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Drivers and barriers of successful climate commitment development in the fast-food industry

The case of MAX Burgers

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Abstract

Despite the fast food industry's significant contribution to climate change, climate action plans are not common practice. Furthermore, there is a lack of academic works devoted to researching climate change issues within the fast-food industry. This thesis project examined the Swedish fast food chain MAX Burgers' involvement with climate responsibility. By applying an internal and external influences framework, this thesis analysed drivers and barriers regarding the development of MAX's climate commitment work. The thesis drew on empirical data from "grey literature" and seven in-depth interviews with MAX Burgers' former and current top management representatives and the company's external consultants on carbon footprint assessment and carbon compensating schemes. The findings suggested that MAX Burgers encountered eight key tipping point-events in its development that influenced and shaped its leadership position that pushes for carbon-reduction in the fast-food industry. Based on the narrative of MAX Burgers' climate responsibility development, the analysed drivers emerging from within the organisation, particularly top management and ethical motives, proved to be the strongest push toward the carbon-reducing initiatives. The external influences, such as the regulatory influence, served as both driving and challenging forces. The lack of clarity in Swedish tax regulations related to carbon offsetting costs challenged MAX Burgers and resulted in a four-year court case. However, driven by the poor governance in combination with the ethical motives "to be a role model" in the market, the fast-food chain contributed to the industry by enabling incentives for spending on voluntary carbon offsetting projects. Other external influences emerging from suppliers, the public, and technological advancements were found to challenge MAX's climate commitment development. Public concerns and criticism raised by Swedish researchers and other stakeholders have steadily been overcome, responded to, and endured by the fast-food chain. The company's transparency and consistent communications on their climate responsibility work gain the trust of their customers and the Swedish nation overall. For other fast-food chains in Sweden, it might be easier to implement the same carbon neutral and positive approach because MAX has already paid its share to change the tax regulations and pushed the market to comply with climate action plan requirements. For policymakers, research implies that there should be a separation between leaders and followers. Therefore, policymakers could create incentives based on the scale of efforts in a climate action plan.

Keywords: fast-food industry, business sustainability, climate action plan, climate responsibility

Executive summary

The impact of food systems on the climate is immense and is estimated to be responsible for between 19-29% of all anthropogenic greenhouse gases (Poore & Nemecek, 2018). This amount accounts for about 9,8–16,9 billion tonnes of CO2e (Vermeulen et al., 2012) and is the third biggest GHG contributor after the transportation and energy sectors (IPCC, 2014; Röös, et al., 2014). The world's economies with their complex systems including governments, industries, and institutions, are urged to transition to low carbon models as fast as possible to keep the global mean temperature rise below 1.5°C relative to pre-industrial levels as recommended by the Intergovernmental Panel on Climate Change (IPCC) in 2018 (IPCC, 2019b).

The Swedish agriculture sector has been estimated to account for a bit more than 13% of national GHG emissions, or 6,79 million tonnes of CO2e in 2018 (Statistics Sweden, 2019). However, eating activities alone were found to be responsible for nearly 19 million tonnes of CO2e (SEPA, 2008). The demand-side of the food sector, for example changing lifestyles and diets to low carbon options, challenge the implementation of carbon mitigation measures (IPCC, 2014). The food production and supply chain represented by suppliers, retailers, and restaurants bears responsibility for climate change mitigation mainly via voluntary, collective actions, activities, and partnerships with other businesses (Brennan & Owende, 2010; Chou, et al., 2016; Gadema & Oglethorpe, 2011; Hutchinson et al., 2012; Pinard et al., 2014b).

However, research and recent media updates show that the fast-food sector's environmental agenda is far from ambitious. The industry either does not include requirements for carbon footprint reduction or fails to develop the realization of claimed carbon reduction targets (Hutchinson, Singh, & Walker, 2012). Instead, the industry drags public and investor attention toward other aspects of environmental performance such as decreasing use of plastic, food waste and water consumption (Hutchinson et al., 2012; Shokri et al., 2014). Academic literature has given very little attention to addressing the fast-food industry's potential to develop GHG emissions reduction plans.

Aim and research questions

This thesis was devoted to the fast-food industry's potential to develop a climate commitment path. This thesis focused on the Swedish fast-food restaurant chain MAX Burgers (MAX). Founded in 1968 in Sweden, MAX is a domestic family-owned fast-food chain with around 153 restaurants, approximately 6,000 employees worldwide, and a turnover of 330 million euro (MAX Burgers, 2018b). The fast-food chain has been committed to corporate climate action since 2008 and today is a leader in corporate climate action initiatives.

This research aims to explore the successful example of MAX Burgers and analyze drivers and barriers in developing a climate commitment path. The following research question was formulated to achieve the research objective:

> *RQ: How did MAX Burgers become a leader in the fast-food industry in developing a climate action plan?*

Research design, materials and methods

Thi qualitative research is a single case-study that allows developing a holistic, in-depth understanding (Eisenhardt, 1989; R. K. Yin, 2014) of the successful example of the Swedish fast-food chain MAX Burgers in developing climate commitment.

Informed by the research design, the thesis was approached with a qualitative research method (Creswell, 2007) and followed a mixed research approach (Blaikie & Priest, 2019). To address the thesis problem, the author explored the gap in previous research regarding other food

industry companies' practises in environmental sustainability. Then, the author analyzed the reasons and obstacles for the adoption of the environmental sustainability plan as there is a lack of studies on climate action plan development in the context of fast-food restaurants. Therefore, taking an abductive approach, the researcher assumed that investigated and analyzed motivations and challenges to environmental sustainability apply to the context of the adoption of carbon reduction strategies. Informed by the available theory, the author developed an analytical framework (chapter 2.5) that suggests distinguishing among four internal and seven external areas of influence (figure 2-1). The designed framework assisted the structure of the analysis of drivers and barriers during MAX's climate action plan development.

The thesis case study research primarily relied on two data sources for empirical data collection: semi-structured interviews conducted via the video conferencing software Zoom and document analysis of "grey literature." MAX's operations commenced in 1968 but its early climate commitment action efforts began in the early 2000s. Therefore, the research embraces the period of climate development starting from the 2000s to c.2020. Empirical qualitative data that was collected from the interviews focused on the respondents who worked for MAX Burgers during the last 20 years. As such, target interviewees included key individuals who were directly involved in MAX's climate action plan development. Respondents included former and current employees responsible for corporate sustainability, marketing, communications, and public relations, and operations and external specialists who assisted MAX Burgers with its carbon reduction plan. Thus, seven in-depth semi-structured interviews (appendix 3) were conducted with participants selected via expert sampling with following criteria:

i. The respondent had a relevant and robust knowledge of MAX's climate commitment history.
ii. The respondent has or had some level of influence on the decision-making processes for MAX Burgers.
iii. The respondent currently works or worked with/for MAX Burgers within the last 20 years.

The empirical data as retrieved from grey literature (table 3-1) was chosen on following the mentioned time frame criteria. The target materials were selected based on their relevance to the concepts related to the company's environmental sustainability, sustainable value chain, product development, carbon labelling, climate reduction strategies, carbon footprint assessment, carbon offsetting, climate neutrality, carbon neutrality, and climate positive business.

Main findings

Research showed that MAX worked to slowly but steadily improve the company's carbon emission work and that the company now advocates for beyond 100% climate neutrality. It has been 12 years of the climate development work for the fast-food chain. MAX has become corporate climate activists within its industry and promotes its carbon positivity, indicating GHG compensation of 10% more of what the fast-food chain already emits. Several critical moments had to be overcome as reported in the thesis (chapter 4 and table below). Climate action plan development is not a steady and smooth path but rather a continuous "roller coaster" ride experience where the company had to overcome stages of failures and difficulties (stages III, V, VI, VII in the table below or chapters 4.3, 4.5, 4.6, 4.7). The eight tipping-point events that were identified in the development process of climate action path by MAX Burgers are depicted in the table below.

Table. MAX's climate development path depicted in the timeline.

1999-2006	I. Precursors of MAX's climate work: maturity, crisis, and time for changes
	- Restaurant business growth and change of management - Leadership gap and change in culture - Communications and gaining trust
2007-2008	II. The start of MAX's climate commitment work
	- MAX's owners' initiative - Establishing partnerships with sustainability consultants - Sustainability strategy formation
2007-2009	III. Carbon analysis and the launch of the carbon labelled menu
	- Carbon footprint analysis - Acknowledgement of supply chain significance in carbon assessment - The lack of customer awareness prevented acceptance of carbon labeled menu. - Limited communications and others telling MAX's story
2008-2020	IV. Time of climate commitment development strategy: reduction of carbon emissions
	- The competitive and financial advantage - Carbon-reducing activities
2009-2016	V. Climate impact reduction: failure of falafel burger and success of Green Family menu
2008-2018	VI. Climate neutrality and carbon offsetting projects' critique
2014-2018	VII. Court case: the battle for making voluntary carbon offsetting costs tax-deductible for Swedish businesses
2018-2020	VIII. Climate positivity and call for joining MAX's path

Source: Author's findings

- The time component was found to be crucial in the research about the fast-food chain's leadership in climate action. From the beginning, MAX was committed to long-lasting climate responsibility. The company's growth, a gain of trust from the public, and solving leadership gaps by changing the company's culture were vital parts of the first efforts for initiating climate action plan. All growth occurred in the context of the company's core values. A clear position on the market and the importance of standing for it proved necessary for achieving the leadership especially when MAX started encountering external barriers emerging first from customers and suppliers and then from academia and regulatory bodies. The company's willingness to engage with these long-term processes, as depicted in table 6-1, to which MAX has committed enormous attention and resources continuously contribute to improvement and have had positive outcomes.
- Areas of influence such as ethical motives, competitiveness, and other external influences were found to constantly drive MAX's climate action plan development. Meanwhile, influences emerging from suppliers, the public, and technological advancements challenged MAX's climate commitment development. However, the areas that were found to both drive and challenge the fast-food chain in climate responsibility were the top management, employees, budget, regulatory influence, and customers.
- MAX relied on its core values and mission "to do the right things for the climate." MAX actively responds to criticism, whether it is raised by academia (chapters 4-6) or the media. Moreover, multistakeholder considerations or willingness to collaborate with research institutions, as mentioned in the literature, served as critical factors in developing corporate climate action (Chou et al., 2012). For example, MAX worked with researchers and several institutions to develop sustainable beef production (R6). MAX organizes stakeholder dialogues to build a basis for decision making for a particular climate-related initiative (Conrad & Thompson, 2013). Thus, as mentioned by all the respondents, the company's principles that emerged from its drivers of ethical considerations and core values such as transparency, sharing knowledge, and proactive communications with customers and the public are critical success factors for MAX's path in climate work development.
- The strongest driver for MAX's climate action development emerged from within the organization, particularly its owners who are also members of the company's board and top

management. It is important that MAX is privately owned, and the owners were willing to be a climate-committed company. The owners made the decisions, and they were aware of all the challenging dynamics the business had to overcome.

- Moreover, existing literature does not distinguish between privately or family-owned businesses and other types of business ownership. This has not been a focus of those researchers. However, this thesis indicates that ownership could be important distinguisher because long-term commitment often requires steady ownership. This implies for the research field that long-term commitment to something (such as climate responsibility) that does not immediately give economic benefits needs ownership that is on board and agrees with this. This research implies that there is a risk with publicly traded companies that have to report quarterly earnings to their shareholders and that there is not enough long-term commitment to climate responsibility.
- The methodological approach to answering the research question started by analysing the tipping point-events that influenced MAX's climate action development. The developmental narrative approach served as the basis for the analysis of drivers and barriers emerging from internal and external influences. This approach also helped identify and classify the drivers and barriers that belong to a particular timeline, simplifying the application of the analytical framework. Moreover, the methodology's clarity in the identification of drivers and barriers might be considered as the advantage of the chosen approach and is recommended for research of organizational changes in sustainability.

Implications for non-academic audiences

The aspect of time is important. For managers, it is important to understand that setting long-term goals and long-term visions are crucial aspects of climate commitment. For other fast-food chains in Sweden, it might be easier to implement the same carbon neutral and positive approach because MAX has already paved the way by changing the tax regulations and pushing the market to develop climate work. Thus, they could also learn from a local competitor like MAX Burgers. For policymakers, this research implies that there should be a separation between leaders and followers. It is assumed some companies internally set up to lead and others are set up to follow. Therefore, policymakers could create incentives based on the scale of efforts in a climate action plan. Moreover, policymakers should help create new demand for products and services of more sustainable and climate-oriented organizations.

Recommendations for future research

The thesis aimed to explore the leadership of a fast-food chain in the process of climate commitment via narrating the developmental process of climate action implementation and analysing of internal and externally emerged drivers and barriers. This thesis project could be complemented with a comparative study with more cases selected to provide broader contexts. Potential research also includes considerations of various hierarchy levels of participants, different geographical locations of MAX (for example, Norway, Poland, Denmark), and, perhaps, a broader range of internal and external stakeholders such as suppliers and line managers. Moreover, this research could be followed with quantitative research that could provide more information on the perceived significance of drivers and barriers by a broader range of interview sampling. Additionally, as it has been discussed earlier, the importance of ownership should be investigated for a company's commitment and engagement with issues such as climate action plans.

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Abbreviations

CDM – Clean Development Mechanisms

CERs – Certified Emission Reduction units

CO2e – Carbon dioxide equivalents

EU ETS – European Union Emission Trading Scheme

GHG – Greenhouse gas

IPCC – Intergovernmental Panel on Climate Change

LCA – Life cycle assessment

MAX – MAX Burgers

SBMI – Sustainable business model innovation

TFGB – Trees for Global Benefit

UNFCCC – United Nations Framework Convention on Climate Change

UNEP – United Nations Environment Programme

1 Introduction

1.1 Food systems and climate change

A substantial body of research is devoted to the connection between food and climate change; most of this research has been explored from two angles. In one way, the literature views climate change as an impact on food systems. Therefore, the topic of food security is one of the most discussed concerns that analyses the effects on crop yields, the availability and accessibility of food, and the vulnerability of the food supply chain system (FAO, 2016; IPCC, 2019b; Lake et al., 2012; MacMahon et al., 2015; Myers et al., 2017). Another direction studies the impacts of the intensified production and consumption of food on the climate. Increase of production and consumption is primarily driven by rapid human population growth (IPCC, 2019a; World Bank, 2008). Moreover, according to Smith (2013), world production and consumption volumes will increase fourfold by 2030 due to the rise of a consuming middle class (Kharas, 2010). Changes in consumption habits (Pathak et al., 2010), shifts in dietary lifestyles (Stehfest et al., 2009), effects caused by urbanisation on the food system, and income distributions (Gill et al., 2010; Godfray et al., 2010; Harvey & Pilgrim, 2011; Jianyi et al., 2015; Lal, 2016) all substantially drive food production dynamics.

Food systems are the third most significant contributor to climate change after the transport and energy sectors (IPCC, 2014; Röös, Sundberg, & Hansson, 2014). Research suggests that food systems contribute between 19% and 29% of global human-induced greenhouse gas (GHG) emissions; in carbon dioxide equivalents (CO2e), these emissions account for 9,8–16,9 billion tonnes of CO2e (Vermeulen et al., 2012). Researchers estimated that in 2018, food contributed 13.6 billion tonnes of carbon dioxide equivalents, which accounted for 26% (figure 1-1) of that year's total global GHG emissions. The GHG sources in food systems (figure 1-1) vary and include land use (24%), crop production (27%), livestock and fisheries (31%), and supply chains (18%) (Ritchie, 2019).

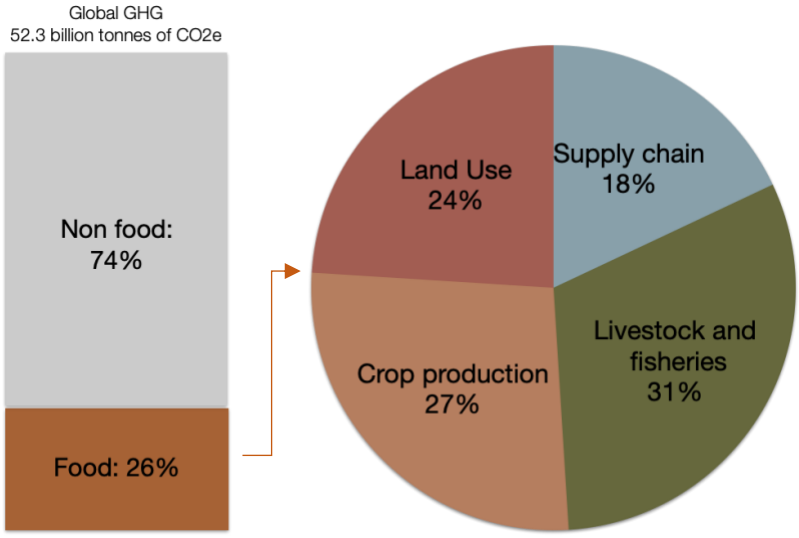

Figure 1-1. Global greenhouse gas emissions from food systems.

Source: Based on data provided by Poore & Nemecek (2018).

Each of the four sources of food emissions (figure 1-1) represents a variety of activities where GHGs occur. The emissions directly accountable to the animal food industry are estimated to

account for 60% of food emissions. The direct GHG sources in animal food include cattle digestion or enteric fermentation in animals, manure management, pasture management, crops for animal feed, land-use change, cultivated organic soils, and Savannah burnings. The 60% figure does not account for emissions generated from activities such as transportation, packaging, retail, and food processing (Poore & Nemecek, 2018; Ritchie, 2019; Röös et al., 2014).

It is evident that human-caused activities, including food systems, represent substantial damage to the climate. However, the global scientific society has asserted that a transition to a low carbon global society may solve the issues arising from climate change. The adoption of the Kyoto Protocol in 1997 was an essential step in resolving global warming issues. However, Protocol's rules do not apply to the business sector, but rather to national states (Chu & Schroeder, 2010). In addition, in 2018, the Intergovernmental Panel on Climate Change (IPCC) urged the world, including governments, industries, and institutions, to transition to low carbon models as quickly as possible to keep the global mean temperature rise below 1.5°C relative to pre-industrial levels (IPCC, 2019b).

Scientists estimated that in 2018, Sweden's agriculture sector accounted for just over 13% of national GHG emissions, or 6,79 million tonnes of CO2e (Statistics Sweden, 2019). However, eating activities were found to be responsible for nearly 19 million tonnes of CO2e (SEPA, 2008). Therefore, the sector has both a significant potential and necessity to advance low carbon transitions. However, this challenge involves a high-level complexities due to slow policy coordination and implementation challenges caused by governance issues (IPCC, 2014). In various degrees, the food supply industry, which is represented by suppliers, retailers, and restaurants, is active in carbon emissions mitigation activities mainly via collective actions and partnerships with other businesses (Chouet et al., 2012; Hutchinson et al., 2012; Pinard et al., 2014a). However, consumption components or the demand-side of the food sector (changing lifestyles, diets to low-carbon options) make it challenging to implement carbon mitigation measures (IPCC, 2014). It also drives the food supply industry to seek ways to reduce carbon emissions via voluntary initiatives and leadership (Brennan & Owende, 2010; Gadema & Oglethorpe, 2011).

To conclude, businesses in the food industry must take responsibility for contributing to climate change solutions. Food businesses have previously made individual efforts in implementing carbon reduction initiatives but certainly lack guidance, means and clear understanding on the ways of its achievements (Shokri et al., 2014). By advancing the available knowledge on the development and adoption of climate mitigation measures in the food industry, businesses will be able to implement low-carbon transition plans sooner.

1.2 Problematisation

Fast food has become an integral part of today's busy culture as it provides cheap food that is quickly served and meets the tastes of various customers. Fast food restaurants are also often conveniently located in both highly populated urban areas and their outskirts. Thus, the accessibility of fast food makes it even more preferable for a broad category of consumers in comparison to sit-down restaurants (Chou et al., 2012; FAO, 2018; Garza et al., 2016; Krishna & Somavarapu, 2017). With a global rise in population, especially among the middle- and low-income classes, the fast-food market is predicted to grow and reach 691 billion USD globally in 2022 (Zion Market Research, 2018). Besides, increased opportunities to eat out and increased passions for socialising are also drivers of consumer choices for fast food options (Chou et al., 2012; Garza et al., 2016; Krishna et al., 2017). Meanwhile, in the last few decades, the global scientific society has widely debated negative impacts linked to the fast-food industry, including

animal welfare, healthy diets, and environmental protection (Pinard et al., 2014a; Revell & Blackburn, 2007b; Vu et al., 2017). Such debates consequently raise people's awareness of negative impacts of the fast-food industry and enables them to make more conscious food choices (Campbell-Arvai et al., 2014; de Boer et al., 2007). As such, consumer purchasing behaviours have gradually shifted toward sustainable products and services (Jang et al., 2011; Perramon et al., 2014).

The fast-food industry has contributed to issues of deforestation, food waste, and plastic pollution (West, 2019) and has a tremendous carbon footprint (Busby, 2019; McGrath, 2019; Scott, 2019). The fast-food industry intensely depends on animal agriculture and dairy products, sectors that emit the highest portion of global GHG emissions alongside the transport and energy sectors. However, the fast-food industry has predominantly failed to account for carbon emissions reductions in its environmental agenda (Andersen et al., 2014; Busby, 2019; McGrath, 2019; Peters et al., 2010; Röös et al., 2014; Scott, 2019; Thornton et al., 2009). As a response, sometime in the early 21st century many food companies gradually started implementing environmental initiatives to get access to new market segments and achieve a competitive advantage (Han et al., 2011; Kincaid et al., 2010; Kleemann & Murphy-Bokern, 2014).

Following this trend, in January 2019, 80 large investors urged fast-food chain giants like McDonald's, Restaurant Brands International (who owns Tim Hortons, Burger King, and Popeyes), Yum Brands (which represents KFC, PizzaHut, Taco Bell, WingStreet, and The Habit Burger Grill) and Starbucks to develop carbon reduction plans (Busby, 2019; McGrath, 2019; Scott, 2019). As outlined by Hutchinson et al. (2012), recent research and media updates have shown that the environmental agenda of the fast-food sector is far from being ambitious. Fast-food businesses either do not include requirements for carbon footprint reduction or fail to develop the realisation of carbon reduction targets (Hutchinson et al., 2012). The fast-food industry drags public and investor attention about its environmental performance toward other aspects such as decreasing plastic, food waste, and water consumption (Hutchinson et al., 2012; Shokri et al., 2014). In other words, almost no efforts have been made so far by the global fast-food sector to reduce its carbon emissions (Chou et al., 2012; Folk, 2018; Hutchinson et al., 2012; Shokri et al., 2014). According to a literature review conducted by the researcher, academic literature gives little attention to addressing the fast-food industry's potential to develop a GHG emissions reduction plan. As such, this thesis explored the growing evidence on climate change issues linked to the fast-food industry via an analysis of its drivers and barriers.

The case of MAX Burgers. This thesis focuses on the case of the Swedish fast-food restaurant chain MAX Burgers (MAX). Founded in 1968 in Sweden, MAX is a domestic family-owned fast-food chain with 153 restaurants, approximately 6,000 worldwide employees, and a turnover of 330 million euros (MAX Burgers, 2018b). The company has been committed to corporate climate action since 2008 when MAX attempted to assess the total GHG emissions of its food production from farm to table. Then, the company followed by carbon labelling the menu, continuously reducing carbon emissions, and practicing 100% carbon offsetting. Ten years later, MAX went beyond its carbon neutrality by launching a new concept of a carbon positive business. Under the carbon positivity plan, the company indicated a GHG compensation commitment of 10% beyond what the company already emits. Today, the company advocates for climate reduction importance in the fast-food industry and beyond by urging other businesses to become climate positive. MAX Burgers is the only fast-food chain in the world that compensates its GHG emissions more than it emits (Piccard, 2019; Sustainable Brands, 2018; UNFCCC, 2019). The company has been the subject of academic research, especially in the field of corporate social sustainability management (Grebe et al., 2013), sustainable communications (Ohlsson & Riihimäki, 2015), effects of carbon labelling menu (Babakhani et al., 2020), social sustainability (Bohman et al., 2013), and transformative business sustainability

(Wagner & Svensson, 2014). As MAX also urges other businesses to join their carbon mitigation path, it puts extra efforts to be as transparent and open as possible. Such a position enabled the accessibility of the company's representatives for this research project.

