Sustainability at the Core of Corporate Strategy – A Case Study on Sustainable Strategy Development at BMW Group

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Abstract

Title: Sustainability at the Core of Corporate Strategy – A Case Study on Sustainable Strategy Development at BMW Group

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Key Words: Sustainability, Strategy, Sustainable Development Goals, SDG Compass +, Business Cases for Action, Automotive Industry

The current decade is defined by the presence of multiple concurrent crises, especially driven by ecological and social and societal issues. In this context, the notion of sustainability has gained huge importance. The private sector plays a crucial role in catalyzing the sustainable transformation of the economy. However, companies do not only have the responsibility to drive this change but can profit from opportunities through the sustainable transformation. Therefore, it is imperative for companies to succesfully implement sustainability into their corporate strategy, displaying a huge challenge for many companies. In 2020, the BMW Group initiated the design of a new corporate strategy, seeking to make sustainability the core of its future strategic direction. This paper focuses on a case study that tells the story of how BMW created and operationalized this new strategy with sustainability at its core. The case study illuminates a successful approach to integrating sustainability, serving as a blueprint for both the academic and the business world on making sustainability core of corporate strategy. It offers an opportunity to analyze business cases through sustainability at the BMW Group. Furthermore, the SDG Compass +, a theoretical framework on strategic SDG integration, is applied to understand and investigate BMW's approach. The case further illustrates the challenges faced by subsidiaries of multinational enterprises when adapting the group strategy in local markets, using the example of BMW Portugal and highlighting that there is a significant need for adaptation to local circumstances.

Resumo

Título: A sustentabilidade no centro da estratégia empresarial - Um estudo de caso sobre o desenvolvimento da estratégia sustentável no BMW Group

Autor: Tobias Wilke

Palavras-chave: Sustentabilidade, Estratégia, Objectivos de Desenvolvimento Sustentável, SDG Compass +, Business Cases for Action, Indústria Automóvel

A atual década é marcada pela presença de múltiplas crises simultâneas, especialmente motivadas por questões ecológicas, sociais e societais. Neste contexto, a sustentabilidade adquiriu uma enorme importância. O setor privado desempenha um papel crucial na catalisação da transformação sustentável da economia. No entanto, as empresas não só têm a responsabilidade de impulsionar esta mudança, como também podem beneficiar de oportunidades decorrentes da transformação sustentável. Por conseguinte, é imperativo que as empresas implementem com êxito a sustentabilidade na sua estratégia empresarial, o que constitui um enorme desafio para muitas empresas. Em 2020, o BMW Group iniciou o desenvolvimento de uma nova estratégia empresarial, procurando fazer da sustentabilidade o núcleo da sua futura orientação estratégica. Este artigo centra-se num estudo de caso que conta a história de como a BMW criou e operacionalizou esta nova estratégia, colocando a sustentabilidade no seu centro. O estudo de caso ilustra uma abordagem bem-sucedida à integração da sustentabilidade, servindo de modelo para o mundo académico e empresarial no que diz respeito à integração da sustentabilidade na estratégia empresarial. Oferece uma oportunidade para analisar casos de negócios com sustentabilidade no BMW Group. Além disso, é aplicado o SDG Compass+, um quadro teórico sobre a integração estratégica dos ODS, para compreender e investigar a abordagem da BMW. O estudo de caso ilustra ainda os desafios enfrentados pelas subsidiárias de empresas multinacionais ao adaptarem a estratégia do grupo nos mercados locais, com o exemplo da BMW Portugal, destacando a necessidade significativa de adaptação às circunstâncias locais.

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List of Abbreviations

SDGs	Sustainable Development Goals
UN	United Nations
UNGC	United Nations Global Compact
UNDP	United Nations Development Program

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1 Introduction

The current decade is defined by the presence of multiple concurrent crises, including wars and conflicts, the consequences of the global pandemic caused by COVID-19 and the effects of climate change (United Nations Department of Economic and Social Affairs, 2023).

The concept of sustainability with all its dimensions, ecological, social, and economic, therefore has attained increasing relevance, particularly in the business world. The role and the responsibility of the private sector in the sustainable transformation of the world has been a subject of frequent discussion for several years, especially influenced by the contrary concepts of shareholder and stakeholder capitalism (Freeman, 1984; Friedman, 1970).

However, nowadays it is not only a topic of responsibility anymore. Qualitative and quantitative evidence shows that the integration of sustainability can be an attractive opportunity for the private sector (Clark et al., 2015; Scott & McGill, 2018; Unruh et al., 2016; Van Tulder et al., 2021). The successful integration of sustainability into the corporate strategy comes with specific business cases that can translate into economic success (Guerreiro et al., 2023). To capture these opportunities and to build a future-proof strategy, companies must incorporate sustainability into their strategies, which displays a challenging task for the private sector.

In recent years, a lot of research has been dedicated to this subject matter. The literature in this field often is characterized by academic and theoretical approaches which is why there is a call for further research on this subject matter with a more practical focus, examining real world examples (De Almeida et al., 2023; Domingo-Posada et al., 2024). Therefore, this dissertation seeks to analyze the approach towards the strategic integration of sustainability of a multinational enterprise within the automotive industry. The industry was chosen due to the big challenges its facing in terms of sustainability and its transformational character (Mayyas et al., 2012; Wolff et al., 2020).

This dissertation focuses on a practical case study of the BMW Group, a multinational automotive company from Germany. The case is about the new corporate strategy that the company developed at the beginning of 2020, seeking to make sustainability core of the company's future direction. The case study tells the story of how the company managed to successfully create a new corporate strategy, which centers around sustainability in all its dimensions and how BMW managed to operationalize the strategy in all areas of the company.

The case study can be seen as a methodological tool, seeking to answer the following research question: *"How did the BMW Group develop a new corporate strategy, making sustainability core of its future strategic direction?"*

To systematically answer this research question, this dissertation is guided by the following structure:

Chapter 2 presents the relevant theoretical background to the topics addressed in the case study. The section will focus on the current state of research on the relevance of sustainability for the private sector, theoretical background on strategy and sustainability strategy, as well as sustainability in the automotive industry.

Chapter 3 explains the methodological approach that is employed to address this subject matter. The format of the case study will be explained and the specific research design will be presented.

In Chapter 4, the case study will be presented. In addition, this chapter entails a subsection with the teaching note for the case study. The teaching concept for the case study will be introduced and the pedagogical goals will be presented. Moreover, this subsection shows specific assignments with potential analyses and answers that can be used to teach this case in class.

Chapter 5 entails the conclusion and explains the limitations of the dissertation, indicating potential areas for future research in this field.

2 Literature Review

The methodology for this literature review is derived from that proposed by Mio et al., as outlined in their publication on SDGs and the strategic role of business (Mio et al., 2020). To identify relevant literature, scientific databases were systematically searched, using a set of keywords with Boolean operators. Considering the focus of this dissertation, the following keywords were employed for the search in the databases:

Sustainability; sustainability strategy; sustainability integration; SDGs, SDG integration, SDG implementation, business, business model, core business, strategy; automotive industry, automobile industry

2.1 Sustainability: Relevance and Progress

As mentioned in the introduction to this paper, we are living in a world with multiple challenges and crises. This refers to environmental challenges, such as global warming and climate change, with a temperature rise of 1.1° Celsius above pre-industrial standards, as pointed out in the IPCC report of 2023 (Calvin et al., 2023). But this also refers to social and societal challenges, such as poverty, gender or ethnic inequalities, and many other issues, as outlined in a recent Oxfam briefing paper (Christensen et al., 2023).

2.1.1 Sustainable Development Goals as a common Agenda

In 2015, the United Nations (UN) released the Sustainable Development Goals (SDGs) as an agenda for people, planet, and prosperity, seeking to combine the three sustainability lenses: economic, environmental, and social sustainability, with order to address the concerns mentioned above. The SDG agenda is an action plan signed by all 193 UN member states, comprising 17 goals and 169 targets that are supposed to be achieved by 2030 (Cuervo-Cazurra et al., 2022; Pizzi et al., 2020).

2.1.2 SDGs and the Private Sector

The contribution of the private sector, particularly led by multinational enterprises, is critical to the timely achievement of the SDG agenda. In its publication of the SDGs in 2015, the UN recognized the importance of the private sector in achieving the goals (United Nations, 2015). The extant literature on sustainable development and business integration of the SDGs confirms this. A substantial body of research shows that the private sector is an essential actor in the realization of the 2030 agenda (García-Sánchez et al., 2022; Kim et al., 2021; Montiel et al., 2021; Liou & Rao-Nicholson, 2020; Munro & Arli, 2020; van Zanten & van Tulder, 2018).

