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## Staying True to the Mission

Exploring Mission Drift in Green Start-ups

Master's thesis in Innovation Management, Sustainability and  
Entrepreneurship

Supervisor: Meike Siefkes, Øyvind Bjørgum

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## Preface

This thesis was written by Hannah Blanke, Philip Dervedde, and Franziska Maisack, who are students at NTNU Norwegian School of Science and Technology in their second year of their master's degree. Their academic stay at the NTNU School of Entrepreneurship is part of the double degree program with Technical University Berlin, where the students study *Innovation Management, Entrepreneurship and Sustainability*.

The students have an inherent motivation for sustainability and wanted to further advance in this topic during their time at NTNU School of Entrepreneurship. Therefore, in the second half of 2022, they conducted a literature review on the topic of mission drift in sustainable start-ups. After identifying a research gap explicitly in the field of green start-ups, the authors started to write their master's thesis in January 2023, building upon the results of their literature review. Understanding that green start-ups have a critical impact on implementing sustainable solutions, the students wanted to know what it takes for them to maintain their mission in the long term. The authors were especially motivated to generate valuable findings for both theory and practice: While the authors contribute to the scarce existing literature and offer points of reference for future research, their findings can also serve as guidance for practitioners in the field of sustainable entrepreneurship.

The authors would like to thank their supervisors Meike Siefkes and Øyvind Bjørgum from the Department of Industrial Economics and Technology Management at NTNU for their excellent guidance during the semester. Their regular and constructive feedback was much appreciated, and inspiring discussions and methodical recommendations have contributed decisively to this master thesis. In addition, the authors want to express their gratitude to all (co)founders, employees of the start-ups, and investors, who have participated in the study and have shared valuable insight on their mission. Lastly, the authors are grateful for their joint journey during the past year – both personally and academically.

The Authors,

Hannah Blanke, Philip Dervedde, and Franziska Maisack

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## **Abstract**

**Purpose** – The purpose of this thesis was to investigate the phenomenon of mission drift in green start-ups by uncovering the connection between its causes and action strategies. Additionally, the study aimed to explore how green start-ups perceive mission drift, thereby bridging the gap between theory and practice.

**Design/methodology/approach** – The researchers engaged in an exploratory qualitative study using a distinctive dataset derived from multiple case studies of 13 German start-ups in the climate tech industry. They collected data through in-depth interviews with (co)-founders and employees of these start-ups. Additionally, secondary material was collected to gain further insight. To provide a comprehensive perspective, the researchers also conducted interviews with investors for triangulation of the findings. The collected data was coded using an iterative approach influenced by Gioia et al. (2013), resulting in a comprehensive code structure.

**Findings** – The analysis revealed that in both, theory and practice mission drift is not on the radar of green start-ups. Instead, the findings suggest a willingness to compromise rather than fear of mission drift. The linkage between causes that favor a gradual process of mission deviation were highlighted and what action strategies start-ups are currently taking to stay on track and prevent mission drift. The comparison between the prevailing literature on social start-ups and the practical insight of green start-ups makes it possible to derive room for maneuver specifically for start-ups from the climate tech sector.

**Originality/value** – This analysis is the first comprehensive study that specifically addresses the topic of mission drift in green start-ups and closes a research gap in the field of environmental entrepreneurship. On top it sensibilizes about the gradual evolving phenomena of drifting away from the mission while pointing practically what mission drift causes and how it can be prevented/encountered.

**Keywords** – green start-ups, mission drift, exploratory qualitative multiple-case study

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## List of Abbreviations

3Ps	People, profit, and planet
BA	Business angel
B2B	Business-to-business
B2C	Business-to-customer
CB	Crunchbase
CEO	Chief Executive Officer
CO <sub>2</sub>	Carbon dioxide
COVID-19	Coronavirus disease 2019
EU	European Union
I	Interviewer
IN	Investor
IPPC	Intergovernmental Panel on Climate Change
KPI	Key performance indicator
MVP	Minimum viable product
OKR	Objectives and key results
S	Start-up
UNEP	United Nations Environment Program
VC	Venture capital
WCED	World Commission on Environment and Development

# 1 Introduction

The need for an economic transformation toward sustainability has been proclaimed for over 30 years, ever since the United Nations called for a common future worth living in (WCED, 1987). Environmental and societal crises have made the impact of human influence on the ecosystem increasingly evident over the past several years, so the global community is increasingly responding to the call and discussing possible approaches (IPCC, 2023). Entrepreneurship can help to accelerate sustainable transformation by introducing innovative ideas, technologies, and business models that promote environmental and social responsibility to drive change across industries (Hummels & Argyrou, 2020; Johnson & Schaltegger, 2020). Under the umbrella of sustainable start-ups, it is particularly green start-ups that promote the well-being of the environment. By bringing less resource-intensive practices to the market and prioritizing environmentally friendly technologies, these start-ups can make a substantial contribution to sustainable transformation (Hockerts & Wüstenhagen, 2010; Schaltegger & Wagner, 2011; Thompson et al., 2011). Green start-ups pursue a twofold mission: Environmental sustainability and economic viability. The focus on environmental sustainability should be maintained throughout the start-up's development phase to ensure the start-up's long-term contribution to the sustainability transformation. This might be challenging due to the interrelations of the two missions: While profit maximization may not be the primary mission of green start-ups, reaching a certain level of economic performance is necessary to ensure the start-up's survival and long-term impact (York & Venkatarman, 2010). In turn, scaling the sustainable impact increases the success and thus the profitability of the start-up (Leendertse et al., 2020). Balancing both missions can be challenging and poses the risk of drifting from sustainability to profit orientation (Loscher & Kaiser, 2022). The development of cleantech, in which green start-ups often participate, is recognized for its significant capital costs and high investment needs (D'Orazio & Valente, 2019; Gaddy et al., 2017; Randjelovic et al., 2003). When seeking investments, those start-ups often interact with external investors who have their own financial and reputational goals. As a result, conflicting objectives may arise, causing the start-up's mission to slowly deviate from its original purpose due to external pressures. The phenomenon of the financial logic eventually dominating the sustainability-oriented mission is referred to as mission drift (Cetindamar & Ozkazanc-Pan, 2017; Loscher & Kaiser, 2022).

