



MAX CLIMATE ANALYSIS 2021

June 2022

Contact information:

Kaj Török, MAX, kaj.torok@max.se
Isabelle Marklund, MAX, isabelle.marklund@max.se

Peter Wrenfelt, U&We, peter.wrenfelt@uandwe.se
Håkan Emilsson, U&We, hakan.emilsson@uandwe.se
Katrín Dahlgren, U&We, katrin.dahlgren@uandwe.se
Christina Wikberger, U&We, christina.wikberger@uandwe.se
Johanna Grant, Zero Mission, johanna.grant@zeromission.se

Content

Summary	3
Introduction	5
Overview	5
MAX Climate targets	6
Participants	7
Method	8
Functional unit	9
The scope of the study	9
Data collection and data quality	9
Boundaries in time	16
Greenhouse gases	16
Land Use Change (LUC)	16
Interpretation of results and limitations	17
Third-party review	17
Results	18
Total climate impact	18
Results per scope and category	24
Max's own operations	26
Climate impact per country	29
Climate impact per restaurant	29
Carbon Offsetting Process	31
Background	31
MAX's carbon offsetting 2021	31
About the Plan Vivo standard	32
Description of the carbon offset process	33
Actors and concepts	33
CLIPOP criteria for Climate Positive	35
CLIPOP Criteria for products/services 2021 v.1	35
Criteria for products 2021	35
MAX comments on the criteria	36
References	38
Auditor's limited assurance report on MAX Burgers AB's greenhouse gas reporting	41

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 2021 total climate impact was approximately 170 thousand tonnes CO₂e for all countries (Sweden, Denmark, Norway, Poland and Egypt). The 2021 assessment shows that 46 percent of the total value chain emissions comes from beef. 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, for instance, the number of restaurants has tripled from 56 in 2007 to 177 restaurants in 2021. More importantly, MAX's Climate impact per krona has decreased by 22 percent from 53g CO₂e per krona in 2013 to 41 in 2021 (table 1 and 2).

Table 1. Climate impact per turnover.

Climate impact per turnover (g CO ₂ e per SEK)	2013	2019	2020	2021	Difference previous year
Sweden	-	39	38	39	1%
Denmark	-	59	40	39	-1%
Norway	-	36	35	35	2%
Poland	-	135	71	84	19%
Egypt	-	442	459	320	-30%
Total	53	41	40	41	2%

During 2021 we increased our emissions per earned krona for the first time in 8 years (+2 %). One reason for this marginal increase in our biggest market Sweden (+1 %), was increase in the

category other foods than beef. In Poland, our second biggest market, emissions per earned krona increased with 19 percent mainly due to increased marketing driven by electricity with high climate impact.

A new and important reduction target is to reduce our climate impact per sold calorie because it relates to how we help society reduce its total emissions - people will eat irrespective if they do it at MAX or not. The climate impact per sold calorie in Sweden was 2.8 g CO₂e per 1000 calories table 2).

Table 2. Turnover, total climate impact and climate impact per krona. Recalculated for 2013 to account for extended scope of the calculation.

	2013	2019	2020	2021	Difference previous year
Turnover (MAX group, million SEK)	1 875	3 847	3 641	4 093	12 %
Total climate impact (thousand tonnes CO ₂ e)	99	158	147	168	15 %
Climate impact per krona (g CO ₂ e per SEK)	53	41	40	41	2 %
Climate impact per sold calorie (g CO ₂ e per 1000 calories), Sweden				2.8	

Remove

Since 2008 we have planted approximately 3.26 million native trees in small-scale systems that remove carbon dioxide as they grow, thus removing it from the atmosphere. Carbon is removed through tree planting by smallholder family farmers in Africa and South America. These programmes also reduce pressure on natural forests, contribute to decreased poverty, increased food security, decreased soil erosion and drought and increase 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 for climate positive products. We also passed this verification in 2021.

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 , 2021 – December 31 st , 2021
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 had approximately 55 million guests during 2021.
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, the 174 of the 177 restaurants in five countries (Sweden, Norway, Denmark, Poland and Egypt) that have been open during 2021, 89 percent of which are directly owned by MAX and the remainder are franchisees. Products sold in retail stores are not included.
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.

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



MAX Climate targets

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 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 and for our claim to have a climate positive menu in accordance with the 2021 [CLIPOP.Org's criteria](#) for climate positive products (illustration 1).

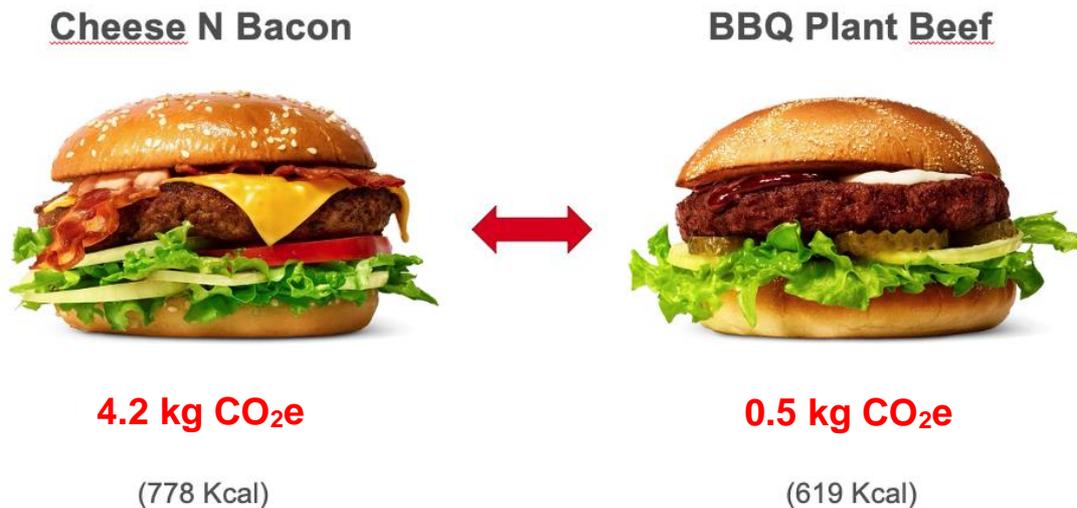


Illustration 1. The comprehensive climate analysis enables MAX to label our menu with a carbon footprint for every product.

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).

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. Our target is also that every other sold meal in 2022 should be without red meat (figure 1). Our short-term reduction targets for 2021 is to keep reducing our carbon footprint per earned krona. Another concrete target for the year 2021 is to live up to the requirements for carbon neutral products in the standard ISO 14021:2017 on environmental claims.

Exactly how performance against this target will be calculated is currently under revision to make it simpler to calculate. However, during 2020 it was estimated to be 2.1 kg CO₂e. That means we need to reduce our climate impact for an average meal with 76 percent to 2050.

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

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.