2.1.3 Progress of the SDG Agenda

However, looking at the progress made so far in achieving the 2030 agenda, we see a strikingly slow pace. The United Nations Sustainable Development Report points out that only 16 per cent of the 169 SDG targets are on track, with the remaining 84 per cent showing limited progress or even reversal of progress (Sachs et al., 2024). When examining the reasons for this slow progress, a striking gap between intention and realization of SDG alignment stands out. A 2019 analysis, which surveyed CEOs of large companies, reveals this discrepancy. The study shows that 99% of the CEOs surveyed perceive sustainability as a key factor for their future success. Nevertheless, only 21% of the surveyed CEOs consider their companies to be making a tangible contribution towards the achievement of the SDGs (Accenture & UNGC, 2019).

2.2 Strategy and Management

The topic of corporate strategy has been a topic of frequent discussion in academic circles for several decades. A considerable body of research has been devoted to this subject, and several distinct theories and concepts have emerged over time.

2.2.1 Defining Strategy

To define strategy, it is important to distinguish between corporate and business strategy. While business strategy focuses on how single business units within a larger company compete in specific areas, corporate strategy addresses the question of how a company can manage all these businesses together (Grant, 1995). The concept of corporate strategy has been defined in several different ways by a number of leading scholars.

Michael Porter (1980) defined corporate strategy as “developing a broad formula for how a business is going to compete, what its goals should be, and what policies will be needed to carry out those goals.” According to Mintzberg (1987), corporate strategy is a plan and guide to address a specific situation, defined by two main characteristics: strategies are made in advance of certain actions that they apply to, and they are developed with a specific purpose. There are several other definitions of strategy but for the purpose of this section, we will focus on these two. Both have in common, that strategy is a tool that helps to address complex problems in the future.

2.2.2 Sustainability as a Strategy

The integration of sustainability into the corporate strategy has been a topic of considerable debate for several years, particularly in light of the divergent perspectives on shareholder and stakeholder capitalism. The shareholder theory posits that the sole responsibility of a business is to maximize profits for its shareholders, with no obligation to consider social responsibility

(Friedman, 1970). Conversely, Freeman (1984) proposes the stakeholder theory, which asserts that companies must consider the interests of all stakeholders, not merely shareholders.

These opposing perspectives have been subject of frequent discussion in the past. However, in light of the crises and sustainability challenges outlined earlier in this chapter, there is a growing inclination towards Freeman's theory. Consequently, the topic of sustainability has gained greater relevance in both practice and scholarship.

Considering this, there has been a notable shift in the focus of strategy and strategic management literature towards the integration of sustainability (Galpin et al., 2015). A substantial body of research has been devoted to this subject, highlighting its significance. Consequently, it is essential to understand the concrete meaning of organizational sustainability. Dyllick and Hockerts (2002) define it as an organization's capacity to simultaneously fulfill the needs of its stakeholders and maintain economic prosperity while upholding environmental and social responsibility.

This definition highlights that sustainability is not only about the consideration of social and environmental aspects, but also about an economic perspective. As explained earlier, strategic management is about creating a competitive advantage and a well aligned sustainability strategy can lead to such a competitive advantage.

The concept of organizational sustainability can challenge firms to rethink their business models and strategies, which can lead to strategic improvements (McPhee, 2014). This shows that the connection of the three lenses, economic, social, and ecological sustainability, can lead to corporate success. Porter and Kramer (2011) studied this connection and developed a concept on how to create shared value (CSV). The main idea behind CSV is to unleash new opportunities by reconceiving products and markets, redefining productivity in the value chain, and enabling local cluster development through social and environmental sustainability.

2.2.3 Sustainability as a Business Case

This illustrates that sustainability is not merely an obligation for businesses, rather, there are tangible business cases that support it. The integration of sustainability at the core of corporate strategy can be an attractive business opportunity, resulting in increased profits for the company (Van Tulder et al., 2021). In this context, it is essential to gain a comprehensive understanding of what constitutes a sustainability business case. Comparable to the CSV concept of Porter and Kramer, Carroll and Shabana (2010) define it as a social or environmental practice that provides companies with a case that translates into economic or financial success.

For instance, sustainable corporate activities can facilitate a more efficient use of resources, technological innovation, an alignment with new market trends and product portfolio differentiation (Erzurumlu et al., 2023). Guerreiro et al. (2023) derive four specific business cases for action, which translate social or environmental activities into economic performance. The four specific business case are: reducing costs, increasing prices, increasing market shares, and creating a new business model. PwC claims that the business cases through sustainability collectively represent a business opportunity of $12 trillion for the private sector which also results in the creation of numerous new jobs (Scott & McGill, 2018).

In addition, several quantitative studies have identified theses business cases for sustainability and have reached the same conclusion as the aforementioned studies: there is a strong link between a company's sustainability performance and its financial performance (Unruh et al., 2016). Moreover, empirical evidence suggests that the adoption of sustainable practices by companies is associated with an increase in their stock price (Clark et al., 2015).

Conversely, some empirical findings indicate that the integration of sustainability has a negative impact on the financial performance. Cappucci (2018) posits that the sustainable transformation of a business entails considerable upfront costs that do not yield immediate financial benefits. In this context, other findings indicate that investments in a firm's sustainability may result in the diversion of valuable resources that could otherwise be allocated to the firm's core business (Di Tommaso & Thornton, 2020). Further empirical evidence suggests a clear negative relationship between sustainability and financial performance (Duque-Grisales & Aguilera-Caracuel, 2021).

However, in a review of over 2,000 empirical studies, Friede et al. (2015) found that 90% of the studies identified a nonnegative connection between sustainability and economic success and that most findings report a positive connection. Similarly, Orlitzky et al. (2003) conducted a meta-analysis and reached a comparable conclusion, stating that corporate sustainability is financially beneficial for companies.

2.2.4 Integrating Sustainability into Corporate Strategy

Given these findings, the pressing issue in this area of research is not to examine whether companies should integrate sustainability into their strategy or not, but rather to analyze how to do so (Engert & Baumgartner, 2016; Mio et al., 2020; Van Tulder et al., 2021).

A substantial body of scholarship has been devoted to the question of how companies can integrate sustainability into their strategies and business models. The increased relevance of the subject coupled with its growing economic attractiveness, as evidenced by the business cases

previously outlined, underscores the necessity to accord sustainability a fundamental role in the business strategy and integrate it into all corporate goals and targets (Baumgartner & Rauter, 2017). Several scholars address this subject by developing specific models and frameworks that guide companies through the implementation of sustainability. A significant proportion of this research is specifically dedicated to the integration of the Sustainable Development Goals into the corporate strategy, with the objective of making sustainability core business (Beyne, 2020; De Almeida et al., 2023; Grainger-Brown & Malekpour, 2019; Montiel et al., 2021).

De Almeida et al. (2023) propose a comprehensive approach to strategic SDG integration. The authors conclude that the existence of numerous different approaches to SDG implementation leads to confusion rather than effective action, which is why their study aims to consolidate the various findings and frameworks into one comprehensive solution. As a result of their research, the authors develop the SDG Compass +, which is a framework that takes the SDG Compass, as established by the United Nations Global Compact (UNGC), as its foundation and considers the results of other research in the field of corporate SDG integration. The framework comprises seven stages, commencing with an understanding of the rationale for engaging with sustainability and followed by the definition of specific goals and targets. Based on that, the SDG Compass + guides a company through the concrete implementation as well as the measurement and reporting. Figure 1 shows the framework.