## 1.1 Research Question

Despite established organizational research with an increasing focus on entrepreneurial ventures (Ebrahim et al., 2014) on the one hand and growing academic attention to sustainability issues on the other (Markard et al., 2012), the current literature still offers limited insight into mission drift in sustainable start-ups. A fragmented picture emerges, with existing research mainly focusing on possible causes of or action strategies against mission drift (Caserta et al., 2018; Jones, 2007; Loscher & Kaiser, 2022). Initial research on possible reasons for mission drift points out potential causes on the individual (Cesinger et al., 2022; Miller & Wesley, 2010), organizational (Bergset, 2017; Wolf & Mair, 2019), and societal level (Akinboade et al., 2021; Staessens et al., 2018). A clear understanding of potential causes of mission drift is helpful, as mission drift is a gradual and unintended process (Loscher & Kaiser, 2022). Likewise, the literature presents certain prevention (e.g., Ebrahim et al., 2014; Klein et al., 2021; Michaud & Tello-Rozas, 2019; Ometto et al., 2018; Vanoorbeek & Lecluyse, 2021) and, although less frequently, counterbalancing measures (Agrawal & Hockerts, 2019). Only very little research addresses the identification and assessment of mission drift (Cetindamar & Ozkazanc-Pan, 2017; Esposito et al., 2022) or even deals with the actual process of mission drift in sustainable start-ups, which should, however, form the basis for discussing causes and action strategies. Also, existing research is mostly set in specific contexts, for example in non-profit organizations (Jones, 2007), microfinance companies (Caserta et al., 2018), or large corporations (Loscher & Kaiser, 2022). In this regard, the existing literature also focuses primarily on social start-ups, while research on mission drift in green start-ups is particularly scarce. As it is important to bring environmentally friendly technologies and practices to the market to answer the call for sustainable transformation, this thesis looks at how the sustainable mission of green start-ups can be preserved while still enabling them to scale up. Therefore, this thesis seeks to answer the following research question:

### ***How does mission drift occur in green start-ups?***

To comprehensively answer the research question with a focus on filling gaps in the theory and testing existing theoretical assumptions with practical insight particularly relevant to green start-ups, the following two sub-questions were formulated:

- 1) *How are causes of and action strategies against mission drift in practice linked to those suggested in theory?*
- 2) *How do green start-ups perceive mission drift?*

## 1.2 Approach and Contribution

The authors seek to contribute to the existing literature by focusing on the holistic view of mission drift in sustainable start-ups that particularly aim to have a positive environmental impact. This adds value in two ways: On the one hand, the prevailing static perspective on mission drift is broadened by the perception of a process reality as suggested by, e.g., Kurland (2022), Loscher and Kaiser (2022), and Siegner et al. (2018). For example, Siegner et al. (2018) have started the dynamic approach by investigating the different maturity stages at which mission drift arises and call for more in-depth research on further dynamic perspectives on mission drift. Furthermore, causes of and action strategies against mission drift are investigated from an interplay perspective. In previous research, authors such as Ramus and Vacarro (2014) and Cetindamar and Ozkazanc-Pan (2017) have admittedly only taken a one-sided approach by examining causes or measures without investigating their interplay and are now calling for further research to determine a successful interplay between the two. On the other hand, this thesis expands the knowledge about the risk of mission drift for environmentally driven start-ups. So far, the risk has only been considered in the bigger picture of sustainable start-ups (Engbring & Hajjar, 2022; Van der Byl & Vredenburg, 2015) and has thus received only superficial attention. A review of the current literature on the topic as part of a pre-study laid the initial foundation for this thesis and provides the necessary theoretical background. Due to the broad nature of the research question, the authors aim to investigate the research topic exploratively through qualitative research in the form of a multi-case study. In-depth interviews with green start-ups are conducted to identify the perception of mission drift and provide insight into practice. In addition, individual opinions of investors are considered to gain better insight into this important stakeholder relationship by triangulating the analysis results of the start-up interviews with those of investor interviews.

This thesis aims to uncover how mission drift occurs in green start-ups that need to balance the twofold mission of environmental sustainability and financial viability. Besides adding to the existing literature, revealing the challenges in more depth enables the authors to outline practical implications for start-ups and their stakeholders to scale sustainable impact successfully in the long run. This work proceeds by giving fundamental theoretical background knowledge on the terms sustainable entrepreneurship and mission drift. In the following, the conceptual background as well as the method applied to conduct the case studies are introduced. Afterward, the synthesized findings from the case studies are presented and discussed. Finally, the findings of this thesis and further research topics are pointed out.

## **2 Theoretical Background**

To establish a common understanding of the terminology used, it is necessary to provide an overview of green start-ups and mission drift. This chapter defines green start-ups in the context of sustainable entrepreneurship by outlining its two major streams of social and environmental entrepreneurship. Next, the authors outline the concept of mission drift in sustainable start-ups.

### **2.1 Sustainable Entrepreneurship**

The term “sustainable entrepreneurship” is a fusion of sustainable development and entrepreneurship. The origin of the term “sustainable” can be traced back to the concept of sustainable development, which was introduced by the World Commission on Environment and Development (WCED) in 1987 (Belz & Binder, 2015). The term refers to the kind of development that fulfills the current needs without endangering the capacity of future generations to satisfy their own needs (WCED, 1987). Joseph A. Schumpeter (1934) coined the term modern entrepreneurship, which places innovation at the heart of its definition. In his view, entrepreneurs are individuals who undertake novel combinations (Schumpeter, 1934). Furthermore, as early as 1776, Adam Smith highlighted the importance of profit as a motivation for economic activity and emphasized profit maximization as a crucial aspect of traditional entrepreneurship (Smith, 1776). Building on this, entrepreneurship is defined as the discovery and creation of new goods, ventures as well as markets (Shane & Venkataraman, 2000; Venkataraman, 1997). Entrepreneurship is mainly carried out by small and young companies, which are in the process of exploring technology to develop their business, commonly known as start-ups (Bjornali & Ellingsen, 2014; Fontes & Coombs, 2001; Klotz et al., 2013). Entrepreneurs may move away from traditional entrepreneurship if they perceive greater potential for profit or growth in other areas (Shane & Venkataraman, 2000). This and an increasing awareness of environmental and social issues, has led to a growing interest in the topic of sustainable entrepreneurship (Hockerts & Wüsthagen, 2010, Schaltegger & Wagner 2011). However, sustainable entrepreneurship remains incompletely understood and requires analysis, organization, and synthesis (Terán-Yépez et al., 2020).

Although there are several definitions of sustainable entrepreneurship, the concept of sustainable development in the context of entrepreneurship is very broad (Hall et al., 2010). Sustainable entrepreneurship involves creating new products, processes, and services with the aim of gaining economic and non-economic benefits while preserving nature, life support, and

community (Shepherd & Patzelt, 2011). It is considered as a way of implementing sustainable innovations that benefit a larger segment of society (Schaltegger & Wagner, 2011). It has also been defined as the discovery and exploitation of opportunities for future goods and services that sustain both the natural and social environment while providing economic and non-economic gains to others (Johnson & Schaltegger, 2020). Utilizing the explanations provided, the subsequent definition of sustainable entrepreneurship will be used: Organizations, that are using the process of developing a business to solve social or environmental problems (Leendertse et al., 2020). Although the definitions presented predominantly refer to both social and environmental aspects of sustainability, there remains a persistent lack of clarity within the sustainability-focused domain of entrepreneurship (Hummels & Argyrou, 2021). Several related terms appear in the context of sustainable development and entrepreneurship, such as “sustainable entrepreneurship”, “environmental entrepreneurship”, “ecopreneurship”, and “green entrepreneurship” (Hall et al., 2010). Different forms of sustainable entrepreneurship including social entrepreneurship and ecopreneurship have also been acknowledged (Johnson & Schaltegger, 2020; Shepherd & Patzelt, 2011).