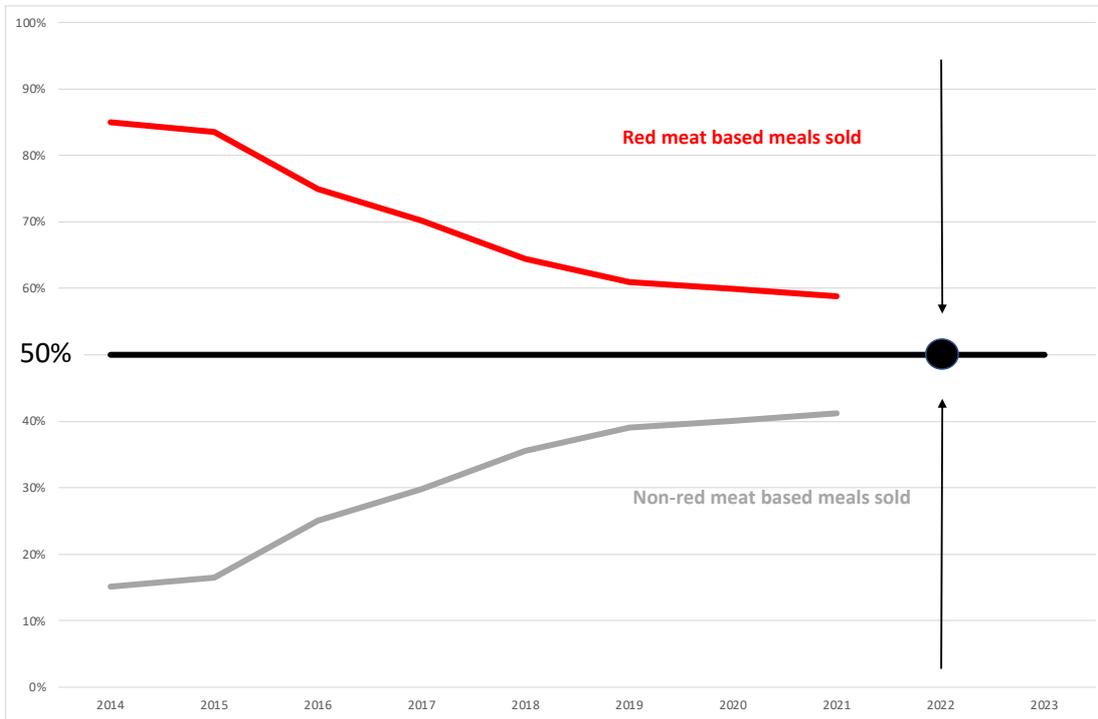


Figure 1. The climate target of Max Burgers is to reduce red meat based meals and reach a sale of 50 per cent non-red meat based meals year 2022.

Participants

From MAX, Isabelle Marklund and Kaj Török have participated, together with further internal data providers for various activity areas. An overwhelming part of our suppliers have responded to questions about their climate related activities, including their inputs and transports.

From U&We, Christina Wikberger, Håkan Emilsson, Katrin Dahlgren, and Peter Wrenfelt have participated.

From ZeroMission, Johanna Grant has contributed with the information on the carbon offset projects.

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 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, 2021. 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 result 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. This year climate impact per delivered calories have also been calculated, a KPI that will be used by Max the coming years.

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

The data collection has been developed since year 2007 in Sweden and after fifteen years is the data quality high and increasing for each year. The data quality in Denmark and Norway is fairly high. The business in Poland is rather new and the data quality was initially poor, but the data development has been fast, and for every year has more and more specific data been collected. For Egypt, there is no working data collection and the basis for the climate emissions is the share of Egypt’s turnover, adjusted for differences in price index, and Egypt’s number of restaurants.

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 3.

Table 3. Description of data used in the analysis.

Activity area	Description
Business travel	Business travel by air, train, company car, employee car, and taxi have been included as well as overnight stays in hotels. Max has an agreement with a travel agency, but most bookings are done by the employees themselves. Information on routes and number of flights have been collected through an internal survey and processed by U&We. In total 217 answers were collected, 60 % from office personnel in Sweden (115), Poland (15), Norway (1) and Denmark (1), 40 % from restaurant personnel (head of restaurants) in Sweden (75), Poland (4), Norway (3) and Denmark (3). The results were extrapolated to cover a total of 327 employees, assuming the same travel pattern for those that have not answered the survey as those answering. Air travel for restaurant



	<p>personnel going for training at Max Academy have also been included with an estimate of travel distance equal to the distance between Luleå and Stockholm. Specific information on mileage, fuel consumption and fuel type, regarding full year for company cars in Sweden have been reported by MAX's leasing company. For Poland an estimate on mileage has been reported. Denmark and Norway do not have any company cars. Emission data from Energimyndigheten (2021) have been used for specific fuels, and Trafikverket (2019) has been used for average car based on mileage.</p> <p>Specific information on reimbursement for use of employee car for business travel has been collected from accounting for Sweden and Norway. Use of employee-owned cars in Denmark, Poland and Egypt have been estimated based on the number of employees and the average travel for employees in Sweden.</p> <p>Business travel with taxi, rental cars, and hotels have been reported based on expenses from accounting for Sweden, Norway, Denmark and Poland, and average prices in different countries. We assume no business travel with rental car, taxi, train or company car, or overnight stays, for personnel in Egypt because there are no office personnel in Egypt (same as last year).</p>
Construction	<p>Detailed material specification on two of Max's typical restaurants (Wingård house 130 "130-hus" and DT72) have been reported by Head of Construction. The information includes substructure, superstructure, internal finishes as well as landscaping. Emissions data on specific materials have been collected from specific Environmental Product Declarations (EPDs). Information on kitchen appliances and furniture have been collected but were excluded due to lack of weights (only number of machines and equipment).</p> <p>The use of material for the typical houses have been extrapolated based on the total floor area for new restaurants in Sweden and Poland, divided by type of house (130-hus, DT72, Instore). The use of construction electricity has also been reported and included.</p>
District heating	<p>District heating has been reported for 61 of the restaurants in Sweden and one restaurant in Norway. For the remaining restaurants in Sweden, Poland, Norway and Denmark, we have assumed them to be heated with district heating, and the consumption has been estimated as an average of the consumption reported by reporting restaurants in Sweden. For Egypt, we assume that heating and cooling are covered by the electricity use. Two restaurants in Sweden have also reported district cooling.</p> <p>For offices there are no available data on heating. An average 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, as well as new restaurants under construction in Sweden, based on electricity meters. Specific information also reported for franchise restaurants in Norway and Sweden. For Max own restaurants in Denmark and franchise in Egypt, the average electricity intensity per restaurant in Sweden has been used.</p> <p>Specific information on electricity use, at Max head office in Luleå. For the office in Stockholm electricity use has been estimated based on floor area and the electricity intensity at the head office in Luleå. Electricity use for Poland has been reported as a total for all sites in Poland, including the office in Poland.</p> <p>Certificates showing that electricity is of renewable origin have been collected</p>

	for all of MAX's own restaurants and franchises in Sweden. Franchise restaurants in Norway do not have specific agreements on renewable electricity, and the climate impact of their electricity usage has been calculated using residual factors. For Egypt, the grid-mix factor was used since there is no market for contractual instruments for electricity in the country.
Gas	Some restaurants use gas. The amount of gas used was collected by Emc2 and reported in kWh. We assume all restaurants in Sweden and Norway that use gas have reported this to Emc2. The amount of gas has been extrapolated from the average use in Sweden per restaurant, for the restaurants in Denmark, Poland and Egypt.
Food	The climate impact of food has been calculated based on grouping ingredients into approximately 60 categories. Data on volumes were 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 were collected through web-based or excel-based surveys to producers and suppliers.
Guest travel	The guests' travels to and from restaurants were surveyed for the 2017 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 2021 no new survey was carried out. The previous results were adjusted based on the increase in turnover.
Guest waste	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 guests interviewed have described to what extent they sort their waste for recycling. 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. For 2021, the emission factors for packaging were updated and the share of sales that are home deliveries or take-away were adjusted as well.
Home delivery	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.
Inbound transports	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.
Marketing	Data on marketing on social media, TV commercials, and outdoor lighted signs were reported by MAX's suppliers. 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.
Nutritional value	Data on nutritional value have been collected for most products sold during 2021, and the total delivered energy content have been calculated by Max.
Office equipment	Purchase of computers and electronics for office employees in Sweden and Norway were included. Information on models and brands have been used to match the actual purchases with emission data from the actual suppliers. When the specific supplier does not have information on carbon footprint, emission data from competitors have been used instead, with an extra margin. This is motivated by the assumption that the most proactive suppliers more often are the ones who are also transparent with the products climate footprint, and therefore the ones that are not transparent tend to have a higher footprint.