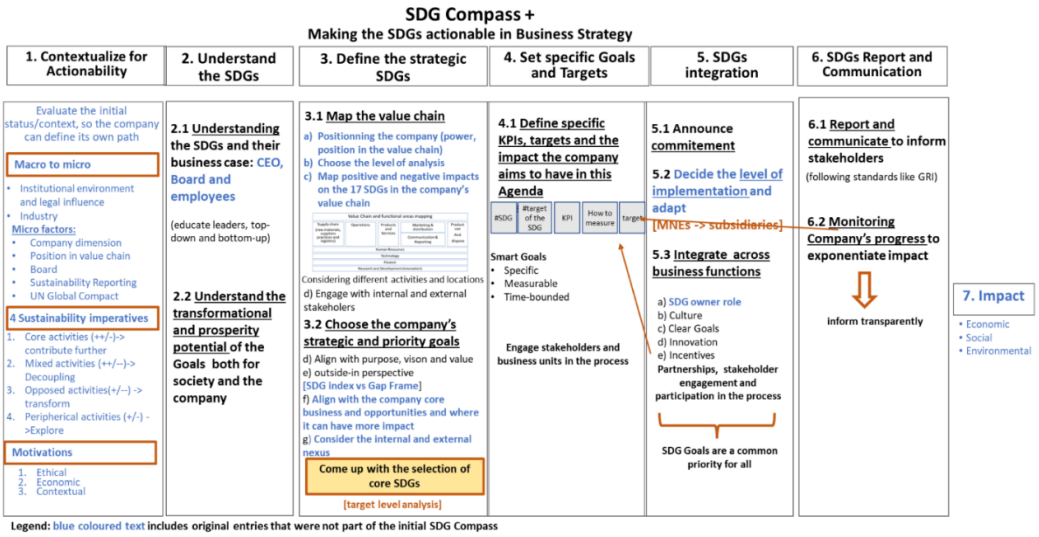

Figure1: SDG Compass + (De Almeida et al., 2023)

The blue colored text indicates changes to the original SDG Compass, as proposed by the UNGC. The original SDG Compass can be found as a reference in appendix 1. The initial step of the SDG Compass +, which is about contextualizing for actionability, represents a significant distinction from the original SDG Compass. By situating this step at the outset of the implementation process, the authors seek to prompt organizations to undertake a

comprehensive assessment of their current sustainability and SDG integration status. Consequently, organizations are also expected to gain insights into their own motivations for engaging with the SDGs. The authors posit that this is an essential step in defining the trajectory a company wishes to pursue in integrating the SDGs.

The specific recommendations they propose for this stage are derived from the findings of other scholars who have studied how to successfully integrate sustainability. Analyzing the macro- and microenvironment of a company can be a crucial step in this regard, as illustrated at the top of the first step. Burch and Di Bella (2021) argue that a better understanding of these factors can help organizations assess their status quo in terms of sustainability. Van Zanten and Van Tulder (2021) identified the four strategic sustainability imperatives, depicted in the center of the first step in the framework, which are designed to motivate companies to assess their current level of SDG alignment in relation to their economic activities.

Finally, it is important to assess the company's motivation to engage with the SDGs, as illustrated at the bottom of the first step in the SDG Compass +. Santos and Silva Bastos (2020) developed a framework to address these motivational issues, which suggests three potential motivations for a company to engage with the SDGs: ethical, contextual, and economic ones. While the ethical perspective refers to corporate culture and values, the contextual motivation aims at stakeholder legitimacy. The economic motivation can be understood as the search for economic benefits through the integration of the SDGs.

The third stage of the SDG Compass +, which deals with the definition of strategic SDGs, also shows significant differences from the initial SDG Compass. De Almeida et al. suggest mapping the company's current value chain with SDGs, by performing a systematic analysis of positive and negative impacts. This step is also mentioned in the UNGC's original SDG Compass. However, their approach to value chain mapping is not as sophisticated as that described in the SDG Compass +.

The second important distinction made by the authors is about the selection of strategic SDGs, which especially refers to the alignment of the goals with the core business of the firm and the consideration of the internal and external nexus. According to the authors, in this stage of the framework it is not only important to analyze which SDGs are suitable to the company's core business but also to examine where the firm can have the most impact. This marks an important difference to the approach suggested by the UNGC in 2015.

Furthermore, the SDG Compass + suggests implementing the role of an SDG owner, which is a concept that was developed by Wolff et al. (2020). The integration of an SDG owner, adapted

from the principles of Scrum and Lean Management, is regarded as a solution for successfully integrating sustainability in all areas of the company. The research suggests positioning the SDG owner as a mediator between the management level and the operational level, and as an external bridge to stakeholders. The SDG owner is tasked with aligning the corporate sustainability strategy with products, services, and operations.

Finally, the last important novelty in the SDG Compass + is the additional seventh stage about the impact, which is not included in the original SDG Compass at all. It is important to distinguish this step from reporting and communication, what is already included in many frameworks and mentioned by several authors (UNGC et al., 2015, Grainger-Brown & Malekpour, 2019). The impact phase in the SDG Compass + is about the collection of evidence on how the company is generating impact for economy, environment and society at large (De Almeida et al., 2023).

2.3 Sustainability in the Automotive Industry

Considering that the case study of this dissertation is about a multinational enterprise within the automotive industry, it is important to provide a brief introduction to the current state of research on sustainability in the automotive industry.

2.3.1 Relevance and Motivation

The role of the automotive industry in terms of sustainability is a topic of frequent discussion. The consequences of the Volkswagen emissions scandal, for instance, are a driver for the sustainable transformation of this sector, but there are also other motivations that need to be considered to understand the motivation to become a sustainable company within this industry. In this context, the three main motivations for the integration of sustainability at the core of corporate strategy were explained earlier in this chapter: ethical motivation, contextual motivation and motivation driven by economic incentives. (Santos & Silva Bastos, 2020).

The emission scandal can be seen as a trigger event for ethical motivation. Moreover, the considerable ecological and social impact of the industry, which is driven by aspects such as accidents, air and water pollution, and significant GHG emissions, can be identified as an ethical motive to make sustainability core of corporate strategy (Mayyas et al., 2012).

But there is also strong economic motivation, which is driven by concrete business cases that go along with a sustainable transformation of the industry. Vaz et al. outline that sustainable business models in this industry can lead to innovations, lower risk, lower costs, and less complexity (Vaz et al., 2017).

While this refers to economic benefits, we can also identify contextual motivation in the automotive industry, which is characterized by stakeholder legitimacy. In this context, external stakeholders exert considerable pressure on automotive companies to integrate sustainability into their strategies (Jasiński et al., 2021; Szász et al., 2021). Moreover, the automotive sector is significantly influenced by regulations that mandate sustainable transformation for automobile manufacturers (Wolff et al., 2020).

2.3.2 Key Challenges in the Industry

It is important to understand which challenges in terms of sustainability this industry is currently facing. One of the most significant challenges currently facing this industry is the emissions produced by the vehicles it sells. Accordingly, the transition from fossil fuel-based cars to electric vehicles is regarded as an essential strategy for the sustainable transformation of this sector. While this refers to the use phase of cars, another significant challenge faced by the industry arises during the production stage of automobiles. The entire supply chain of car manufacturers is responsible for the emission of considerable greenhouse gases, driven by the shipping of materials, the production process and the transportation of vehicles (Günther et al., 2015).

Ghosh et al. (2019) reach a comparable conclusion in their analysis on the primary sustainability challenges faced by the automotive industry. They identify four categories of concern: durability, heavy material usage, fuel consumption, and environmental pollution. The authors emphasize that a fundamental transformation of the production process is essential to address these challenges, with a focus on renewable and sustainable materials.

To address this issue, the transition from a linear to a circular economy is regarded as a solution with significant potential for impact in the automotive industry (Lukin et al., 2022; Prochatzki et al., 2023). However, looking at the progress made thus far in achieving fully circular business models, we can identify some obstacles. Although some circular approaches are in place, there is a lack of comprehensive circular economy-based strategies that affect the entire production process in this industry. Consequently, there is a necessity for novel, circular methodologies, and greater investment in research activities in this domain. (Prochatzki et al., 2023).

2.3.3 Implementing Sustainability in Automotive Companies

It is essential to understand where the industry stands in terms of implementing sustainability at the core of corporate strategy. A 2022 industry analysis concludes that each of the examined companies, namely Toyota, Mercedes-Benz, BMW, Honda, and Hyundai, makes a positive

contribution to at least 12 out of the 17 SDGs. It is important to note that this assessment is based solely on publicly available reports and information from websites (Lukin et al., 2022).

A comparable approach was employed by Sukitch et al. (2015) who examined the sustainability reports of 14 automobile companies to assess the implementation of corporate sustainability in this industry. The authors conclude that there is awareness for the importance of this topic throughout the entire sample, and that necessary changes have been made in some of the companies, for example, the adaption of corporate strategies or goals. Furthermore, their study indicates that numerous companies adopt a siloed approach to sustainability, implementing separate sustainable product lines, rather than implementing sustainability at the core of corporate strategy, which can be identified as an essential challenge for this industry.

Looking into implementation challenges in more depth, we can find certain barriers preventing automobile firms from implementing sustainability into their operations. The three most common barriers identified are: a lack of common definitions and targets, a lack of responsibility, and a missing organizational integration (Wolff et al., 2020).

Summary and research gap

A substantial body of research has been devoted to the relevance of sustainability for strategic management and to the specific business cases through sustainability (Erzurumlu et al., 2023; McPhee, 2014; Porter & Kramer, 2011; Unruh et al., 2016; Van Tulder et al., 2021).

