The Swedish University of Agricultural Sciences Department of Forest Products, Uppsala. Report no. 24.

RISE LCA-studie, Livscykelanalys av Oumpf och Beat, 2016. Florén et al.

Roy, P., Ijiri, T., Nei, D., Orikasa, T., Okadome, H., Nakamura, N. och Shiina, T. 2009. Life cycle inventory (LCI) of different forms of rice consumed in households in Japan, Journal of Food Engineering, 91(1) 49-55.

Röös, Mat-klimat-listan 2014

SIK Food production and emissions of GHG. An overview of the climate impact of different product groups.

Sund Veronica, 2009. Environmental assessment of Northeast arctic cod caught by long-lines and Alaska pollock caught by pelagic trawls, SIK 799.

Vattenfall AB. Certified Environmental Product Declaration EPD® of Electricity from Vattenfall's Nordic Wind Farms. UNCPC Code 17, Group 171 – Electrical energy. S-P-00183 2016-02-01

Williams, A.G., Audsley, E. and Sandars, D.L. (2006) Determining the environmental burdens and resource use in the production of agricultural and horticultural commodities. Main Report. Defra Research Project IS0205. Bedford: Cranfield University and Defra.

Williams Adrian, Natural Resources Management Centre, Cranfield University. Environmental Life Cycle Assessment (LCA) of strawberry production.

WWF Sverige (Världsnaturfonden), One Planet Plate: <https://www.wwf.se/mat-och-jordbruk/one-planet-plate/>

AUDITOR'S LIMITED ASSURANCE REPORT ON MAX BURGERS AB'S GREENHOUSE GAS REPORTING

To Max Burgers AB, 556188-7562

Introduction

We have been engaged by Max Burgers AB to perform a limited assurance engagement, as defined by International Standards on Assurance Engagements (ISAE), on MAX climate analysis 2020 (the "Subject Matter").

Responsibilities of the Board and Executive Management

Max Burgers AB's management is responsible for selecting the criteria, and for presenting the Subject Matter in accordance with those criteria, in all material respects. This responsibility includes establishing and maintaining internal controls, maintaining adequate records and making estimates that are relevant to the preparation of the Subject Matter, such that they are free from material misstatement, whether due to fraud or error. In preparation of the Subject Matter, Max Burgers AB applied the Greenhouse Gas Protocol, ISO 14021 and CLIPOP Criteria for products/services 2021 v.1 (hereinafter: Criteria).

Responsibilities of the auditor

Our responsibility is to express a conclusion on the presentation of the Subject Matter based on the evidence we have obtained. Our engagement is limited to historical information presented in this document and does therefore not include future oriented information.

We conducted our engagement in accordance with the *ISAE 3410 Assurance Engagements on Greenhouse Gas Statements*, which require that we obtain limited assurance about whether, in all material respects, the Subject Matter is presented in accordance with the criteria, and that we issue a report. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error.

The audit firm applies ISQC 1 (International Standard on Quality Control) and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We are independent in relation to Max Burgers AB in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our professional ethical responsibility in accordance with these requirements.

A limited assurance engagement is different from and substantially less in scope than a reasonable assurance conducted in accordance with IAASB's Standards on Auditing and other generally accepted auditing standards in Sweden. A limited assurance engagement consists of making enquiries, primarily of persons responsible for preparing the greenhouse gas and health and safety reporting and related information, and applying analytical and other appropriate procedures.

We gained an understanding of the part of the company's internal control that is relevant for our limited assurance to design procedures that are appropriate in the circumstances, but not to express a conclusion on the internal control.

We included the following procedures:

- Conducted interviews with Max Burgers personnel to understand the business and the reporting process
- Conducted interviews with key personnel to understand the process for collecting, collating and reporting the Subject Matter during the reporting period
- Checked that the calculation criteria have been correctly applied in accordance with the methodologies outlined in the criteria
- Undertook analytical review procedures to support the reasonableness of the data
- Tested, on a sample basis, underlying source information to check the accuracy of the data

Our procedures are based on the criteria defined by the Board and Executive Management as described above. We consider these criteria suitable for the preparation of the Subject Matter.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our conclusion below.

Conclusion

Based on the limited assurance procedures performed, nothing has come to our attention that causes us to believe that the greenhouse gas reporting for the financial year ending on 31 December 2020 is not, in all material aspects, prepared in accordance with the specified criteria.

Stockholm 9 June 2021
Ernst & Young AB

Micael Engström
Authorized public accountant

Ingrid Cornander
Specialist, Climate Change
and Sustainability Services