Company KPI's	Data on turnover, number of restaurants and number of employees were reported by HQ, per country. This also includes a list of new restaurants opened during the year.
Packaging and consumables	Packaging and consumables were reported by producers and 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 consumer packaging used in restaurants, consumables for the restaurants such as toilet paper, gloves, bin bags etcetera, and packaging for the products delivered to MAX. For this year's assessment the emission factors for different materials have been reviewed and updated, and the number of different materials included expanded for improved precision. The primary sources of emission factors for materials are BEIS (2021) and Ecoinvent 3.8.
Pension provisions	MAX's economy department provided information on total pension provisions invested during the year and information on which investment funds provisions were placed in. The climate impact is calculated based on the pension provisions made during 2021 (previous year the impact was calculated based on the accumulated pension provisions during many years). The potential climate impact of investments was analysed based on average climate impact of funds from the asset manager where the majority of MAX's portfolio is invested.
Refrigerants	Volume of refilled and drained refrigerants and type was collected from the supplier. Max changed supplier the 1st of April. According to head of administration the previous supplier was instructed to report volumes and types refilled and drained to the new supplier, so the full year is still covered by the calculation.
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 2021 no new survey was performed the previous results were adjusted for the number of employees for the actual year.
Waste	Supplier's reported volumes of waste collected from 120 Swedish restaurants and four Norwegian restaurants, except for sorted waste for incineration reported for 43 Swedish restaurants and four Norwegian restaurants. The remaining restaurants' waste volumes was estimated based on an average volume of waste per restaurant in Sweden, and the number of restaurants that have not reported waste volumes in the different countries. In Sweden incineration plants for unsorted waste use energy recovery, and there is an agreement by VMK (2022) that the emissions from energy recovery of waste should be accounted for by the supplier of energy. This follows from an LCA-perspective where the life cycle emissions of recycling is cut-off from the product climate footprint and accounted for in the next product's life cycle. In Norway or the other countries, we are not aware of any sector-specific agreement on the accounting of emissions from recycling (rather the opposite, as energy suppliers with district heating in Norway argue that the emissions from incineration of waste should be accounted for by the waste collector and the company creating the waste). Therefore, we assign incineration in Sweden with an emission value of zero, while for the other countries we account for the emissions from incineration of the waste, as if the heat was not recovered. For the coming years MAX needs to get more information on how the waste is treated in the specific countries and how the emissions are accounted for by

	the energy companies that potentially make use of the recovered energy. Transports of waste were added based on assumptions of an average transport distance.
--	---

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.

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 2021, 174 restaurants have been open at some point during the year (Table 4 and 5). Some of the restaurants in Egypt were only open part of the year. During the year eight new restaurants opened in Sweden, and four in Poland. The calculations take this into account, which is reflected in the number of full year-equivalents that can be compared to the number of restaurants open any time during the year (Table 4).

Table 4. Restaurants in 2021.

Country	Turnover (million SEK)	N° of employees (incl. franchise)	N° of open restaurant (year equivalent)	N° of open restaurant	N° of restaurant (incl. temp. closed)
Sweden	3 736	3 069	136	140	142
Denmark	60	47	4	4	4
Norway	140	90	6	6	7
Poland	143	273	11	14	14
Egypt	11	100	10	10	10
Total	4 093	3 578	167	174	177

Table 5. The number of restaurants open at the end of 2021, divided on franchise, and owned by Max. Observe that Max also has an agreement with three more restaurants (franchise) that have been temporarily closed during the year.

Country	Owned by Max	Franchise	Total
Sweden	135	5	140
Denmark	4	0	4
Norway	5	1	6
Poland	14	0	14
Egypt	0	10	10
Total	158	16	174

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 suppliers¹. 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.

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 and databases, 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 (table 6). Some activities are not included in the calculations as they are not motivated (table 7).

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 in the PCR Basic Module for Accommodation, food and beverage services. The GHG Protocol's corporate standard is another reference.

The main system boundaries used are set as described in the figure (figure 2). 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.

¹ Suppliers in this case refers to distributors, and producers are the companies that manufacture products and/or supply them to the distributors.

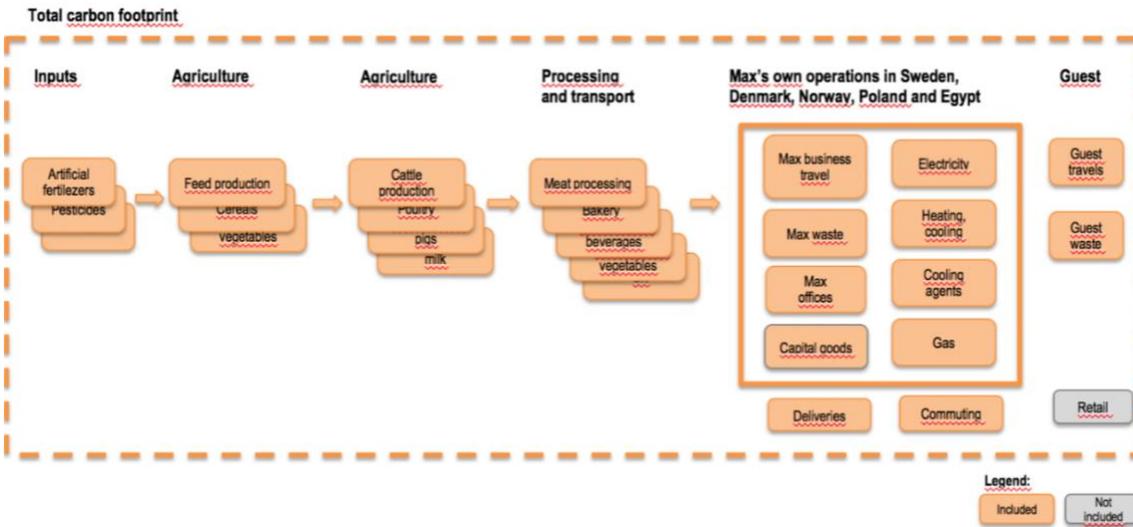


Figure 2. General system description.

Table 6. Emissions in Scope 1,2 and 3.

Scope	Definition	Emission sources/activities included
1	Direct GHG emissions from vehicles/premises	Natural gas for heating and/or cooking in restaurants. Refrigerant gases and leased vehicles.
2	Indirect emissions from purchased heating and electricity from premises	Production of purchased electricity, cooling, heating for restaurants and offices.
3 up-stream	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. Empl yee commuting	Employee commuting on buses, car and rail, to and from work.
	8. Upstream leased assets	Leased restaurants and offices.
3 down-stream	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

Table 7. Activities 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 are released during a short time span. Food is in most cases fresh, chilled 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)

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.

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 in the section Results and Greenhouse gases.

Guests' travels influence results significantly. A difficult part of the assessment is to determine what proportion of these travels 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) was 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 is 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

Total climate impact

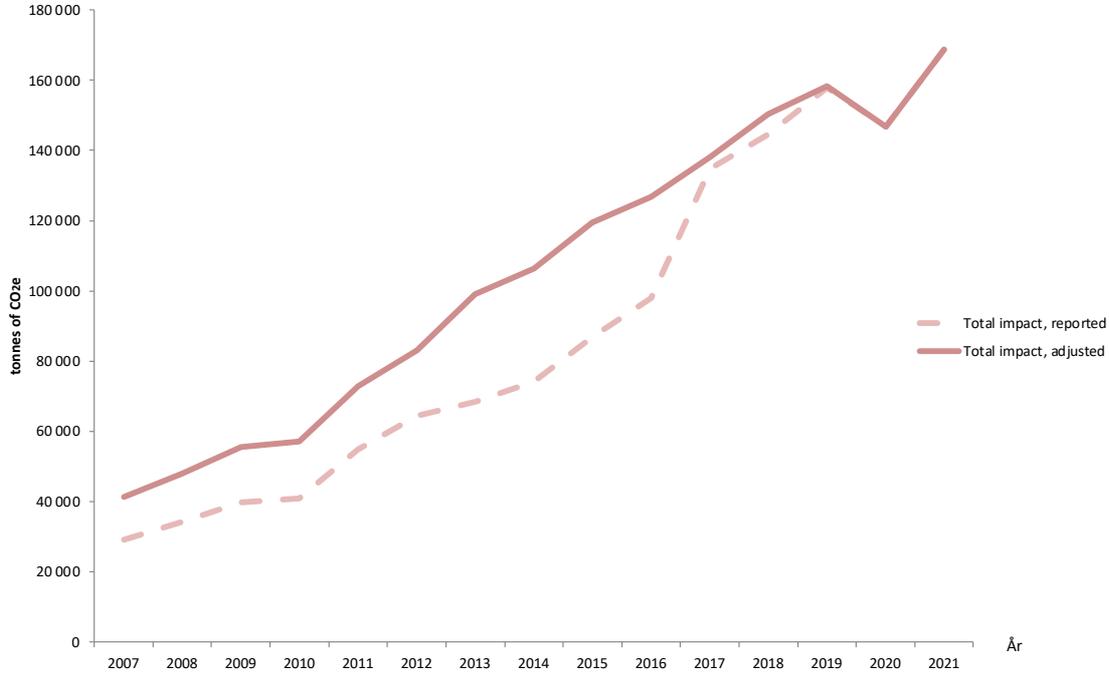


Figure 3. MAX's total climate footprint from a lifecycle perspective.