Furthermore, numerous scholars have addressed the question of how to successfully integrate sustainability into corporate strategy (Baumgartner & Rauter, 2017; McPhee, 2014; Teh & Corbitt, 2015). In addition, specific models and frameworks were developed with the aim of guiding companies through the complex integration process of corporate sustainability. Some of these were designed with the specific intention of implementing the SDGs into multinational enterprises, aiming to embed sustainability at the core of corporate strategy (De Almeida et al., 2023).

However, there are some limitations to the current approaches in the scientific literature on the strategic integration of sustainability. Teh and Corbitt (2015) argue that there is lack of research that is specifically focused on a holistic approach and strategic perspective on implementing sustainability in companies. Furthermore, research on how strategy development can achieve both environmental and economic sustainability, is currently scarce (Engert et al., 2016).

The mentioned framework, that seeks to make sustainability core of corporate strategy through successful SDG implementation, also offer opportunities for further research. The authors

request the assessment of practical validity of the framework together with companies. (De Almeida et al., 2023). Other authors echo the call for more research in this area. Domingo-Posada et al. (2024) point out that the link between the SDGs and corporate strategy is an understudied area with few references, which needs further investigation. Beyne draws the conclusion that future research should focus on collecting more practical data and conducting in-depth interviews (Beyne, 2020). Ivanaj et al. confirm this call for further research by requesting more empirical analyses on the strategic integration of SDGs into multinational enterprises (Ivanaj et al., 2021).

A comparable conclusion on future research areas can be reached in the analysis of the current state of research on sustainability in the automotive industry. In this area of scholarship it is notable that a frequently employed methodology for practical oriented studies is the review of sustainability reports and website information (Lukin et al., 2022; Sukitsch et al., 2015). These authors do not collect primary data from companies within the industry, instead relying solely on publicly available information. Consequently, this type of research is primarily influenced by the information disclosed by companies regarding their sustainability and SDG initiatives, rather than by a comprehensive examination of their operational activities.

Additionally, there is a lack of illustrative case studies that focus on a single company and its approach to integrating sustainability in the strategy and its operations.

Given these limitations and the need for further research, this dissertation seeks to understand how one particular multinational enterprise within the automotive industry integrates sustainability into their core business and strategy. The following chapter will present the methodology employed and the concrete research design.

3 Research Design and Methodology

3.1 Research Design

Given the findings from the literature review, this dissertation focuses on a practical case study. The use of a case study of one specific company is considered an important method for developing novel and testable theories, as highlighted by leading scholars (Eisenhardt & Graebner, 2007).

The case study for this dissertation will be the BMW Group, a multinational automotive company headquartered in Germany, which will be introduced in more depth in the case study.

The BMW Group employs a comprehensive approach to sustainability. In a ranking of the CSR reports of the 100 largest companies in Germany by the Institute for Ecological Economy Research, the BMW Group was identified as not only a leading actor in the automotive industry but also as a top performer across all industries (Hoffmann et al., 2021). It is important to note that such a ranking should not be considered a definitive representation of a company's sustainability efforts. However, it can serve as an indicator that the firm is addressing these issues comprehensively.

Consequently, the BMW Group is deemed a suitable case study for investigating the subject matter of this dissertation.

3.2 Research Methodology

To develop the case study, a qualitative research methodology is employed, which entails the collection of both primary and secondary data. The primary data are being collected through the conduct of expert interviews, with the objective of gathering firsthand insights from the BMW Group on its approach to the strategic integration of sustainability. To improve the quality of the data collection, additional interviews with external experts have been conducted. An overview of the experts interviewed can be found in the table below. Due to a confidentiality agreement with the experts, names and personal information are not being disclosed.

Interviewee	**Organization**	**Position / Background**
Interviewee 1	BMW Group	Sustainability Strategy Plant Berlin
Interviewee 2	BMW Group	Head of Sustainability and Mobility
Interviewee 3	BMW Group	CEO & Managing Director BMW Portugal
Interviewee 4	Salvador Caetano	CEO Mobility & Energy Transition

Interviewee 5	Aurelius Group	Manager Sustainable Value Creation
Interviewee 6	Aurelius Group	Manager Sustainable Investments
Interviewee 7	UNDP	Business Development & Impact Management

Figure 2: Overview Expert Interviews Primary Data Collection

The interviews were conducted as semi-structured interviews, characterized by the use of open questions and follow-up questions designed to elicit more in-depth information on specific subjects and allow for personal stories experienced by the interviewees (Kvale & Brinkmann, 2009). The interviews were recorded and transcribed to enhance the quality of the subsequent data analysis.

The secondary data collection is based on an analysis of publicly available documents and information on the BMW Group and its approach to sustainability. In addition to annual reports and sustainability publications, this data collection is primarily driven by the analysis of a set of expert interviews that the company published. Through this analysis, 11 interviews with experts from the company were identified as contributing to the data collection, as illustrated in Figure 3.

Name	**Position**
Oliver Zipse	CEO BMW Group
Thomas Becker	Head of Sustainability & Mobility
Manfred Heller	First Environmental Officer
Anna Goldhofer	Supply Chain Sustainability Specialist
Tanja Hornbachner	Sustainability Strategy Plant Steyr
Peter Tarne	Vehicle Life Cycle Specialist
Katrin Mechler	Design Communicator
Daniela Bohlinger	Head of Sustainability BMW Design
Stefanie Wurst	Head of the Mini Brand
Claudia Maasdorp	Project Manager Sustainable Production
Jury Witschnig	Head of Environmental Protection

Figure 3: Overview Expert Interviews Secondary Data Collection

4 Sustainability at the Core of Corporate Strategy at BMW Group

4.1 Case study

On a cloudy and cold day in January 2020, Mr. B. was sitting in his office in Munich, the capital of the German state of Bavaria. He had just started his new position as the Head of Sustainability and Mobility at BMW Group and was thinking about the company's future.

He thought about how much the BMW Group has already done to be sustainable over the years and about one of his predecessors who might have sat in this or a similar chair many years ago. Manfred Heller was the first Environmental Officer of the BMW Group, appointed in 1973. He was the first in the automotive industry.

Since then, the company has made a lot of progress in terms of sustainability, Mr. B. thought. The first environmental report in 1999, the first luxury car powered by hydrogen in 2007, the BMW i3 as the first mass-produced fully electric vehicle worldwide in 2013, and many more things came to his mind.

On the other hand, he thought, there is still a long way to go and a lot has happened in the last few years. In 2015, BMW made a commitment to the Paris Agreement to limit global warming. The Sustainable Development Goals were published in the same year as a common agenda for people, planet and prosperity. And just recently, in December 2019, the European Green Deal was announced. On top of that, the market started to expect more electric vehicles, investors incorporated sustainability more and more into their evaluations, and competitors increased their sustainability efforts.

He thought about this rapdily changing environment and how it would affect the BMW Group. What does this mean for the BMW Group today in terms of sustainability? What, if we do not only take care of environmental management but make sustainability the central direction of our entire business? Mr. B. was sitting in his chair and an important question popped up in his head:

How can we define a corporate strategy and associated goals to make sustainability the core of our future strategic direction at BMW Group?

Company Background BMW Group

The BMW Group is one of the world's leading premium automotive and motorcycle manufacturers, as well as a provider of financial and mobility services. Headquartered in Munich, Germany, BMW employs over 120,000 people across its global operations, which

span over 140 countries across five continents. The company reported revenues of approximately €155.5 billion in 2023.

Founded in 1916 as an aircraft engine manufacturer, BMW initially focused on advancing aeronautical engineering. Following the Treaty of Versailles in 1919, which restricted Germany from producing aircrafts, BMW shifted its focus to motorcycles in 1923. The expansion into automotive manufacturing came in 1928 with the acquisition of a car factory in Eisenach, marking the beginning of BMW's journey as an automobile manufacturer.

BMW established itself in the market with a focus on high-quality, performance-driven vehicles. The company expanded globally and introduced the MINI and Rolls-Royce brands, further strengthening its position in the luxury automotive segment. Over the past two decades, the BMW Group has transitioned into a mobility leader, investing heavily in electric vehicles, autonomous driving, and digital services, while maintaining its core commitment to quality and innovation.

Automotive industry in Europe – competitor's sustainability efforts

BMW Group operates in a highly competitive market. The following competitor overview considers three of the largest (by revenue) original equipment manufacturers in the European automotive industry, briefly introducing their commitment to sustainability.