1.3 Aim and research questions

This research aimed to explore the successful example of MAX Burgers and map drivers and barriers for businesses in the food industry and beyond in developing climate commitment paths. The Swedish self-declared "carbon positive" fast-food chain MAX Burgers served as a case study to achieve this objective. The following research question was formulated to guide the research objective:

RQ: How did MAX Burgers become a leader in the fast-food industry in developing a climate action plan?

1.4 Scope and limitations

This thesis is a single case study based on the Swedish fast-food chain MAX Burgers' development of a carbon reduction commitment. Thus, the focal attention of the research was an analysis of the key events, policy changes, management decisions, and other details that have assisted MAX Burgers' development from being a traditional fast-food company with no climate action plan to becoming a leader focused on carbon reduction responsibility.

As the central research question of this study sought to understand the company's carbon emission reduction commitment, the focus of the empirical research was the motivations and drivers for the company as well as the challenges and barriers experienced while developing the MAX Burgers climate action plan.

MAX Burgers first initiated its climate action efforts in the early 2000s. Therefore, the research embraced the period of climate development from the early 2000s to 2020.

The empirical qualitative data included data collected via interviews with respondents who worked for MAX Burgers during the last 20 years. As such, target interviewees included the key individuals that were directly involved in the development of MAX Burgers climate action plan. Interviewees included former and current employees responsible for corporate sustainability, marketing, communications, public relations, and operations. Other interviewees included external specialists who assisted in the development of the MAX Burgers' carbon reduction plan. Seven in-depth semi-structured interviews were conducted with participants selected via expert sampling with the following criteria:

i. The respondent had relevant and robust knowledge of MAX's climate commitment history.
ii. The respondent had some level of influence on decision-making processes for MAX Burgers.
iii. The respondent currently works for or worked with MAX Burgers within the last 20 years.

Appendix 3 provides a list of interviewees and descriptions of the background profiles of each respondent. The empirical data that was retrieved from grey literature have also been chosen on following the mentioned time frame criteria. The target materials were selected on the basis of their relevance to the concepts related to the company's environmental sustainability, sustainable value chain, product development, carbon labelling, climate reduction strategies, carbon footprint assessment, carbon offsetting, climate neutrality, carbon neutrality, and climate positive business.

Regarding delimitations, the thesis only covered the Swedish context and focused on a particular time, meaning that memory or documentation of events in the past might be deficient. The thesis research lacked the contribution of MAX Burgers' head chef and product developer, which may have provided insight into the area of low carbon food supply for the MAX Green Family menu. Furthermore, the data could be analysed by several researchers to reduce the researcher's bias.

1.5 Audience

The research conducted for this thesis potentially has several audience groups.

Firstly, as the Mistra Sustainable Consumption research programme inspired the thesis topic, the organisation may be interested in the thesis as it implicitly facilitated the research project.

Secondly, the findings and results may be essential for researchers conducting studies on low carbon transitions and the management of businesses that centralise their operations on transitions to carbon emission reductions. Also, the thesis might be interesting for researchers whose interests include topics of food supply, consumption governance, carbon reduction strategies, and organisational change management.

Thirdly, the results of the thesis may serve as a set example for businesses considering adopting strategies to reduce carbon emissions as it represents a big challenge for a wide variety of companies of different sectors and sizes. Moreover, the thesis also showcases a successful case of a growing company while retaining its environmental sustainability credentials in reducing its climate footprint. Therefore, it would be a valuable source for those companies challenged with meeting their sustainability goals due to continuous growth.

Additionally, the thesis results may also interest policymakers as they face challenges in decision making regarding achieving the carbon reduction goals set by various global and national public documents and agreements. The thesis may serve as a practical example for policymakers on how to encourage businesses to step in a path of achieving their climate goals without compromising business interests.

Certainly, MAX Burgers itself may be interested in this research as the company will learn about its climate commitment path from a developmental and influential perspective. This perspective will allow for a better understanding of how this climate commitment has come about and, thus, will potentially guide future decisions on climate-related activities.

Finally, a full range of professionals including sustainability experts, consultants, analysts, and specialists could also benefit from thesis research as it showcases the practical experience of a company's changes to becoming a low carbon fast-food company.

1.6 Ethical considerations

Honesty and personal integrity. This thesis is a project inspired by the Mistra Sustainable Consumption research programme. However, the research received no research funds. As such, the thesis author only followed the guidance of research directions delivered by the thesis supervisor. The supervisor, in turn, directly interacted with the Mistra Sustainable Consumption, and the thesis author had no direct interaction with the organisation. Additionally, the thesis author ensured that apart from the thesis supervisor, no outside parties were able to influence the analysis and conclusions.

Ethical responsibilities to the subjects of research, such as consent, confidentiality, and courtesy. The respondents' participation in the thesis research was entirely voluntary. All respondents who participated in the study consented to disclose their names in the thesis as well as citing their perceptional contributions to the research. All the participants agreed on having their names disclosed in the study. However, for space-saving purposes and reader-friendly representation of the thesis results, the author used shortened versions of references in the text by citing the interviewees as the "respondent N" where N is the assigned letter to a respondent based on the order of interviews.

Ethics regarding the outcomes of the research. The thesis author assures that none of the results or conclusions have the intention to harm the reputation, dignity, or privacy of MAX Burgers and its employees.

Handling, storing, and/or making data records available. The thesis does not include sensitive data provided by any of the respondents. Interview transcripts and recordings are stored on HappyScribe's servers under an agreement that guarantees accordance with the General Data Protection Regulation.

Research design has been reviewed against the criteria for research requiring an ethics board review at Lund University and has been found not to require a statement from the ethics committee.

1.7 Disposition

Chapter 1 introduces the background of the thesis and states the problem addressed in the study. The content then presents the aim, intended research questions to be answered by the end of the research, and its scope and delimitations. It also provides a thesis outline, describes the potential audience, and discusses the ethical considerations of research.

Chapter 2 presents an analysis of relevant academic literature and outlines the main gaps in the topic's research field. It also presents an analytical framework applied to the data analysis.

Chapter 3 presents the research design, the nature of materials used for research, and methods chosen for answering the research questions and processing and analysing the data.

Chapter 4 delivers the main findings and results of the study narrating the key events that served as tipping points for MAX Burgers' climate action development path. Findings were retrieved from empirical data such as participant interviews and a "grey literature" content analysis.

Chapter 5 provides an analysis of the drivers and barriers based on the narrative provided in chapter 4 and structured in accordance with the analytical framework as outlined in chapter 2.

Chapter 6 provides a critical discussion of the results. It also presents a reflection on the approached thesis methodology for answering the research question.

Chapter 7 briefly concludes the main ideas made during the research, provides an explanation of the importance of the insights derived, and finally outlines areas for future research.

2 Literature review

This chapter aims to identify the previous research regarding the topics of business sustainability, environmental responsibility and strategies, and practices in food and fast-food industries as well as literature that seeks to explore the barriers and drivers of businesses to commit to climate impact reduction responsibility. In the end, the chapter suggests an analytical framework for identifying drivers and barriers to climate responsibility development.

2.1 Business sustainability

The business sector has been recognised as an essential contributor in the move to a more sustainable future. Since the 20th century, society has been gradually realising its responsibility toward the environment as human-caused impacts have been found to drive climate change and global warming and lead to other environmental damages such as loss of habitat and biodiversity (Hutchinson et al., 2012). Impacts from unsustainable practices of industries and businesses are immense and include air pollution, plastic pollution, food waste, and deforestation as well as exploitative working practices (Long et al., 2018). As the awareness for the need for sustainability is growing, many companies are beginning to acknowledge the interconnectedness of corporate success with meeting commitments to the economy, society, and especially the environment (Raworth, 2017; Rockström et al., 2009).

No single overarching understanding of business or corporate sustainability has been established to guide companies to define sustainability management within their operations. Yet, there are various approaches toward business sustainability due to the diversity of business types, sizes, supplied products, and services. Thus, every business's consideration of sustainability varies.

The very first mentioning of sustainability and the most widely accepted definition of sustainability has been given in the Brundtland Report prepared by the United Nations in 1987 which referred to it as "the development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland, 1987; Hitchcock & Willard, 2009). This definition served as an orientation to business sustainability. The Institute for Sustainability has a slightly different definition of business sustainability that suggests a company's improvements in productivity and in the reduction of used resources should not jeopardise the quality of a product or service, competitiveness, and profitability while fulfilling the obligation to save the environment (Institute for Sustainability, n.d.). The Swedish Ministry of Enterprise and Innovation (2017), however, defined business sustainability from an innovation angle where business sustainability is a state of mind that drives companies to use innovation for contributing to sustainable consumption and production that improves a company's competitiveness, and to design solutions to tackle the challenges encountered by the whole society in a broad interaction. Furthermore, Smith (2013) found corporate sustainability as a set of business efforts intended to create values for economic, environmental, and social aspects of a business by being transparent and involving stakeholders in decision-making processes. Even though there are many definitions of corporate sustainability, they all agree on the need for contributing to society's prosperity and environmental conservation while gaining economic benefits.

As this thesis concentrates on the food industry's development of climate-related commitment or the ways food companies transition to sustainability and carbon reduction, the researcher found that academic literature barely covers this topic. The topic is being slightly discussed within the research of the environmental aspect of sustainability management. Environmental sustainability includes the processes in the company that enable it to reduce its environmental

impacts (Jang, 2016; Szuchnicki, 2009; Tzschentke et al., 2008). Thus, the next subsection will discuss the environmental strategies and practices implemented within the food industry.

2.2 Food industry sustainability strategies and practices

The environmental strategies that aim at reducing GHG emissions in the food industry context of sustainability have not been clearly presented in literature but rather are covered under various concepts. Fields with existing research on the topic include sustainable practices (Vu et al., 2017), sustainability initiatives (Hutchinson et al., 2012), green practices (Chou et al., 2012; Perramon et al., 2014), environmental innovation strategies (Chou et al., 2012; Krozer, 2008), and environmentally friendly practices (Choi & Parsa, 2007).

Existing research suggests that companies usually integrate sustainability practices into policies that guide operations, production processes, and overall company management for improved environmental performance (Chou et al., 2012; Lefebvre et al., 2003; Noci & Verganti, 1999). In addition, available studies suggest companies to adopt and implement sustainable practices in a structured manner. Hu et al. (2010) referred to the international non-profit organisation, the Green Restaurant Association (GRA), whose guidelines assist restaurants in reducing their environmental impacts and improve their operational efficiency. The GRA's certification guidelines suggest the following seven considerations when greening restaurants: energy, water, waste, food, disposables, chemicals, building, and employee education (Hu et al., 2010). Restaurants' environmental sustainability can also be measured in indicators that analyse the progress of achieving a specific environmental goal (Freeman, 2011). Legrand et al. (2010) and Freeman (2011) developed restaurant sustainability indicators and found that the top four restaurant sustainability indicators include energy, water, waste, and food sources. Other indicators include building design, corporate social responsibility, plastics, paper, furniture, and fixings (Freeman, 2011; Legrand et al., 2010). Research conducted by Schubert et al. (2010) found that restaurants can engage in three major categories of sustainable practices: (1) green action, including energy, water, recycling, pollution prevention, and green building construction; (2) green foods, including organic and locally sourced; (3) green donation, including engaging in community events and contributing to green projects. However, Szuchnicki (2009) conducted a study of 28 restaurants' perceptions of what sustainability attributes they considered would be necessary for their customers. The study concluded that the most crucial restaurant operation practices for customers are those that promote conservation, the use of organic materials, and carbon footprint reduction. However, what has been found missing in the explored concepts and approaches is the driving idea around environmental sustainability management directed at tackling climate change issues; i.e. carbon-reducing elements throughout a company's value chain.

2.2.1 Environmental sustainability practices in the fast-food industry

The existing available scientific research is dominated by discussions on the sectors' tendency to serve healthier meals with lower fats, oils, and sugar as well as activities to enhance social wellbeing of the staff and communities (Currie et al., 2010; Jeffery et al., 2006; Stender et al., 2007). However, literature on the environmental sustainability practices of the fast-food sector is limited. Several studies have analysed environmental sustainability in the fast-food industry. These are studies conducted by Hutchinson et al. (2012), Pinard et al. (2014), Shokri et al. (2014), and Vu et al. (2017).

It is important to note that restaurants do not approach climate-related commitment as a comprehensive strategy for business operations. Environmental practices in the restaurant and fast-food industry are usually voluntary initiatives presented as single-aspect projects that focus

on a specific practice within restaurant operations, for example, energy-saving measures in the restaurants, water conservation, or plastic use reduction (Perramon et al., 2014). The examples presented in the following section represent single activities, practices, and strategies operating at a project scale rather than a companywide scale.

Tim Hortons is a large Canadian fast-food chain that specialises in doughnuts and coffee. Hutchinson et al. (2012) assessed the company's sustainability practices. They concluded that Tim Hortons lacked to specify its sustainability goals progress, which is challenging to evaluate. Tim Hortons made sustainability commitments such as reduction of carbon emissions in a corporate responsibility statement but then failed to report on their progress toward those goals. As a result, Hutchinson et al. (2012) recommended Tim Hortons to track the company's carbon footprint in a more thorough and detailed manner. Another research study conducted by Shokri and his colleagues (2014) evaluated the environmental sustainability initiatives of a wide range of local and national businesses involved in the fast-food supply chain in the UK that differed by size and type. The evaluation involved the fast-food industry's supplies, production, distribution, and sales that were divided into 3 clusters depending on the sustainability knowledge and its practice. Overall, companies possess some knowledge on the importance of sustainability but considerbly lack practicing it. The paper discussed the importance of GHG emissions considerations but concluded that it is challenging specifically for the fast-food sector due to the complex nature of the supply chain. Pinard et al. (2014) analysed the implementation of sustainable food practices by the top 20 chain restaurants in the United States. The main finding concluded that recent increases in public interest around the advantages of sustainable food practices caused a boom of programs with the concept of "farm where you are" among fast-food chains. The practices they analysed are related not only to food sourcing but procurement, marking, and the quality of food. Another study conducted by Vu and colleagues (2017) investigated the level of business sustainability of a fast-food company in the UK that has more than 700 restaurants in the country and serves around 12 million consumers daily in 109 countries. Thus, for addressing environmental issues in the UK, this fast-food company created an internal policy that encourages conservation of natural resources, recycling and source reduction as well as pollution control to ensure cleaner air and water and to reduce landfill wastes. However, the company's policy did not include GHG gas emissions considerations.

The environmental commitment practices in the fast-food industry that have been found in four research papers have been analysed below following the three-part model framework developed by Chkanikova and Mont (2011). This framework helps analyse the current state of the fast-food sector regarding the sustainability commitment practices and define the classification on the basis of the three value chain streams: (I) upstream from the suppliers, (II) in-house activities by the restaurant, and (III) downstream initiatives.

Among practices found in the literature that are implemented by fast-food businesses, the (I) activities of the first stream in the value chain applied to suppliers include decisions related to three areas (appendix 1). The first area is addressed in the requirements of ingredients, products, or materials. Companies usually apply "sourcing locally" policies in these instances (Shokri et al., 2014) or implement "farm where you are" concept programs (Hutchinson et al., 2012; Pinard et al., 2014b). Some companies practice food supply chain traceability to ensure that products were raised sustainably (Pinard et al., 2014b). A second area of practice was related to requirements in packaging material, which is evaluated to ensure correct sizing, weight, and packing efficiency. Or, businesses decide to purchase packaging with certain properties (such as reusable properties) that eventually help reduce costs (Hutchinson et al., 2012) or that are produced from 100% renewable and sustainable sources, 100% recyclable, biodegradable, and made in the country of operation (Vu et al., 2017). The last area covers decisions regarding the

implementation of internal management, policies, or protocols by a supplier. Several practices fall in this category, including: monitoring suppliers' internal codes of conduct; selecting suppliers by looking at key performance indicators of pest control, sanitation, operations and facility management, good manufacturing practices and product protection, recovery and food security system; testing a supplier's food safety and security practices; and looking for outstanding performance in the quality control of suppliers' management processes (Vu et al., 2017). Some companies require their suppliers to follow international environmental standards such as ISO 14000 (Shokri et al., 2014).

Sustainability practices of the second stream in the value chain of Chkanikova and Mont's (2011) three-part model framework (point II) include initiatives implemented by fast-food businesses within their operational scope, or simply put, direct in-house sustainability practices (see table 1-1). First, some companies develop and impose internal environmental policies or a set of rules that navigate actions to reduce climate impacts from various sources such as energy use efficiency. Academic researchers explored many measures that could be applied to the optimisation of energy use. For example, companies train their employees to use equipment only when required and remind employees to assure that equipment is switched off when not in use. Fast-food chains also try to install energy-saving technologies in restaurants (Shokri et al., 2014; Vu et al., 2017) such as variable-speed air compressors, industrial battery chargers for forklifts, and high-performance energy-efficient lighting. Companies also use large fans on ceilings to circulate heat and cooling, on-demand water heaters, variable-speed drives on some larger motors, and modified conveyors that only operate when required (Hutchinson et al., 2012). Second, some companies have implemented transportation policies regarding in-house sustainability practices. Fast-food companies have reduced the maximum speed of on-site vehicles, introduced anti-idling policies for all on-site vehicles that allow reducing petrol consumption and carbon emissions (Hutchinson et al., 2012), and implemented efficient route planning (Shokri et al., 2014). Third, some fast-food companies have addressed water use in their environmental practices, such as training the staff to use water responsibly (Vu et al., 2017). Restaurants have also installed consumption-reducing equipment. For example, dedicated fondant chillers reduce water per kilogram of coffee production (Hutchinson et al., 2012). Fourth, many fast-food restaurants committed to reducing their waste by switching from cardboard cartons to paper-based packaging materials (Vu et al., 2017) and by boosting recycling programs by classifying wastes and providing different disposal bins in restaurants (Pinard et al., 2014; Vu et al., 2017). Also, the giant fast-food company in the UK practices transferring leftovers from palm oil, animal fats, waste products into biofuel to power the vehicles that deliver company products to stores. For this purpose, the fast-food business conduct annual internal waste audits to identify waste streams and opportunities for reduction, reuse, and diversion of waste (Vu et al., 2017). In developed countries where deposit-return programs are available, restaurants participate for branded beverage containers and collect used coffee cups for a diversion program (Hutchinson et al., 2012). Fifth, some practices are aimed to promote sustainable building design so that restaurants can register for certification in Leadership in Energy and Environmental Design (LEED) (Hutchinson et al., 2012). Hutchinson et al. (2012), however, recommended calculating the total GHG emissions covering the impacts of the entire supply chain of the fast-food business. It has been found that many organisations only account for those emissions covered by in-house operations.

The downstream (III) or third stream of Chkanikova and Mont's (2011) value chain (appendix 1) includes the practices that fast-food businesses apply toward their customers and local institutions. Researchers have found that some restaurants (1) encourage their guests to separate the waste such as leftover food and packaging (Vu et al., 2017); (2) annually publish sustainability reports on their websites (Hutchinson et al., 2012; Vu et al., 2017); or (3) motivate customers to

reduce the use of disposable hot drink cups by offering a 10-cent discount on travel mug refills (Hutchinson et al., 2012).

Overall, an analysis of sustainability practices among fast-food businesses showed that most of the implemented initiatives in the fast-food industry are concentrated in stream II as identified by Chkanikova and Mont (2011) or "in-house" within the scope of the company's operations. However, it became more evident for many companies that a business should achieve sustainability across its entire supply chain (Shokri et al., 2014) that accounts for both direct impacts caused by the company's operations and the indirect impacts that originated from the upstream suppliers (Smith, 2013). Moreover, two analysed studies addressed the assessment of supply chain of the companies (Shokri et al., 2014; Vu et al., 2017), and two other studies considered supply chain involvement when requiring local sourcing of materials for a restaurant's operations (Hutchinson et al., 2012; Pinard et al., 2014b). The life cycle of fast-food restaurants' goods and services in the entire value-chain has to be considered when identifying critical aspects that form a company's sustainability (Smith, 2013). Due to the supply chain's complexity and fragmentation, life cycle assessment (LCA) was found to be the most challenging task for the fast-food industry (Shokri et al., 2014).

The author's finding of the literature review is that practices of carbon footprint assessment in the overall analysed practices were poorly identified. The issue of GHG emissions was mentioned in four studies (Hutchinson et al., 2012; Pinard et al., 2014 Shokri et al., 2014; Vu et al.; 2017) in three contexts. The first context was the approval of certification for the design of low-energy buildings (Vu et al., 2017). The second context was establishing a sustainability program; however, Hutchinson et al. (2012) pointed out that the fast food industry failed to implement transparent and consistent sustainability plans. And in the third context the fast-food chains were determined to have regular checking procedures as a measure for the reduction of GHG emissions (Shokri et al., 2014). In the research conducted by Hutchinson et al. (2012), the carbon footprint assessment was mentioned as one of the environmental initiatives implemented by a studied fast-food chain. But still, they criticised the chain for inconsistency between the company's claim of reducing its total carbon footprint and the company's opposite result of increased emissions over the year. Hutchinson et al. also pointed at the absence of guidance for the consumer as the carbon footprint was not reported per product. Besides, the calculation of GHG emissions did not include indirect impacts in the assessment but only included the impact within the scope of its operations. Therefore, the company was advised to assess its carbon footprint "in a more detailed fashion so that the next time one joins the line at a fast-food restaurant's drive-thru, for example, they would be conscious of how that may affect rising ocean levels and ultimately the health of our planet" (Hutchinson et al., 2012, p. 529). To conclude, it is evident that the environmental sustainability practices implemented by fast-food restaurants require a fresh view that will allow businesses to benefit by improving their environmental performance (Chou et al., 2012; Revell & Blackburn, 2007).

Thus, this thesis literature review concludes that the carbon footprint assessment is recognised as an essential tool for sustainability improvement. However, the existing literature lacks sufficient research on the business practice for climate change mitigation. Therefore, this thesis had an opportunity for an in-depth analysis of the potential motivations, drivers, challenges, and barriers to adopting practices for reducing carbon emissions and transitioning to business promoting climate commitment development in the fast-food industry.

The analysis of academic literature also found that the available research lacks analysis of the developmental perspective of a fast-food business adoption of environmental sustainability with the focus on climate mitigation. As such, the thesis fills this gap by exploring the climate

commitment development path of MAX Burgers (chapter 4) from the perspective of drivers and barriers (chapter 5).

2.3 Drivers of the fast-food industry's engagement in environmental commitment practices

Generally, restaurant businesses are influenced by external or social pressures to adopt environmental sustainability strategies. It should be evident that the legitimation or the desire of an organisation to comply with governmental regulations should be a primary reason as it is claimed to be for regular businesses (Bansal & Roth, 2000; Kim, 2009; Perramon et al., 2014; Zailani et al. 2012). However, research has found that regulations do not heavily require restaurants to reduce their environmental impacts (Chou et al., 2012; Jang, 2016; Revell & Blackburn, 2007). For that reason, academic researchers suggest that providing incentives would be an essential driver to encourage restaurants to implement environmental sustainability innovation practices (Ayuso, 2007; Bohdanowicz, 2005; Chou et al., 2012). Further, restaurant businesses claim that the influence of customers and public concerns is the critical driver for engagement in environmental sustainability practices (Bansal & Roth, 2000; Jang, 2016; Perramon et al., 2014). For example, when people decide to keep up with health-oriented trends, they shift their dietary choices toward healthy products and services (Jang et al., 2011; Longart, 2010; Perramon et al., 2014). This shift could induce restaurants to consider new market opportunities (Hoffman, 2005a) by implementing green strategies.