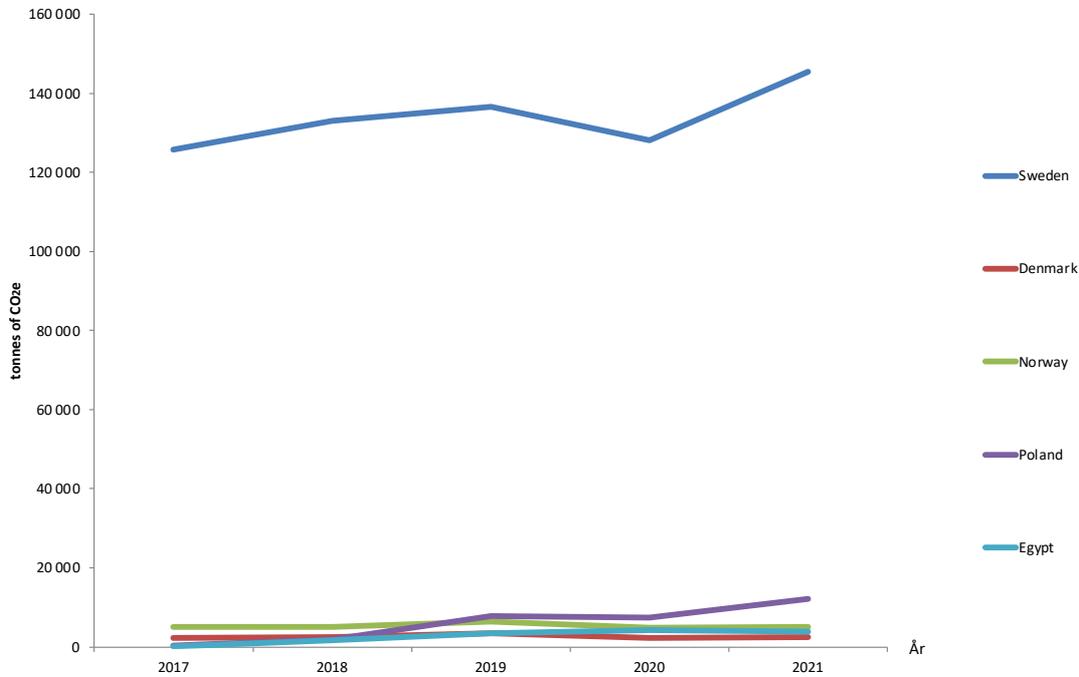


Figure 4. MAX's climate footprint from a lifecycle perspective, divided by country.



MAX total climate impact (tonnes CO₂e)¹ increased between 2007 and 2021, primarily due to a significant increase in operational growth (figure 3 and 4). Restaurants have more than tripled, from 56 to 177 restaurants. In 2021, total climate impact was 168 432 tonnes CO₂e for all countries (Sweden, Denmark, Norway, Polen and Egypt). Turnover increased in 2021 by 12 percent compared to the previous year, and total climate impact increased by 15 percent (table 8). Compared with year 2019, before the covid pandemic, turnover increased in 2021 by 6 percent, and total climate impact increased by 7 percent.

In figure 5 is the climate impact per country and category described. Sweden is dominating the carbon emissions due to a very extensive business.

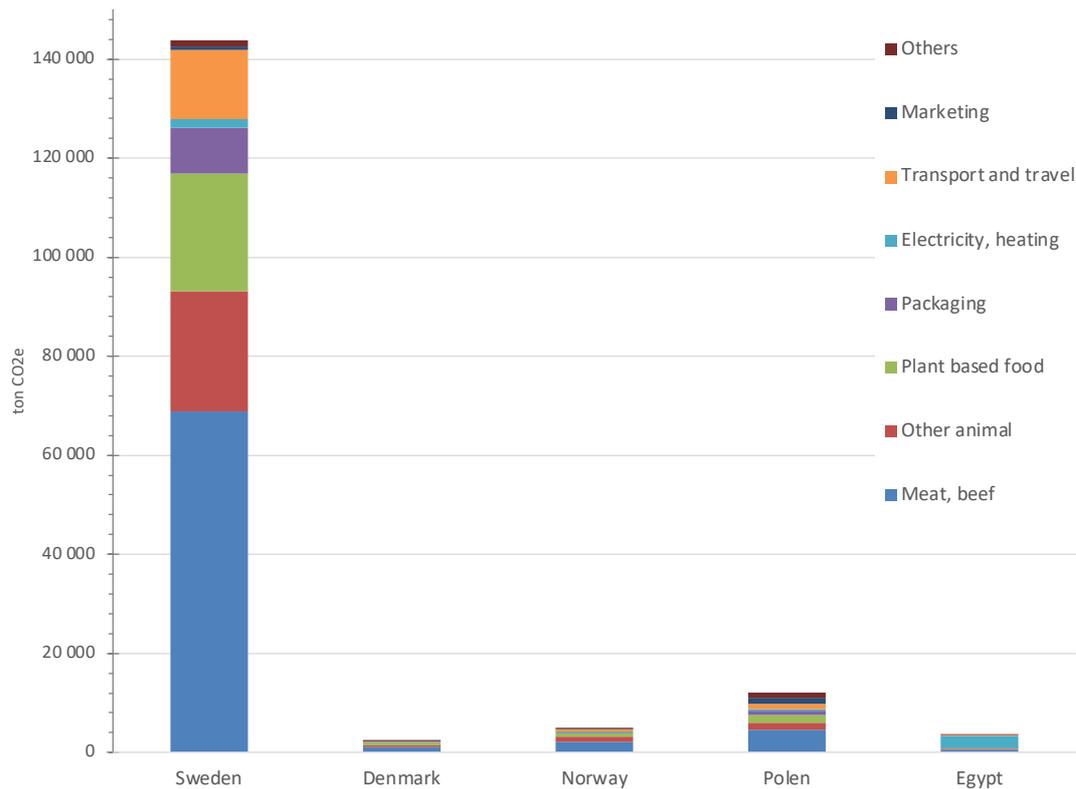


Figure 5. The relative contribution from different categories to the total climate footprint for Sweden, Denmark, Norway, Polen and Egypt.

Data for 2021 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.

Other foods have increased more than beef has decreased in carbon footprint gram per krona (figure 6).

The carbon footprint per krona for marketing has increased due to more marketing activities in Poland. The electricity in media used for marketing comes from fossil-based electricity. (figure 6).

¹ 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.



Supplied weight of non-food items (packaging and other consumables) has increased by 19 percent between 2020 and 2021, while average climate impact per tonne goods has decreased by 3 percent. This is primarily an effect of updated emission factors, and an increased number of emission factors and their resulting precision. While shifts in the composition of materials supplied has made a modest contribution to resulting emissions reductions per tonne material, if any, it is still pleasing to see that volumes of renewable PE as a liner in paper cups has increased from just over one tonne in 2020 to nearly 39 tonnes in 2021, and bagasse has doubled in volume to close to 25 tonnes.