Volkswagen AG

Volkswagen's "Way to Zero" strategy aims to reach carbon neutrality by 2050, with a 30% CO_2 reduction per vehicle by 2025 compared to 2018 levels. The company is prioritizing an all-electric fleet, targeting that 50% of its European vehicle sales will be electric by 2030. To support a circular economy, Volkswagen is committed to extensive battery recycling, setting up recycling facilities in Salzgitter, Germany, and ensuring materials from end-of-life batteries are repurposed. Additionally, it focuses on resource-efficient production by incorporating renewable energy in manufacturing and exploring sustainable material sourcing across its supply chain.

Mercedes Benz Group AG

Under its "Ambition 2039" strategy, Mercedes-Benz is targeting carbon neutrality across its entire value chain by 2039. The plan is to transition its entire car fleet to electric by 2030 where market conditions allow. Mercedes is also advancing circular economy initiatives, particularly through battery recycling projects in Kuppenheim, Germany, where it aims to achieve closed-loop recycling for batteries. Additionally, the company is focused on sustainably sourcing

materials like cobalt and lithium and using recycled plastics, particularly in its EQ line of electric vehicles.

Stellantis NV

With its "Dare Forward 2030" plan, the company aims for a 50% reduction in carbon emissions by 2030 and carbon neutrality by 2038. A key component of Stellantis' strategy includes expanding its portfolio to 75 all-electric models by 2030, aiming for 100% electric car sales in Europe by the same year. Stellantis is also dedicated to circular economy principles, partnering on sustainable battery material sourcing and recycling initiatives across its brands. The group operates recycling and remanufacturing facilities and is committed to reducing the ecological footprint of its products, materials, and processes through eco-design and vehicle end-of-life recovery programs.

Sustainability at BMW Group: Status Quo in 2020

To think about new strategic directions and goals for the future of the BMW Group, it was important to assess the status quo in terms of sustainability and the achievements made so far. Since the first implementation of an environmental management system in the company in 1973, a lot has been accomplished. Manfred Heller, who was the environmental officer back then, says about the firm's progress:

> *"We built competencies, established mandatory processes, and introduced worldwide standards".*

This direction made a difference. The BMW Group managed to cut energy consumption per vehicle produced by 40 percent and CO_2 emissions by about 70 percent compared to 2006. On top of that, the company cut emissions from its new vehicles sold in Europe by about 42 percent between 1995 and 2019. As of 2020, all the company's production locations obtain their electricity exclusively from renewable sources. They have also made sure that their supply chain management is as environmentally and socially responsible as possible, which makes them a leader in this field. In terms of production, the company has started to integrate first circular economy principles into their operations, for example, recycling and closed-loop systems for high-impact materials like aluminum and steel.

All these achievements were tied to specific sustainability goals that the BMW Group set a couple of years earlier. The company hit almost all the targets a year ahead of schedule, in 2019 instead of 2020.

"In short, we met nearly all our targets last year already. So, we were able to start developing a completely new sustainability strategy for the future earlier than expected." -CEO BMW Group-

Strategic Shift: Laying the Foundation for the new Direction

Consequently, a team around Mr. B. worked hard to develop this new strategic direction, always keeping in mind Mr. B.'s overarching question of how to create a new group strategy with sustainability at the core of it. It was important to move from environmental and social projects and goals to a more holistic perspective on sustainability. The new strategy should align environment, social aspects, and economic well-being. The board of management recognized the relevance of unifying these three dimensions to still be successful in the future.

"I firmly believe the fight against climate change and how we use resources will decide the future of our society – and of the BMW Group." -CEO BMW Group-

The BMW Group started the new strategy process together with a strategy and management consultancy. First, the team thought about how to derive new and suitable strategic directions for the company and which interests needed to be aligned in this context. There were different drivers influencing these decisions. Firstly, the changed and increased regulatory demands and shifted customer preferences, especially towards electromobility were an important driver.

"So, the issue of electromobility and its ramp-up is of course one that comes in very strongly from a regulatory and market perspective." -Head of Sustainability & Mobility BMW Group-

The market demand for electric vehicles has significantly increased from 2016 to 2020. While in 2016 the global sales of electric vehicles were around 0.77 million, in 2020 this number has risen to 3.18 million vehicles, indicating an increase by more than 300 percent. In addition, new regulations strongly influenced the automotive industry and the BMW Group. The European Green Deal from 2019 or the first Circular Economy Action Plan from 2020 were essential drivers in this context.

The second important lens for the BMW Group was the strategic direction that the company wanted for itself, besides regulatory and market demands. Therefore, the team, working on the new strategic direction, needed to conduct in-depth analyses.

"This process included the materiality analysis, survey of stakeholder groups, and evaluation of the results." -Employee Sustainability Strategy BMW Group-

Key Pillars of the new Strategy

The results of these in-depth analyses showed that there are two overarching topics, that are most relevant to the future direction of the BMW Group: Reducing the CO_2 footprint significantly and conserving resources. With these results, the team started to define different strategic pillars, which then should build the foundation to set specific goals for the group and targets for different areas. Through a number of intense workshops and discussions, the team derived six pillars that should build the foundation for the further strategy process:

1. Circular Economy: Maximum energy and raw material efficiency.
2. Electrification: Every second car will be a battery electric vehicle from 2030 onwards.
3. Production: BMWiFactory – Lean, Green, Digital.
4. Supply Chain: High environmental and social standards, for our partners too.
5. Employee development: Investing millions in training employees.
6. Societal responsibility: Commitment to diversity and cultural understanding.

The idea behind these six pillars was to create a 360° approach to sustainability. Mr. B. emphasized the importance of this holistic perspective again and again.

> *"Sustainability means much more for the BMW Group than merely building and selling electrically powered vehicles." -Head of Sustainability and Mobility BMW Group-*

Deriving specific Goals

In light of the two overarching strategic directions and the six derived pillars, the team was now tasked with formulating specific and measurable goals for the future of the company. The team conducted several workshops to integrate the findings from the stakeholder survey and the materiality analysis with the two overarching strategic directions and six pillars. Additionally, the team engaged in extensive research on the subject matter to gain a comprehensive understanding of the scientific perspective on the relevant topics. They also involved a number of employees from various departments with practical experience to ensure the definition of group goals was highly operational from the beginning.

The BMW Group initiated a process of defining specific and measurable goals for the reduction of CO^2 emissions. In this context, the team reflected on the company's initial commitment to the Paris Agreement.

"But regarding CO^2 reduction, we´ve oriented ourselves towards limiting global warming and the Paris Climate Agreement of 2015. We´ve said that we must develop a 1.5-degree compliant target path in the sustainability strategy. That was the input for the specific CO^2 issue." -Employee Sustainability Strategy BMW Group-

That was a good foundation to derive goals for the company, but the team wanted to ensure a very specific goal-setting process. Coming back to the findings from the stakeholder surveys, the workshops and the materiality analyses, the team members thought about the different pillars within the value chain where the company produced emissions. After long discussions, they agreed to cluster the goals for CO^2 emissions along three stages: supply chain, production, and the use phase of the vehicles. To be compliant with the emissions reduction path of the Paris Agreement they defined three essential goals for reducing emissions:

1. **Supply Chain:** Reduce CO^2 emissions per vehicle by 20% by the year 2030, compared to the baseline year 2019.
2. **Production:** Reduce CO^2 emissions per vehicle by 80% by the yar 2030, compared to the baseline year 2019.
3. **Use Phase:** Reduce CO^2 emissions per vehicle by 40% by the year 2030, compared to the baseline year 2019.

The second important strategic direction that the team derived is about the conservation of resources. The team also thought about specific goals for the future strategic direction of the company in this area but had more difficulties to derive them this time. After a series of workshops and intense discussions, they agreed on the following goal:

1. Significantly increase the share of secondary materials in our vehicles until 2030.

Contributing to the Sustainable Development Goals

With its new strategic direction, the company is actively contributing to the Sustainable Development Goals. However, they decided to not make the SDGs themselves central to the company's strategy since BMW was thinking about sustainability comprehensively long before the SDGs were published. Furthermore, the company concluded that the SDGs are not specific enough for its business model and therefore not suited to serve as the core of the corporate strategy.

"But we feel that the SDGs are a bit vague. In the automotive industry we really need to get down to the nitty-gritty, down to the cycle, down to the component, down to the

individual material number, and down to the individual responsibility, if we want to make a real impact. Yes, the 169 targets are helpful. It is still too vague for the automotive industry." -Employee Sustainability Strategy BMW Group-

Consequently, the company decided to align their already existing strategic directions with the SDGs. In general, they wanted to contribute to all 17 SDGs but they concluded that this was not possible if they wanted to have a serious contribution.