Vedula et al. (2022) distinguish between social entrepreneurship and environmental entrepreneurship, identifying them as separate research streams within the field of entrepreneurship research through a combination of bibliometric network analysis and a qualitative literature review. These findings align with previous research recognizing social and environmental entrepreneurship as distinct categories within sustainable entrepreneurship literature (Belz & Binder, 2015; Bocken, 2015; de Lange, 2017). It is important to note that the distinction between the concepts of social and environmental sustainability remains blurry since environmental problems are often closely linked to significant social as well as economic consequences. Social problems, like poverty or inequality, might also lead to environmental implications such as resource depletion, waste, or habitat destruction (Lepoutre & Heene, 2006; Schaltegger et al., 2016). This relationship can also be viewed from the reverse perspective as ecological solutions are likely to create positive social outcomes as well (e.g., job creation, community development, etc.). Just as solutions for social problems, such as fair trade or microfinance, are likely to create positive environmental effects as well (Kuckertz & Wagner, 2010). As hybrid organizations, sustainable start-ups combine social and commercial objectives by aiming to address societal problems through market-based means (Battilana & Lee, 2014; Pache & Santos, 2013). They also encounter challenges regarding their potential climate and business performance since, although they are very different, they are still mutually

dependent. On the one hand, actual climate performance requires effective business performance. On the other hand, fostering business performance can lead to prioritizing it over climate performance. However, sustainable start-ups can overcome this paradox and balance climate and business performance by choosing a suitable business model. Adopting innovative hardware-based technologies helps to overcome barriers such as high costs, regulatory restrictions, and scaling difficulties (Leendertse et al., 2020).

In the context of sustainable entrepreneurship, start-ups should incorporate sustainability into their business models, which ensures that they operate sustainably from the beginning (Stubbs & Cocklin, 2008; Porter & Kramer, 2019). A sustainable business model is defined as “a business model that creates competitive advantage through superior customer value and contributes to a sustainable development of the company and society” (Lüdeke-Freund, 2009). As indicated above, the main challenge in creating sustainable business models is to provide economic value by delivering social and environmental benefits (Schaltegger et al., 2016). However, at the same time, these business models ensure the creation of long-term value by the start-up and reduce the risks associated with resource scarcity and environmental degradation (Bocken et al., 2014). By embedding sustainability into their business models, start-ups can create value that is more resilient and adaptable to changing market conditions, customer preferences, and environmental constraints (Bocken et al., 2014).

### **2.1.1 Social Entrepreneurship**

While social entrepreneurship has been recognized as a topic of interest since the 1950s, research into the area has only gained significant attention in the past two decades (Saebi et al., 2019). Despite its growth as a significant literature stream, a clear definition of its domain remains elusive (Zahra et al., 2009), and the processes underlying social entrepreneurship remain largely unexplored (Belz & Binder, 2015). In recent years, social entrepreneurship has become an increasingly important topic in both the public and academic spheres. The term describes business ventures that prioritize not only economic profit but also positive social contributions (Peredo & McLean, 2006). While commercial entrepreneurship is primarily motivated by profitable market opportunities (Abebe et al., 2020), social entrepreneurship is primarily motivated by solving social problems using market-based approaches (Bacq & Janssen, 2011). Social entrepreneurs act as change agents when applying innovative and cost-effective methods to achieve social missions such as reducing poverty, empowering women, or fostering inclusive growth (Peredo & McLean, 2006). However, in some research, the term



social entrepreneurship is also used as the overarching term for start-ups addressing societal challenges, including both social and environmental challenges (Yunus, 2010) and expanding the definition of “social mission” to include the environmental mission within the scope of the term (Kurland, 2022). Although social entrepreneurship proves to have clear economic and societal benefits (Saebi et al., 2018; Zahra et al., 2009), research has revealed that organizations involved in this field may face conflicting pressures and paradoxes. Social entrepreneurship is characterized by tensions that arise from the inconsistencies between social and economic goals, and this ambiguity can affect the well-being of individuals (Peredo & McLean, 2006; Stephan, 2018; Wry & York, 2017). Additionally, social entrepreneurship endeavors often face financial difficulties in obtaining sufficient funding and managing administrative challenges (Brieger & De Clercq, 2019; Hoogendoorn et al., 2017). However, this thesis is specifically focused on environmental entrepreneurship, one of the two streams of sustainable entrepreneurship, instead of social entrepreneurship.

### **2.1.2 Environmental Entrepreneurship**

Environmental entrepreneurship is a distinct area of entrepreneurship that aims to provide opportunities for profit while also delivering environmental benefits (Meek et al., 2010). However, the lack of defined boundaries in this area, particularly regarding the uncertainties surrounding the definition of environmental sustainability, has created some ambiguity in academia (Hall et al., 2010; Thompson et al., 2011). Environmental entrepreneurs create new products, services, and institutions that are more environmentally sustainable than those of incumbents (York & Venkataraman, 2010). Being more environmentally sustainable can refer to the implementation of eco-friendly production methods utilizing resources more efficiently (Schaper et al., 2014), the development of sustainable products with minimal environmental impact throughout the lifecycle (Lepoutre & Heene, 2006) or establishing sustainable business models, which integrate solving environmental issues in the core of the activities of business (Kuckertz & Wagner, 2010). These activities are characterized by promoting the well-being of the environment while also achieving financial viability (O’Neil & Ucbasaran, 2016; Thompson et al., 2011). By implication, these entrepreneurs are therefore primarily focused on not negatively impacting the environment and aim to contribute to the sustainable transition toward the goals of a green economy (Bergset & Fichter, 2015). In this context, “green economy” is described as an economic system, which promotes sustainable development by mitigating environmental risks and ecological scarcities, while at the same time promoting economic growth and social well-being (UNEP, 2011). This points toward the start-up’s

alignment with the triple bottom line, which includes the three sustainability pillars of social, environmental, and economic sustainability (Elkington, 1998). Green start-ups thus fall under the environmental entrepreneurship category and are defined as high-tech companies that use green technologies or offer green products and services (Hall & Helmers, 2010). In line with these are “green ventures”, which refer to for-profit enterprises that leverage opportunities to deliver both environmental and economic benefits by commercializing new green technologies (Hegeman, 2022).