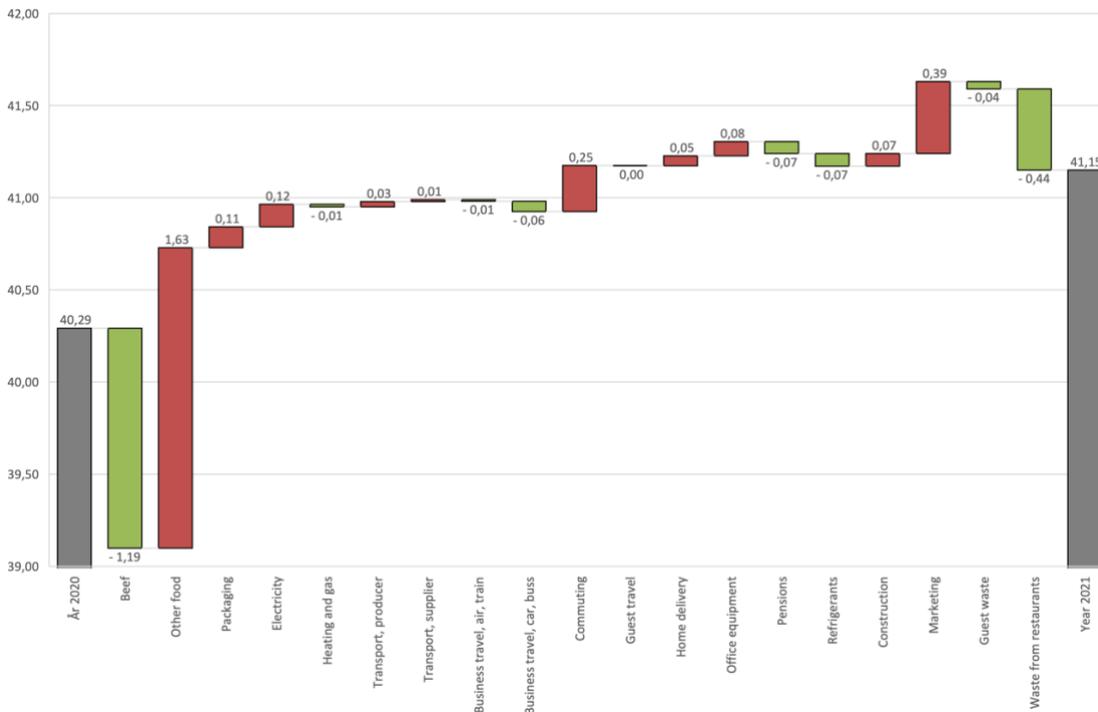


Figure 6. The difference in impact per category from 2020 to 2021(carbon footprint g CO₂e per SEK).

Over the years our absolute emissions have increased as guests and number of restaurants have increased. Our emissions per Swedish krona (SEK) increased by approximately 2 percent compared to previous year (figure 7 and table 11). There is no increase in Sweden, and this almost also applies to Norway and Denmark. The increase is primarily driven by increased sales in Poland and Egypt, where emissions per SEK is significantly higher than in Sweden, due to energy characteristics and production conditions for key raw materials, and likely also currency effects. Another factor for the turn out for Poland is more and improved data, which is a natural development for new, inexperienced businesses. Finally, is the emission factor for beef production much higher in Poland. Since 2013, climate impact has been decoupled from turnover (figure 8).

A new and important reduction target is to reduce our climate impact per sold calorie because it relates to how we help society reduce its total emissions - people will eat irrespective if they do it at MAX or not. The climate impact per sold calorie in Sweden was 2.8 g CO₂e per 1000 calories (table 11).



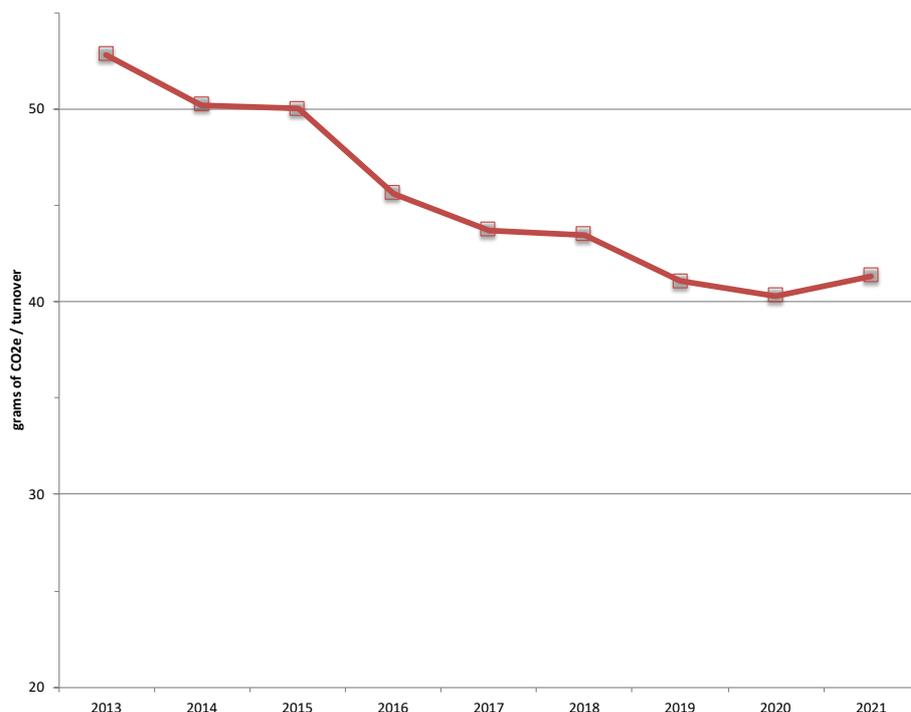


Figure 7. MAX's Climate impact in gram CO₂e from farm to fork and back again, per SEK between 2013 and 2021.

Table 8. Turnover (MSEK). Recalculated for 2013 to account for extended scope of the calculation.

Turnover (MSEK)					Difference previous year
	2013	2019	2020	2021	
Sweden	1 800	3 541	3 334	3 737	12 %
Denmark	20	59	57	61	7 %
Norway	54	181	138	141	2 %
Poland	-	58	103	143	39 %
Egypt	-	8	9	11	24 %
Total	1 875	3 847	3 641	4 093	12 %



Table 9. Climate impact (thousand tonnes of CO₂e). Recalculated for 2013 to account for extended scope of the calculation.

Climate impact (thousand tonnes of CO ₂ e)	2013	2019	2020	2021	Difference previous year
Sweden	-	137	128	145	13%
Denmark	-	3	2	2	6%
Norway	-	6	5	5	4%
Poland	-	8	7	12	66%
Egypt	-	3	4	4	10%
Total	99	158	147	168	15%

Table 10. Climate impact per turnover (g CO₂e per SEK). Recalculated for 2013 to account for extended scope of the calculation.

Climate impact per turnover (g CO ₂ e per SEK)	2013	2019	2020	2021	Difference previous year
Sweden	-	39	38	39	1%
Denmark	-	59	40	39	-1%
Norway	-	36	35	35	2%
Poland	-	135	71	84	19%
Egypt	-	442	459	320	-30%
Total	53	41	40	41	2%

Table 11. Turnover, total climate impact and climate impact per krona. Recalculated for 2013 to account for extended scope of the calculation.

	2013	2019	2020	2021	Difference previous year
Turnover (MAX group, million SEK)	1 875	3 847	3 641	4 093	12 %
Total climate impact (thousand tonnes of CO ₂ e)	99	158	147	168	15 %
Climate impact per krona (g CO ₂ e per SEK)	53	41	40	41	2 %
Climate impact per sold calorie (g CO ₂ e per 1000 calories), Sweden				2.8	