Nevertheless, Chou et al. (2012) found that social influences like external pressures (customers), internal pressures (shareholders), and networks (counterparts) have little influence on restaurants' intention to start green practices. But rather, top management's attitude toward green practices, sufficient budgets to implement measures, management accepting innovative ideas, and management's cooperation with research and environmental institutions were discovered to significantly impact the intention of a restaurant business to adopt green practices (Chou et al., 2012; Jang, 2016). Indeed, the results of the study conducted by Choi and Parsa (2007) proved that restaurant managers have higher preferences for and involvement in green practices. Moreover, driven by managers motivations, such practices do not tend to influence the menu prices increase (Choi & Parsa, 2007). The drivers of restaurants moving to environmental practices in the available literature vary from one study to another, possibly due to the studies' sampling scope that considers restaurant businesses of various sizes and geographical and political contexts (Chu & Schroeder, 2010). What can undeniably be a nature of business logic to accept the idea of shifting to environmentally sustainable practices is improving profitability. That is realised by three possible ways (Bansal & Roth, 2000; Jang, 2016; Kim, 2009). First, profit can be made from reducing costs by taking resource efficiency measures (Chou et al., 2012; Perramon et al., 2014). Second, diversifying income streams by designing new products for markets, promoting themselves as an "eco-friendly" company and thus, attracting more clients can additionally create profit. And third, managing risks and possible threats from both internal and external pressures caused by various stakeholders such as employees, customers, the media, and governments can reduce losses. Risk management, in turn, drives organisational changes and the implementation of different practices as having legal compliance procedures, codes of conduct, and other types of responses that aim to prevent reputational calamity (Perramon et al., 2014).

Additionally, in the existing literature, drivers that lead to sustainable business model innovations (SBMI) are asserted to be different from those that drive products or process innovation and the adoption of environmental and green practices. Long et al. (2018) found SBMI involves changes to a firm's foundational values and is often radical and transformative with profound implications. Moreover, the literature of business models for sustainability

discusses additional factors that assist the driving forces to a faster transition to more sustainability. These factors include collaboration, a clear narrative and vision, continuous innovation, a foundation of sustainability, a necessity for profitability, and serendipitous external events (Long, Looijen, & Blok, 2018).

Due to the absence of obligations under the Kyoto Protocol and national regulations to reduce GHG emissions, not many companies are proactive in the reduction of climate change risks and are able to take advantage of opportunities from repositioning to climate-oriented activities (Chu & Schroeder, 2010). The early corporate initiatives that aimed to reduce GHG emissions have been argued to serve as strategies to elevate the corporate reputation (Hoffman, 2005). For example, Greenpeace criticized McDonald's in Denmark on the compensation of costly protests on the use of refrigerants that contain freon and hydrofluorocarbons, which contribute to global warming. The fast-food company, together with activists, policy experts, suppliers, and partners, organised a "refrigeration summit" that raised the topic of less-polluting activities. As a result, in 2003, a fast-food restaurant in Denmark announced that they were first in the sector that started using refrigerants without elements harming the climate. However, it seems that this action was just the reaction of one company toward locally-raised criticism. Would companies implement any climate-related strategies without public pressure? From a wide perspective, drivers explicitly related to the implementation of GHG reduction strategies have been discussed in the works of Hoffman (2005, 2006), Kim (2009), Okereke (2007), and Chu and Schroeder (2012). Their studies suggest that the top three motivations to implement climate-related strategies were implications for increasing a company's profitability, influential regulations, and an enhanced corporate reputation (Hoffman, 2005, 2006; Kim, 2009; Okereke, 2007). Okereke (2007) listed five drivers to corporate climate action: (1) energy prices, (2) market shifts, (3) regulatory directives, (4) investor pressure, and (5) technological change. Another study conducted by Chu and Schroeder (2012) found that the three most influential drivers for big corporations to engage with climate action activities are enhancing competitive advantages, reputations, and senior management leadership. For small and medium-sized companies, legislative requirements and supply chain requirements were found to be the most significant drivers (Chu & Schroeder, 2010).

2.4 Barriers to the fast-food industry's commitment to environmental sustainability

Institutional theory literature and academic works on innovations widely discuss the factors that inhibit businesses to transition toward sustainability. The fast-food sector has not granted sustainability prompt attention due to the absence of enforcement from policymakers and local authorities (Shokri et al., 2014b), scarce and intermittent green supply chain, non-existent trade pressure (Kasim & Ismail, 2012), and low push from the customer side. The latter is claimed to be due to resistance in accepting the connection between meat consumption and climate change (Kasim & Ismail, 2012; Macdiarmid et al., 2016) or the prevalence of non-green consumers (Graça et al., 2014; Holm & Møhl, 2000). An empirical study on the Taiwanese restaurant industry conducted by Chou et al. (2012) found that restaurants were more willing to change their business models to align with healthy diets, vegetarianism, and wellness than with green or environmental philosophies. Also, another study showed that economic crises and socio-technical systems associated with the studied sector are commonly not supportive in the business model innovation transition (Long et al., 2018).

In the case of smaller and medium-size fast-food businesses that volunteer initiatives to commit to sustainability, they also encounter specific obstacles, especially related to the supply chain network and internal factors, according to Shokri et al. (2014). In comparison to food retailing, the fast-food supply chain is more complex and has a decentralised supply network because it

usually does not have distribution centres. Therefore, it is not able to implement and impose its own distribution policies and strategies. Additionally, the complexity of the fast-food supply chain is related to the various importance, prevalence, and balance between economic, environmental, and social characteristics and the different levels of the chain represented between suppliers and businesses in that chain (Aarnio et al., 2008; Shokri et al., 2014). Besides, a lack of environmental sustainability awareness and competence and environmental illiteracy are often principal barriers in performing integration of environmental initiatives among small and medium-sized businesses (Kasim & Ismail, 2012; Revell & Blackburn, 2007). Additionally, while environmental initiatives require high financial capacities, the majority of fast-food companies in the market are small and medium-sized, where the costs play a crucial role in the decision-making process (Shokri et al., 2014). Thus, cost considerations might pose a barrier to such organisations.

GHG reduction strategies are challenging for the fast-food sector for the following reasons. The first challenge is that product LCA analysis and carbon footprint assessment is more difficult for the fast-food industry as compared to food retailing because of supply chain complexities, fragmentation, and the dispersion of businesses in the sector (Shokri et al., 2014; Wakeland et al., 2012). Secondly, often fast-food companies with ambitious climate-related goals to reduce carbon emissions are faced with the fact that technology somewhat limits the attainment of energy-saving goals (Zhang et al., 2011). Besides, Okereke (2007) and Chu & Schroeder (2010) found the most proactive climate strategies point out the weak policy framework or absence of legal requirements as a barrier to climate actions. For example, Hong Kong lacks minimum thermal efficiency regulations for offices, commercial buildings, and shops. This circumstance leads to energy inefficiency as many Hong Kong stores have huge windows (which cause heat loss and increase energy consumption) and no doors, which lead to a loss of cold air. However, an installation of a door poses a threat to the store of losing clientele to a competitor who did not install a door (Chu & Schroeder, 2010). In another example, some companies complain that the absence of a strong, clear, and robust policy framework that would assure long-term development makes it challenging for them to convince their boards of directors and shareholders in the necessity of investments in low carbon technologies (Okereke, 2007). Other challenging factors that inhibit the development of GHG reduction strategies were related to government actions and the marketplace (Long et al., 2018; Okereke, 2007). Government actions are claimed to be related to political stability in the country of the company's operations and worldwide, and to the roles of regulations commanded by international institutions on the national and domestic regulations. Marketplace uncertainty includes the factors of the economic state in a country, public acceptance and awareness of climate-friendly products, and public purchasing power. As businesses are usually not sure how well new changes in products would be in demand, welcomed, and rewarded by the overall market, they are hesitant to commit to these changes (Long et al., 2018; Okereke, 2007).

2.5 An analytical framework for identifying drivers and barriers to climate commitment development

As the existing literature lacks research devoted to the development of climate action plans in the fast-food industry, this chapter attempts to build an analytical framework to discuss barriers and drivers to climate responsibility adoption and development. The framework is based on Lozano's (2015) categorisation of influences into internal (dealing with processes inside the corporation) and external (relations with external stakeholders) impacts. However, unlike Lozano's approach where the divisions were designed for analysis of motivations or drivers only, the thesis author further developed the framework for the application of the analysis of the potential business challenges or barriers. Depending on the content, the internal and external areas of influence might be analysed from both perspectives that serve as the driving force or

opposite – the barrier. Thus, each area of influence of the two divisions describes specific characteristics that have been found most commonly representing it. In the analysis section of the thesis, results have been delivered following the developed analytical framework's reasoning.

Internal influences: Top Management.

Driver/Barrier. Senior management leadership (Chu & Schroeder, 2010) or proactive leadership (Long et al., 2018) plays a highly decisive role in opting for engagement with climate change initiatives. Depending on top management beliefs, attitudes, ability to narrate the business's vision (Choi & Parsa, 2007; Chou et al., 2012; Kasim & Ismail, 2012; Long et al., 2018), and a willingness to accept new ideas, an organisation may either be driven or challenged to set decisions for carbon-reducing activities (Griffiths & Petrick, 2001; Kasim & Ismail, 2012; Lusser & Riglar, 1999; Stone et al., 2004). Management's impact is even more influential in times of economic crises and budget cuts. Thus, the stronger the desire of top management to incorporate environmental initiatives and ethics into the structure and culture of their companies, the higher the probability of success in the acceptance of the environmental practices (Faulkner et al., 2005; Kasim, 2007; Kasim & Ismail, 2012). Conversely, the lack of top management commitment and their ignorance of climate issues could pose a barrier to a company's implementation of environmentally friendly practices (Blanco-Portela et al., 2017; Kasim & Ismail, 2012).

Internal influences: Employees.

Driver/Barrier. Academic researchers and businesses discuss that lack of in-house competence and skills challenges many companies to a commitment to climate action (Chou et al., 2012). The company's employees might face illiteracy of environmental sustainability knowledge, or difficulties in implementing LCA or measuring carbon footprint (Kasim & Ismail, 2012; Revell & Blackburn, 2007). Additionally, apathy and fear can inhibit employees' manifestations of change, which might be linked to perceived risks related to job security or insufficient trust (Lozano, 2013).

On the contrary, strong employee connectedness is one of the primary internal organisational factors that could positively influence corporate response to green, environmental, or sustainability issues (Kasim and Ismail, 2012). Additionally, the aspiration of employees might be related to the desire for achieving goals, which serves as a supporting force to organisational change (Long et al., 2018). Change can be supported by introducing environmental education and training for employees, which is critical in the transition to a more sustainable society and future. Environmental education techniques, programmes, and strategies may be used as a mechanism through which the ultimate goal of sound management of environmental resources may be achieved to foster a more sound use of environmental resources. Hence, the motivation to initiate environmental education is significant (Bohdanowicz et al., 2011; Filho, 1997).

Internal influences: Budget.

Driver/Barrier. Raising profit was found to be the highest motivation in the studies of Okereke (2007), Kasim & Ismail (2012), Hoffman (2005, 2006), Kim (2009), and Long et al. (2018). This research shows that companies tend to considerably save on costs once they implement carbon management programs (Okereke, 2007). As such, cost usually drives companies to implement energy-saving activities. Companies with larger financial capacities are more capable of allocating budgets to activities aimed at conserving the environment and improving overall business sustainability (Kasim & Ismail, 2012, Florida et al., 1999). Local sourcing initiatives could be essential but are usually significantly costly for purchasing raw materials (Bansal & Roth, 2000; Kasim & Ismail, 2012; Revell & Blackburn, 2007). Thus, global sourcing remains a

critical issue but is attractive for fast-food chains as it keeps the end price competitive and reasonable for clientele (Kumar et al., 2011).

Internal influences: Ethical motives.

Driver. Driving forces are motivated by a company's stand on ethics, not only as compatible with but as an integral part of a corporate business strategy (Okereke, 2007). Moreover, the literature on business models for sustainability states that change in a company's values defines significant transformations and changes. As such, moral and ethical considerations are often placed as a basis for values formations. Besides, Long et al. (2018) observed that companies with clear, regularly and consistently conveyed visions ensured demand for their sustainable products, strong partnerships, and motivation of the employees of the company. The vision was also noted as needing to be genuine for success. This factor links to a need to create a market and engage with consumers. Thus, ethically motivated companies believe that "it is the right thing to do" when they oblige to become more climate-oriented and still stay compatible with their ethics, core values, and vision (Bansal & Roth, 2000; Long et al., 2018; Okereke, 2007). Therefore, the absence of ethical considerations might be a barrier to climate action plans.

External influences: Suppliers.

Driver/Barrier. Supply chains play a significant role in climate action plan development as they contribute to the carbon emissions footprint of end products and services. However, restaurant businesses that consider a shift to "green ingredients" are challenged with existing insufficient and intermittent green supply chains (Kasim and Ismail, 2012). Moreover, researchers have found that the fast-food sector's supply chains are more complicated as compared to the food retailing industry (Aarnio & Hämäläinen, 2008; Shokri et al., 2014). For that reason, fast-food restaurants face an immense obstacle to imposing environmental policies on their suppliers. Usually, it is suppliers' lack of competence or reluctance to collaborate, or their absence of means to support the carbon reduction strategy, that are the hurdles to change (Aarnio & Hämäläinen, 2008; Kasim & Ismail, 2012; Shokri et al., 2014; Smith, 2013). However, if suppliers were willing to cooperate, restaurants would be capable of shifting to more sustainable and climate-friendly businesses (Chou et al., 2012; Kasim & Ismail, 2012).

External influences: Regulatory influences.

Driver/Barrier. Some studies suggest that legal compliance and governmental regulations significantly impact the corporate adoption of environmental measures (Bansal & Roth, 2000; Chou et al., 2012; Lee et al., 2013; Perramon et al., 2014). Therefore, a driver of regulatory influences refers to the aspiration of a company to improve the conformity of its actions within an established set of regulations, norms, values, or beliefs (Bansal & Roth, 2000). For restaurants, the legal requirements related to carbon emissions seem to be absent or are framed as nonmandatory recommendations. Therefore, the lack of robust policy framework for corporate climate action serves as a barrier for restaurants' engagement, as such action often seems like an "extra" challenge which in some cases leads to a competitive disadvantage (Shokri et al., 2014b, Chu & Schroeder, 2010; Okereke, 2007). For example, in Hong Kong, stores do not have doors and that attracts more customers. However, it leads to inefficient use of electricity since the cold air from inside is continuously released outdoors. Thus, having the government to impose minimum requirements on thermal efficiency for commercial organisations and installation of doors would decrease the loss of cold airflow (Chu & Schroeder, 2010). An additional barrier includes a lack of regulatory incentives (Chou et al., 2012; Chu & Schroeder, 2010; Hillary, 2004; Long et al., 2018; Lozano, 2013; Shokri et al., 2014). For example, when electricity prices are insignificant, there is no incentive for consumers to conserve energy. Many regions lack incentives to shift to renewable resources. In general, an

absence of influence from regulatory and governmental bodies severely limits the range of decisions and choices companies could make with their climate strategies (Okereke, 2007).

External influences: Customers.

Driver/Barrier. Market trends that are negated within customers' purchasing behaviours, for example, shifts to greener and healthier food significantly influence a company's decisions to consider new markets to retain and attract new customers and elevate competitiveness (Okereke, 2007; Perramon et al. 2014). Thus, customers with a strong responsibility for climate action might also drive companies to consider carbon-reducing activities to keep the loyalty of their customers and gain more trust. Moreover, the willingness of customers to pay higher prices for greener products is also a supportive factor for companies to offer them (Chou et al., 2012; Kim, 2009; Perramon et al., 2014; Revell & Blackburn, 2007). Conversely, a low push or demand from the customer side (Kasim & Ismail, 2012) can be expressed by the prevalence of non-green consumers that inhibit restaurants from introducing menus that are less environmentally harmful or initiate environmentally friendly activities (Macdiarmid et al., 2016).

External influences: Competitiveness.

Driver/Barrier. Under the drivers of competitiveness, ecological or climate initiatives are adopted if they serve to enhance a firm's financial performance. Firms motivated by competitiveness actively innovate ecologically benign processes and products to strengthen their market positions (Bansal & Roth, 2000). This area of influence also means enhancing competitive advantage when companies engage with climate action initiatives (Chu & Schroeder, 2010; Porter & Reinhardt, 2007; Okereke, 2007; Bansal & Roth, 2000). The competitive advantage can be gained via cost or differentiation advantages. For example, this advantage occurs when a company offers the same product as its competitor but at a lower price, or when a company sells higher quality services at the same price of a competitor (Chu & Schroeder, 2010; Porter & Reinhardt, 2007). Okereke (2007) mentioned that companies are motivated by competing for credibility and for the opportunity to contribute to developments of climate policy discourses. As an example, many corporations disclose their close engagement with the climate-related programs of the United Nations Environent Programme (UNEP), the European Union Emission Trading Scheme (EU ETS), or the Associations of British Insurers (Okereke, 2007).

External influences: Public society and media.

Driver/Barrier. The power of public influence is immense and is usually expressed by strong concerns over ecological and climate change issues. Awareness that is spread through climate protests and media coverage might drive companies' decisions to engage with environmental and climate actions (Jang, 2016; Kim, 2009; Perramon et al., 2014; Long et al., 2018). Usually, companies react to public concerns to help in retaining or creating a positive image (Perramon et al., 2014). In contrast, risks associated with unfavourable attitudes of a society or bad publicity, such as greenwashing criticisms, may lead to an organisation's avoidance of environmental actions (Bansal & Roth, 2000).

External influences: Technological advancements.

Driver/Barrier. Innovations in technologies might not be a clear driving force, but they provide the potential for substantial production cost reductions as well as improved product performance that could consequently lead to gaining a competitive advantage (Papathanassiou & Anderson, 2001; Pries, 2003). For this reason, companies operate with risks if they allow competitors to achieve advances in research and development (Okereke, 2007). On the other

hand, insufficient or unavailable technological advancements that support environmental innovations may hinder companies from implementing carbon-reducing initiatives (Chou et al., 2012; Kasim, 2007; Zhang et al., 2011).

External influences: Other external forces emerged from stakeholders, events, and conditions.

Driver/Barrier. In general, all of the serendipitous events that were not covered by the previously mentioned areas of influences that induce an adoption or development of climate initiatives and that are considered as driving forces may fall into this category. A range of examples could be included in the category. For instance, governments' decisions to sign climate treaties and the existence of visible crises such as global warming could fall into this category (Long et al. 2018; Okereke, 2007). In the opposite direction, adverse events can lead to a stepping back or withdrawal of obligations toward corporate climate action. Such events include, for example, an economic crisis or an increase in energy prices can be included as an example. Overall, companies operate depending on circumstances caused by country governance, financial situations of the country, and the influence of international agreements (Blanco-Portela et al., 2017).

The overall internal and external influences in the development of climate commitment work have been depicted in figure 2-1.

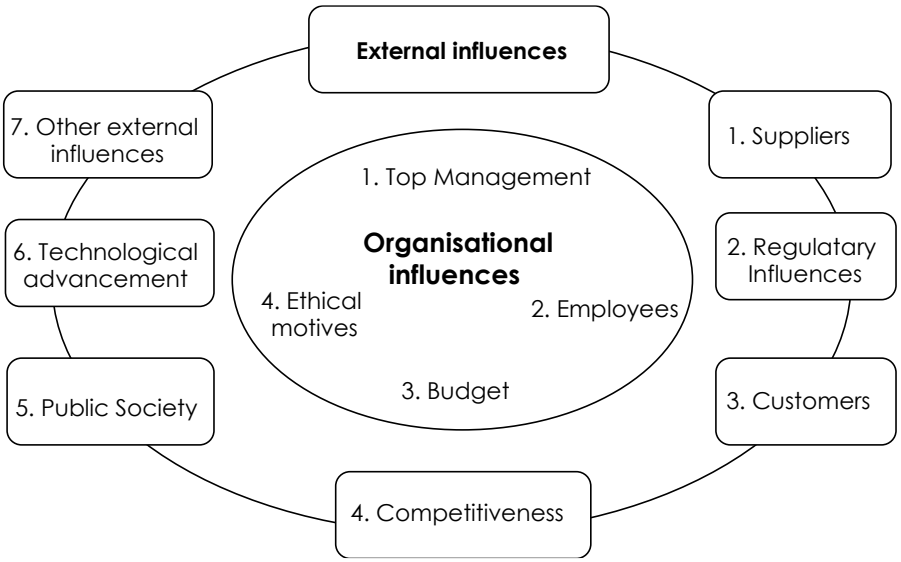

Figure 2-1 Internal and external influences that could drive or challenge corporate climate action.

Source: Author's adaptation inspired by Lozano (2015).

3 Research design and methodology

This chapter first introduces MAX Burgers' company profile and then discusses the overall research approach for this thesis. It also summarises the strengths and limitations of the chosen research design and explains the reasoning of the selected methods through a detailed description of the data collection and analysis.

3.1 Overall research design, process, and company profile

The research was conducted on the basis of a single case study of MAX burgers, which represents a unique example of a fast-food business that has reduced its carbon emissions. This family-owned Swedish fast-food chain was founded in 1968 in Gällivare, Sweden by Curt Bergfors and Britta Andersson. The company has expanded to 153 restaurants. The company claims it has been annually growing 17% annually in the last 18 years, and it is the most profitable restaurant chain in Sweden, outperforming McDonald's and Burger King (MAX Official Website, 2018). MAX represents a contradictory yet unique case in the fast-food business because in 2008, it addressed the necessity of climate action as an explicit priority for its business and applied climate action as the central policy in the management and decision-making process. In 2020, the company's climate work profile includes a regular analysis of carbon emissions of food production "from farm to table," carbon-reducing activities within the entire operational line of business, and voluntary carbon compensation throughout its supply chain to support reforestation programs in Africa, Mexico, and Nicaragua. Overall, the company's factsheet profile is depicted in figure 3-1.

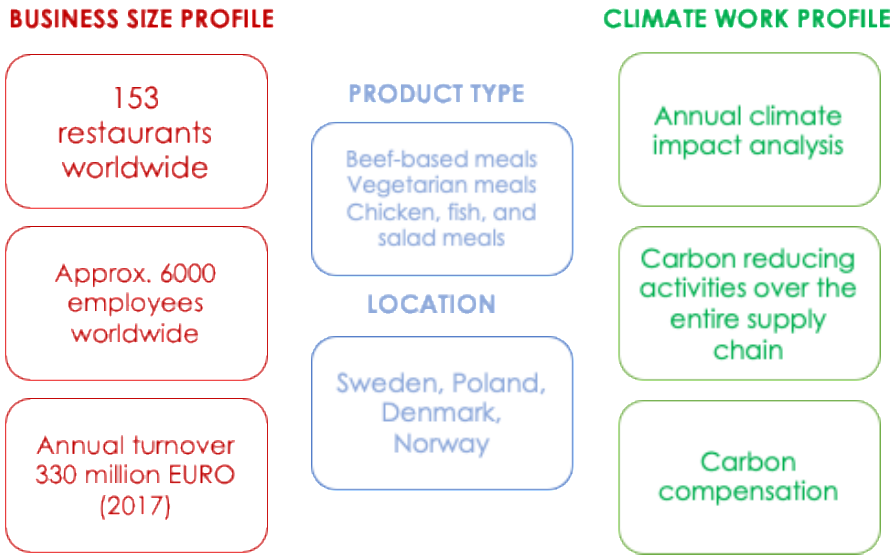

Figure 3-1. MAX Burgers' profile.

Source: Based on data from the 2018 MAX Burgers' report on climate positive and corporate website.

As this thesis is based on a unique case study, it only answers the research question that was introduced in section 1.3.

RQ: How did MAX Burgers become a leader in the fast-food industry in reducing carbon emissions?

This research seeks to develop a holistic, in-depth understanding of the successful example of the Swedish fast-food chain MAX Burgers in developing a climate commitment. The research

question is also based on an analysis of drivers and barriers that MAX Burgers has encountered within its climate responsibility development path.