Environmental entrepreneurship is also referred to as “eco-preneurship”, which describes the efforts of “ecopreneurs” whose concern for the environment is as important as profit (Schuyler, 1998). Start-ups that promote environmentally friendly solutions providing clean energy are classified as “clean techs” within the field of environmental entrepreneurship (Bjornali & Ellingsen, 2014). The terms “clean” and “green” technologies are often used interchangeably in the literature (Hall & Helmers, 2013) and encompass any product, service, or process that uses limited or zero non-renewable resources and/or produces significantly less waste than conventional offerings (Pernick & Wilder, 2007; Roy, 1993). Examples of these technologies include renewable energy, energy storage, distribution and management, recycling and waste management, industrial processes, and water filtration (Hall & Helmers, 2013; Mrkajic et al., 2017; Ottman & Stafford, 2006). Another term used for this type of company that seeks to offer or develop products, services, and technology aimed at mitigating climate change through, e.g., decarbonization, renewable energy, and energy storage technology is “climate tech” (Hakovirta et al., 2022). The different definitions of environmental entrepreneurship, as outlined above, indicate that this field, similar to the research streams of social, environmental, and sustainable entrepreneurship, is also characterized by fragmentation.

#### Financing as a Major Challenge for Environmental Start-ups

Sustainable entrepreneurs can seek investor support from big equity investors like Business Angels (BAs) and Venture Capitalists (VCs) (De Clercq et al., 2006). Investments from BAs and VCs are characterized as being in the middle of the entrepreneurial finance spectrum, as they can take higher risks than banks and have access to deeper pockets than the entrepreneur and their personal network (De Clercq et al., 2006). BAs, who are non-family private investors that provide high-risk funding to start-ups (Mason et al., 1995), use their own accumulated capital for their investments (De Clercq et al., 2006). Unlike venture capitalists, BAs are known as “invisible investors” and have considerable discretion over their investments without public scrutiny (Botelho et al., 2022). BAs invest 16 times more often in seed-stage initiatives than

VCS (Sohl, 2007) and not only provide capital but also add value to start-ups through their human and social capital (Politis, 2008). Despite their low profile, BAs rely heavily on informal structures for their activities (De Clercq et al., 2006; Harrison & Mason, 1992). They typically hold their investments for about seven years, indicating a more patient approach than VCs (Mason et al., 2019), who focus on later-stage start-ups and have a lifespan of around ten years (Gompers & Lerner, 1998; Wright & Robbie, 1998). VC firms have a flat organizational structure and invest in a portfolio of companies (Sahlman, 1990). The pre-investment period for VCs involves several activities such as checking referrals, screening the deal, conducting due diligence, and finalizing the shareholder agreement (De Clercq et al., 2006). Traditional investors may perceive financing sustainable start-ups as a risk, making financing green start-ups a considerable challenge (Lehner & Nicholls, 2014). However, for environmental entrepreneurs, investor support can be crucial to achieving legitimacy in terms of their sustainable undertaking (De Clercq et al., 2006). Without such support, start-ups risk market rejection (O'Neil & Ucbasaran, 2016). A particular type of investor has therefore emerged that specializes in sustainable start-ups, commonly referred to as green investors or cleantech investors, some of which operate as green business angels or as green VCs (Mrkajic et al., 2019; Randjelovic et al., 2003).

The originality of sustainable enterprises often stems from their innovative, socially disruptive, and environmentally friendly technologies, processes, and business models (Bocken et al., 2014). While these novel approaches can create new opportunities, they also complicate their evaluation and make establishing their legitimacy and gaining access to resources more challenging (Zimmerman & Zeitz, 2002). The capital-intensive nature of commercializing complex technologies, which typically have longer development times, is the primary reason for this perception (Marcus et al., 2013). The commercialization process involves moving from discovery to a proposal that is accepted and taken into use by the market (Balachandra et al., 2010). The discovery is characterized by research and development, which usually leads to the creation of a prototype or minimum viable product (MVP) in the demonstration phase (Murphy & Edwards, 2003). In the later stage of commercializing the technology, the new venture transforms the idea into a value proposition for customers (Gans & Stern, 2010; Roure & Keeley, 1990). In this phase, the enterprise should gradually become self-sustaining through generated revenue, in addition to financing from sources such as bank debt and private equity. The time between demonstrating an MVP and commercialization can be challenging for entrepreneurs and is commonly referred to as the "Valley of Death" (Murphy & Edwards,

2003). This period is characterized by high production costs and limited market access, resulting in a high failure rate before reaching commercialization. This is especially challenging since the amount invested in seed and angel funding may not be adequate to support the business through the early commercialization phase, where VCs typically invest (Gompers & Lerner, 2001; Murphy & Edwards, 2003). For green start-ups, the time and cost involved in the phase before market launch are often higher than those for conventional products, resulting in limited revenue (Bergset & Fichter, 2015). Additionally, the scalability of the business and the lack of a proven track record are also uncertainties for investors (Ghosh & Nanda, 2010). Information asymmetries among stakeholders of green start-ups present an additional challenge, resulting in a gap between the needs of the entrepreneur and the understanding of sustainability-related dimensions by typical venture capital investors (Bergset & Fichter, 2015; Cumming et al., 2016; Ghosh & Nanda, 2010). This results in green start-ups having an extended commercialization process and higher capital outflows and thus face a prolonged and deeper “Valley of Death”, which is characterized by high production costs and low market penetration presenting a significant challenge for new ventures (Balachandra et al., 2010). Cleantech development, in which green start-ups are frequently involved, is known for its high capital costs and time-consuming nature (D’Orazio & Valente, 2019; Gaddy et al., 2017; Randjelovic et al., 2003), making the “Valley of Death” faced by cleantech firms even deeper, as highlighted by several scholars (Murphy & Edwards, 2003; Michelfelder et al., 2022; Stern, 2007).

#### Green Start-ups in the Context of Greenwashing

As described earlier, the concept of sustainable development leaves a lot of room for interpretation. For this reason, start-ups that want to create sustainable impact, often face the difficulty of proving or even justifying their sustainability claim, which puts them at risk of being accused of greenwashing. Greenwashing is defined as the act of making false, exaggerated, or unsubstantiated claims about the environmental impact or benefits of a product or service for the purpose of enhancing its market appeal (De Freitas Netto et al., 2020). Creating the impression of environmental advantages can manifest in various ways (Wright & Nyberg, 2017) such as vague or unclear language, making irrelevant or misleading claims, or using images or symbols that suggest environmental benefits without providing any evidence to support the claims (De Freitas Netto et al., 2020). Consumers can become skeptical and mistrustful of companies that make environmental claims without proper substantiation (Chen & Chang, 2013), which also indicates the risks of greenwashing for green start-ups. More start-

ups have started to position themselves as environmentally responsible or sustainable, often making bold claims about the environmental benefits of their products or services. However, some of these claims may be misleading or exaggerated, and in some cases, they may even be false. Sustainable claims do not guarantee a positive market response, and especially, when they are disclosed as greenwashing, may result in unfavorable reactions. For this reason, combating greenwashing should be seen as essential for start-ups suggesting that they should be transparent in their environmental claims and take concrete measures to reduce their environmental impact (Neumann, 2021). Using third-party certification systems such as eco-labels can be an effective way for companies to provide objective evidence of their environmental performance. Third-party certifications can provide companies with a clear and independent validation of their environmental performance and help build trust with consumers (De Boer, 2003).