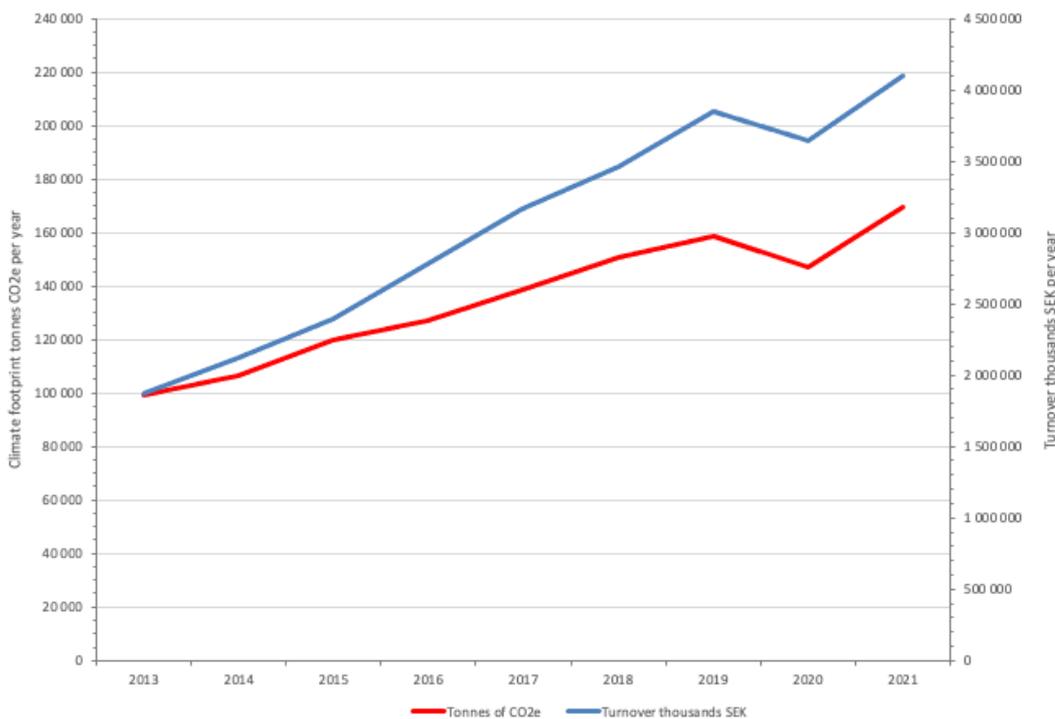


Figure 8. Decoupling of climate impact and economic growth. MAX’s climate impact (tonnes CO₂e) in relation to MAX’s turnover (thousand SEK) year 2013 - 2021. The decoupling is still a fact for Sweden, and also Norway and Denmark, but there is no decoupling in Poland or Egypt.

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 46 percent of total climate impact is from beef production which is one percent more than the previous year (figure 9).

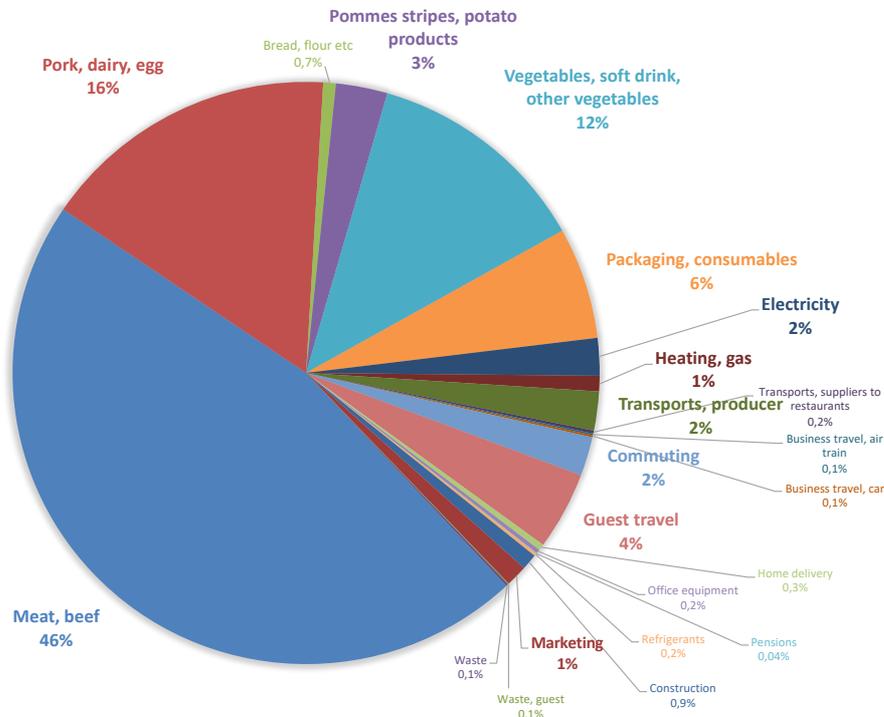


Figure 9. MAX’s climate impact for the entire lifecycle, distributed on different ingredients and activities for 2021 (tonnes CO_{2e}).

Results per scope and category

Scope 2 emissions were calculated based on the market-based method (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 6 853 tonnes CO_{2e} in the location-based reference scenario (1 152 tonnes CO_{2e} 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. The footprint is dominated by emissions in Scope 3 (table 12 and figure 10).



Table 12. MAX's climate impact per scope and categories (tonnes CO₂e).

Total climate impact per scope and category (tCO ₂ e)		2013 ⁷	2020	2021
1	Direct GHG emissions from vehicles and facilities under MAX's control		603	358
2	GHG emissions from consumption of electricity and district heating in buildings under MAX's control (market-based method)		1 084	1 152
2	GHG emissions from consumption of electricity and district heating in buildings under MAX's control (location-based method)		5 329	6 853
3	Other indirect emissions			
	Purchasing of goods and services		125 813	145 595
	Capital goods		1 070	1 575
	Activities related to fuel and energy production, not included in scope 1 or 2.		961	1 122
	Transport and distribution (upstream)		3 340	3 920
	Waste generated in operations		1 756	179
	Business travel		406	293
	Staff commuting		2 324	3 625
	Leased assets (upstream)		-	0
	Transport and distribution (downstream)		6 851	7 906
	Processing of sold products		-	0
	Use of sold products		-	0
	End of life of sold products		227	94
	Leased assets (downstream)		-	0
	Franchising		1 961	2 602
	Investments		301	69
	S:A (within all scope)		146 696	168 491
	Out of scope		12	-59
	Total (based on market-based method)	98 876	146 708	168 432

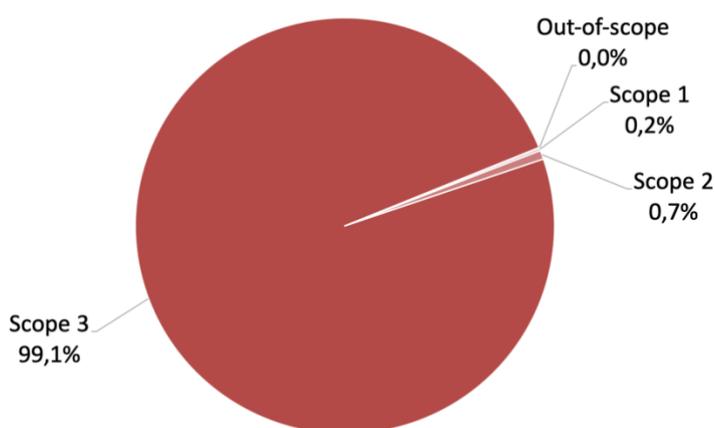


Figure 10. MAX's climate impact per scope 1, 2 and 3 for 2021 (tonnes CO₂e).

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.



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) and 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 0.03 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 greenhouse gases, 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.

Max's own operations

Climate impact from MAX's own operations was 10 240 tonnes of CO₂e in 2021, which amounts to 6 percent of total climate impact (figure 11).

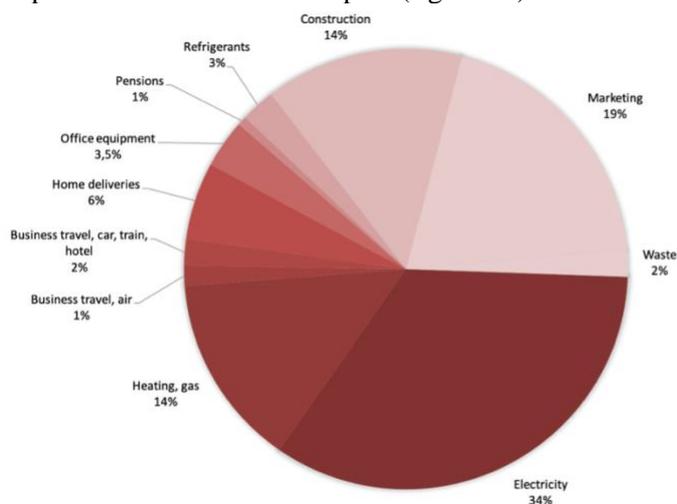


Figure 11. MAX's climate impact from "own" operations, such as electricity, heating, cooling, refrigerants and business travel 2021 (tonnes CO₂e).