As the study aims to provide an explanatory outlook on the development of the climate responsibility of a single company, the thesis used a qualitative research method (Creswell, 2007) and followed a mixed research approach (Blaikie & Priest, 2019). To address the thesis problem, the author explored the research gap within environmental sustainability practices of the food industry. Then, the author analysed the reasons and obstacles for the adoption of environmental sustainability plans as there is a lack of studies on climate action plan development in the context of fast-food restaurants. Therefore, taking an abductive approach, the author assumed that investigated motivations and challenges to environmental sustainability apply to the context of the adoption of carbon reduction strategies. Thus, the developed analytical framework based on the available literature assisted the deductive approach interview structure. The deductive approach of the interview questions (appendix 2) facilitated the formulation of explanations via identifying tipping point-events (chapter 4) that influenced the decision-making process at MAX Burgers for the promotion of a low-carbon business. Figure 3-2 describes the overall working process followed during the thesis project.

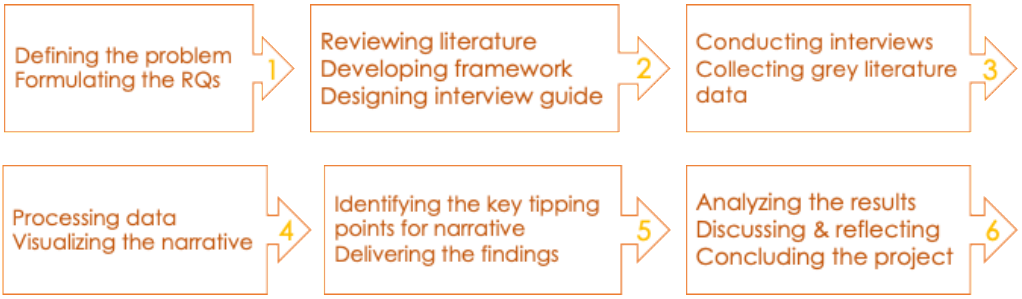

Figure 3-2. Thesis project's working stages.

3.2 Case study research

The case study is an empirical investigation of a contemporary phenomenon that uses multiple sources for evidence (Dul & Hak, 2007; Robert K. Yin, 2009). Case studies usually provide in-depth explanatory, exploratory, and descriptive analysis of the dynamics present in a single setting (Eisenhardt, 1989; R. K. Yin, 2014). As such, case studies are usually used to answer "how" and "why" research questions (R. K. Yin, 2014); therefore the case study method is appropriate for this thesis.

3.2.1 Case-study design: strengths

The strengths of a single case study research lie in data richness. Case study designs can elucidate the deep significance of a complex data set. Also, they can produce in-depth, detailed, rich, and subtle outlooks of the complex sets of conditions that impact specific events, decisions, or choices as in the case of MAX Burgers (6 & Bellamy, 2014; Gerring, 2006; Robert K. Yin, 2009). A single case study also provides the flexibility that allows capturing interesting nuances that may not have been explored and identified before the study; thus, the research may serve as a critical point for the investigated issue (6 & Bellamy, 2014; R. K. Yin, 2014). Moreover, case studies can track and describe change over time and not just provide a "snapshot" view (Gerring, 2006).

3.2.2 Case-study design: limitations

Among the limitations of case study research, the main challenge is analysing and processing a large unstructured data set. In this thesis, the large data set from multiple resources (refer to subsections 3.3.1 & 3.3.2) might limit comprehensive analysis within the given time (6 & Bellamy, 2014; R. K. Yin, 2014). Case study approaches have also been criticised for limited generalizability. Usually, case studies represent a unique phenomenon and the produced results are more often particularistic with incomprehensible applicability to other contexts (6 & Bellamy, 2014; R. K. Yin, 2014). Additionally, case studies have also been noted for their limitations of providing incomplete information and a reliance on self-reported data that might result in misleading conclusions. Since case studies are usually researched by one investigator, the research might be subjective and might lead to biased results (Willig, 2001).

3.3 Methods used to collect data

The thesis case study research primarily relied on two data sources for empirical data collection: interviews and the analysis of documents and other "grey literature."

3.3.1 Interviews

Semi-structured interviews were conducted to collect data. The questions were pre-planned prior to the interview. However, the interviewer gave the interviewees the chance to elaborate and explain particular issues through the use of open-ended questions (Alsaawi, 2016). The baseline interview questions, which are presented in Appendix 2, guided the general discussion of the interviews. Depending on how the conversation with the interviewee developed author adjusted questions while the remaining discussion followed the analytical framework reasoning.

The data collection included online video interviews because they allow for face-to-face conversations, promote honest responses, enable the establishment of mutual understanding between the researcher and the interviewee, and provide the ability to further investigate the responses (Flanagan et al., 2015). Besides, one-on-one interviews provide extensive responses regarding attitudes, learning, perceptions, feelings, and experiences that are rich, long, and revealing (Taylor, 2000). At the same time, online interviews are restricted to individuals with access to the internet (Curasi, 2001). For this study project, the participants were selected via expert sampling with the following criteria:

i. The respondent has relevant and robust knowledge of MAX's climate commitment history.
ii. The respondent has or had some level of influence on decision-making processes for MAX Burgers.
iii. The respondent currently works for or worked with/for MAX Burgers within the last 20 years.

The criteria for respondent sampling were communicated to a key individual at MAX, the Chief Sustainability Officer, Kaj Török. He provided an expert sampling of 14 individuals who were contacted via email. The email instructed the potential respondent to book a 1-hour time slot via Calendly, an online appointment scheduling software. Seven of the 14 contacted sampled individuals responded and participated in an online, video, face-to-face interview; the other seven contacts did not respond. While the case study interview sampling might be statistically insignificant, the in-depth interviews allowed the researcher to comprehend the rationale for current corporate climate actions that have been voluntarily developed (Chu & Schroeder, 2010).

Three respondents are current internal employees and two are former employees. These five respondents shared views regarding the climate work at MAX they formed while holding positions in the sustainability, marketing, and communications departments. The employees of the communications and marketing department are fully aware of the developmental events of the climate work of MAX Burgers. They represent a key part of the study input as they directly worked with the promotion of carbon labelled products and continuously dealt with public relations regarding the topic. The remaining two respondents are experts from external organisations, U&We and ZeroMission, and each works for MAX Burgers on a specific climate-related activity. Thus, the thesis data was gathered from one external respondent with a carbon footprint analysis perspective, and another external respondent with a carbon offsetting program delivery perspective.

Even though the allocated time for one interview was planned for 60 minutes, the longest interview lasted 97 minutes and the shortest was 52 minutes. The list of interviewees, their titles, their current employment status, the date of each interview, the time spent with each interviewee, and descriptions of each interviewee's profile and their relevance for the study are provided in Appendix 3.

Additionally, the number of each interviewee in the thesis narrative indicates the referencing number cited in the findings and analysis sections of the thesis. The interviews were conducted via Zoom, a video conferencing software. The software was chosen for its audio recording features and its ability to create files in the m4a format. While conducting the interviews, the researcher took notes in Excel sheets that were prepared before each interview.

Before the start of the interviews, each respondent was asked for their consent regarding recording the conversation and citing their names in the thesis project. All seven interviewees permitted the use of their names in the thesis. The researcher recorded each interview, stored the files on a personal computer, and shared the files with the thesis supervisor for further processing via the transcribing software HappyScribe.

3.3.2 Grey literature

Multiple types of grey literature materials were analysed for this thesis (table 3-1) as they related to MAX Burgers' climate action plan development and supported the study with inputs regarding the tipping point-events identified during the interviews. Thus, table 3-1 summarises the categories of materials that were analysed during the thesis project.

Table 3-1. The categorised list of materials collected and analysed for the thesis project.

Category of material	List of materials analysed for thesis
1. Documents, reports, and other materials provided by MAX	- 2017 carbon footprint analysis report (Török, Wrenfelt, Dahlgren, & Grant, 2018) - MAX's 2018 climate-positive burger report (MAX Burgers, 2018b) - Historical overview of MAX (MAX Burgers, 2020) - 2018 MAX Burgers factsheet brochure (MAX Official Website, 2018)
2. Videos	- Presentation on Sustainable Hamburgers by the former MAX's Chief Sustainability Officer on TEDxPresidio (TEDxTalks, 2011) - Speech on "The New Era of Sustainable Business" by Former MAX's Chief Sustainability Officer (SOCAP, 2012) - MAX Burger's Climate Positive speech by current Chief Sustainability Officer at the Porto Summit in 2019 (Climate Change Leadership, 2019) - MAX Burger's presentation by current Chief Sustainability Officer at the World Forum for a Responsible Economy 2019, "Climate: Managerial Courage to Tackle Environmental Issues" (Réseau Alliances, 2019)

3. Podcasts and audios	- Interview of current MAX's Chief Sustainability Officer with Foretagarna on how to build a sustainable business (Foretagarna, 2019) - MAX's current Chief Sustainability Officer on PODDTOPEN podcast on "The World's first climate positive menu. What does that mean?"
4. Reports on interviews conducted by external organisations	- Report on the interview with MAX's CEO about "Launching the World's First Climate-Positive Burgers" (FoodService Europe & Middle East, 2018; Selberg, 2018) - Report on an interview with MAX's Head of Product Development, "How sustainable food concepts can be implemented in the corporate world" (ProVeg, 2019)
5. Materials published by external organisations	- U&We report on MAX Burgers profile (Wrenfelt, Emilsson, & Dahlgren, 2018) - ZeroMission report on MAX Burgers climate compensation profile (ZeroMission, 2019a) - UNFCCC' summary on MAX's climate positive menu (UNFCCC, 2019)
6.Previous research papers based on MAX Burgers case study	- Published article in the *Journal of Sustainable Tourism*: "Carbon labels on restaurant menus: do people pay attention to them?" (Babakhani et al., 2020) - Bachelor thesis (Linköpings Universitet): "Challenging Green Capitalism: An Ideology Critique of MAX Burgers' Environmental Strategies" (Hedenqvist & Johansson, 2018) - Bachelor thesis (Stockholm University): "Sustainable Communication or Communicating Sustainability? Qualitative research studying sustainable marketing practices at IBM, MAX Burgers & H&M Sustainable communications" (Ohlsson & Riihimäki, 2015)
7. Books	- MAX Burgers case analysis: "Idea behind the Climate on the Menu initiative" in the book *The New Brand Spirit* (Conrad & Thompson, 2013) - MAX Burgers case analysis: "Sustainability Advocate Par Larshans: Honoring Core Values Catapults Burger Chain" in the book *Brave Leaders: Finding The Guts To Make Meaningful & Lasting Change* (Barchan, 2016)
8. Other materials that supported the thesis project	- Newspaper articles - Articles published by food restaurant magazines - Articles and reports made on the basis of conferences, speeches, and hearings

3.4 Data processing and data analysis

Once interview data was collected, the HappyScribe software package was used for transcribing, correcting, and coding. The software allows a user to comment online in the transcribed text and underline and highlight text in different colors. The transcribing of each interview took on average 6.5 hours. Then, the researcher became thoroughly acquainted with the interview data by reading each transcribed document opened in HappyScribe online and by simultaneously highlighting important events (hereafter "tipping point-events") that influenced MAX's climate responsibility development. The identification of tipping point-events was based on the information provided by the interviewees. For a tipping point-event to be developed, it had to be mentioned by at least two interviewees. As the interviews were semi-structured and open-ended, the author was flexible to questioning interviewees regarding key facts mentioned by previous interviewees.

After identifying and describing the tipping point-events, the author followed the analysis of drivers and barriers by first classifying them according to the analytical framework's areas of influence. The list of codes examples for the identification of areas of influence is provided in Appendix 4. However, a more open coding approach was used to identify drivers and barriers, seeking to let tipping point-events within the data to emerge. Any information relating to the answering of the research questions was coded. The coding process was accompanied by a continuous comparison of the responses of each interviewee. After all interviews were transcribed, explored, and coded, the researcher visualized the structure of the delivery of the findings by narrating the key "tipping point-events" in their historical order that highlight circumstances that significantly impacted the climate commitment development path at MAX Burgers. In addition, the researcher analysed grey literature data that validated and supported the explored facts, arguments, and described events found from interviews.

4 Findings

This chapter presents key findings based on empirical data collected from interviews and a content analysis of grey literature. It dives into narratives of the key tipping point-events of MAX Burgers (MAX) that contributed to the company's development of climate commitments. Subchapters are headed according to the main events in the development of the climate commitment path. This chapter complements the analysis of driving forces and barriers as it presents the reasoning behind external and internal influences. The significance of the chapter is that MAX's motivations, drivers and challenges are related to a particular time of company's climate action development. For reader friendliness and space-saving purposes, findings retrieved from interviews have been referenced in the text in a shortened manner. Thus, reference for an individual interviewee is written in parenthesis indicating "R" for "respondent" followed by the interviewee number presented in Appendix 3. However, the quotes have been cited by interviewees' names and the consent for that purpose has been approved by all participants. Additionally, a personal communications' list can be found in the section following the bibliography. Supporting respondent quotes are framed in italics and referenced by interviewees' names.

4.1 Precursors of MAX's climate work: maturity, crisis and time for changes

The analysis of the empirical data revealed the starting point for MAX's climate work. The company's profile prior to the period of climate commitment is crucial for the analysis of drivers and barriers. It describes the company's market position, its maturity level, and its overall experiencing dynamics. Thus, this chapter describes the early tipping point-events that have complemented the climate work development at MAX.

Restaurant business growth and change of management. Since its commencement in 1968, MAX's operations were managed by its owner Curt Bergfors. Until 1999, the family business expanded to other types of companies such as hotels, gas stations, gyms, tanning salons, gourmet pubs, and others ventures (MAX Official Website, n.d.). In 1999, the Bergfors family decided to refocus and fully invest in the hamburger business; by that time, the MAX network had grown to around 40 restaurants. In 2002, Richard and Christoffer Bergfors, sons of former managing director Curt Bergfors, took over the operational responsibility for the family business (R1) (Max Burgers, 2020; TEDxTalks, 2011). By the beginning of 2002, the company had grown to nearly 50 restaurants around Sweden (R1, R6). Thus, with the new top management and the attainment of a certain level of organisational maturity as the fast-food business grew from a small restaurant in Gällivare to a broader chain across Sweden, MAX realised the need for organisational changes. The company wanted to either a start with a "fresh alternative" or take a new position in the restaurant industry (R1). MAX aspired to figure out their brand position that they could clearly state to the market.

> *We matured, and we were thinking about what is our role? What is that MAX should beat? So, it was more like making a clear position statement of who we wanted to be (Török, pers.comm.).*

The Bergfors family had a strong desire to bring changes to the fast-food company and considered different versions of how to be a "fresh alternative" in the industry. "Fresh alternative" was considered from improving the way the company treated the staff to making toilets extra clean, adding healthy meals in the menu (R1), and making burgers oval (Esensjö & Petrina Esensjö, 2010). Thus, while looking for a unique concept and testing different variations MAX was in parallel changing organisational culture (R2) and figuring out sustainability work directions (R1, R2, R6, R7).

Leadership gap and change in culture. Along with the company's expansion, during the mid-1990s, MAX profoundly struggled with a staff crisis in its restaurants. The company had high rates of staff turnover and excessive sick leaves (R2). The former Human Resources Director Pär Larshans analysed the company's dynamics with the Swedish labour regulations and concluded that MAX needed to solve a gap in leadership. Thus, to cope with the employee crisis, he suggested that MAX's family owners change the internal culture and, therefore, fill the leadership gap.

> *And if I can change the culture, adjust the culture, I know that I will have a much longer-lasting way of working (Larshans, pers.comm.).*

Thus, Pär Larshans searched for a culture change model to apply to MAX (figure 4-1). According to Pär Larshans, the model was relevant to strengthening leadership.

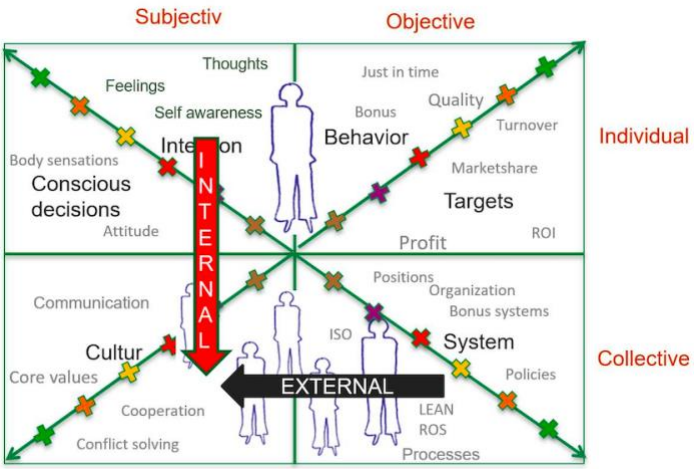

Figure 4-1. The model for the change in culture applied for the risk reduction and profit improvement at MAX.

Source: Consent approved by Pär Larshans. Pär Larshan's combined adaptation inspired by both the integral theory of Wilber (1998) and spiral dynamics of Beck and Cowan (Beck & Cowan, 1996). Retrieved from interviewee's presentation on MAX sustainability.

Having analysed the model depicted in figure 4-1, MAX acknowledged that refocusing the leadership on the individual was an essential area for their culture change. The core individuals at MAX who needed to be recognised as "heroes" were found to be line managers at restaurants (R2). Thus, MAX worked on the leadership development of line managers by training them according to The Human Element theory, where results are driven by behaviours that are in turn driven by feelings which are, in turn, driven by self-realisation (Esensjö & Petrina Esensjö, 2010; Max Burgers, 2013; SOCAP, 2012). The change in the focus of the leadership from owners and top managers to the line managers allowed MAX to successfully improve employee turnover and customer service and also implement new hiring strategies (R2).

Communications and gaining trust. The new hiring program considered disabled persons and immigrants as potential workers at MAX's restaurants. This new program was found to be the critical aspect of gaining trust from the Swedish public. Moreover, respondents 1, 2, 4, and 5 mentioned that MAX was not promoting its social programs in the 2000s but instead was voluntarily supported by external "organisations that were telling MAX's story" (R2) (Ohlsson & Riihimäki, 2015). This method substantially boosted the public's trust of MAX, which was the first lesson that MAX learned that positive word-of-mouth is crucial to build a reputation and gain public trust. In 2003, MAX began a close collaboration with the governmental

organisation Samhall on a hiring program focused on disabled persons (SOCAP, 2012). As the program went into full swing, MAX shared its knowledge with others regarding their social responsibility. Samhall made a series of press releases between 2006 and 2007 about MAX's unique social program in a Swedish labour market focusing on the recruitment of the disabled and later on immigrant human resources. The press releases attracted wide attention and were recognized by Swedish ministers, the media, and public society (R2) (Ohlsson & Riihimäki, 2015). This attention has led to numerous invitations of Pär Larshans to present MAX's social responsibility. During the research for this thesis, Larshans commented that he realised that the key to gaining trust was sharing knowledge as much as possible. He also claimed that "there was one article in the newspaper every day about MAX Burgers in a positive way" (R2). MAX has been awarded several accolades for its initiatives in social responsibility, including the 2007 European Union recognition of MAX's social program as the best in Europe (MAX Burgers, n.d.). Such events, starting with the governmental organisation Samhall spreading positive messages regarding MAX, resulted in trust of public to MAX's brand. This trust in the brand served as a competitive advantage and success factor for MAX by the time the company initiated addressing climate issues (R2).

4.2 The start of MAX's climate commitment work

MAX's owners' initiative. Climate commitments began as an initiative of MAX's family owners. In 2006, after watching the documentary film *An Inconvenient Truth* that depicts global warming issues, the Bergfors family realised their fast-food business was "a part of a [climate] problem" (R1-R7). The movie tremendously impacted the Bergfors family and they watched it more than 10 times together with the company's management team (R1, R2, R3, & R4) (Sustainable Brands, 2018; TEDxTalks, 2011). They recognised the need to precisely understand the climate impacts of their own company in order "to be a part of the [climate] solution" (R1-R7). Highly concerned, MAX owners gave the former MAX's Director of Human resources Pär Larshans the task to find out MAX's impact on the climate (TEDxTalks, 2011). Thus, the analysis of the carbon footprint of MAX became the area of responsibility of Pär Larshans. Owners admitted that he was a valuable resource as he spent lots of energy and time developing the victory formula model (figure 4-2) for a social program that aimed to forma of MAX's core values (figure 4-3). The model in figure 4-2 has been proved viable for the climate dimension of sustainability, where instead of a "solution," MAX depicts CO2 emissions (R2).

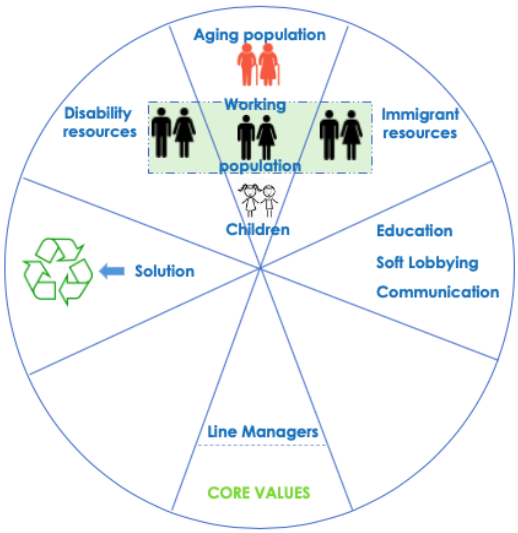

Figure 4-2. The Victory model designed by Pär Larshans to reduce risks and improve the business profit.

Source: Author's elaboration based on Pär Larshan's presentation on MAX's sustainability work. Consent for the reproduction of the figure given by Pär Larshans.

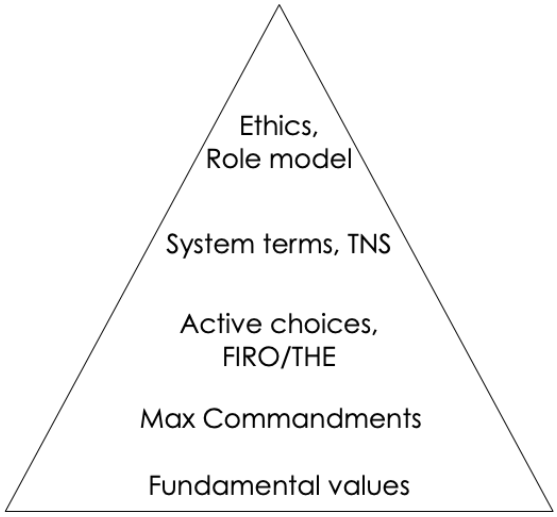

Figure 4-3. Core values of MAX Burgers.

Source: Author's adaptation based on the data given on the MAX Burgers corporate website.

Establishing partnerships with sustainability consultants. Challenged with MAX owners' request to come up with the suggestions for addressing climate responsibility, Pär Larshans had to find a solution despite having no experience and competence in work related to climate issues at the time. First, he vigorously started searching for a business model that would align with MAX's vision which focused on future and long-term considerations. As a result, Pär Larshans found a model suitable to MAX's case (figure 4-4) that fit his thinking in seeking the answer to "How can MAX be the winner tomorrow" (R2). For MAX, it was crucial that the model was based on visioning the possible future and that it suggested coming up with creative solutions. The ABCD model was developed by the Swedish sustainability consulting company The Natural Step. Thus, MAX selected this company among other companies for establishing a partnership for sustainability work development.

> *I had several companies that were giving me offers, but I wanted the premium. I wanted The Natural Step to work with me because I wanted not just to do the calculation [of carbon footprint]. I wanted to have the system changed. I wanted to change the culture. I wanted to change how we acted within MAX Burgers. And that [The Natural Step] was something that out-of-step thought would give me. Because if you want to change something by yourself as a leader, it's very hard to do it by yourself. But if you have an external expert that has high recognition, people will listen to them easier (Larshans, pers.comm.).*

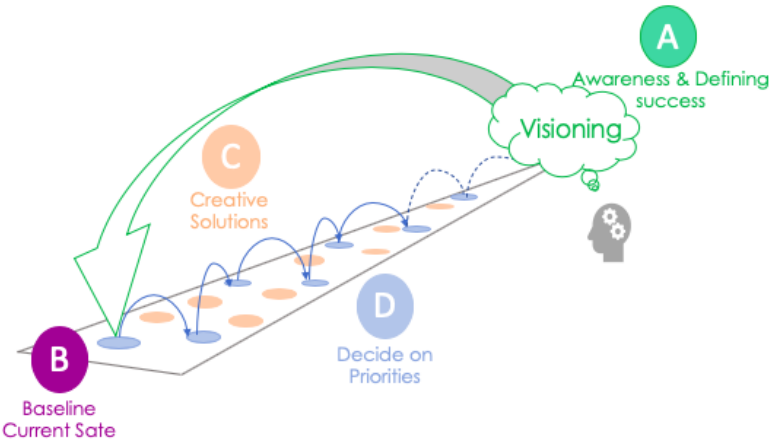

Figure 4-4. The Natural Step ABCD model for sustainable business.