## **2.2 Mission Drift in Sustainable Start-ups**

To understand mission drift, one must first understand the concept of the mission. Various scholars and research fields have conducted extensive research in this field for many decades (Bart et al., 2001; Ebrahim et al., 2014; Selznick, 1997). However, despite the substantial amount of research, there is no single definition of the term. This is because the mission concept is multidimensional and reflects a variety of meanings (Raynor, 1998; Sidhu, 2003; Stevens et al., 2015). The multidimensional nature of the mission concept is characterized by several interconnected attributes such as purpose, values, identity, and goals, which exist in various domains such as organizational mission, social mission, and economic mission (Klein et al., 2021; Stevens et al., 2015). This complexity of the mission concept results in missions integrating various goals from multiple coexisting, dynamic, and often incompatible values (Grimes et al., 2019). The significance of the mission for organizations has been established early on, as proven by research that demonstrated a connection between mission and firm performance (Bart et al., 2001; Pearce & David, 1967). This importance has further been emphasized by renowned economist Peter Drucker (1973), who states that “a business is not defined by its name, statutes, or articles of incorporation. It is defined by the business mission” (p. 122). This statement underscores the belief that the organizational mission embodies the essence of an organization’s identity and its primary objective (Miller & Wesley, 2010). The organizational mission can be viewed as a collection of fundamental and recurrent patterns of actions that reflect the values and purposes of an organization (Selznick, 1997). As such, it provides direction to companies (Stevens et al., 2015) and acts as a “socio-cognitive bridge”

between their goals and actions (Grimes et al., 2019). On the organizational level, the mission is referred to as a crystallization point for various institutional logics in the field, acting as a filter in the organization and narrowing down the pathways of legitimate actions. In practice, this means that the mission serves as a guide for balancing and prioritizing different demands, directing intentions toward actions that comply with the organization's long-term goals (Loscher & Kaiser, 2022). The significance of the company's mission is particularly evident in stakeholder interactions. First, it aligns the actions of organizational members with the values of the organization, motivating them toward a common goal, and thus influencing organizational innovativeness and performance (Bart, 1996; Bart, 1997). Second, it communicates stable expectations about the organization to external audiences (Grimes et al., 2019).

### **2.2.1 The Concept of Mission Drift**

There is no generally recognized definition for mission drift since the interpretation of the term mission itself is broad as outlined above (Ometto et al., 2018). One way in which mission drift can be described is when a company's actions deviate from its assigned mission (Klein et al., 2021). This deviation is perceived as a socio-cognitive and perceptual construct (Grimes et al., 2019). Although research in this area is not very advanced (Ometto et al., 2018), the study of mission drift has gained momentum in recent years, especially in the context of hybrid organizations (Weisbrod, 2004). Two theoretical perspectives for perceiving mission drift are "organizational identity" and "organizational adaptation". The former refers to stakeholders' impression of inconsistent behavior, while the latter refers to mission drift due to external pressures to adapt to a changing environment for long-term success (Grimes et al., 2019). Therefore, depending on the perspective, mission drift can be perceived as either a "perception of inauthenticity or a perception of responsiveness to external institutional environments" (Klein et al., 2021, p. 660). Mission drift is likely to be a prevalent issue in organizations that operate under multiple competing logics (Pache & Santos, 2021), as the mission serves as a vital element in maintaining a balance between these logics (Loscher & Kaiser, 2022). Compared to organizations that operate under a single dominant institutional logic, those that balance multiple demands and stakeholder expectations may gradually deviate from their long-term mission and objectives (Ebrahim et al., 2014). Mission drift is often conceptualized as the eventual dominance of financial logic over social aims, following an institutional logic approach (Cetindamar & Ozkazanc-Pan, 2017). It can become a source of institutional change due to the affected relationships between field-level logic (Loscher & Kaiser, 2022). Mission

drift differs from an intentional change in an organization's mission based on a change process (Loscher & Kaiser, 2022). However, it is also seen as unrealistic to maintain a one-time established mission (Ometto et al., 2018). The complexity and turbulence of the external environment, in which the start-up operates, require effective mission balance making adaptivity a necessary feature for organizations (Reeves & Deimler, 2012). Maintaining the mission is an ongoing effort to stabilize the congruence between the organization's actions and the expectations of various external stakeholders (Loscher & Kaiser, 2022). Additionally, it has been suggested that instability within a mission could lead to innovation due to new combinations of knowledge, capital, and resources (Jay, 2013; Klein et al., 2021).

In summary, it quickly becomes apparent that sustainable entrepreneurship, with its diverse forms, is highly vulnerable to mission drift due to the competing logics that drive it, which puts sustainable start-ups particularly at the risk of being accused of greenwashing. The social and environmental mission is at the heart of the sustainable venture's existence, distinguishing them from purely profit-driven organizations. On the one hand, they require revenue from commercial activities to sustain their operations, which increases the risk of prioritizing commercial goals over their mission. On the other hand, commercial success enables them to pursue their social and environmental objectives. Given their hybrid nature, sustainable start-ups must balance multiple institutional logics and stakeholder expectations. This balance makes them especially susceptible to deviating from their intended mission and experiencing mission drift.

### **2.2.2 Causes and Action Strategies for Mission Drift**

Mission drift in sustainable start-ups has a variety of causes on the socio-economic level, on the organizational level of the sustainable start-up, and on the individual level of the entrepreneur. Action strategies to prevent or to avoid mission drift are not addressing the socio-economic level but are more focused on the organizational and individual level taking the perspective of both the start-up and the entrepreneur. The causes and action strategies for mission drift are summarized in the following figure, which is referred to as a-priori framework in the rest of the thesis as a priori framework (Figure 1). Additionally, the (mis-)match between the causes of mission drift and the corresponding action measures will be explored.

#### Causes of Mission Drift

On the socio-economic level, the trends of commercialization and professionalization through policy measures have been observed as potential causes of mission drift (Sarma, 2019;

Staessens et al., 2018). Along with this, the implementation of ratings and certifications are mentioned as potential causes on this level since they lead to the standardization and formalization of processes and products (Staessens et al., 2018). This leads to the risk of mission drift for start-ups if they compromise their original mission to comply with the certification (Munzo et al., 2018) or rating requirements (Akinboade et al., 2021). However, commercialization (in the sense of shifting toward unrelated business activities) is only one of several pathways to mission drift, and not the most threatening (Jones, 2007).