The heating for restaurants is mostly district heating. The share of the climate impact that comes from electricity, for the different countries, was 69 percent for Egypt and approximately 1 percent for Sweden, Poland, Norway and Denmark. This is because the operations in Sweden (including franchise), Norway, Poland, and Denmark run on renewable electricity. Only restaurants in Egypt and franchisees in Norway have not explicitly sourced renewable electricity, and therefore have a significantly higher footprint per kWh used.

Climate impact from electricity per restaurant is shown in tonnes of CO₂e per restaurant (figure 12). Climate impact from electricity use (market-based method) in a life cycle perspective, including emissions of carbon dioxide from biogenic sources, amounts to approximately 3 504 tonnes CO₂e, with MAX’s own restaurants representing 981 tonnes CO₂e.

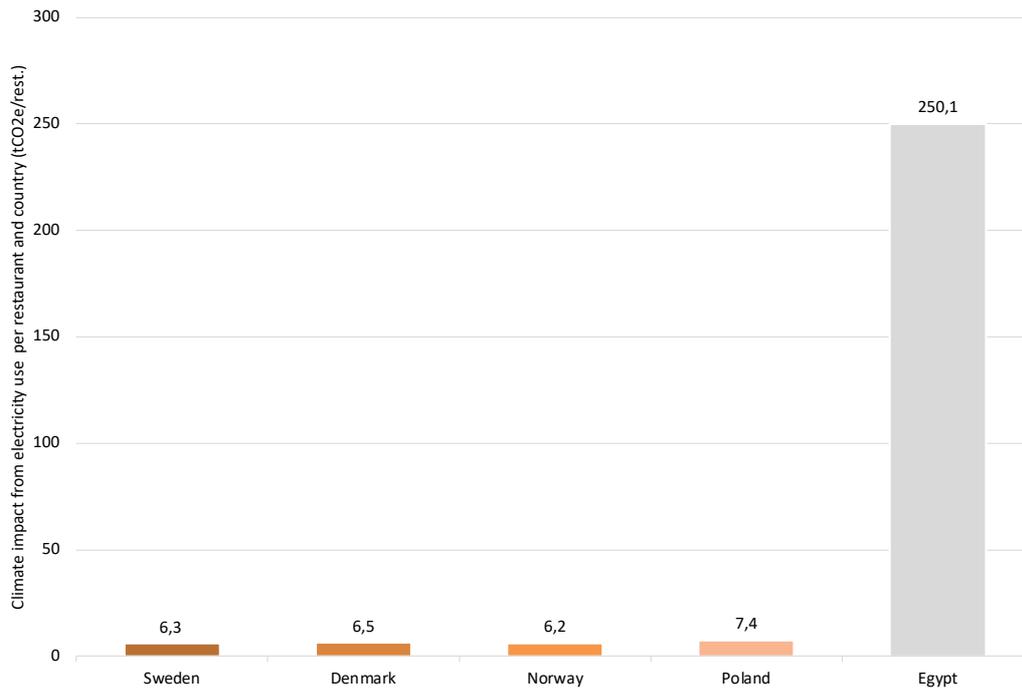


Figure 12. Climate impact from electricity use per restaurant and country 2021 (tonnes CO₂e per restaurant).

Business travel’s share of climate impact has increased in 2021 mainly due to better reach of air travel survey internally in the organisation (better data quality). Business travel in 2020 was exceptionally low due to the pandemic. Business travel makes up 0.2 percent of total emissions and three percent of impact from own operations. Air travel was responsible for 44 percent of climate impact from business travel (figure 13).



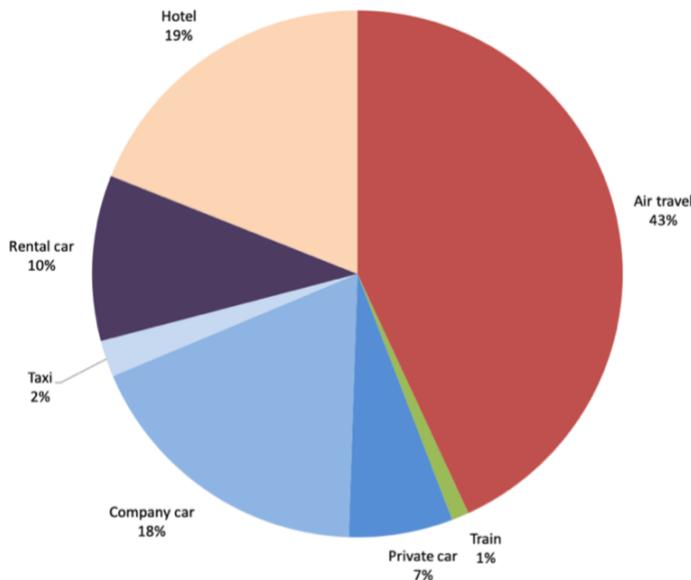


Figure 13. Climate impact from business travel 2021 per travel mode (tonnes CO₂e).

Waste handling is relatively low, just under 2 percent of MAX’s impact from own operations. The methodology for calculation of waste handling has been updated, leading to a significant decrease in the emissions from waste. There is a sector-wide agreement in Sweden to allocate emissions from energy recovery to the recycled product's life cycle (heat and electricity) by VMK (2022), so emissions from incineration of waste with energy recovery in Sweden will not burden MAX’s climate footprint (see also section Data Quality, Waste). The relative distribution of waste handling is one-third to incineration and two-thirds to material recovery (Figure 14). This is similar to the previous year.

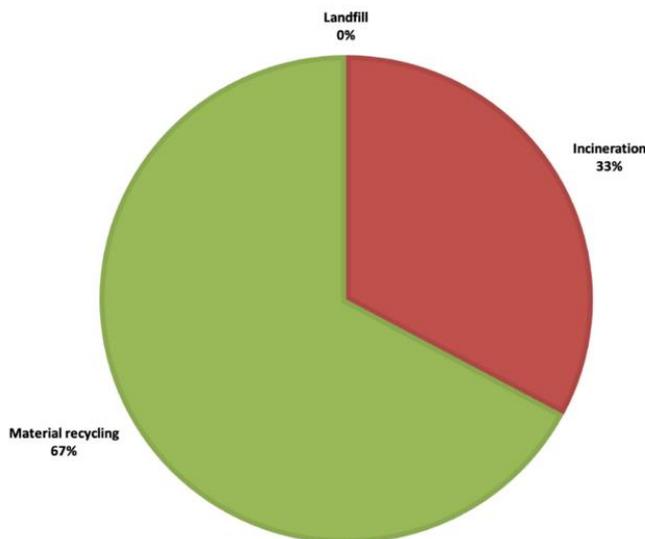


Figure 14. Waste handling at MAX restaurants in Sweden in 2021 (tonnes handled).

MAX’s home deliveries were 0.3 percent of the total footprint, and 6 percent of the emissions from own operations. There is a higher share of deliveries with cars and mopeds than bikes this year, compared to last year. In Sweden 92 percent of deliveries were done by vehicles that mainly

run on fossil fuels (cars and mopeds) and 8 percent by bike. In Norway 26 percent are delivered by vehicles that mainly run on fossil fuels and 74 percent by bike and foot. In Poland 62 percent of deliveries were done by vehicles that mainly run on fossil fuels (cars and mopeds) and 38 percent by bike.

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 2021, as 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 15).

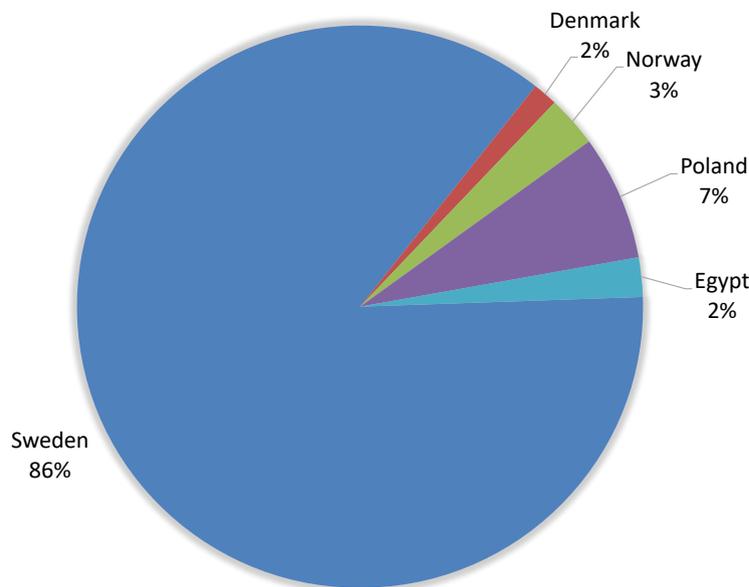


Figure 15. Distribution of emissions on all countries 2021 (tonnes CO₂e).