Source: Author's adaptation based on Pär Larshan's presentation on MAX sustainability.

However, in 2007, the The Natural Step was the sustainability consultant for McDonald's, MAX's biggest competitor in the Swedish fast-food market, and thus, rejected MAX's initial request for providing consulting services. Later on, the Swedish branch of McDonald's did not renew its contract with The Natural Step. Thus, the company established a collaboration with MAX for the next several years (R1, R2).

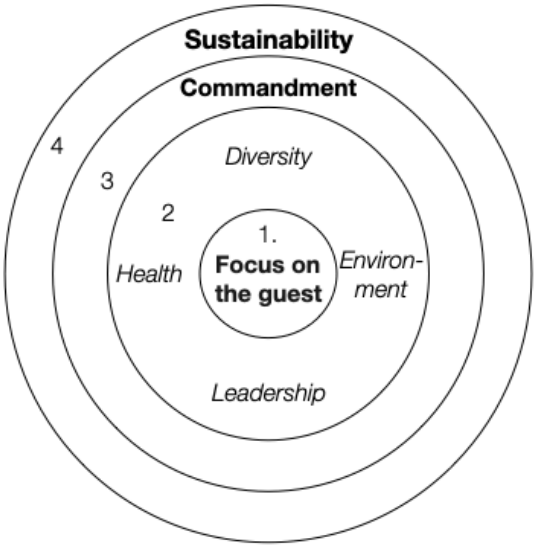

Figure 4-5. MAX and sustainability.

Source: Author's adaptation based on data retrieved from the MAX Burgers corporate website.

Sustainability strategy formation. Thus, a 2-year partnership with The Natural Step resulted in building a sustainability framework for MAX (figure 4-5). The focal point of the company's business is the guest who chooses MAX products because of their healthy, diverse, and environmentally responsible product options. These product options were designed following the core values of MAX's commandment. Thus, all four components constitute MAX's sustainability plan.

4.3 The carbon analysis and the launch of the carbon labelled menu

Carbon footprint analysis. MAX Burgers, together with the The Natural Step and consultants from U&We (R1, R4, R5), was challenged to calculate the climate impact of MAX (SOCAP, 2012). This calculation was the first of its kind in the industry. The first attempt of MAX's carbon assessment was approached to understand whether it was possible to realise it in the first place (R6). Consultants started by drawing a sketch of all the climate impact components for MAX products and setting boundaries and researched the available LCA for each component and raw material. However, all the available information on LCA was given for products made in the United States (US) when MAX sourced raw materials from Sweden. According to Katrin Dahlgren, a climate consultant at U&We, the challenge was to collect different types of data from a diverse range of MAX's suppliers. Regarding access and quality of data, "that's a matter of trust [between supplier and MAX]. I would say that MAX has done a great job of building trust with their suppliers" (R6). Over time as the carbon footprint assessment has become a regular process for the company, MAX worked on establishing reliable communications between data collection from suppliers and its provision to U&We. For that purpose, MAX assigned a specific internal employee to handle data collection; this employee also serves as the communicator between U&We and suppliers on questions of following the guidelines and formulating U&We's requests (R6).

Carbon calculations are based on the global standardised framework of the Greenhouse Gas Protocol (Török et al., 2018). The framework divides the total GHG emissions into three scopes. Scope 1 includes the GHG emissions of the organisation, scope 2 involves purchased energy, and scope 3 embraces all other emissions that cannot be categorised in first two scopes (table 4 -1). As respondents 1 and 5 noted, in MAX's analysis of emissions, it was necessary for MAX to consider potential impacting activities as completely as possible because they realised that many other companies count what has been emitted only within their operations. MAX wanted a full consideration of the business's climate impacts (R1, R5).

Table 4-1. MAX's GHG-causing activities categorised into the GHG Protocol's scoping framework.

GHG emissions scope categories	MAX's GHG sources	Share of emissions, %
Scope 1: Direct emissions	- Refrigerants - Leased cars - Use of natural gas	~1%
Scope 2: Purchased energy	- Electricity consumption - District heating and cooling	
Scope 3: Everything else	- Waste - Franchised restaurants - Consumable supplies - Packaging - Guests' journeys to and from restaurants - Handling of customer waste - Incoming transport of ingredients and materials - Food production - Staff travelling to and from their place of work - Business-related travel - Upstream emissions from the production of electricity and heating - Outgoing transport of food and waste	~99%

Source: Compiled from the 2017 report "Analysis of MAX Burgers AB's carbon footprint" and 2018 report "Climate Positive Burgers."

In the end, according to respondent 2, "it took eight months to conduct the [first] study [on climate impact analysis] and come up with a suggestion of what we can do because nobody has done it before in the world" (R2) (Barchan, 2016). Over the years, the carbon assessment process has substantially improved thanks to developing an understanding of boundaries of LCA's components, the criteria and requirements of the carbon calculation framework, planning, and close collaboration and trust with the parties involved in the process (R7). Therefore, today, MAX and U&We can deliver carbon assessments within four months, starting from data collection in January and calculating the final result in April.

The analysis eventually revealed that scope 3 activities were the biggest source of carbon footprint (table 4-1) and accounts for 99% of the company's total emissions. The analysis of its carbon footprint allowed MAX to realise which activities the company should consider for optimisation policies or rules to make them climate-friendly. Respondents observed that the climate-friendly policy rule eventually led to reducing costs (R1, R2, R3). However, the main result of the analysis showed that beef constitutes the highest contribution to the company's carbon footprint (R1, R2, R4, R6) (Climate Change Leadership, 2019). For MAX, removing beef was not an option, as beef was MAX's core product ingredient. The company's board then decided to focus on the customer side and educate them by putting carbon labels on the products so they could make informed choices and choose products with lower emissions (R1, R2) (Babakhani et al., 2020).

> *So, what MAX need to target is the beef. So. And how to do it? Well, we can't get rid of the beef because then we will get rid of our customers also. So, in the short-term perspective. Then the decision was "let's include the customer in our change and let's educate the customer as well." So, then we need to put the carbon on the menu. So then, in May 2008, we put the carbon on the menu (Larshans, pers.comm.).*

Acknowledgement of supply chain significance in carbon assessment. The success of MAX is in the desire to genuinely comprehend the climate impacts the company causes in the whole value chain. Kaj Török explained that MAX considered all three scopes of GHG Protocol and realised that the proportions of real climate damage come from scope 3 (table 4-1) that many other companies neglect in their carbon footprint calculations.

> *For MAX, 99.1% of the GHG emissions is in scope 3. And for many companies, it's the same. So, for IKEA, it's 97% in scope 3. For H&M, it's 99.6%. So, when we're thinking about carbon footprint, it's always important to understand which footprint are we talking about? Is it the full value chain that means the full scope? 1, 2, 3? Or is it just scope 1 and 2? Because quite often, companies just look at scope 1 and 2. And when they do that, like Ericsson, for example, the huge tech company. They have reduced their climate impact with 46% they say, but that's 46% of scope 1 and 2. So that means they also have 99.6% in scope 3. So, it's 46% of 0.4%. That's what they have reduced. So, this is important to understand what the difference is between how companies connect to the climate issue (Török, pers.comm.).*

The lack of customer awareness prevented the accepting of the carbon labeled menu. The carbon analysis and labelling performed by MAX were the first of their kind in the global fast-food industry market (R2). The media brought wide attention to the launch of carbon labelling and compensating (R5) (ProVeg, 2019). However, the main challenge for MAX was the absence of immediate reaction by the customers as the average customer in 2008 significantly lacked awareness of the connection between carbon dioxide and consumption in general according to respondents 1 and 2.

> *When it comes to the hurdle there, we did have a problem because the people didn't understand carbon dioxide either. They thought, "oh my, why don't you take away the carbon from the soft drinks?" But that's not that carbon. So, there were questions like that. So, it was really hard to convince about that (Larshans, pers.comm.).*

Thus, MAX then understood that the climate commitment path was not a short but a long-lasting responsibility, the benefits of which will be gained in the long term.

> *A project like this is not one day project. It is a project that is supposed to be run for a lot of years, many years to be successful. So, we continued to talk with a lot of newspapers, researchers, politicians and everybody to tell them about what MAX was doing (Forssten, pers.comm.).*

Yet, the low reaction to the "educating the customer" idea was perceived as a failure to MAX's owners as the guests did not understand how to benefit from the use of carbon labels on MAX's products (R2).

> *I remember that the CEO of MAX Burgers was really very clear: "We have worked so long with a start [carbon labelled menu]. You are the director of human resources. Go back and hire people. That is your task. Hire train your managers. You're the head of marketing. You should make people aware of this. So now it's time to market" (Larshans, pers.comm.).*

Limited communications. Even though MAX decided to stay committed and focused on long-run strategies, however, there was another challenge for the task delivery. The company management did not allocate financial resources for the marketing and promotion of carbon labelled menu through traditional marketing campaigns and commercial advertising on television (R2). The company was entirely relying on its channels and through communicating with visitors via signs in the restaurants (R5). As such, it was a challenge for MAX to deliver the carbon labelling message to a broader array of potential customers (R1, R5). However, according to Anders Forssten, former Chief of Marketing at MAX, the argument for not having promotion via television was that MAX intentionally did not aim to be loud about it. Because MAX conducts the climate compensation and carbon labelling not for commercial reasons, he claimed it also helped to avoid greenwashing discussions (R5).

Furthermore, MAX relied on the well-known "others telling your story" strategy of promotion MAX's case across-the-board (R2, R5). By 2008, MAX's reputation was widely known as a highly socially responsible company, and that image crucially supported MAX's launch of the carbon labelled menu. Thus, the media made an immediate response and issued press releases about MAX's climate commitment work (R1, R2, R5).

> *It really didn't start with the environmental dimension. But what we did in work, environment, and the social dimension created a trust for the brand. And then when we put the carbon on the menu and launched a program, we became the example because we were trustworthy. We have already done things before. They will recognise us as different. So even if we put a new thing in place, we were reliable. Trust is a key, key enabler (Larshans, pers.comm.).*

Others telling MAX's story. However, a year later after MAX's carbon labelled menu launch, Paul McCartney gave a speech at the European Parliament Hearing on the Climate Change and Food Policy titled "Less Meat Less Heat." McCartney used MAX's case of the carbon labelled menu as an example of company climate responsible action (Max Burgers, 2009; SOCAP, 2012; TEDxTalks, 2011). This event was another tipping point for the MAX position at that time as they suddenly became the role model not only for their social responsibility but for climate commitment as well (R2). After that, MAX was announced as the first climate-friendly fast-food

chain in the world, an announcement that attracted the attention of international publicity. Numerous invitations were sent to Pär Larshans, the former MAX Sustainability Officer, to present MAX's story for carbon labelling at different occasions. For example, he spoke at a 2009 event in Stockholm where IPCC scientists gathered to encourage the Swedish Government to sign the Copenhagen Climate Agreement where the former Head of IPCC was also attending (R2). These significant large-scale events gave attention to MAX's efforts. As a result, MAX was awarded the Green Award in London at the end of 2009. That, in turn, brought the broader recognition of the media. Pär Larshans has given presentations about carbon labelling not only to business and policy-oriented audiences but also presented it numerous times at Swedish universities. Thus, MAX's case became not only a subject for the media but a topic for research and lectures in academia (R1, R2).

4.4 Time of climate commitment development strategy: reduction of carbon emissions

The competitive advantage. Even though MAX had been implementing some of the activities for carbon reduction for a long time, in the 1990s, MAX eliminated the use of plastic foam packaging and only served Swedish beef, chicken, and bacon (R1). Respondent 1 claimed that these initiatives initially started without being planned as part of the climate commitment path to reducing GHG emissions but rather as a feature of competitive advantage.

> *Some of the things we've done to reduce emissions have been without planning, and I wouldn't say it's reducing emissions. It's more having a competitive advantage. So MAX is the only national burger chain that serves beef and chicken and bacon that's only from Sweden. And that is quite important because Swedish beef has a significantly lower climate impact than comparable EU, maybe 30%, maybe 50%. So that was kind of an unplanned competitive advantage, but it still had a fairly big impact in lowering the emissions compared to competitors (Török, pers.comm.).*

Indeed, beef produced in Sweden is known for the lowest use of antibiotics in the entire EU; Sweden also has the strictest regulations on animal welfare in the world. Additionally, the carbon footprint of Swedish beef is much lower than the EU average (MAX Burgers, 2018). In 2008, MAX had its carbon footprint assessed, which gave the company the directions to focus on the initiatives that would substantially reduce carbon emissions throughout the value chain. Also, in 2008, MAX reached out to its employees via an internal newspaper, newsletter, and regular employee meetings to come up with suggestions to reduce carbon emissions in restaurants as well as with ideas on the carbon compensation. MAX's employees were highly involved in the idea generation process (R5). MAX has introduced the following carbon-reducing activities since 2008 (MAX Burgers, 2018):

- In 2008, MAX carbon labelled its menu to allow guests to make informed choices.
- In 2008, all MAX restaurants and offices switched to electricity generated by Swedish windmills.
- In 2009, MAX started to recycle frying oil into biodiesel.
- In 2009, MAX stopped using box packaging for kid's menu meals.
- MAX stopped providing restaurant guests with lids and straws for drinks.
- MAX eliminated the use of palm oil in all restaurants in European operations.
- Since 2008, MAX has worked to decrease food waste from kitchens. Thus, in 2018, it estimated that kitchen food waste accounts for less than 1% of all MAX's wastes.
- MAX continuously introduces energy efficiency measures such as recycling heating and self-adjusting heating and cooling depending on the number of guests in a restaurant.
- In 2016, MAX launched the Green Family menu containing five low carbon meals (elaborated in chapter 4.5)

Financial advantage of being a climate-driven company. The analysis of its carbon footprint helped MAX to understand the areas to implement climate-friendly activities. Many of the activities listed above were found to be financially beneficial (R1, R2, R3, R5). Practices such as the removal of packaging from certain meals, a reduction of the amount of beef in burgers, and continuously using energy optimisation measures substantially helped to lower the costs and increase profit (R2, R3).

> *I would say that that to be honest, many of the activities we did had to do with cutting costs even though that was not the costs driving activities. We ordered a Swedish beef, local one. We took away the unnecessary things we had there. You know, when you buy a kid's meal at McDonald's, you receive a box that costs 1 krona per box. So, we could cut that. We took away packaging material. We took away the amount of beef in our burgers. So many of the activity we did was reducing costs. It didn't cost us money (Larshans, pers.comm.).*

> *A positive side effect with reducing your supply and using less materials that you also save money and that the people start liking MAX, even more for this [climate related] program (Forssten, pers.comm.).*

4.5 Climate impact reduction: failure of falafel burger and success of Green Family menu

As mentioned by respondent 1, the precursors for the climate-friendly burger were delifresh burger alternatives on the MAX's menu 2003 (SOCAP, 2012; TEDxTalks, 2011); these burgers had less beef to help to make them healthier than climate-friendly (R1). But six years later, in 2009, the fast-food chain had a better understanding of their climate contributions to climate issues. Then, MAX started thinking of designing products with lower carbon footprints and thus, they created a falafel burger, which was their first veggie burger with a low climate impact (R1, R5). However, MAX did not succeed with the falafel burger as "it never sold well enough" (R1), and eventually it was withdrawn from the restaurant's menu three years after its launch in 2012.

> *If we're going to change our menu, what we sell, our core product, our core offer, all of that we need to. That needs to be popular with our guests, and we cannot decide what our guest wants. We can offer them opportunities, but if they're not on the same page. So, the falafel burger, obviously our guest didn't appreciate it enough for many different reasons (Török, pers.comm.).*

However, over the years, MAX has been exploring product development to design meals with reduced carbon impacts (R5). The founder of MAX, Curt Bergfors, worked with product development considerations (R5) and wanted to create a "world burger" that he envisioned with less beef. However, back then, in 2008, the plant-based burger concept was not yet discovered (R5). Thus, MAX tried different substitutes for beef that would have a lesser carbon impact and was welcomed by guests. For example, MAX introduced a chicken burger that was more feasible for the guest to choose instead of a beef burger.

By January 2016, MAX managed to design and launch the whole Green Family menu that served five meals including plant-based vegetarian and lacto-ovo options. According to Kaj Török and the 2018 Climate Positive Burgers Report, the Green Family has been the most profitable and essential product launch MAX did for the reduction of GHG emissions; one respondent stated that "the guests were really impressed with the taste of the green burgers" (R7).

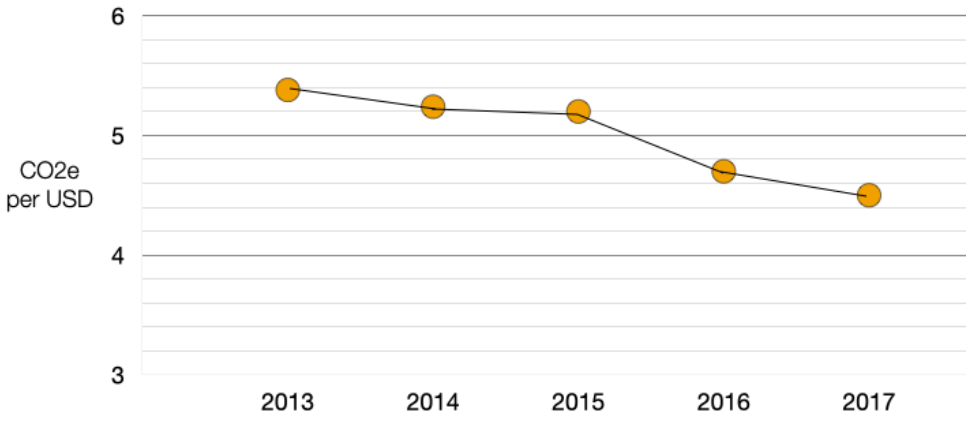

Figure 4-6. MAX's total climate footprint (scope 1, 2, and 3) expressed as grams CO2e per 1 USD in sales. Source: Built on data given in the 2018 report on "Climate Positive Burgers."

As the company expanded between 2013 and 2017, total emissions for scope 1, 2, and 3 have been growing as well. Total emmissions increased from 95,000 tonnes of CO2e in 2013 to 135,000 tonnes of CO2e in 2017. However, most importantly, the company managed to reduce its carbon footprint per 1 US dollar (figure 1-4) by 18% over these four years. As shown in figure 1-4, after the launch of green burgers with a low climate impact in 2016, the CO2 continued decreasing and reached 4.5 grams CO2 per 1 USD at the lowest point (MAX Burgers, 2018b).

Soon after the Green Family launch, the company renamed themselves from "MAX Hamburger Restaurants" to "MAX Burgers" as the restaurant chain extended its product line beyond the red meat-based menu. Respondents explained that "Because we know there can be so many good things between two pieces of bread that don't have to contain red meat" (R1) (Climate Change Leadership, 2019) and, thus, "we are much more than hamburgers, we are other kinds of burgers as well" (R7).

After the launch showed success in sales and climate impact reduction per earned US dollar, the company realised that MAX's efforts to connect climate change with the shift from a beef-made burger to green options were consistent with the company's passion for improving taste. Many of MAX's sustainability efforts reflect the company's focus on guest experiences (figure 4-5) (R1).

> *So, we know now that the most important thing we can do to reduce our carbon emissions is to make sure green burgers taste at least as well as red beef, red meat burgers. And that means that taste is at the heart of all our change. And that is very interesting to me. I start from science myself. So, to learn something so ephemeral, so hard to define as taste. Well, not just be so important for sales. We knew that before. Not just for how happy the customers were and their willingness to come back. But now also deciding in one way the fate of humanity through climate change. So, that is usually an important part of MAX's culture. To really love our own food and try to make it better all the time. So that means the passion for taste, which is deeply ingrained in the family and in the organisation, that means we can keep on doing what we love and connect that to climate change (Török, pers.comm.).*

Additionally, the company foresees that future customers will shift to choosing green alternatives over red meat meals as the taste of the green alternatives keeps improving (R1):

> *…And I think that in 5 years many people will say, you know what, I'm not eating the beef burger because the green burger tastes better. And some audiences say that today, but not most people.*

As shown in figure 4-7, the company's sales proportion between green and red meat menus has significantly changed. Green alternatives are becoming more popular, having reached almost 39% of all sales at MAX in 2018.

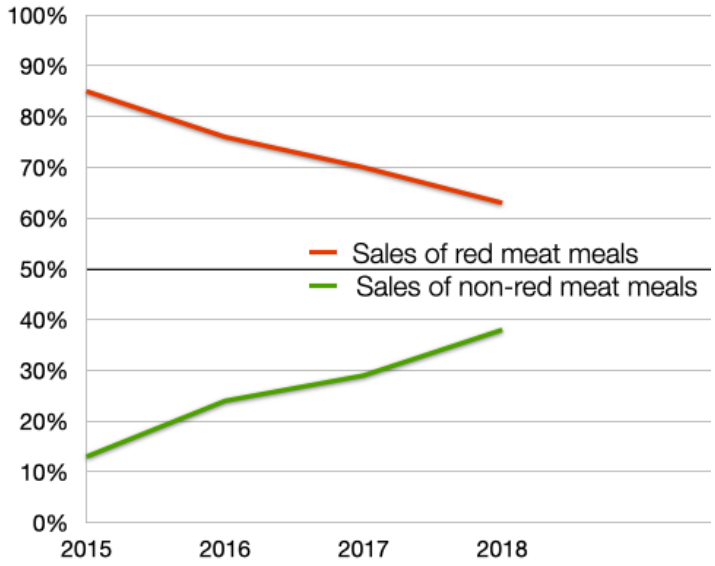

Figure 4-7. MAX's sales trend for red meat meals and non-red meat meals.

Source: Built on data given in MAX's 2018 report on "Climate Positive Burgers."

Thus, having results and setting goals for "being a part of a climate solution" is eventually a success factor for MAX in being the leaders in reducing carbon emissions (R1).

> *If I only would say one thing that has made us a leader and be seen as a leader in this area. It's because we have results (Török, pers.comm.).*

After the Green Family menu succeeded with customers, MAX decided to go further and set a goal that 50% of their burgers sold would be beef-less (figure 1-8) and declared that "in 2022, every second meal served should be made without beef" (Climate Change Leadership, 2019; Max Burgers, 2018b). MAX changed its business model from a conventional model associated with a red-meat fast-food company to a company with green burgers "that taste even better than beef" (R1).

There have been three reasons for the success of the 2016 Green Family menu over the falafel burger in 2009 as mentioned by several respondents. Firstly, the target consumers began to demand more green products, mostly due to a general increased awareness of climate issues and an eventual shift in mindsets to sustainable consumption (R1, R2, R6).

> *The audiences that were looking for a green menu alternative had grown significantly in Sweden. Not just the vegans and vegetarians, but especially the flexitarian is the normal people that just wanted to reduce their meat consumption and consumption and eat more greens (Török, pers.comm.).*

Secondly, MAX refocused its product marketing from communicating the "climate" aspect in burgers to emphasising its "taste" (R1, R5).

> *The second one was that we communicated the second time differently. So instead of saying buy this falafel burger, it's good for the climate, and it's organic. We're saying buy this burger because it tastes awesome. And that's why our guests come to us. We can sometimes we can imagine that people are coming to us because we have the sustainability profile and they do that to some extent. But much more important than the sustainability profile is how they perceive our products (Török, pers.comm.).*

Thirdly, product development advanced and the necessary ingredients became available for designing green burgers that tasted better than meat (R1, R6). For example, back in 2009, the beef substitute ingredient most often used in designing low carbon products was texturised soy. It had a specific soy taste that interfered with a beef-like taste. Suppliers did not yet have another available ingredient for the green menu that would cover up the taste of soy. However, by 2016 and today, product quality increased and soy taste became neutral, making it easier for MAX to design the extended Green Family menu (R1).