Figure 1: A-priori framework of causes of and actions strategies against mission drift (own creation)

From an organizational perspective, mission drift in sustainable start-ups is mainly caused by the contextual embeddedness, and its organizational development and is closely connected to the start-up's maturation level and self-perception. Contextual embeddedness refers to the start-up's various connections to its ecosystem and stakeholders, including asymmetric power dynamics leading to compromises regarding the social impact to secure a long-term relationship with a dominant partner (Kwong et al., 2017). Working with established institutionalized actors like public authorities (Baringa, 2020) with potentially different



institutional demands (Sarma, 2019) shows how institutional constraints can also cause the mission to shift (Wolf & Mair, 2019). Financial dependencies explain why financiers or investors potentially gain huge influence within start-ups (Sarma, 2019; Wolf & Mair, 2019). For this reason, sustainable start-ups should be careful when it comes to choosing their funding source and the type of investor (Agrawal & Hockerts, 2019; Bergset, 2017). Sustainable start-ups further face various mission-related challenges in their organizational development, when confronted with growth as they face the expectation of maximizing their profits (Agafnow 2013; Miller & Wesley, 2010). Expanding their ventures into other regions (Vickers & Lyon, 2012) as well as scaling up (Ometto et al., 2018) can potentially result in an orientation toward financial performance (Klein et al.; 2021). Potential causes for this are the loss of focus, a dilution of resources, or burnout of the social entrepreneur (Kodzi, 2014). Suykens et al. (2018) add that a restructuring toward a more typical for-profit setup can, on the one hand, support social ventures “to secure sufficient resources, efficient use of these resources, financial stability, and ultimately organizational survival” (p. 633), however, it may also endanger “safeguarding the mission and values” (p. 633). When it comes to the maturity of the start-up, the organizational development over time (Wolf & Mair, 2019) as well as the start-up’s performance, can be major drivers for mission drift. The phenomenon of “reverse mission drift” might occur, if top performers focus on social performance once they achieved economic success if the newly available resources are allocated toward social aims (Staessens et al., 2018). Considering the start-up’s identity includes changes in the start-up’s *raison d’être*, which might lead to a loss of organizational identity (Centindamar, 2018). Ventures with low social identity and high market identity are more likely to encounter mission drift, as they prioritize market-related aspects instead of their social mission (Ávila & Amorim, 2021). Closely linked to the start-up’s identity is the legal form of the start-up as mission drift can also be caused by different forms of organization and their divergent orientation (Smith et al., 2012). Non-profit or for-profit orientation is an example of this cause (Caserta et al., 2018).

From the individual perspective of the entrepreneur, mission drift can be linked to the desire for control, which relates to the likelihood of mission drift. Entrepreneurs with a stronger need for control are also facing a reduced risk of mission drift (Vanoorbeek & Lecluyse, 2021). Management experience of social entrepreneurs relates to a higher probability of venture effectiveness with a low focus on social investments (Miller & Wesley, 2010). This underlines the so-called “hybrid identity” of sustainable entrepreneurs balancing social and environmental concerns and economic goals (Cesinger et al., 2022). Drawing on Hofstede’s cultural

dimensions “Individualism versus Collectivism”, “Large or Small Power Distance”, “Strong or Weak Uncertainty Avoidance”, and “Masculinity versus Femininity” (Hofstede, 1983, p. 78), entrepreneurs with high uncertainty avoidance “have a larger probability to be affected by mission drift” (Esposito et al., 2022, p. 22) as they have a higher risk awareness, which reduces their innovativeness (Esposito et al., 2022). The concept of masculinity is used to describe cultural differences in attitudes and behaviors related to gender roles and refers to how a culture values traditionally masculine traits such as assertiveness or competitiveness, versus traditionally feminine traits such as caring or collaboration (Hofstede, 1984). High masculinity scores have been observed to be a cause for mission drift, as these entrepreneurs are more prone to drifting away from their mission because they prioritize financial goals in their social enterprises due to a more profit-driven mode of operation (Esposito et al., 2022).

### Action Strategies

Mission drift is mainly addressed on the organizational level focusing on prevention strategies to avoid mission drift. On this level, mission drift can be prevented through a community-oriented organization of the start-up including transparent guiding and internal structures that bring together different members of the organization. Normative values are a key concept to building a community-oriented organization (Michaud & Tello-Rozas, 2019) as well as a strong sense of community (Engbring & Hajjar, 2022). The communal mindset of the employees can be enhanced by spaces providing both room for debate as well as a moral compass (Kodzi, 2014), which should be centered around the business model of the start-up (Sarma, 2019). Stakeholder management and collaboration are seen as key elements to prevent mission drift (Ramus & Vaccaro, 2014) as they create commitment from employees and customers and hold start-ups accountable for their mission (Lin et al., 2021). Working toward an overarching purpose creates a shared identity and thus functions as a mechanism to align multiple stakeholders (Cesinger et al., 2022), which in turn also leads to start-ups establishing a better “balance of forces” (Wolf & Mair, 2019, p. 542). This can be achieved by the following three steps to create an ecosystem to strengthen the mission: Stakeholder scan, stabilization, and reinforcement (Kurland, 2022). Building strong relationships with investors helps start-ups to align their mission before and after investments. This includes the disclosure of goals and targets of both investor and investee already during the due diligence phase and clear communication of expectations (Agrawal & Hockert, 2019). After the investment, shareholder management, and engagement as well as monitoring of social/environmental and financial performance can help to keep the start-up from mission drift (Van der Byl & Vredenburg,

2015). From an investor's perspective, the evaluation of a new venture's social mission can be beneficial to assess the likelihood of the venture's effectiveness, especially when it comes to meeting the needs of beneficiaries (Miller & Wesley, 2010). New deal structures as well as below-market financial assessment to integrate non-financial social and environmental values are some measures that investors can take to prevent mission drift in the start-ups they invest in (Andersen & Tekula, 2022). Crucial for the prevention of mission drift is monitoring and controlling, ideally of the following governance measures: Monitoring the relationship between social and commercial activities, developing appropriate control strategies to monitor managers' performance, and establishing meaningful forms of downward accountability to beneficiaries (Ebrahim et al., 2014). Additionally, long-established governance structures, particularly in the areas of leadership and decision-making help to reduce conflicts between core purposes (Engbring & Hajjar, 2022). The governance approach of structured flexibility refers to the interplay of "stable organizational strategies, structures, and practices to engage hybridity" (Smith & Besharov, 2019, p. 28) and adaptive processes. The interplay of stability and adaptation is critical to maintaining hybridity over time and therefore avoiding mission drift (Smith & Besharov, 2019). Setting a too broad purpose in the premature state before business model validation can harm the potential success of the venture when the entrepreneurs predominantly focus on the sustainable mission and neglect securing the business model functionality. In this case, fulfilling the mission may become impossible and societal benefits may not be realized at all (Muñoz et al., 2018), making business model design a crucial measure to avoid mission drift. A business model that has a trusted stakeholder network at its core promotes organizational sustainability (Akinboade et al., 2021). Sticking to social values as decision criteria and transparency in business activities, stakeholder management, and collaboration with partners that share the same values, should be incorporated into the business model (Klein et al., 2014). By focusing on value delivery, ventures can also exploit the potential of resource mismatch by combining assets that are contrary to a traditional business strategy and thus turning them into competitive advantages (Alberti & Garrido, 2017). Incorporating the strategic value of a social mission as a competitive advantage is also seen as a good way to align social and economic missions rather than letting them diverge (Muñoz & Kimmit, 2019). The legal form of the start-up such as a "Community Interest Company", "Low-profit Limited Liability Company", and "Benefit Corporation" can capture the hybridity of a social enterprise. As the official nature of these forms provides greater legitimacy for stakeholders, they can be an effective measure to address accountability challenges (Ebrahim et al., 2014). Other forms of legal mechanisms for accountability include specific agreements with boards of directors or

other contractual terms to ensure the continuance of the mission and the according practices of the firm (Sarason & Dean, 2019).