"In general, we identify with all the SDGs and the 2030 agenda. We are committed to doing our part. However, we know that we cannot make a direct contribution to all the SDGs as a company. That is why we decided to take a goal-oriented approach. We asked ourselves: Where are the stakeholders? Where is the greatest impact? Where is our business actually located?" -Employee Sustainability Strategy BMW Group-

Consequently, the team derived five specific SDGs, that go in line with the general strategic direction of the company and affect areas where the BMW Group has the most impact.

Figure 4: Strategic SDGs at the BMW Group

Operationalizing Strategic Pillars, Goals, and SDGs

After setting the strategic pillars, specific goals and strategic SDGs, the team needed to figure out how to successfully implement all of this into the day-to-day business.

For BMW, it was important to make sustainability and the set goals a part of the company's culture and operations. Since BMW is pretty hierarchical, they wanted to bring sustainability top-down, from the top management to the manufacturers. So, the first step was to define the general responsibility for sustainability within the company. They decided not to create a separate sustainability department, but to place the responsibility directly with the company's CEO, Oliver Zipse.

"So, he is directly in charge of the legal department, the group strategy, the product strategy, and the compliance organization. So, it is part of his own portfolio, what we do with it." -Head of Sustainability and Mobility BMW Group about Oliver Zipse-

Then, the new strategic pillars and goals were first shared with the high and middle management to make sure they would include them in their operations and decision-making. That was the start of implementing them across the whole group.

> *"We set up committees to make sure we are making sustainable decisions. For instance, we included sustainability as a factor in purchasing decisions. And then at some point, we got really good at this, and sustainability ended up being a factor in almost all decision-making processes." -Employee Sustainability Strategy BMW Group-*

After incorporating sustainability and the set goals top-down, the team thought it would be a good idea to bring in an approach that would let everyone in the company contribute. They figured it would be great to create some concrete incentives for the employees at BMW Group to motivate them to act sustainably and come up with innovative sustainable initiatives. And that is how the sustainable idea management tool was created. The main objective of this tool is to generate and implement sustainable ideas in the day-to-day business at BMW. Every employee can submit ideas through the tool.

The team also decided to translate the overarching pillars and goals into specific operational targets for the different teams and departments within the company. To do this, they created a performance management system with a balance scorecard. This system helps to translate goals into actionable targets and assigns them to the different departments. The targets are evaluated every year using a traffic light system with the colors green, yellow, and red to indicate how well the targets are being met. They also decided to add these targets and sustainability measures to the job descriptions. For example, a purchasing job has a clear sustainability measure in the job profile.

The team managed to embed sustainability in every area of the company. It was important to ensure everyone in the company understood that sustainability is not just about doing your job and doing something sustainable on the side. It is about doing your job in a sustainable way from the beginning to the end. The Head of Sustainability at BMW Group Design said that one of the main questions for her and her job is "How are we going to manage to design all our vehicles sustainably?". This goes for all departments and functions within the company and is a very important aspect for the entire team. Sustainability cannot longer be in some projects on the side. It needs to be part of how business is done at BMW Group in every area.

Translating the Group Strategy into Subsidiaries: The Example of BMW Portugal

The BMW Group is a multinational enterprise operating in more than 140 countries, which means that the group strategy and goals need to be adopted in the subsidiaries in different countries and markets. One of these subsidiaries is BMW Portugal, which is responsible for the entire Portuguese market.

BMW Portugal was officially established as a subsidiary in 1994, operating as a key regional arm of the BMW Group with headquarters in Lisbon. Its operations include the sale of vehicles, after sales services, and providing financial services solutions to the customers in Portugal.

The group strategy, as presented earlier, applies to BMW Portugal as well and they are committed to fully adopt this strategic direction. While the subsidiary is committed to all the overarching goals, its biggest focus remains on two key issues:

1. **Sustainable product portfolio:** BMW Portugal actively promotes the sale and adoption of the BMW Group's growing range of electrified and alternative fuel vehicles, such as battery electric, plug-in hybrid, and hydrogen-powered models to help drive the transition towards more sustainable mobility solutions in the local market. This remains the strongest measure in terms of decarbonization.
2. **Renewable energy, emissions reduction, and circular economy practices:** BMW Portugal has implemented measures to increase the use of renewable energy sources and reduce its carbon footprint. The recycling and reuse of materials, waste reduction, water consumption, and the development of sustainable product lifecycle management is taken into consideration as well. BMW Portugal rewards initiatives in the dealer network that support the shift towards more sustainable practices.

However, there are some local circumstances in Portugal, which display barriers for BMW Portugal in terms of the implementing the group strategy. Firstly, there are specific environmental regulations in Portugal that BMW Portugal needs to comply with. Furthermore, the infrastructure for electric vehicles varies significantly between the different regions in Portugal. The availability of electric vehicle charging stations is very limited in certain regions of Portugal. This makes the market approach towards selling electric vehicles more complicated than in other markets. Moreover, the current infrastructure for renewable energy production and storage is scarce in Portugal, displaying a hurdle for the goal of clean production facilities that are powered solely by renewable energy.

Another hurdle to the implementation of the group strategy in Portugal is the market demand for electric vehicles. In Portugal, it differs from other markets and customers in Portugal have unique preferences and expectations. As of 2022, the share of electric vehicles in Portugal is 3.5%, which is significantly lower than in many other European countries BMW is operating in.

Furthermore, financial constraints are a major challenge for BMW Portugal in terms of sustainability. The implementation of certain sustainable measures requires considerable upfront investments, which may not always be available for BMW Portugal. Balancing these financial requirements with other necessary investments is a major challenge for BMW Portugal.

Lastly, the alignment of all relevant stakeholders is considered an essential challenge for BMW Portugal. They named employees, customers, suppliers, and partners, as well as the government and regulatory authorities and pointed out that it was a complex and time-consuming process to align these different interests in terms of sustainability. Since BMW Portugal considers the engagement with the stakeholders a crucial step to adopt the group strategy in Portugal, they have come up with concrete measure and ideas to successfully engage with these stakeholders.

1. **Employees:** The subsidiary introduced a set of measures to integrate sustainability into the corporate culture at BMW Portugal. Through regular communication and feedback systems they include the opinions and the knowledge of the employees. Moreover, BMW Portugal introduced specific incentive programs that reward sustainable decision-making.
2. **Customers:** BMW Portugal introduced educational programs for its customer base in Portugal to explain features and benefits of BMW's sustainable products and services. In this context, they started to collect specific customer feedback on sustainable preferences and concerns of consumers in order to be able to react to these specific demands.
3. **Suppliers and partners:** The collaboration with its suppliers and partners is an essential step for BMW Portugal to ensure sustainability throughout the entire value and supply chain. The subsidiary is helping its suppliers and partners to comply with the sustainability standards. Moreover, they started to engage in joint activities with its suppliers and partners to explore new and innovative technologies and practices that foster sustainability.

4. **Government and regulatory authorities:** BMW Portugal actively participates in consultations and conversations with the government for specific policies, regulations, and incentives that foster the sustainable transformation in Portugal. Furthermore, they started actively collaborating with the authorities to identify and address the infrastructural barriers in Portugal that prevent the shift towards electric mobility, as mentioned earlier.

Outlook: Big Challenges ahead

In July 2020, the new group strategy was publicly announced by the BMW Group's CEO, Oliver Zipse. With the words "The BMW Group is making sustainability and resource efficiency central to the company's strategic direction" the press release for the strategy announcement was published on July 27th, 2020. Oliver Zipse highlighted:

> *"Sustainability and premium will be inextricably linked in the future."*
>
> *"As a premium car company, it is our ambition to lead the way in sustainability. That is why we are taking responsibility here and now and making these issues central to our future strategic direction."*

However, there is still a long way to go for the BMW Group. There are still many remaining challenges that require research and development, investments, and innovations. The BMW Group representatives as well as external stakeholders agree that one of the biggest challenges ahead is the transition from a linear to a circular economy. When talking about the future and the biggest challenge of the company, BMW Group's Head of Sustainability & Mobility highlights:

> *"So, for us, of course, the focus of our sustainability impact is shifting from the exhaust to the supply chain." - Head of Sustainability and Mobility BMW Group-*

The sustainability investors reach a comparable conclusion, investigating the BMW Group from an outside-in perspective.

> *"The topic of the circular economy plays a role, and if the focus shifts more towards e-mobility, other resources will of course be required". -Manager Sustainable Investments-*
>
> *"Circularity is by far the biggest problem because decarbonization will solve itself in the long term. So, far a car manufacturer, I am firmly convinced of this." -Manager Sustainable Value Creation-*

The BMW Group is aware of this challenges and invests a lot of effort and money into this transition. They recognize the importance of a fully circular business model, which can contribute to the two main goals of the group: a responsible use of limited resources and a decarbonization path to achieve the Paris Agreement. Even though the BMW Group is on a good way to achieve its goals in this area, the responsible people within the company see room for improvement.