The success of the green menu was also the result of the will and continuous work of specific individuals at MAX. Jonas Mårtensson, Head of Product Development and Head Chef, was the key person in the task of developing products with lower climate impacts and appealing to guests' taste preferences (R7). He stayed updated on the market and industry trends and the availability of necessary ingredients; he also required MAX's suppliers to meet MAX's needs for raw materials as it was also related to changing the cooking process in the restaurants.

> *We had our head chef who understood that now is the time. Because he was always, you know, serving the market, understanding what is happening and how can he find this kind of product. So, he has always been working very goal-oriented, how to develop the menu the whole time. And then he started to notice that now we have more products coming in, which tastes really good and which works for us too (Wengelin, pers.comm.).*

Kaj Török was a second key person responsible for MAX's sustainability strategy. He searched for sustainable beef production solutions by establishing collaboration with a wide range of stakeholders.

> *MAX has been involved in projects over the years with other researchers and other stakeholders in trying to define what would be a sustainable beef production. And what would be the most carbon-efficient beef production (Dahlgren, pers.comm.).*

4.6 Climate neutrality and carbon offsetting projects' critique

In 2008, with the expertise of sustainability consulting agencies The Natural Step and U&We, MAX analysed its total carbon footprint. With that figure calculated, MAX's management decided to strongly align with the mission "to be part of the climate solution"(R1, R2) (FoodService Europe & Middle East, 2018) and thus, advocated for the compensation of their carbon emission. For that purpose, MAX established a partnership with a provider of carbon offsets, ZeroMission, and requested to compensate 100% of the carbon it emitted. Thus, the organisation provides carbon management services to MAX under the facilitation of PlanVivo standard's project of high-quality forests in Uganda "Trees for Global Benefit" (TFGB). The PlanVivo organisation developed a standard for community-based projects using a "payments for ecosystem services" approach and ensured its compensation for MAX following Greenhouse Gas Protocol guidelines (MAX Burgers, 2018b) (R4, R7).

MAX Burgers has never used the term "carbon neutrality" toward their products; but between 2008 and 2018, MAX's promotion claimed they participated in carbon offsetting of 100% of their total GHG emissions according to the world's only independent carbon neutrality international standard, ISO 14021. The standard relies on Greenhouse Gas Protocol's comprehensive standardised GHG measurements and management frameworks (R1). To ensure the correctness of carbon calculations, MAX's carbon analysis receives third-party validation by the international auditing company Ernst & Young (MAX Burgers, 2018b) (R1, R4, R7).

In 2017, MAX was negatively mentioned in an academic paper related to the TFGB project in Uganda, which had been operated since 2003 by Ecotrust, a Ugandan non-governmental organisation (NGO), and PlanVivo, the regional partner. In 2017, Lund University researchers Wim Carton and Elina Andersson published an article that criticised the ongoing small-scale rural development TFGB project in Uganda by applying a structural Marxist subsumption theory. They pointed out that "the management practices of carbon forestry are fundamentally shaped by the requirements of the carbon market, which for all sorts of socioeconomic reasons (not least widespread poverty) are often far from the reality on the ground" (Carton & Andersson, 2017, p. 840). Thus, the paper's conclusion implied the carbon forestry project conflicted with the farmers' ability to meet the project's requirements of "Ecotrust's ideas about 'boutique' offset production" that resulted in "large numbers of farmers to fall short of their contract requirements, with some even removing trees and leaving the project" (Andersson & Carton, 2017, p. 840). In response to their research, another academic paper was issued that discussed the limitations of their applied methodology as focusing only on "conflict ridden, exploitative" nature that "neglect actual benefits" (Purdon, 2018, p.1). In 2018, MAX and the ZeroMission sustainability consultants invited the Lund University research team to MAX's office in Stockholm. The aim was to grasp the depth and details of the researchers' criticism of MAX's carbon offset project, as MAX and ZeroMission have found that the research project was mostly "cherry-picking" and focused on the "dissatisfied" farmers (R4, R7). Thus, MAX and ZeroMission asserted that the researchers did not consider the project's advantages. Additionally, as a response, ZeroMission contacted PlanVivo with concerns to answer if those participating in the TFGB project in Uganda's rural communities encountered socioeconomic and technical challenges in following the carbon sequestering criteria. The time coincided with the regular 5-year audit of PlanVivo's TFGB project and third-party reviewers included in the verification process the questions regarding MAX's concerns that reflected the study findings of Lund University researchers (R4).

4.7 Court case: the battle for making voluntary carbon offsetting costs tax-deductible for businesses in Sweden

Another challenging tipping point for MAX and other Swedish companies' climate action development paths was the period between 2014 and 2018. During this time, MAX was defending the costs for carbon offsetting cases as worthy of tax deductions in Sweden's Supreme Court against the National Tax Agency (Skatteverket) (R1, R4). However, the story started with Saltå Kvarn, a Swedish food company that applied for tax reductions for their carbon offsetting costs that were denied by the Swedish Tax Agency (R4) (ZeroMission, 2018a).

In general, the carbon offsetting schemes operate on compliance and voluntary markets. Compliance carbon offset markets are set and regulated under the Kyoto Protocol treaty. The costs allocated, for example, to finance the Clean Development Mechanisms (CDM) Certified Emission Reduction units (CERs) are considered as the direct costs eligible for tax reduction programs. The challenge with carbon offsets on the voluntary market was that the market is unregulated and uncertain (R4, R7). Besides, the voluntary market carbon offsetting scheme fell under neither European Union's Emission Trading System (EU ETS) regulations nor Sweden's

Climate Act and Climate Policy Framework. Therefore, the Swedish Tax Agency argued that the costs of any entity in Sweden for carbon offsetting projects were indicated as voluntary initiatives (R4). Therefore, as they are voluntary corporate initiatives, the costs for voluntary carbon compensation credits have been classified as ones spent for charity and aid purposes (Blinfo, 2018).

Salta Kvarn did not agree with the statement that costs spent for carbon compensating projects was charity and other companies such as Arla and MAX, that also allocate funds to compensate their carbon emissions, did not accept the Swedish Tax Agency's statement, either. Thus, MAX, Arla, and Salta Kvarn separately became embattled in 4-year court cases on the matter; they ended their cases separately due to the companies' different methods and philosophies about product marketing (R4, R6). Johanna Brunge Grant, a consultant for ZeroMission, was consulting MAX in the defending process and stood with MAX. She commented that the tax law in Sweden did not consider tax deductions from the sales of products that harm health such as alcohol and cigarettes or fall into "questionable" categories of businesses like adult video platforms. Thus, "carbon offset ended up in the same corner as alcohol and adult videos." (R4). She has also expressed:

> *For all our [ZeroMissions'] customers, including MAX, carbon offset has been something that has been part of the marketing and especially for MAX, the carbon offset has been like on their menu, and it's part of a communication to their customer (Grant, pers.comm.).*

In four years, MAX and ZeroMission participated in numerous round table discussions with the Swedish government representatives aiming to change a law and make climate initiatives work for other companies plausible and, thus, make voluntary carbon offsets deductible. At some point, the Swedish Supreme Court suggested that that "only emission reductions through the EU ETS units, a cap and trade system within Europe, can become deductible and nothing else" (R4). However, having not been satisfied with the suggestion MAX and ZeroMission pushed the court battle further.

> *It was like you [the Government Tax Agency] don't understand the way companies thinking. Nobody would ever carbon offset through the EU emission reduction units. It's more for countries, not for a company like MAX (Grant, pers.comm.).*

MAX did not consider carbon offsets as aid, charity, or donations, and none of the others involved in court cases did. MAX stated instead that carbon offsetting costs served as trade and thus, were included in the market. Thus, it was a long-lasting challenge for MAX to make Swedish Government representatives understand that the reduction of their carbon emissions was part of their marketing and a core business strategy (R1, R4) (ZeroMission, 2018b). However, in June 2019, MAX received a positive statement from the Swedish Supreme Court. Thus, for MAX, the court victory resulted in a tax refund from the Swedish Tax Agency for the years between 2012 and 2017 (R1) (MAX Burgers, 2018a). More importantly for MAX, the most significant victory was the regulation change in the national tax system to count costs spent for voluntary carbon offset credits as marketing costs that are eligible for tax deduction (R1, R4). In a press release on June 29, 2018, MAX asserted that a ruling from the Supreme Administrative Court concluded that "a company that had expenses for climate compensation and marketed the compensation for the sale of the company's products such as marketing costs it has been allowed a tax deduction" (MAX Burgers, 2018a). The change in Swedish tax law implicated that for all Swedish companies inclining to compensate carbon emissions, 22% of the costs that are taxed will be refunded (R1) (MAX Burgers, 2018a). The only requirement to the new tax regulation was that companies offsetting their carbon emissions have to explicitly apply it as a marketing tool in products sales (R4) (Blinfo, 2018). MAX spent four years working over the

court case with other companies, which eventually resulted in the change of national taxation regulation. These efforts are a testimony to how MAX fulfills its mission "to make the world a little, both by serving the best tasting burgers and by doing good in society and for the world" (FoodService Europe & Middle East, 2018, p.1). Respondents R1, R4, R5, and R6 clearly stated that MAX's initial purpose in engaging in the court process was not the tax refund for their carbon compensation initiatives. Instead, the primary goal was leveraging a change in the tax system that would give small companies a more straightforward path to implement carbon compensation projects.

> *With the changed legal practice, it is now easier for more companies to create climate-positive products, and it feels fantastic (Török, pers.comm.).*

> *We are happy and relieved that climate compensation has finally become deductible not only for us but for all companies. The change of jurisprudence is a victory for the earth's climate, said Richard Bergfors, CEO of MAX Burgers (MAX Burgers, 2018a).*

> *MAX's purpose with this [court defending case] is not reducing tax. It tried to make a better world actually* (*Forssten, pers.comm.).*

The current sustainability director of MAX, Kaj Török, additionally claimed that MAX considers the court case victory not only as a prize for several companies (Arla, Saltå Kvarn, and MAX). Instead, the country's people and the environment are the ones who eventually won and benefited the most in the long run (R1).

> *It made it a 21% cheaper for all other companies in Sweden to buy carbon offsets. So that's why we said, Okay, MAX, Arla wins, and MAX wins. But it's really the Swedes and the climate (Török, pers.comm.).*

4.8 Climate positivity and urgent call for joining MAX's path

As MAX has expanded, their GHG emissions have expanded as well. On December 12, 2015, at the 21st Conference of the Parties of the UNFCCC, the Paris Agreement was adopted by consensus and signed by more than 190 nations. The agreement announced the world has to enhance the efforts to limit the global temperature rise to 1.5 degrees this century. That announcement has tremendously influenced MAX's family owners and management and led them to develop an idea that would inspire others to become committed to climate issues. Thus, two and a half years later on June 5, 2018, MAX announced plans to offset 110% of the carbon they emit.

> *'If we are to achieve the UN climate goal of keeping the global temperature rise below 2 degrees, it is not enough just to reduce greenhouse gas emissions. What we have already released must also be cleared away' said Kaj Török (MAX Burgers, 2018a).*

MAX gave the term "climate positive" to the initiative of sequestering 10% more than the company emitted. In essence, it indicated that MAX purchases 10% more carbon offsets that it produces (Climate Change Leadership, 2019; UNFCCC, 2019). The realisation of a climate positive initiative relied on MAX's partnership and collaboration with highly skilled experts within its climate commitment work. This partnership allows MAX to build a comprehensive analysis of carbon emissions and organise carbon sequestration schemes. MAX assigns its carbon footprint assessment to the consulting company U&We, which follows the Greenhouse Gas Protocol measurement standard. Each year since 2008, U&We collects data from MAX's supply chain, calculate emissions, and passes the final result to ZeroMission. ZeroMission

operates as a provider of carbon offsets as requested and based on the carbon analysis number. Between 2008 and 2018, ZeroMission provided carbon offsets for 100% of MAX's total carbon emissions. Thus, the project in Uganda "Tree for Global Benefit" was sufficiently operating for that purpose. Since 2019, as MAX started promoting climate positive change, ZeroMission provided additional carbon offsetting schemes in Nicaragua and Mexico (figure 4-8).

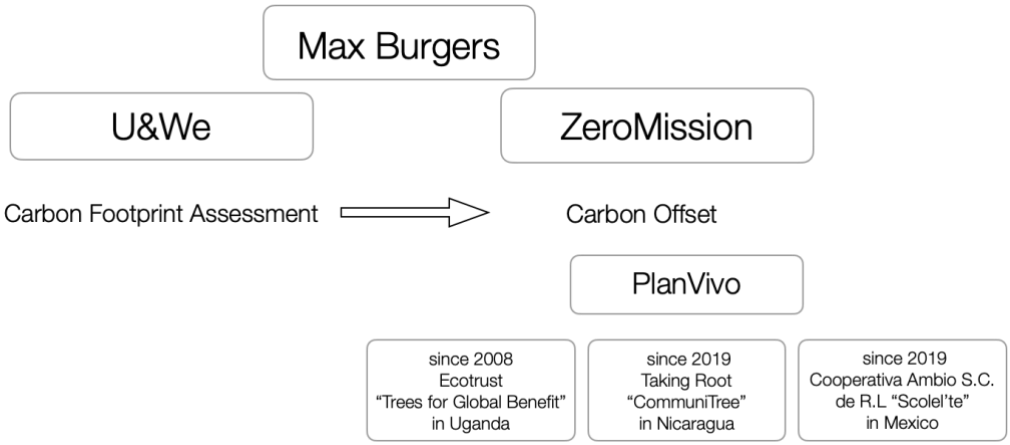

Figure 4-8. MAX's climate work partnership.

Source: Author's elaboration based on data given by respondents 4, 6 and various sources (PlanVivo, n.d.; ZeroMission, 2019b).

During the interview for this thesis, Kai Török commented that since the carbon positive initiative launch time up until April 2020, he made approximately 190 presentations on advocating the climate positive initiative and urged others, including individuals, companies, and societies, to join MAX's climate path. For the latter purpose, MAX came up with three steps on how others can make their products climate positive. First, MAX advises starting with a measurement of what is included in 100% of total emissions throughout the value chain. They admit that value chains are complex, and therefore, advise that companies hire experts to assist with this step. Secondly, MAX recommends committing to continue reducing emissions, warning that the process might turn slow and long. Thirdly, MAX suggests compensating for at least 110% of the total emissions.

Additionally, at the various arrangements, Kaj Török presented that carbon positive initiative cost MAX between 0.25% and 0.4% of their entire turnover to invest into the climate positive menu, which also has been expressed by him as a relatively cheap investment (Climate Change Leadership, 2019; Réseau Alliances, 2019; Sustainable Brands, 2018). Meanwhile, according to former Chief Marketing Officer, the 0.4% of MAX's total annual turnover is "a substantial amount of money" for going climate positive (R5) that accounts approximately 880,000 euro from the total turnover of 220 million euro in 2018 (MAX Burgers, n.d.).

MAX learned their mistakes from previous initiatives when they launched the carbon labelled menu in 2008 and the falafel burger in 2009. They admitted that they needed to correctly communicate the launch of climate-positive burgers to their audience and educate their customers and society on how MAX is connected with climate issues (R1). Thus, as compared to the carbon labelling launch, the carbon positivity initiative was advertised via TV channels (R5). To make it more understandable for the audience on what MAX implies by climate positive, MAX's sustainability manager Kaj Török made the world news announcement a speech on the launch of the climate positive initiative at the Sustainable Brands Fair in

Vancouver (Sustainable Brands, 2018). As Kaj Török mentioned, in 2018, MAX started to call its business climate positive. He made the following remark about the shift and the company's transparency.

> *Between 2008 and 2018, where we're looking at about 85% of the value chains, total footprint. And from that perspective, we were leaders in that we have the widest climate analysis I've seen in the restaurant industry globally. But in 2018, we started measuring the last 15$ as well. So, we came up to 100% of the value chain. And at that time, we went from 100%, carbon offsetting from the 85% the farmer's land to the guest, and that's 85% of the carbon footprint to 110% of the whole value chain. So that's about a 25% increase. But these things are really difficult to talk about without knowing more details. So that's why we said we used to say 100% carbon offset it and we're open and transparent about what we meant with that. And now we're saying climate positive. And that means we're 110% of everything (Török, pers.comm.).*

All the mentioned efforts for climate responsibility made so far by MAX are strongly consistent with its core goal to inspire others to join the climate commitment path.

> *"We hope that we can inspire other companies to launch climate-positive products and services" said Richard Bergfors at the interview with Food Service Europe & Middle East (2018, p.2).*

Table 4-2 depicts findings of the developmental process of achieving the climate action plan via highlighted tipping point-events in the timeline. The table also indicates interviewee sources that mentioned specific events.

Table 4-2. The categorised list of materials collected and analysed for the thesis project.

Timeline	Identified tipping point-events	The interview sources that shared about the tipping point-event (in bold - major contributors)
1999-2006	**I.** Precursors of MAX' climate work: maturity, crisis, and time for changes	**Pär Larshans, Kaj Török**, Katrin Dahlgren, Marita Wengelin
2007-2008	**II.** The start of MAX's climate commitment work	**Pär Larshans, Kaj Török,** Tony Jakobsson, Johanna Brunge Grant, Anders Forssten, Katrin Dahlgren, Marita Wengelin
2007-2009	**III.** Carbon analysis and launch of the carbon labelled menu	**Kaj Török, Pär Larshans,** Tony Jakobsson, Johanna Brunge Grant, Anders Forssten, Katrin Dahlgren, Marita Wengelin
2008-2020	**IV.** Time of climate commitment development strategy: reduction of carbon emissions	**Kaj Török, Pär Larshans,** Tony Jakobsson, Anders Forssten
2009-2016	**V.** Climate impact reduction: failure of falafel burger and success of Green Family menu	**Kaj Török, Anders Forssten,** Pär Larshans, Marita Wengelin, Katrin Dahlgren
2008-2018	**VI.** Climate neutrality and carbon offsetting projects' critique	**Johanna Brunge Grant, Marita Wengelin**, Kaj Török, Pär Larshans
2014-2018	**VII.** Court case: the battle for making voluntary carbon offsetting costs tax-deductible for businesses in Sweden	**Johanna Brunge Grant**, **Marita Wengelin**, Kaj Török, Anders Forssten
2018-2020	**VIII.** Climate positivity and urgent call for joining MAX's path	Kaj Torok, Johanna Brunge Grant, Katrin Dahlgren

Source: Author's work.

5 Analysis of drivers and barriers

This chapter analyses the drivers and barriers of MAX Burgers to the development of climate responsibility that was narrated in the previous findings chapter. The chapter is structured in accordance with the analytical framework that seeks to analyse the driving forces and challenges emerging within the organisation and from external influences.

5.1 Internal drivers and barriers

Internally emerged drivers within the organisation drove MAX during the development of climate initiatives and served as motivational leverage and challenging factors; these drivers and barriers are analysed in this section. Each area of influence has been analysed as a driver or barrier based on the provided data by interviewees and supported by grey literature. Thus, some areas of influences only serve as a barrier or driver.

5.1.1 Top management

Driver. All respondents agreed that MAX's family owners as top management was a crucial influence in the climate action plan initiatives. Throughout the initiative, the family took the lead in driving all climate initiatives at MAX (R1-R7), starting from carbon footprint evaluation to product development and support of carbon positivity.

> *The owners had the same mission and the values that they would like to contribute to the society, not only be a profitable company but also contribute and be part of the society and also be a part of the solution of the problems that exist in this world (Forssten, pers.comm.).*

Respondents 6 and 7 noted that due to the family's leadership capabilities, strong will, and courage in taking risks, brave decisions in the climate-oriented initiatives were made quickly and thoughtfully (R6, R7). When the first attempt to come up with a green burger filled with falafel did not succeed and was eventually removed from the menu, MAX's owners still believed in the idea of greening the menu to reduce its carbon footprint. Then, a few years later, they were at the forefront of the launch of a menu with more extensive offers (R1).

> *It didn't work like a falafel burger. But we didn't forget. So, we tried something new. A couple of years later. And I think. One of the most important things for us to succeed was the Bergfors family. The family owns MAX. They have been willing to take risks (Török, pers.comm.).*

Most importantly, the Bergfors family has been noted to have a strong motivation to keep their family business for an extended period. Therefore, their main goal is to keep the company's profitability at an optimum instead of maximum (R1) (Foretagarna, 2019).

> *And the family says, you know, "we want to be family-owned for a really, really long time, maybe for a generation. So, we want to strive for optimum profitability right now, not maximum." So, that's actually a little bit funny because MAX doesn't want to go maximum on profitability. So, we go optimum into that. And that means we are really building for the future. And so that's one of the success factors [in leading in climate commitment development] (Török, pers.comm.).*

The management's ability to make brave decisions and their courage despite uncertainties and risks was mentioned by external respondent 6 as the success factor for leading in carbon assessment:

> *One of the things that success factors for MAX are the courage of the organisation, the courage of making the decision beforehand that we are going to do this. We don't know what it will take. We*

> *don't know the cost beforehand. We don't know how much time it will take from us. We don't know how much strain it will put on our suppliers in collecting the data. We want to do this anyway. And that courage, I would say, is a great success factor for them in terms of being in the forefront of carbon footprinting of restaurant services (Dahlgren, pers.comm.).*

There are other key management individuals whose leadership capabilities leveraged the implementation of climate initiatives. One of them mentioned by respondents was Pär Larshans, former head of human resources and first sustainability director at MAX. He established networks with experts, the public, and the government at the beginning of the development and implementation of the climate-related activities—that period dated between 2006 and 2015 (R1, R5).

> *Other [successful factor in leading climate commitment development] has been, of course, strong individuals. We have my predecessor at this post, Pär Larshans has been very eager on doing its job well and been connecting a lot in Sweden (Török, pers.comm.).*

Pär Larshans was at the forefront of changing the company's culture. Moreover, his ambitious personality was capable of handling a challenge to reposition himself for tasks such as climate impact assessment while being accountable for human resources management and social responsibility at MAX back in 2008. Larshans' endurance in pushing things until they produced results benefited the company at the beginning of all the changes at MAX (R2). Thus, under his management as the first Chief Sustainability Officer, the company gained a Green Award in London in 2009.

Another key individual, according to the majority of respondents (R1, R3, R4, R6, R7), Kai Török, played a significant role in climate profile development at MAX is. He is the current Chief Sustainability Officer who ensures climate initiatives' implementation and communications in a way that follows the strategic mindset. He has assisted in MAX's strategy formation since 2007, making sure MAX makes people aware of what efforts the company has taken to reduce its impact on the environment. Thus, people find out that MAX is something different from the other burger businesses (R2). Moreover, respondents 4, 6, and 7 mentioned that Kaj Török was a key person in facilitating various projects with researchers and other institutions around what would be sustainable beef production (R6). He organised a series of stakeholder dialogues to build a basis for decision making of a particular climate-related project, initiative, or decision.

> *He's been working quite interestingly I think with the stakeholders. In stakeholder dialogues where he has invited me, he has invited NGOs, and he has invited scientists. He has invited a broad range of people from different types of societal organisations in order to test ideas with them and say, OK, what would you say if MAX did this? What would you say if MAX wanted to do that? What do you think about the term carbon neutrality and so on? So, he would have a basis for the decisions that needed to be made by the MAX Burgers' decision-makers, the boards (Dahlgren, pers.comm.).*

Jonas Mårtensson, Head Chef and Head of Product Development, was also mentioned as a vital person at MAX. He was at the forefront of managing the Green Family product development project. His primary task was to design a product that would be low on carbon emissions and would taste similar to beef (R7). Thus, he searched the right suppliers that could meet MAX's green product requirements.