Action strategies on the individual level of the entrepreneur also need to be considered. However, as this level is comprised of the closely intertwined dissensions of values, identity, and emotions, one can only speak of *active* action strategies to a limited extent. Normative values are one of the core motivations for founding a sustainable venture and help to preserve the mission in the long term (Dees, 2012). These values are commonly embodied by members in key positions and thus create a certain person-related dependency (Michaud & Tello-Rozas, 2019). By imprinting their personal values into their venture, sustainable entrepreneurs build up competencies for balancing sustainable and commercial goals (Kummitha, 2022). The entrepreneur's identity, in the sense of their social motivations, can be a predictor of their desire to control the course of the venture, especially, if also a larger amount of personal wealth is invested (Vanoorbeek & Lecluyse, 2021). Through dynamic identity shifts of the entrepreneur, an idealistic evaluation can turn into a rational evaluation to balance environmental, social, and economic benefits (Cesinger et al., 2022). "A strong emotional attachment to both types of mission [social and economic]" (Siebold et al., 2019, p. 721) enables the entrepreneur to facilitate dual missions successfully. This leads to positive mission spillover effects if the entrepreneur can connect and intertwine them and is closely linked to "the social motive of wanting to change the world" (Siebold et al., 2019, p. 721).

#### (Mis-)Match of Causes and Action Strategies

Exploring the causes and action strategies of mission drift reveals that some of the mission drift causes are not addressed by adequate coping mechanisms within the action strategies. Vice versa, there are several action strategies in place that go beyond the causes previously described. This (mis-)match of causes for and action strategies against mission drift is outlined in the following chapter. On the socio-economic level, the commercialization of the social sector impacts not only non-profit organizations but also other stakeholders such as public institutions or beneficiaries themselves, as they increasingly participate in market activities (Staessens et al., 2018). The resulting merge of two previously separated worlds with different logics requires clarification and guidance. Regulations have been implemented to organize related phenomena, such as the commodification of customers. However, while these regulations should serve as orientation, they may also be a cause for mission drift (Suykens et al., 2018). Start-ups may be overburdened with legal requirements and stray from their mission,

indicating a lack of integration from the beginning that considers all needs. This suggests an implementation error, as something meant to prevent mission drift can also contribute to it.

Hybrid companies typically follow multiple logics, which affects not only their internal structures and activities but also their relationships with stakeholders, some of whom have contradictory goals from the start-ups (Wolf & Mair, 2019). Managing these ambiguities and dependencies is necessary for start-ups to pursue their goals, especially when confronted with stakeholder power dynamics that may lead to mission drift (Kwong et al., 2017). Thus, it is not surprising that the challenges of external embedment of sustainable start-ups find appropriate action measures, largely transferred from economic literature. However, these measures may not fully consider the unique characteristics of sustainable start-ups, thus bearing the risk of adaptation errors. The maturity level of a start-up has been found to significantly influence the potential for mission drift, but adequate prevention or counteractions are missing. While the maturing process cannot be entirely controlled by the start-up, some preventive measures suitable for avoiding mission drift caused by organizational development may be appropriate (Ometto et al., 2018; Wolf & Mair, 2019). Organizational development, such as growth and scaling driven by profit maximization and restructuring, can be a major cause of mission drift within the start-up. Ex-ante strategies like monitoring and controlling, transparent guiding and internal structures, and business model design should be put in place in advance to effectively limit the potential for mission drift. These measures transform irregular processes of organizational development into a more orderly form, making it easier to balance the social and financial mission during scaling. For instance, with transparent guidelines and internal structures in place, decisions can be made in accordance with the original mission (Klein et al., 2021).

Sustainable start-ups are founded on the purpose of addressing societal issues, which is closely intertwined with creating meaning and serves as an identifier for the company's identity (Mair & Marti, 2006). The establishment of a social mission can result in unique corporate attributes like the vision and mission holding significance for both internal and external stakeholders as part of the organizational identity (De Clercq & Voronov, 2011; Grimes et al., 2019). However, the inherent contradiction of achieving their mission and thus dissolving their purpose of existence can lead to identity conflicts and mission drift (Ebrahim et al., 2014). The mission concept's multidimensionality (Stevens et al., 2015) implies that organizational and individual levels interact, as identity struggles at the individual level can lead to mission drift, while the entrepreneur's social identity can prevent it. The entrepreneur's identity is more flexible than

the organizational identity, which is more rigid. As the entrepreneur's identity significantly contributes to the start-up's identity, it can help to maneuver the company's direction more agilely (Cesinger et al., 2022). As values and identity are internal processes, legal mechanisms, and new business models can provide (positive) outward signals to stakeholders during the identity struggle. Entrepreneurs who have less desire for control of their venture are more susceptible to mission drift as they face the trade-off between growing their start-up and keeping control of their business (Vanoorbeek & Lecluyse, 2021). Combining this with the fact that dynamic balancing of multiple identities can help prevent mission drift (Cesinger et al., 2022) suggests that a mission drift-avoiding entrepreneur has a high desire for control (Vanoorbeek & Lecluyse, 2021), dynamically balances multiple identities (Cesinger et al., 2022), and has management experience (Miller & Wesley, 2010).

### **2.2.3 Relevancy of Mission Drift**

Although sustainable entrepreneurship has gained recognition in academia, politics, and business, profit maximization remains the driving force for many practitioners, which may lead them to undervalue mission drift toward profit goals (Schaltegger et al., 2016; Shepherd & Patzelt, 2011). Still, an organization's mission is its *raison d'être* and core to its business, and mission drift should be considered equally important (Mair & Marti, 2006). So far mission drift is mainly portrayed as a shift from social or environmental goals to profit goals. Only Staessens and colleagues (2018) raise the question of a positive "reverse mission drift". With sustainability increasingly becoming the focus of businesses, many start-ups are integrating social or environmental goals into their mission, shifting their focus toward sustainability instead of finance (Schaltegger et al., 2016). This direction of mission drift could potentially outweigh any mistargeting problem created by previous mission drift (Kwong et al., 2017). Sustaining the sustainable mission is crucial for the key role that start-ups play in sustainability transformation (Hummels & Argyrou, 2020; Johnson & Schaltegger, 2020). However, since start-ups are highly dynamic organizations that undergo frequent changes, including changes to their mission, some discuss the relevancy of mission drift after all: In particular during the typical phases of growth and scaling, the mission might continue to evolve or even new ones could emerge due to further market findings (O'Reilly & Tushman, 2021). As a mission is characterized as a dynamic concept, it itself involves flexibility and adaptation to some degree (Grimes et al., 2019). Given this, one might question whether mission drift is always harmful. Mission drift could be seen as beneficial, as instability within a mission leads to innovation because of new combinations of knowledge, capital, and resources (Jay, 2013; Klein et al.,

2021). This results in more efficient approaches to achieving social impact (O'Reilly & Tushman, 2021). Mission drift should neither be seen positively nor negatively as it simply describes changes to the mission (Kwong et al., 2017). Until a proper assessment of mission drift is available, it is difficult and subjective to judge, which is why one may not want to evaluate it at all.