> *"We need a lot more courage and have to think in terms of a circular economy and CO_2 savings from the very onset." -Supply Chain Sustainability Specialist BMW Group-*

4.2 Teaching Note

The following chapter presents the teaching note for the case study. After a brief synopsis of the case (4.2.1), the main learning objectives of the case are being presented (4.2.2). Finally, the teaching strategy is being explained (4.2.3) and the specific assignments are presented (4.2.4).

4.2.1 Case Synopsis

This teaching cases displays the process of how a multinational car manufacturer from Germany, the BMW Group, developed a new corporate strategy with sustainability at its core. The case starts by presenting the status quo, especially in terms of sustainability, at the BMW Group in 2020. Based on that foundation, the strategy development process is explained, starting with the overarching strategic directions the company defined. The case study then goes into more detail, outlining how specific goals and targets were set, followed by the concrete implementation process. Furthermore, the case entails a section about the strategic SDGs of the BMW Group and the translation of the group strategy into one the company's subsidiaries, using the example of BMW Portugal. The case closes with a brief outlook into the future of the BMW Group, presenting the challenges ahead.

4.2.2 Learning Objectives and Contribution

The case study of the BMW Group can be taught to undergraduate, graduate, and MBA students in management, strategy, and corporate responsibility and sustainability. It can be used to understand strategy development processes with sustainability at its core and to showcase a suitable and successful real-life example on the strategic integration of sustainability in multinational enterprises. The main pedagogical objectives are:

- Understand what a successful corporate (sustainability) strategy in the automotive industry can look like

- Understand how the new corporate strategy of BMW Group displays business cases for action through sustainability
- Identify challenges that subsidiaries, in this case BMW Portugal, are facing when implementing group strategies in local markets
- Understand the strategy development process of the BMW Group and how it derived specific sustainability goals und strategic SDGs for the company
- Apply the theoretical framework of the SDG Compass + to the case of BMW Group and derive insights for the business world as well as for the further development of the framework

Furthermore, the case study delivers the following contributions:

- Illustrating a practical example for multinational enterprises and corporate leaders on how to make sustainability the core of corporate strategy
- Showcasing how corporate (sustainability) strategies can be adapted in subsidiaries in other markets, despite local circumstances and challenges
- Illustrating the urgency for companies within the automotive industry, and also other sectors, to fight climate change

4.2.3 Teaching Strategy

Students are supposed to start the case work by carefully reading and understanding the case in detail. Moreover, students should read the literature review of this dissertation to gain a better understanding of the theoretical background on sustainability and strategic management. In case some students want to dive deeper into some of the subjects, the references can be used to read some of the papers cited in the literature review.

In Addition, students studying the case should have a look at the corporate website of the BMW Group and the latest group reports to gain a more detailed understanding of the company and its current sustainability efforts. They can also look at the publicly available interview series on sustainability that is published on the website of BMW Group.

4.2.4 Assignments and Analysis

The following section presents the specific assignments that can be used to guide students through the case study analysis. The answers and analyses can be found below each question. Figure 5 illustrates the teaching plan for the case study. To save time for the group work and discussion in class, the students are supposed to read the case before class. The in-class assignments and discussions are designed for 90 minutes.

Item	Duration
Reading time for the students before class	20 minutes
Assignment 1	20 minutes
Assignment 2	20 minutes
Assignment 3	30 minutes
Presentation results and discussion	20 minutes

Figure 5: Teaching Plan Case Study

The assignments should be solved in small groups of four to six students. For the in-class discussion, every group is supposed to select one representative who presents the results and leads the discussion for his or her group. The other group members can add information or jump in during the discussion.

Assignment 1

Where do you see specific business cases for the BMW Group through the new strategic alignment of the company? Use the four business cases for action, as identified by Guerreiro et al. (2023), to structure your results. As a reminder, the business cases for action are: reducing costs, increasing prices, increasing market shares, and creating a new business model.

Answer / Analysis

The analysis can be guided by the four business cases for action, identified by Guerreiro et al. (2023): reducing costs, increasing prices, increasing market share, and creating a new business model. The new strategy created by BMW Group in 2020 with the two overarching directions and 6 key pillars, as outlined in the case study, translate into concrete business cases that can be measured at BMW Group.

1. **Reducing costs**

   BMW Group has committed to reduce CO_2 emissions by 80% by the year 2030 compared to the baseline year 2019. This overarching goal was translated into specific measures such as powering plants by renewable energy, more energy-efficient manufacturing processes, and waste reduction directly translated into reduced operating costs for the BMW Group.

2. **Increasing prices**

   The CEO of the BMW Group pointed out: “Sustainability and premium will be inextricably linked in the future”. The company positions its sustainable premium cars

successfully in the market, enabling them to demand higher prices for the cars. Products such as the BMW iX or i4 incorporate premium sustainability features (e.g., vegan leather interiors, many recycled materials). Therefore, these vehicles sell to significantly higher prices in the market.

3. **Increasing market shares**

   The BMW Group has strongly increased its market shares in the electric vehicle market since 2020. In the first half of 2024, the company had increased its electric vehicle sales by 34.1% compared to the previous year. The company thereby strongly outperformed its traditional competitors and gained significant market shares in Europe.

4. **Creating a new business model**

   The BMW Group is working on a new, circular business model for manufacturing cars. The company intensives the use of recycled materials to build new cars and offers recycled materials to other industries. Moreover, the BMW Group is working on a battery-lifecycle-management in order to reuse old batteries of electric vehicles. As mentioned in the case study, there is still a long way to go for the BMW Group and the entire automotive industry in terms of circular economy. However, the current efforts mark a starting point for developing a new, circular business model at BMW Group.

The explained examples illustrate that BMW's new strategy, published in 2020, translates into concrete business for action, that lead to economic and financial benefits for the company.

Assignment 2

What are the most challenging aspects when adapting a group strategy as a foreign subsidiary, looking at the case of BMW Portugal?

Answer / Analysis

The case of BMW Portugal showcases, which challenges subsidiaries might face when implementing a group-wide strategy in local markets. The first specific challenge faced by BMW Portugal refers to local regulations in Portugal. The regulatory environment in terms of sustainability in Portugal is different from that in Germany or other markets of the BMW Group, which makes it difficult to just simply adapt the group strategy in Portugal.

Another essential hurdle for BMW Portugal is the infrastructural circumstances in the country, especially when it comes to selling electric vehicles. The infrastructure for electro-mobility in Portugal is, compared to other markets in Europe, poor. The availability of electric vehicle

charging stations is very scarce in many regions of Portugal. Furthermore, the availability of renewable energy sources to power the plants in Portugal is poor as well.

The third major barrier preventing BMW Portugal from effectively adapting the group strategy is about the market demand for electric vehicles, which might be linked to the poor infrastructure for electric vehicles in Portugal. As of 2022, the market share of electric vehicles in Portugal is 3.5%, which is extremely low in comparison to other European markets.

Furthermore, BMW Portugal faces financial constraints, which display a major challenge when implementing sustainability measures. The necessary investments in the sustainable transformation of BMW Portugal require a lot of financial resources, which may not always be available for the subsidiary.

Lastly, the management of the stakeholder network at BMW Portugal is complex and challenging for the subsidiary. It is a complex and time-consuming process to align the interests of the relevant stakeholders when it comes to sustainability at BMW Portugal.

Assignment 3

How do you evaluate the goal setting process of the BMW Group, considering the general sustainability goals as well as the five strategic SDGs? Use the SDG Compass + for your analysis, as introduced in detail in the literature review.

Answer / Analysis

The SDG Compass + is a framework designed to assist companies in implementing the SDGs, with the objective of making sustainability core business. The new corporate strategy of the BMW Group, as displayed in the case study, aims for the same thing: making sustainability core of the corporate strategy. Moreover, the BMW Group has defined five strategic SDGs in line with its new corporate strategy. The SDG Compass + can thus be utilized to assess the strategy development and goal-setting process of the company. The analysis can be structured by the six main pillars of the SDG Compass +.

1. **Contextualize for Actionability**

   The BMW Group did a status quo assessment before thinking about the new strategy and the goals for the future. The CEO, Oliver Zipse, highlighted that the company met all sustainability goals previously set one year ahead of schedule, which is why the group was able to develop a completely new strategy. Furthermore, they assessed the

company's business environment, as outlined in assignment 1, concluding that there is a need to adapt to the fast-changing environment. These steps can be mapped to the macro and micro environmental analysis, which is the first part of the status quo analysis in the SDG Compass +.