> *… So, he [Jonas Mårtensson] was always keeping an eye. "What is going on? How can I find this kind of products? How can I create something that is tasty and has less climate impact than meat burgers?" So, he was always pushing suppliers, you know, "no, we don't want this kind of product. We*

want this kind of product. Otherwise, we cannot cook it or prepare it in our restaurants." So, he was pushing the suppliers to develop other kinds of products that would work for us (Wengelin, pers.comm.).

Barrier. There has been a slight resistance, disbelief, and absence of interest in climate action expressed by MAX's Head of Purchasing, according to respondent 2. This resistance is connected to the period when the company initially was challenged to design not only a tasty and healthy product but one that would stay consistent with the company's aspiration to stay climate responsible.

It was really the owner to be honest who wanted really to do this [climate commitment]. But the management board did not really believe in it because they were really into selling as many burgers as possible. That was one of the biggest hurdles internally because the Head of the Purchasing was not interested in this at all. He saw this just as a problem (Larshans, pers.comm.).

5.1.2 Employees

Driver. Employees at MAX were found to be personally motivated to have a positive impact and seemed willing to bring that to the company (R5).

But luckily, I think almost any person would like to reduce their effect on the environment. So, I think the staff adapted really quickly, and they understood that we need to do something, and they start coming up with their own ideas how can reduce our emissions. The will was pretty strong for everybody. It was easier to get people [employees] thinking about a reduction in environmental impact (Forssten, pers.comm.).

Barrier. When owners initially communicated to internal employees about their desire to initiate climate impact assessments, they faced a lack of internal competence in climate questions (section 4.2). Pär Larshans was first tasked with the climate impact assessment. However, he found himself insufficiently experienced with this environmental responsibility as he was responsible for human resources at MAX.

I had not worked with that [climate related work] before because I was trained in economics and engineering. I have worked for ten years with human resources and education. So, I was not really skilled in the environmental aspect of sustainability. So, I needed to understand who I can work with, who will be the best partner for me (Larshans, pers.comm.).

Besides, when climate-related activities were initially introduced to the staff, reaching employee connectedness and focus over the carbon reduction idea was challenging at the beginning according to Anders Forrsten as it seemed time and budget consuming (R5). However, these challenges were internally resolved, partially due to the gained trust from employees. MAX previously implemented a culture change via a new hiring strategy, continuous top-down communications, and the formation of a sustainability vision. These measures seem to have supported MAX's willingness to communicate their climate responsibility (R2). Besides, the current Chief Sustainability Manager, Kaj Török, ensures that strategical thinking connects the different departments at MAX (R1). For achieving this connectivity, MAX organises regular internal meetings with a sustainability council three times a year (R1, R3).

We do also have a sustainability council. And so, we meet three times a year. And that means that we meet all of the top management teams and also some extra important competencies like our main chef and someone extra at the supply chain and so on. At these meetings, we're trying just to create a shared view on what we're doing and what's happening in different parts of the organisation (Török, pers.comm.).

MAX has organised a series of courses and training workshops to educate its staff, so they gain trust in and recognise the values related to climate initiatives (R5) (Conrad & Thompson, 2013). Also, MAX has an internal newspaper for employees; via this publication, MAX is able to ask employees to come up with the solutions and suggestions on how MAX could reduce its carbon emissions. There was a high involvement among all the employees (R5).

5.1.3 Budget

Driver. Many activities that aimed to reduce the carbon footprint at MAX had cost-reducing effects (R2, R3). Respondent 3 has expressed his surprise on the issue that other companies do not practice carbon-reducing policies if such activities reduce costs or cost the same.

> *And I have a hard time to understand why all companies don't do the same, if you have a choice between something that is better for the environment and it's pretty much the same cost, whys shouldn´t you do it. Anyway, that's how we think and how we do it. (Jakobsson, pers.comm.).*

Additionally, respondent 5 highlighted that the grounding motivations for climate commitment activities were not costs considerations as MAX always had the budget to invest in carbon labelling and compensation purposes. However, MAX's internal policies for decision making in building operations, real estate development, and facilities management affairs do follow the climate-friendly plan. They also depend on cost considerations because, as respondent 3 shared, "it [decisions on costs] needs to be neutral or almost neutral or maybe positive in earnings or spendings" (R3).

Barrier. As the company was relying on its own channels of marketing between 2008 and 2016, MAX did not consider commercial advertisements via traditional marketing channels such as television. Thus, when the carbon labelled menu was launched and did not receive full attention by customers, it was assumed that insufficient finances for its promotion was a challenge to achieving the desired customers' reaction rates (R2) (Barchan, 2016). However, MAX did not advertise climate-related activities on TV as the climate work was not considered as something to earn from (R5). As the company grew and climate action development improved at MAX within the following years, so did the allocation of budget for the promotion of the climate initiatives (R1).

> *We haven't had a clear business [climate] plan for MAX at all, actually, but we, of course, have had a budget (Török, pers.comm.).*

5.1.4 Ethical motives

Driver. MAX's robust compatibility with core values was found to be the driver in pushing climate-related initiatives (R4, R5, R7). For example, the tipping point-event (subchapter 4.7) of defending the carbon compensation costs against the national tax agency in court for years proved the company's strong will and consistency to align with its core values (figure 4-3) to be role models and do good for business.

> *MAX were brave and said: "No, we won't take no for an answer. We think we believe in what we're doing and think this is the right way." So, they were brave enough to take it to the next instance. (Grant, pers.comm.).*

> *We are a value-driven company in reality, instead of trying to think about "will I keep my job as a CEO if we create this report, trying to sell yourself to the board" we focus on doing the right things (Török, pers.comm.).*

Moreover, several respondents stated that MAX strongly believes that what they are doing helps the environment (R1, R3, R4, R5, R7).

> *I think one of the critical success factors for MAX to manage to become trustworthy within sustainability is mainly because it is actually a core value of the company because I don't believe you can be really trustworthy and be really forward and progressive within field. If you don't really believe deeply, believe in what you're doing. So really it has to come from inside the core value. And I believe that is the case actually for MAX as the company and for the owner family. It is really, truly a core value to do good and to serve the world (Wengelin, pers.comm.).*

Most important in MAX's core values is being an inspiration and example for other companies (R1, R6, R7); the company's leading efforts in climate action initiatives prove that.

> *What we can do is a big part. We can do what we do as a company. But the bigger aspect of it is to talk about it. We have to inspire others to follow our way. So, the other part of the sustainability work is to actually put a lot of effort in spreading the word to talk about it. So, and to set an example to inspire others to do more. If we can do it, why can't you do it? You know, we have chosen to do this now. You can also choose to do this now. So, this kind of message we are trying to send to other businesses (Wengelin, pers.comm.).*

The empirical analysis of the internal influences as drivers or barriers showed that for some areas of influence only acted as driving factors. This is true for ethical motives (figure 5-1) as the MAX has strong core values with moral motives expressed in their mission which is "to make the world a little better, both by serving the best tasting burgers and by doing good in society and for the world" (Selberg, 2018, p.1).

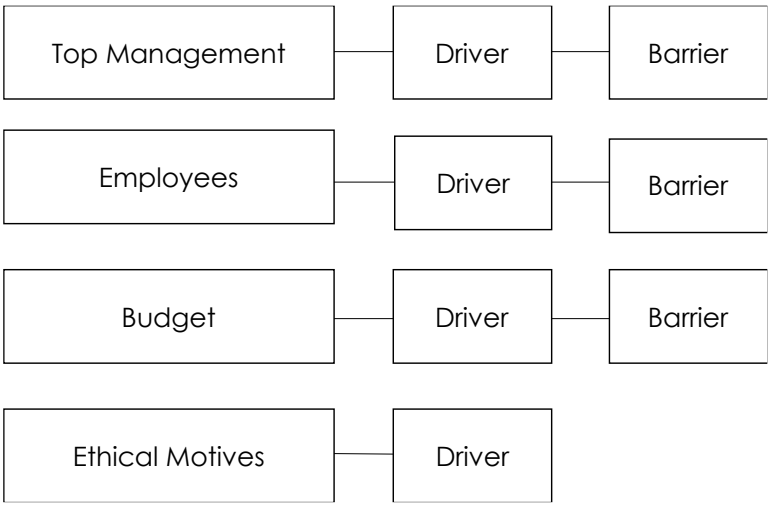

Figure 5-1. Internal areas of influence toward the development of climate action that served as a driver and/or barrier.

Source: Author's work.

5.2 Analysis of external drivers and barriers

This subsection analyses the external areas of influences for their qualities as driving forces and barriers. It is important to mention that each area of external influence was analysed in the scope of data availability. Thus, the absence of a driver or barrier identified under each area of

influence should be noted as due to the lack of provided data or only serving as a driver or barrier.

5.2.1 Suppliers

Barrier. When the company learned of the climate-impacts caused by their beef products in 2008, MAX decided to develop a green burger with a taste not inferior to beef. But at that time, MAX's ideas on a climate-friendly menu did not align with the pace of ongoing product development (R1, R7). Beef substitutes with low carbon profiles were not yet available to the market. More specifically, the main challenge was finding a supplier that could offer a plant-based substitute for beef. Texturised soy was available at that time, but it did not nearly meet MAX's ingredient taste standards. Thus, driven by innovative ideas, MAX has changed suppliers often within the last decade to the ones who were progressive with product development and could fit MAX's standards for the Green Family menu (R1).

> *We've changed suppliers, of course. So that falafel burger came from someone in 2009, the barbecue sandwich that where one of our best sellers in 2016 came from someone else. And now the plant beef that we're selling a lot today is coming from a third supplier. So, we're changing that. We're changing our supply chain to some extent. The sauces or the dip sauces are coming mainly from the same supply. So, it's a mix of keeping suppliers and changing them (Török, pers.comm.).*

5.2.2 Regulatory influence

Driver. There has been a lack of enforcement from regulatory bodies to require companies to reduce their GHG emissions (R1). As the Kyoto Protocol was not designed for businesses, but for countries, change is slow without enforcement (R1, R4). Besides, respondent 1 shared that politicians and governments in Sweden and internationally are not sufficiently addressing the climate change issues. Concerned by this reality, MAX representatives acknowledged the importance of companies' climate responsibility as "there is no chance at all that climate change can be mitigated" (R1). Thus, driven by poor national governance, MAX is conscious of the importance of its business role in voluntarily leading climate initiatives.

> *If I would go back to 2006 and say, would I have preferred that we did the job or that governments did the job? I would still have preferred the government because that meant we would fix the climate issue. So, what we are operating is a leadership gap. There is a gap between what we need to do in the world and what it's done. (Török, pers.comm.).*

Barrier. Swedish regulations were also found to be disincentivise corporate climate activities and even to challenge them. MAX once had to stand up for the industry in the Swedish High Court against the national tax agency regarding the costs spent on carbon offsetting projects on the voluntary market (subchapter 4.7).

> *I think we haven't got that much support from that perspective. We've actually had to fight the system at one time [with National Tax Agency at the Swedish Supreme Court]. So, what they decided was that carbon offsetting was not the top deductive. And I've actually been writing in legal papers and a legal magazine explaining to judges why we're doing this and how it's done. So, from that perspective, I think in one way we can say that's also why we succeeded as leaders, because there was a leadership gap, and someone had to do something. (Török, pers.comm.).*

5.2.3 Customers

Driver: As the core focus of MAX's business is the guest's taste preferences (figure 4-5) MAX puts all its business efforts into achieving the goal "to make the best burger in the world" along with the company's mission "to make the world a little better, both by serving the best tasting burgers and by doing good in society and for the world" (Selberg, 2018, p.1). All respondents highlighted the focus on the guest as a critical driver for MAX's business improvement along with the connection to climate change.

> *The passion for taste [for the guest taste preference], which is deeply ingrained in the family and in the organisation that means we can keep on doing what we love and connect that to climate change (Török, pers.comm.).*

The company believes in its role of educating customers on environmental and climate impacts. By doing so, MAX admits that they have a competitive advantage (R5) (Conrad & Thompson, 2013).

> *So, we did this labelling and compensating. And we also thought it's very important that we tell the customers so they know what we are doing and how much we are affecting the environment so they can also make their own decisions. So, it's both parts of doing things that are good for the environment, but also educate the customer, so they know that they can actually reduce the emissions by making better choices. So, it's kind of 360 approaches to this problem (Forssten. pers.comm.).*

Additionally, it is believed that consumers choose MAX for its sustainability and climate work (R1).

> *We sometimes can imagine that people are coming to us because we have the sustainability profile and they do that to some extent. But much more important than the sustainability profile is how they perceive our products (Török, pers.comm.).*

The company's goal is to influence the customer as it aims to shift the purchasing pattern of a customer from meat-based burgers to "green" burgers with lower carbon footprints. And by doing so, the fast-food chain continuously works on taste development of a plant-based product (R1, R7).

> *Our goal is to make meat lovers want to eat plant-based meals more often thanks to the great taste of our Green Family burgers. We want to be part of that change, and we want to guide and inspire guests to eat more veggie-based food. So, we hope that we will continue seeing a shift in purchasing habits based on our guests' preferences to eat more 'green' food items. – Head Chef and Head of Product Development at MAX (ProVeg, 2019).*

Barrier: In 2008, MAX was challenged with customers' unpreparedness to accept the carbon labelled menu in 2008-2009 (R1, R2) and that caused considerable financial losses for MAX (R5).

5.2.4 Competitiveness

Driver: Apart from the previously-mentioned activities that served as a competitive advantage for MAX and motivated the carbon reduction (thesis section 4.4), it is viable to assume that MAX is motivated by competing for credibility and for the opportunity to contribute to developments in climate policy discourses. MAX is proactively communicating its position on climate advocacy by responding to researchers' critiques (thesis section 4.6) and defending the carbon offsetting costs in the high court against the Swedish tax agency (thesis section 4.7).

They also engage with global occasions such as conferences hosted by UNFCCC (Piccard, 2019; UNFCCC, 2019) and communicating their activities via social media platforms such as YouTube and LinkedIn. MAX also gained a competitive advantage from being a climate-oriented organisation when it negotiated to lease potential restaurant buildings with real estate owners (R3).

> *We are pretty certain that our climates work as a whole has helped us find locations for new stores. Especially the last couple of years when the climate change topic has been top of mind for almost every people in Sweden, of course except the ones that don't believe in climate change. We think that by communicating our climate initiatives the landlords understand that we are a better choice than our competitors and that make it easier for us to find new locations for new stores. This is just one example of how our climate work also helps our business (Jakobsson, pers.comm.).*

Respondent 7 introduced the concept "green muting" to refer to companies who do not disclose their sustainability work. Green muting is considered to be a consequence of avoidance of public blames in greenwashing. Thus, sharing knowledge or the high need to communicate MAX's values were mentioned by several respondents (R1, R2, R5, R6, R7) to be MAX's critical strength over achieving a competetive advantage and leadership in promoting climate responsibility. MAX also believes in the creation of a corporate movement and contributing to "making the world's climate better" (R7).

> *Some companies work a lot with sustainability, but they don't really talk about it. They don't make market campaigns or whatever on what they are doing. So, we call that green muting. You become silent. You do a lot of good things, but you don't talk about it. So, you green mute your sustainability work. And I think many companies do that because they don't want to be blamed for greenwashing, which is the opposite. So that's about as for companies today that we have to either be blamed for greenwashing or we will be green muting. But for MAX it has never been a choice to green mute what we are doing. Because the family owners still believe that we are just a small company, and we cannot make a change for the climate all by ourselves. We need to create a movement of many, many other companies to step forward and do what they can to make the world's climate better (Wengelin pers.comm.).*

5.2.5 Public society and media

Barrier. According to respondent 2's memories, when the public saw MAX's carbon labelled menu for the first time twelve years ago, it seemed as a contradictory idea to accept the fact that the fast-food company could take responsibility for climate issues (R2, R4).

> *We have succeeded with health [menu] because they were great burgers that were something that people understood. But the climate, the environment. Nobody believes that the burger business can be responsible for the climate (Larshans, pers.comm.).*

As respondent 7 shared, MAX Burgers often encounters criticism:

> *So, we're quite used to having all kinds of opinions thrown at us that we have to stand up for it. Some people or media and journalist. Many of them want to criticise us. They only think "this [MAX] company just want to earn money. They [MAX] cannot really do this for the right reasons. They [MAX] are just a big company earning more and more and more money." And if we say something, we do this because it's very important. They [media] think it's just greenwashing. So that is a balance we always work with how to communicate it by being very factful and being very trustworthy in what we are saying. And to have facts that are verifiable and so on, that is very important for us. And of course, that that is also our responsibility, I would say, to do that. Otherwise, we would be lying. And we don't want to lie. We want to really do this 100% correct. So, but of course, it is all a balance. And I think*

> *also being a leader in so many ways in between this field anyway, we expose ourselves for criticism, and we have to be aware of that all the time (Wengelin, pers.comm.).*

MAX admits that as a fast-food company voluntarily advocating whether for climate issues resolution or recruiting immigrants, it is MAX's core values that navigate them in taking the role of defending their position and responding to critiques accordingly (R7).

> *We have the vegans on the one hand and the meat lovers on the other hand. And sometimes they get angry from each side. We are also a Swedish company. But then we have the conservative persons and nationalistic persons that think it's wrong that we hire and recruit people, which has just arrived in Sweden, immigrants coming to Sweden. Because we believe that everybody should work at MAX. It doesn't matter where they come from and what they look like. We want everybody to be included and to have this kind of diversity in the company. So, then you get criticised for that. We're quite used to having all kinds of opinions thrown at us that we have to stand up for it (Wengelin, pers.comm.).*

But more importantly, MAX tries to engage with criticism of any type and to understand the right way of communicating their core values to stay true and factful (SOCAP, 2012). The case of engagement with criticism that arose from researchers from Lund University on the carbon offsetting project in Uganda is a good example of this practice (chapter 4.6). The company tried to quickly explore the issue by inviting the team of researchers to the Stockholm office to receive feedback on the issues. Additionally, it is believed that criticism targeted at MAX (Carton & Andersson, 2017; Hedenqvist & Johansson, 2018) often has more of a political concern (R7).

> *And I think many of these kinds of opinions rely on it as a political opinion actually. A lot of it also. So, it's politics sometimes when we have to face (Wengelin, pers.comm.).*

However, MAX also believes in being a corporate activist in climate change problems and highlights the importance of continuously communicating their core values in response to criticism and public concerns (R7).

> *And I think that what we at MAX are doing with the climate. We are becoming this kind of corporate activists because we're very clear about it. And we don't fail. We just stand by it and keep on communicating. Keep on talking about it over and over and over again. Keep doing things. Keep leading by samples, because that's what we believe in (Wengelin, pers.comm.).*

> *We really need to teach people about what we mean. So, when we're doing something new, the burden of explaining what we mean and what it is falls upon us. So that's a job that we have to do all the time. But we've been willing to do that (Török, pers.comm.).*

Regarding the challenges emerging from public society and the media, MAX found its transparency to be critical (R1, R3, R4, R5, R7). The company addresses its transparency by disclosing carbon calculation methods (Török et al., 2018), publishing updates on carbon emissions for each menu product on the company's website (R5) (MAX Burgers, n.d.), publishing reports on the carbon footprint analysis (Török et al., 2018), having an openly available report on climate-positive burgers with clear and reader-friendly explanations, disclosing their consulting partners in climate work and carbon offsetting projects such as U&We and ZeroMission, who also extensively share the information on the MAX's projects on their websites (Wrenfelt et al., 2018; ZeroMission, 2019a). These efforts prove that the company is open for comments, critiques, and suggestions from competent audiences. In turn, the openness helps MAX to better approach their climate responsibility by challenging the methods they chose for assessment and carbon compensation.

> *Sometimes we are being critized be the by media for our initiatives, but in general, I think we have made it pretty good. Probably that's because one of our strategies in communication has been that we should be 100% transparent with what we do and why we do it (Jakobsson, pers.comm.).*

5.2.6 Technological advancement

Barrier. It has been found that the application of climate-friendly rules on decisions is limited by technological alternatives available at the real estate, facility management, and buildings market. As "the building and construction businesses is pretty slow in taking or getting alternatives [with low carbon]. So, we [MAX] try to do the best" (R3). As Respondent 3 shared, MAX's decisions in this area are always based on the rule to make choices that are the best possible solutions in the market and that sometimes might clash with the low carbon rule.

> *Sometimes it's hard to find good alternatives that work. One example is concrete, you need to have it as foundation for the restaurants. Of course, there are alternatives, but they have other problems and when you consider the maintenance and life cycle for the building you end up with the conclusion that sometimes it might be worth to have higher emissions when you build it because you get lower maintenance during the whole lifecycle. So, I think it's pretty complex, and there are in general hard to find good solutions on the markets. But, for example, a good example is that you can use wood as construction material and get a lower CO2 impact. So that's one example of cutting emissions down today without heavily affecting maintenance or life cycle of the building (Jakobsson, pers.comm.).*

5.2.7 External influences: Other external influences emerged from stakeholders, events and conditions.

Driver. In the early 2000s, MAX was figuring out its position on the market while in parallel dealing with its staff crisis. Between 2000 and 2005, the world's biggest fast-food giant McDonald's, who was promoting sustainability concerns on the Swedish market, was acquired by a less sustainability concerned company, which put an end to any initiatives in the area. This event coupled with MAX's search for a "fresh alternative" (R1) on the market seems to have been a supporting signal for MAX that sustainability and climate could be an area for developmental considerations. Therefore, it is assumed that MAX might have been informed to take the lead in the sustainability area on the Swedish and global fast-food markets (R1).

> *McDonald's used to be really good at the sustainability work in Sweden. But they just sold off to another organisation which wasn't so committed to sustainability. So, I think it was also kind of picking up drop. That tone in our industry was saying 'no one's doing this now, we should do it (Török, pers.comm.).*

Other events such as the release of the movie *An Inconvenient Truth* in 2006 and the Copenhagen climate summit in 2009 were found to drive the motivations of MAX to reduce risks related to climate issues. These two occurrences had substantial impacts on MAX's family ownerss consideration of climate responsibility as a part of their business (R1, R2, R4, R5). Other events included Paul McCartney's 2009 speech (MAX Burgers, 2009) at the European Parliament Hearing on Climate Change and Food Policy titled "Less Meat Less Heat" that included MAX's carbon labelling initiative as a positive example (R2, R4, R5). McCartney's speech gave global attention to the company's profile and led to numerous requests and invitations from various stakeholders to share with MAX's climate action implementation experience. Other considerable events were the Paris Agreement in 2015 on the urgency of reduction of GHG emissions and the IPCC report in 2018 on global warming of 1.5°C above pre-industrial levels that drove MAX to respond and set carbon-reducing goals and initiate a climate-positive concept (R1).

MAX presented its climate responsibility at many different events that were hosted by the Swedish Parliament, the European Parliament, the United Nations High Commissioner for Refugees, the UNFCCC, and many other industrial and the academic institutions (R1, R2). These events seem to have supported MAX in enhancing its reputation and gaining media coverage. This attention helped MAX gain public trust in Sweden but also made MAX a role model business in taking brave and ambitious initiatives in social and environmental work of business responsibility (R2, R4, R6, R7).

Figure 5-2 depicts the barriers and drivers that emerged from each external area of influence. Thus, regulatory influence as well as customers were found to both drive and challenge MAX's climate work development. Competitiveness and seredipitious external events only served as drivers. Challenging influences emerged from suppliers, public society, and the media as well as technological advancements.

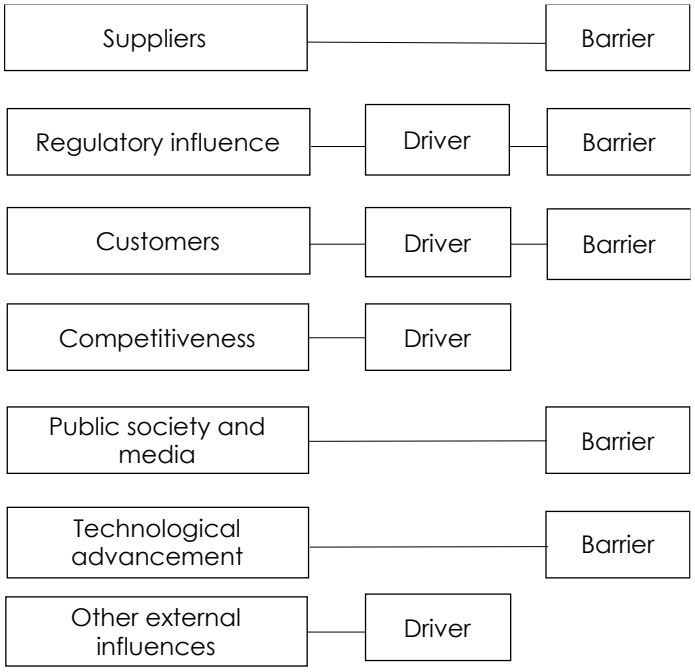

Figure 5-2. External areas of influence toward the development of climate action that served as a driver and/or barrier.