Climate impact per restaurant

Some other restaurant chains in the world report impact per restaurant. Max climate impact during 2021 was 963 tCO₂e per restaurant. Sales increased more than the number of restaurants increased, which explains the positive trend (figure 16).

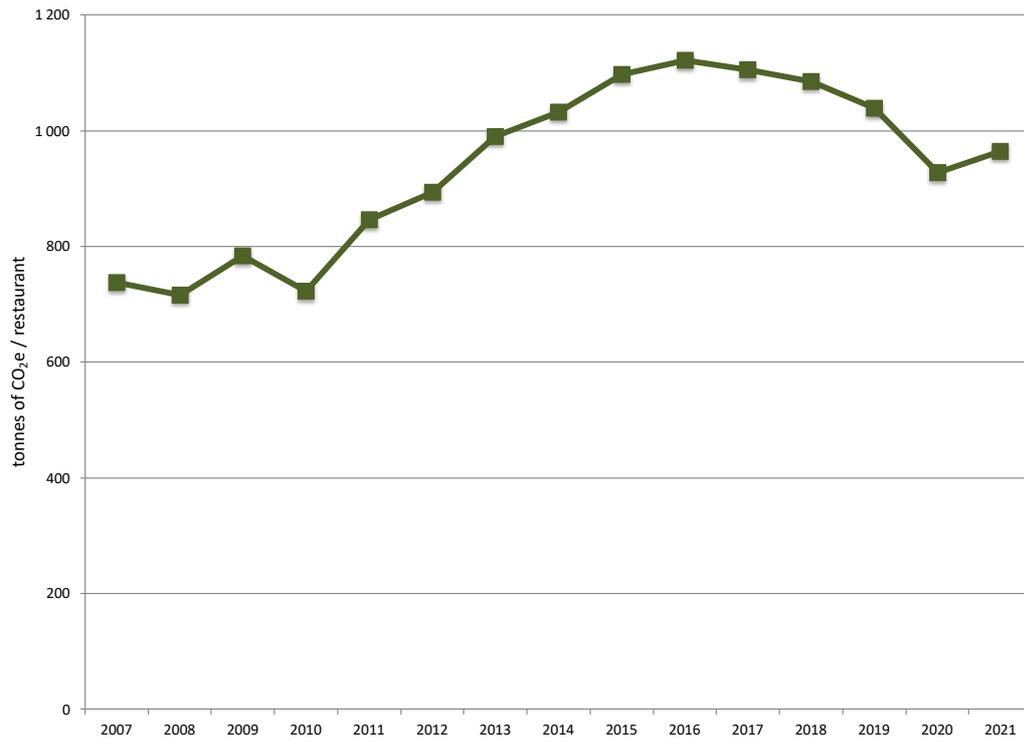


Figure 16. MAX's climate impact in tonnes of CO₂e from farm to table per restaurant for 2007 - 2021.



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 2021

This report refers to MAX's carbon offsetting for the 2021 financial year, which consisted of purchase of 182 346 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'e* ("the tree that grows") in Mexico and *CommuniTree Carbon Programme* in Nicaragua. All projects work in partnership with local smallholder farmers and communities who plant native tree species on their farms, providing them a variety of benefits, in accordance with the Plan Vivo standard.

Figure 17 shows how the carbon offsets have been distributed per cost center and per project in 2021.

MAX purchase in Trees for Global Benefits, Uganda 2021

Year	Cost center	Project	tCO ₂ e	ZM Cert.No.	Invoice number	Order number
2021	Max Burgers AB	Uganda	87 969	ZM202053	71096	542
2021	Max Norway AS	Uganda	3 426	ZM202054	71097	543
2021	Max Poland Sp. Zo.o	Uganda	4 896	ZM202055	71098	544
2021	We Love Burgers AS	Uganda	2 176	ZM202056	71099	545

MAX purchase in Scolel Te, Mexico 2021

Year	Cost center	Project	tCO ₂ e	ZM Cert.No.	Invoice number	Order number
2021	Max Burgers AB	Mexiko	35 839	ZM202057	71096	546
2021	Max Norway AS	Mexiko	1 396	ZM202058	71097	547
2021	Max Poland Sp. Zo.o	Mexiko	1 995	ZM202059	71098	548
2021	We Love Burgers AS	Mexiko	887	ZM202060	71099	549

MAX purchase in CommuniTree Carbon Programme, Nicaragua 2021

Year	Cost center	Project	tCO ₂ e	ZM Cert.No.	Invoice number	Order number
2021	MAX Burgers AB	Nicaragua	43 763	ZM201967	70955	456

Figure 17. 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 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/>

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

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 2021 CLIPOP criteria for climate positive products which where:

CLIPOP Criteria for products/services 2021 v.1

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/organization 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 2021

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 recognised 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 (eg to 2050) for emissions reductions in line with the Paris Agreement eg 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 (eg via the organization's website).

Criteria G: All communication about climate positivity shall be correct, transparent and specific ie communications shall not give the impression that the company has gone further than it has (eg 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 shall 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. *Förenklad metod för klimat-/GWP-beräkningar av livsmedel. Slutrapport, ver 1*. SR 817.

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.

BEIS 2021, UK Government GHG Conversion Factors for Company Reporting. Conversion-factors-2021-full-set-advanced-users.xlsx

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*.

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

Energimyndigheten (2021) *Drivmedel 2020*. Rapport 2021:29.

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

Ita-Nagy et al 2020. *Life cycle assessment of bagasse fiber reinforced biocomposites.* Science of the Total Environment 720 (2020).

Kasmaprapruet, S., Paengjuntuek, W., Saikhwan, 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).*

Lam et al 2021. *Estimating greenhouse gas emissions from direct land use change due to crop production in multiple countries.* Science of the Total Environment 755 (2021).

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

MAX Burgers AB, 2021. 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.

Milà 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.

Morão, Ana and de Bie, François 2019. *Life Cycle Impact Assessment of Polylactic Acid (PLA) Produced from Sugarcane in Thailand.* Journal of Polymers and the Environment (2019) 27:2523–2539

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

Naturvårdsverket 2016. Emissionsfaktorer Klimat 2016.

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

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.

Nilsson 2009. *Klimatpåverkan från primärförpackningar för olika livsmedelsgrupper. Underlag till klimatcertifiering 2009:1.*

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 (2016) 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 (2014) Mat-klimat-listan

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.

Trafikverket (2019) Bilaga 6 Emissionsfaktorer, bränsleförbrukning och trafikarbete i: Handbok för vägtrafikens luftföroreningar.

Tonini et al 2021. *Carbon footprint of plastic from biomass and recycled feedstock: methodological insights*. *The International Journal of Life Cycle Assessment* (2021) 26:221–237

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

VMK, Värmemarknadskommittén (2021) Överenskommelse i värmemarknadskommittén 2021

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 the Group's scope 1, 2 and 3 greenhouse gas emissions presented in the report 'MAX Climate Analysis 2021' (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 A Corporate Accounting and Reporting Standard, including amendments Scope 2 Guidance and Corporate Value Chain (Scope 3), ISO 14021 Environmental labels and declarations, and CLIPOP Criteria for products/services 2021 v.1 that provides criteria for climate positive products in accordance with ISO 14021 (hereinafter: Criteria). In Max climate analysis 2021, the Criteria are described in in the 'Method' chapter and at pages 37-39.

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 Group's scope 1, 2 and 3 greenhouse gas emissions presented in the report 'MAX Climate Analysis 2021' for the financial year ending on 31 December 2021 is not, in all material aspects, prepared in accordance with the specified criteria.

Stockholm 10 June 2022
Ernst & Young AB

Micael Engström
Authorized public accountant

Outi Alestalo
Specialist member in FAR