The second step of the status quo analysis is about the four sustainability imperatives. Looking at the case study and the status quo of BMW Group in 2022, we can identify mixed activities at the company. Therefore, the suitable imperative for the BMW Group would be decoupling.

The last step of the status quo analysis is about the motivation for sustainable activities, which were also explained in more depth in the literature review. Looking at the status quo in 2020, we can identify economic motivation, given the significantly increased market demand for electric vehicles. Furthermore, we can identify ethical motivation, which is especially driven by the Volkswagen emissions scandal from 2015. Lastly, we can also see contextual motivation at BMW Group. As illustrated case, the stakeholders played a crucial role for the company when defining the new strategy. Moreover, the company was strongly influenced by regulatory demands, as pointed out at the beginning of the case, which can also be seen as drivers for contextual motivation.

2. **Understand the SDGs**

   In the case study of the BMW Group, we cannot directly identify this stage. However, BMW has a long history and strong track record in terms of sustainability, as indicated in the introduction and the chapter about the status quo in the case study. Starting with the appointment of the first environmental officer in 1973, the company leveled the playing field in the automotive industry in terms of sustainability. Therefore, we can assume that a good understanding of sustainability was already in place at the BMW Group. Furthermore, the BMW representatives criticized the SDGs and their suitability for the automotive industry, arguing that they would lack specificity, indicating that they have a deep understanding of the SDGs. They also specifically referred to the 169 sub targets of the SDGs, underlining the point.

3. **Define the strategic SDGs**

   Considering the assignment and the case study of the BMW Group, this assignment refers to the strategic SDGs the BMW Group derived as well as to the goal-setting process of the general sustainability goals defined in 2020.

   The compass suggests beginning this process by mapping the value of the company to analyze positive and negative impacts on the 17 SDGs. The case study does not directly

imply that the BMW Group did a value chain mapping. However, the company conducted an analysis to examine in which areas it can have the most impact, which is a comparable to approach to the value chain mapping suggested in the framework. BMW also engaged with several stakeholders and conducted stakeholder surveys to investigate their expectations, which is described in the SDG Compass + as well. Moreover, the BMW Group conducted a materiality analysis, which is not part of the original framework and can be considered as an interesting addition to it.

Based on these results, the company first defined two overarching strategic directions, before deriving specific goals: reducing the CO_2 footprint significantly and conserving resources. After that, the BMW Group defined six pillars that are central to its future strategic direction, in line with the two overarching strategic directions: circular economy, electrification, production, supply chain, employee development, and societal responsibility.

To start making the strategy more operational, the company then started to define specific goals, which can be mapped with the second phase within the third stage of the SDG Compass +. At that point, BMW already involved several employees from different departments to ensure the goals are highly operational from the beginning, which can also be an interesting addition to the original framework. They defined specific goals for the CO2 reduction as well as for the conservation of resources, as outlined in the case study. The goals for CO_2 reduction are defined well, considering that all of them are very specific using a target year and a baseline year for comparison. However, the goal for the conservation of resources lacks specificity. They just pointed out that they want to increase the share of secondary materials by 2030, without specifying it or including a baseline year. Therefore, this goal is not really measurable in the future.

Furthermore, the BMW Group defined five strategic SDGs in line with their strategic ambition: 3, 8, 9, 12, 13. The SDG selection process is also in line with the suggestions of the framework. The chosen SDGs are aligned with BMW Group's purpose, vision and values and are suitable for the core business of the car manufacturer. The selection of the SDG 13 is arguable since it is not directly connected to the core business of the company. Due to the indivisibility of the SDGs, the SDG 13 is more an outcome of the other chosen ones and not a main driver of BMW's business. In total, the selection of the SDGs can still be evaluated positively, considering their link to BMW Group's core activities and the overarching strategic pillars and goals. Furthermore, it is positive that

they decided to narrow it down to five SDGs, which displays a focused and credible approach. For instance, one of the company's main competitors, Volkswagen AG, selected 10 SDGs, which are not suitable to the company's core business and displays an implausible approach.

4. **Set specific Goals and Targets**

   We can already see this in the solution for stage 3, given the goals the company set. As outlined, these goals are specific, measurable, and time-bounded, as suggested in the framework. The framework further suggests engaging with stakeholders and business units in this process, which the BMW Group did as well. Furthermore, the BMW Group used the 169 targets of the SDGs for setting goals and KPIs but pointed out that they are too vague for the automotive industry.

5. **SDGs integration**

   The BMW Group puts a lot of effort into the operationalizing of the strategic pillars and goals. Firstly, it is notable that the responsibility for the topic lies directly with the CEO, Oliver Zipse, which can be seen positively and can be linked to the first step within the fifth stage of the compass: announcing the commitment. As outlined in the case study, the company started to roll out the new strategy to the high and middle management, and then started to integrate it into all departments. This approach can be seen as aligned with the compass. The second step in this stage is about the level of implementation throughout the entire group. We can make two essential observations regarding this step in the case: firstly, the company ensured to implement the strategy top-down from the top management to the manufacturers and to implement sustainability in every business decision. Secondly, they added a bottom-up perspective through the mentioned idea management tool, enabling all employees to contribute and to foster innovation. This can be seen positively and displays an interesting addition to the original framework.

   The SDG Compass + also specifically refers to multinational enterprises and the adaption of the strategy in subsidiaries. Therefore, we can have a look at BMW Portugal, as illustrated in the case study. The BMW Group decided to roll out the new strategy throughout the entire group and all subsidiaries. As outlined in the case, that approach led to several challenges for BMW Portugal, trying to adapt to this strategy in light of local circumstances and market trends in Portugal.

   The last step in the fifth stage is about the implementation across all business units. We can posit that the BMW Group did a solid job here as well. They implemented a performance cockpit with a balance scorecard to bring sustainability and the set goals

in every department. Moreover, they integrated these aspects into the job descriptions, making the goals part of every job profile. The role of the SDG owner, as mentioned in the compass and the literature review of this dissertation, could be an interesting addition for BMW in the future.

6. **SDGs Report and Communication**

The case does not directly point out reporting issues. However, looking at the published reports of BMW Group from the previous years, this aspect can be evaluated positively as well. In 2021, the company started integrated reporting instead of publishing a separate sustainability report. This underlines once more that sustainability is not a side project for BMW but is anchored at the core of their business and corporate strategy. The second step in this stage of the compass is about monitoring the progress. We can see that in the case as well, illustrated by the performance cockpit and the balance scorecard that are used to integrate the goals in every area of the company. Furthermore, we can identify a traffic light system, which is used to evaluate the progress of the goals once a year.

5 Conclusion and Future Research

The case study on sustainable strategy development examined how a multinational car manufacturer, the BMW Group, created and implemented a new corporate strategy with sustainability at its core.

On the foundation of primary and secondary data collection, the teaching case tells the story of the BMW Group from the perspective of Mr. B., who is the Head of Sustainability and Mobility in the company. The case study can be seen as a blueprint for both the academic and the business world, considering the successful strategy development process of the BMW Group.

The company demonstrates how a multinational company within a challenging and transformative industry can shift from doing some sustainable projects on the side to creating a strategic approach that is sustainabe from the scratch. Furthermore, the case illustrates how large organizations can define specific and measurable goals as well as strategic SDGs and how they can operationalize them in the day-to-day business in every decision-making process. Lastly, it showcases one of the major challenges multinational enterprises face when implementing new strategies: translating the strategy into subsidiaries in other markets, given the local circumstances. The teaching case explores the example of BMW Portugal, focusing on their approach to adapting the group strategy and the challenges the subsidiary faces in doing so.

However, the case study and therefore this dissertation show some limitations, given the research design and focus of the case. The research design focuses on the automotive industry and one specific company within this industry, the BMW Group. Moreover, the qualitative approach of this study is exploratory in nature, seeking to generate novel theories. These results require further testing, which can be achieved through quantitative methodological approaches. Looking at the data collection, we can identify limitations in the selection of the experts for the primary data. To address this concern, further experts from the case company could be interviewed to gain more perspectives from the inside. The expert pool with the external perspective could also be expanded, including other stakeholders of the BMW Group such as suppliers or customers.

Future research in this area could take this or a comparable approach and apply it to other companies and industries. In this context, it would also be interesting to compare different industries and explore industry specific aspects. Furthermore, future research could take one of this case study’s topics and diver deeper into one single topic such as the SDGs or the example of BMW Portugal, considering that this case study takes a more comprehensive approach.

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7 Appendix

Appendix 1: SDG Compass (UNGC et al., 2015)