Source: Author's work.

6 Discussion

This section interprets the significance of the results the thesis produced in light of what was already known about the research problem and the fast-food industry's potential to develop a GHG emissions reduction plan. It also reflects upon the methodology followed in the study.

6.1 Drivers for MAX's commitment to climate action: The importance of leadership

MAX has encountered various internal and external influences during its climate responsibility development. These influences were analysed as driving or challenging forces. The strongest driver for MAX's climate action development emerged from within the organisation, particularly its owners who are also members of the company's board and top management. This result aligns with studies from Chou et al. (2012) and Jang (2016) who mentioned top management as the most influential driver. The fact that MAX is a family-owned company allows its owners and employees to make quick decisions and more quickly implement climate-related initiatives. Moreover, the literature this thesis investigated does not distinguish organisations between privately or family owned businesses and other types of business ownership since this topic was not a focus of those studies. However, this thesis indicates that ownership could be an important distinguisher because long-term commitments often require steady ownership; these commitments may not immediately yield economic results. This research implies that there is a risk with publicly traded companies that have to report quarterly earnings to their shareholders; these companies may lack a long-term commitment to climate responsibility. Family ownership may be an important aspect to the development of sustainability plans but has not been a focus of this research.

While it is more common for organizations to be driven towards more climate-friendly actions by external factors such as public protests, regulations, or shifts in customers diets (Jang et al., 2011; Longart, 2010; Perramon et al., 2014), MAX was entirely internally-driven toward decisions about climate sustainability.

Existing literature asserts that the improvement of profitability drives companies to adopt environmental practices (Bansal & Roth, 2000; Jang, 2016; Kim, 2009). However, all of the case study respondents claimed that MAX stands for optimum profitability and not maximum profitability because of the company's goal to sustain its business for generations to come. Instead, the results of the case study align with Long et al.'s (2018) findings that corporate values are radical and support transformations with profound implications. In the case of MAX, core values or ethical motives seem to be (along with top management support) the most influential driver in overall corporate sustainability work for the entire organisation. Thus, when making decisions related to carbon reduction and compensation activities, MAX is guided by its core values (figure 4-3) in "being a role model" for the industry and other organisations. Therefore, MAX actively stood up for business rights in Sweden for tax deductions from the costs of voluntary carbon offsets (chapter 4.7). MAX also openly communicates its climate responsibility work disclosing the standards and methods of carbon footprint analysis, revealing information on the organisations that assist them in carbon assessment and climate compensation issues, and participating in thematic events such as UNFCCC conferences, the Sustainable Brands forum, and similar gatherings.

Relying on its core values and mission "to do the right things for the climate," MAX actively responds to criticism, whether it is raised by academia (chapter 4.6) or the media. Moreover, multistakeholder considerations or openness to collaborate with research institutions, as mentioned in the literature, has been asserted as a critical factor in developing corporate climate

actions (Chou et al., 2012). This research aligns with MAX, as it is "cooperating in different projects with researchers and other institutions around what would a sustainable beef production be, for instance" (R6). For that, MAX organises stakeholder dialogues to build a basis for decision making for a particular climate-related initiative (Conrad & Thompson, 2013). Thus, as mentioned by all the respondents, the company's principles emerged from drivers of "ethical considerations" and "core values" such as transparency, sharing knowledge, and proactive communications with customers and the public, which are the critical success factors of MAX's path in climate work development.

6.2 The importance of time and tipping point-events

The component of time was found to be crucial in the research about fast-food chains' leadership in climate action. Timeline illustration was highlighted by Long et al. (2018) as a necessary step for understanding the exploration of success factors for a certain business transition phase to sustainability. The eight significant events listed in table 6-1 were identified as influential in MAX's climate development path.

Table 6-1. MAX's climate development path depicted in timeline.

1999 – 2006	I. Precursors of MAX's climate work: maturity, crisis, and time for changes
	- Restaurant business growth and change of management - Leadership gap and change in culture - Communications and gaining trust
2007-2008	II. The start of MAX's climate commitment work
	- MAX's owners' initiative - Establishing partnerships with sustainability consultants - Sustainability strategy formation
2007-2009	III. Carbon analysis and the launch of the carbon labelled menu
	- Carbon footprint analysis - Acknowledgement of supply chain significance in carbon assessment - The lack of customer awareness prevented acceptance of carbon labeled menu - Limited communications and other storytelling of MAX's case
2008-2020	IV. Time of climate commitment development strategy: reduction of carbon emissions
	- The competitive and financial advantage - Carbon-reducing activities
2009- 2016	V. Climate impact reduction: failure of falafel burger and success of Green Family menu
2008-2018	VI. Climate neutrality and carbon offsetting projects' critique
2014-2018	VII. Court case: the battle for making voluntary carbon offsetting costs tax-deductible for businesses in Sweden
2018-2020	VIII. Climate positivity and urgent call for joining MAX's path

Source: Author's findings

MAX's climate responsibility is a life-long commitment and has been since the beginning of the initiative. The company's growth, the increase in public trust, and solving the leadership gap by changing the company's culture were all vital parts to initiating the climate action plan. MAX's position on the market has been evolving over time as it started by determining its climate impact, then developed its carbon-labeled carbon menu, and then developed a 100% carbon compensation practice that over time developed to a climate positive initiative. Importantly, the company's will to stand for this position over the last 12 years proved its importance to achieving leadership in addressing climate responsibility.

Therefore, MAX had to stand for its core values as reflected in the climate work and overall sustainability especially at times when MAX encountered challenges that emerged from external influences, such as customers and suppliers at the beginning of climate work between 2008 and

2016, and later from academia and regulatory bodies between 2014 and 2018. A company's willingness to engage with these long-term processes, as depicted on table 6-1, to which MAX has committed enormous attention and resources, continously makes contributions to improvements and has proved to only have positive outcomes.

One important message of the research is that long-term vision, strategy, persistent commitment, and time itself are all crucial to achieving climate action leadership in the fast-food industry. However, the literature that this thesis covered does not sufficiently acknowledge the time aspect. Time plays a vital role as climate action plans take years to be developed for a company to achieve leadership.

6.3 Barriers to MAX's commitment to climate action: patience is crucial to win stakeholders over

Identified barriers of external emergence were very influential for MAX's perseverance that took years to overcome as they had a more responsive nature to the already adopted climate initiatives driven by internal influences. Responsiveness implies that external barriers were mainly dependent on the level of preparedness of the particular area of influence (suppliers, regulatory impact, customers, public society, and technological advancements) for MAX's development of climate responsibility that has been addressed by the company's strong desire to contribute to changes in the entire system.

For example, it was critical to the area of influence of "customers" who were identified as a barrier due to an insufficient level of awareness on the possibilities of the use of the carbon labelled menu back in 2008. To address this challenge, MAX has ever since been educating their customers by improving the communications on the carbon labelled menu and changing marketing approaches from promoting the Green Family menu as "low carbon" to "tastes as good as beef."

Similar dynamics were found with suppliers of MAX that depended on contemporary product development advancements and therefore struggled to comply with MAX's ingredient requirements. Over the years as product development improved MAX managed to find suppliers that met their Green Family menu's ingredient requirements. However, the barrier that emerged from suppliers was not related to the complexity of supply chains as mentioned by Aarnio et al. (2008) and Shokri et al. (2014).

As for regulatory impact, the literature claims that absence or deficient national regulations on corporate environmental responsibility usually inhibit companies from initiating or adopting climate action plans (Shokri et al., 2014b). This lack of regulation served both as a driver and barrier for MAX's case. From one point of view, the fast-food chain was challenged by the underdeveloped Swedish tax regulations regarding the consideration of carbon offset costs as tax-deductible because carbon offsets traded on the voluntary market are not regulated. From another point, MAX was driven by the possibility of changing the tax regulations for the voluntary carbon offset, and thus was involved in a law suit with the national tax agency for four years. The fact that MAX contributed to corporate climate policies in Sweden might be a motivation to gain a competitive advantage. However, it does not seem that MAX promoted itself by disclosing its close engagement with climate-related programs organised by prominent institutions like the UNFCCC, UNEP, and EU ETS, as mentioned in other examples given by Okereke (2007). However, MAX does not connect its court victory with the promotion of its products.

For MAX, the public throughout these years served as a constant tester of the company's climate claims, as were the researchers who have criticised MAX's carbon compensation methods for the last 3 years. MAX openly responded by thoroughly exploring the researcher's claims and personally inviting them to the office in Stockholm for discussions on the carbon offsetting project problems. MAX is aware of the risks related to bad publicity and criticism such as green washing, that according to Bansal & Roth (2000) usually tend to stop companies from communicating on or engaging in environmental actions. However, MAX is always ready to address these risks by organising open dialogues and collaborating with various stakeholders. MAX's approach to openness is to communicate their transparency in disclosing detailed information regarding their climate work such as carbon footprint analysis, carbon offsetting projects, and carbon labelling, which has helped MAX improve its climate responsibility.

6.4 Reflection on the methodology and results of the study

The methodological approach for answering the research question first started with analysing the tipping point-events that influenced MAX's climate action development. The developmental narrative approach served as the basis for the analysis of drivers and barriers emerging from internal and external influences. This approach also helped identify and classify the drivers and barriers that belong to a particular timeline simplifying the application of the analytical framework. Moreover, the methodology's clarity in the identification of drivers and barriers might be considered as the advantage of the chosen approach and recommended for research of organizational changes or transition to sustainability.

However, the analytical framework is limited to the distinguished areas of influence found during the literature review such as internal or external stakeholders (top management, employees, suppliers, government, customers, competitiveness, and public society), the means (budgets and technological advancements) and business morals (ethical motives). Prior to the application of the analytical framework for the analysis of the drivers and barriers, there was no theory used for identifying the tipping-point events in the developmental process of climate commitment at MAX. As such, produced findings or identified key events in MAX's path to leadership in carbon reduction were limited to the researcher's views. Thus, the resulted drivers and barriers shown in the analysis section could also have been biased by the thesis author's perceptions.

Moreover, the analysis was produced for a single case study in accordance with the analytical framework and has a relatively low generalisability for other geographical and cultural contexts. The case was analysed in the Swedish fast-food industry context. Therefore, it was limited to the specificities of national regulations, socio-economic situations, market dynamics, and the availability of expertise. However, considering that the fast-food chain operates in the context of a developed economy, certain developmental events are likely to be repeated for the businesses of the same sector and size operating in the similar national economies.

7 Conclusion

This study set out to understand how a Swedish family-owned fast food chain became a role model in the industry for climate action. In light of a lack of research in the area of carbon-reducing initiatives implemented by the fast-food industry, there is a need for exploration of available fast-food business cases that are leaders in climate responsibility agendas. Thus, this thesis used the case of the fast-food chain MAX Burgers to better understand its development of a climate commitment path and analyse the drivers and barriers of this development.

This research showed that over many years, MAX slowly but steadily worked to improve its carbon emmisions and now advocates for beyond 100% climate neutrality ("carbon positivity"). MAX has been on a climate development path for more than 12 years. Today, MAX leads the industry by further developing its climate responsibility to compensating 110% of GHGs that the organisation emits. As reported in this thesis (chapter 4), this development resulted from several critical moments. One important takeaway is that climate action plan development is not a steady and smooth path but rather is a continuous "roller coaster" ride experience with moments of failures and difficulties (see chapters 4.3, 4.5, 4.6 and 4.7).

It is important to note that MAX is privately owned, and the owners were willing to transform MAX into a climate committed company. MAX is not traded on the stock market and therefore does not have to report earnings to the shareholders. Owners make the decisions, and they are aware of all the challenging dynamics the business had to overcome.

Notably, the areas of influence such as ethical motives, competitiveness, and other external influences were analysed as the drivers of change. Meanwhile, influences such as suppliers, public society and media, and technological advancements were found to create challenges in MAX's climate action plan path. However, the areas that were analysed to both drive and challenge the fast-food chain were the top management, employees, budget, regulatory influence, and customers.

MAX can be commended for its climate action development given the absence of national regulations, a non-supportive tax system, and the unpreparedness of the supply chain and consumers at the beginning of its decision to devote the business to carbon-reducing responsibility.

For managers in general, it is important to understand that setting long-term goals and long-term visions are crucial aspects in cases of climate commitment. For other fast-food chains in Sweden, it might be easier to implement the same carbon neutral and positive approach because MAX has already paid its share to change the tax regulations and has pushed the market to comply with climate action plan requirements. Thus, fast-food organisations could also learn from a local competitor like MAX Burgers. For policymakers, this research implies that there should be a separation between leaders and followers made. It is assumed that some companies are internally set up to lead and some are set up to follow. Therefore, policymakers could create incentives for the companies based on the scale of efforts in a climate action plan. Moreover, policymakers should help create new demand for products and services of more sustainable and climate-oriented organizations.

7.1 Recommendations for future research

The thesis explored the leadership of a fast-food chain in the process of climate commitment via narrating the developmental process of climate action implementation and an analysis of internal and externally emerged drivers and barriers. This thesis project could be complemented with a comparative study with more cases selected in order to provide broader contexts generalisability. Potential research also includes considerations of various hierarchy levels of participants and different geographical locations. Also, MAX franchises in Norway, Poland, and Denmark could be considered for future studies. A broader range of internal and external stakeholders such as suppliers and line managers could also be studied. Moreover, this thesis could be followed with quantitative research that can provide more information on the perceived significance of drivers and barriers by the broader range of interview sampling. Additionally, as it has been discussed earlier, the importance of ownership should be investigated for a company's commitment and engagement with issues such as climate action plans.

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Personal Communications

Török, Kaj. Chief Reputation Officer & Chief Sustainability Officer at MAX Burgers. Former Strategy Consultant at The Natural Step. Formal interview. Sweden, 3 April 2020.

Larshans, Pär. Chief Sustainability Corporate Responsibility & Public Affairs Officer at Ragn-Sells. Former Head of Human Resources and Chief Sustainabiluty Officer at MAX Burgers. Formal interview. Sweden, 17 April 2020.

Jakobsson, Tony. Vice head of operations Sweden and Norway at MAX Burgers. Formal interview. Sweden, 21 April 2020.

Brunge Grant, Johanna. Climate Strategist at ZeroMission. Formal interview. Sweden, 21 April 2020.

Forssten, Anders. Former Chief Marketing Officer at MAX Burger. Formal interview. Sweden, 22 April 2020.

Dahlgren, Katrin. Consultant and coowner at U&We. Formal interview. Sweden, 23 April 2020.

Wengelin, Marita. Head of Public Relations and Corporate Communications. Formal interview. Sweden, 29 April 2020.

Appendix 1. Three-part value chain classification of environmental sustainability initiatives in the fast-food sector

What and how fast-food businesses choose [I. Upstream]	How fast-food businesses operate [II. Direct in-house impact]	How fast-food businesses work with customers and local institutions [III.Dowstream]
1. Materials - Sourcing locally or "farm where you are" concept program implementation - Traceable food supply chain - Coffee raised sustainably **2. Packaging** - Evaluation of packaging material to ensure correct sizing, weight, and packing efficiency -Purchasing packaging materials only made from 100% renewable sources from sustainable forests, 100% recyclable, biodegradable and made in country of operation -Only purchasing reusable cups, plates, bowls, and cutlery that reduce packaging **3.Management/policy/protocols** - Suppliers' code of conduct (monitoring of suppliers) - Selection of a supplier by looking at key performance indicators around pest control, sanitation, operations and facility management, good manufacturing practices and product protection, recovery and food security systems - Testing food safety and security practices by supplier -Looking for outstanding performance in quality control of suppliers' management processes - International environmental management standard -Purchasing policy by providing assistance to 2,500 coffee partners **4. Other** - Assistance to partners to strengthen environmental management through education on sustainable farming techniques such as recycling water, reducing pesticide usage, and promoting shade on the coffee farm	**1. Internal environmental policy** **2. Energy** - Employees are asked to switch off equipment when they are not in use -Energy saving technology in restaurants -Equipment efficiency check -Installing more energy-efficient (up to 30%) variable-speed air compressors - Installing high-efficiency industrial battery chargers for forklifts - .Installing high-performance, energy-efficient lighting in operations - Modifying conveyors so they only operatedwhen required -Installing large fans on ceilings to circulate heat and cooling thereby reducing gas consumption -Installing on-demand water heaters, lighting retrofits, and new equipment - Installing variable-speed drives on some larger motors **3. Transportation** - Vehicle maintenance and safety checks - Reducing the maximum speed of on-site trucks - Implementation of an anti-idling policy for all on-site trucks thus reducing fuel consumption and airborne emissions - Fuel efficiency of the truck fleet - Efficient Route planning **4. Water** - Staff trained to use water responsibly - Water usage reduing equipment, such as a dedicated fondant chiller **5. Waste** - Switch of cardboard cartons to paper-based packaging materials - Less packaging less litter principle - Recycling program - Classification of wastes by providing different disposal bins in restaurants for better recycling -Annual internal waste audits identify waste streams and opportunities to reduce, reuse, and divert waste - Participation in deposit-return programs for branded beverage containers	**1.** Encourage customers at all branches to separate waste such as leftover food and packaging. **2.** Publish Sustainability Report **3**. Encourage customers to reduce the use of disposable hot drink cups by offering patrons a 10-cent discount on travel mug refills 4. Marking the products

	- Collection of used coffee cups for a diversion program - Exploration of leftover such as palm oil, animal fats, waste products for usage as biofuel to power trucks that deliver products to stores **6. Sustainable building design** - Restaurant registration for Leadership in Energy and Environmental Design (LEED) certification **7. Other:** - Assessment of climate impact (only caused within its operations) - In-store diversion program (recycling and composting solutions) for paper packaging (i.e. hot drink cups)	

Source: Compiled by author from various sources (Hutchinson et al., 2012; Pinard et al., 2014b; Shokri et al., 2014; Vu et al., 2017)

Appendix 2. Overview of Interview Questions

The author used the following questions to guide the general discussion in the semi-structured interviews. The remaining discussion was guided by the analytical framework, but the author adjusted the questions and comments based on how the conversation with the interviewee developed.

Introduction to questions. While reading about MAX Burgers we found that initially MAX started with achieving a mission of carbon neutrality. And today MAX Burgers advocate for a mission of carbon positivity. We would like to understand how have MAX Burgers achieved the leadership in carbon reduction mission.
1. Could you please tell us how and why MAX Burgers started the carbon reduction mission and has developed climate work?
2. What have served as successfull factors for MAX Burgers in piloting and further developing the GHG reduction mission?
3. And what external and internal challenges have been encountered by MAX in achieving climate leadership in fast-food industry?
4. What is the role of internal factors in MAX's climate action mission? (top management; employees, budget, ethical motives)
5. What is the role of external factors in MAX climate action plan? (suppliers, regulatory influence, customers, competitiveness, public society, technological advances, external influences)

Appendix 3. List of interviewed respondents

Number of respondent and name	a) Title b)Current/Former c)Internal/External	i. Date of interview ii. Duration, in minutes	Reasoning of the interviewee selection
1.Kaj Török	a) Chief Reputation Officer & Chief Sustainability Officer at MAX Burgers b) Current c) Internal	i.03.04.2020 ii. 71 min	Kaj started advising MAX Burgers while co-partnering with the international non-profit and non-governmental organization "The Natural Step" since 2007. In 2016, Kaj Török joined MAX Burgers as the Director of Information and Sustainability. He has been working with MAX Burgers since the period when the company was developing climate commitment initiatives. Since the launch of climate positivity on 14 June 2018, Kaj has given around 190 presentations on climate positivity. In total, he has worked with MAX Burgers for 13 years; he was an internal employee for the last 3 years.
2.Pär Larshans	a) Chief Sustainability Corporate Responsibility & Public Affairs Officer at Ragn-Sells b) Former c) Internal	i.17.04.2020 ii. 67 min	Pär worked at MAX for a total of 29 years in various positions. As Head of Human Resources between 1997 and 2010, he actively worked over MAX's social responsibility development. Pär was among the key players and facilitators of initial sustainability development work at MAX. While working over the sustainability plan, Pär established the first contacts of MAX with the consuling company "The Natural Step" where Kaj Török was assigned to be responsible for strategic work of sustainability development for MAX. Pär was the first Chief Sustainabiluty Officer at MAX Burgers between 2010 and 2015.
3.Tony Jakobsson	a) Vice head of operations in Sweden and Norway at MAX b) Current c) Internal	i.21.04.2020 ii. 52 min	Tony has a total of 20 years of work experience at MAX Burgers in different positions. Responsibilities include areas of real estate development, facility management, building operations, and franchise. He has been working with the establishment of construction facilities and service management. For the last half year, Tony has become responsible for the tactical and strategic work between the departments of marketing, real estate, and human resources.
4.Johanna Brunge Grant	a) Climate strategist at ZeroMission b) Current c) External	i.21.04.2020 ii. 97 min	Johanna started working with MAX Burgers in 2010. She has been active in consulting MAX Burgers over the questions related to PlanVivo standard certificates, carbon offsetting projects in Uganda and Mexico, as well as media and communication concerns.
5.Anders Forssten	a) Head of Marketing b) Former c) Internal	i.22.04.2020 ii. 58 min	Anders worked at MAX between 1990 and 2013; for the last 12 years, he was the Cheif Marketing Officer. His position included responsibilities in markeing, PR communications, business development, and markeing via digital platforms.
6. Katrin Dahlgren	a) Consultant and co-owner U&We b) Current c)External	i.23.04.2020 ii. 55 min	Katrin has been consulting MAX since 2007 over the climate impact calculations and preparing the annual assessment of carbon footprint reports.
7. Marita Wengelin	a) Head of Public Relations and Corporate Communications b) Current c) Internal	i.29.04.2020 ii. 66 min	Marita has been working in the restaurant industry for almost 30 years. She joined MAX in 2016 as a Head of Public Relations and Press Officer at the similar time when Kaj as an internal employee. Marita is responsible for building communications, marketing, and publuc relations and has played a key role at MAX in communicating the MAX's case on the tree planting study to the media. For that reason, she has been closely working with Kaj and the team from U&We and ZeroMission over the topic of sustainability in general and climate related topics.

Appendix 4. Supporting terminology for coding the interviews for analysis of areas of influence

Area of influence	Supporting terminlogy for scoping the codes	Intervews
Top management	"executive," "company boards," "owners," "key individuals at MAX," "Kaj Török," "Pär Larshans," etc.	All respondents
Employees	"line managers," "staff," "employees," etc.	Kaj Török, Pär Larshans, Anders Forssten, Tony Jakobsson
Budget	"allocation," "money," "internal finances," "enough budget," "cost reducing activities," "profit," "sales," etc.	Kaj Török, Pär Larshans, Anders Forssten, Tony Jakobsson
Ethical motives	"core values," "vision," "right thing to do," "genuine," "mission," etc.	All respondents
Suppliers	"supply chain," "ingredients," "raw material," "supplier," etc.	Kaj Török, Marita Wengelin
Regulatory influence	"government," "system," "high court," "regulations," "tax agency," etc.	Kaj Török, Johanna Brunge
Customers	"visitors," "guests," "consumers," "customers," etc.	Kaj Török, Pär Larshans, Anders Forssten, Marita Wengelin
Competitiveness	"competetive advantage," "compete," etc.	Kaj Török, Tony Jakobsson
Public society and media	"concerns," "criticize," "recognize," etc.	Kaj Török, Pär Larshans, Johanna Brunge, Marita Wengelin
Technological advancement	"product develepment," "technologies," "solutions," etc.	Tony Jakobsson