#### **2.2.4 Mission Drift from a Process Perspective**

It remains unclear whether start-ups are aware of mission drift as the phenomenon is mainly presented from a static point of view. Instead, mission drift should be viewed as an ongoing and omnipresent development process (Mair & Marti, 2006; Siegner et al., 2018). Without a holistic understanding of mission drift as a process, it is difficult to detect or evaluate the effectiveness of counterstrategies. This is, for example, highly relevant for public decision-makers who need to allocate financial resources effectively and structure support in a way that does not have adverse effects (Lepoutre & Heene, 2006). To address the causes of mission drift and evaluate the effectiveness of counterstrategies, it is necessary to develop appropriate mechanisms of assessment. Social impact is harder to measure than environmental impact, which can be measured in the number of saved CO<sub>2</sub>-equivalents (Mair & Marti, 2006). As a result, assessing mission drift in social start-ups can be more of a challenge (Thompson et al., 2011). An academic approach for assessing mission drift is a content analysis of mission statements of both ends and means of organizations making use of mission statements as a proxy of observing the underlying logics and therefore providing insight with regards to the financial or social motivation of a sustainable start-up (Cetindamar & Ozkazanc-Pan, 2017). The majority of mission drift action strategies focus on prevention rather than addressing the issue after it has occurred, indicating long-term strategies rather than short-term approaches to singular actions. However, maintaining a mission requires ongoing work, and it must still be investigated how to sustain prevention mechanisms over a prolonged period (Mair & Marti, 2006). Additionally, proposed measures and mechanisms are often static and neglect the volatile and uncertain nature of the entrepreneurial ecosystem, raising doubts about their practicality and usefulness for start-ups operating in such an environment (Pache & Santos, 2013). Start-ups experience intense growth phases while scaling up, which can significantly impact mission drift (Bocken et al., 2014; Hockerts & Wüstenhagen, 2010).

In this chapter, the authors established a common understanding of the concept of mission drift in sustainable start-ups. While there are significant challenges for sustainable start-ups such as

financing and greenwashing when it comes to mission drift, the question remains whether the phenomenon is actually relevant for environmental start-ups. Mission drift may be more focused on social start-ups due to their reliance on philanthropic funds, such as donations, which makes it more critical for them to uphold their social mission to secure funding. Thus, they must avoid mission drift, which could explain why most research focuses on mission drift in social start-ups rather than environmental start-ups. It is also possible that a shift from a social to an economic mission is more evident, given that social and economic missions are further apart than environmental and economic missions. Environmental start-ups may be involved in green technology or cleantech, which can be sold and conflict less with the economic mission. This leads back to the original research question of how mission drift manifests itself in environmental start-ups and whether it is actually perceived as a problem.



### **3 Method and Research Design**

This chapter provides an overview of the method that is used to find out how mission drift occurs in green start-ups. First, the study design and the chosen method are presented before the case selection and case characteristics are outlined. Then, it is explained which and how data is collected, and how it is analyzed. Finally, some remarks are made on the limitations of the chosen method.

#### **3.1 Study Design and Choice of Method**

The research field around green start-ups, mission drift, and investor relations is nascent and fragmented. This study thus takes an explorative approach to uncover challenges in the relationship between green start-ups and investors that are inflicted with the sustainable mission. This contributes to generating comprehensive knowledge of the phenomena of mission drift in real-life contexts. To answer the research questions, an empirical study is conducted based on the findings of the literature review. The literature review was carried as part of a pre-study. The review's findings add to the entrepreneurship literature on sustainable start-ups and mission drift and elaborate the predominant concept of mission drift as presented in the current literature. The resulting synthesis of the fragmented picture painted by the current literature on mission drift allows the authors to examine the linkage of causes of mission drift in sustainable start-ups, the action strategies against mission drift and how to assess it, and to identify the gaps for the empirical study. Due to the complex question and the expected degree of openness regarding the outcome, a qualitative study design is chosen (Myers, 2019). Qualitative research "perceives the world as being composed of patterned diversity" (Bennett & George, 1997, p. 17) and thus gives the possibility for broad but contextualized research on real-life situations like the presented one.

According to Eisenhardt (1989), "the case study is a research strategy which focuses on understanding the dynamics present within single settings" (p. 534) and is appropriate when the available data and research are not sufficient for quantitative methods (Yin, 2009a). A case study is used to answer "how" and "why" questions for comprehending complex phenomena in depth (Yin, 1984), which applies to the explorative research question of "How does mission drift occur in green start-ups?". Therefore, the case-based approach is deemed appropriate for this project for two main reasons. First, the diverse purposes of case studies can address broad and unexplored research questions. Case studies are suitable for many application areas from

providing description (Kidder, 1982), testing theory (Pinfield, 1986), or even generating theory (Harris & Sutton, 1986). Because they combine various data collection methods (e.g., interviews, archival data, etc.) and numerous levels of analysis (Eisenhardt, 1989) they provide a rich picture and are able to capture the complexity of mission drift or the relationship between investor and investee. Second, case studies can involve either single or multiple cases (Yin, 1984). By considering varied empirical evidence of multiple cases, it is possible to create more robustness for theory building. Considering several cases makes it easier to derive an appropriate level of abstraction as well as to explore the research field more broadly. That is why Eisenhardt and Graebner (2007) conclude multiple cases are more robust, generalizable, and testable. Because mission drift is a complex phenomenon, which is very dependent on unique and various variables of the start-up and its environment and thus individually, the present study takes a holistic view. This means that each case of mission drift within a start-up needs to be considered in an independent context and is investigated as a unit with its single global phenomenon before it is compared to each other. To ensure a holistic approach and valid results, multiple sources of evidence are used following the triangulation strategy (Yin, 2009b). This includes the use of different methods (method triangulation) such as qualitative interviews as well as analysis of secondary material, as well as the integration of start-ups and investors as data sources for the interviews (data triangulation) (Patton & Appelbaum, 2003). To leverage the full benefits of the case study and ensure a reliable outcome, a case study protocol (Appendix 8.1) is set up to describe the process thoroughly.

### **3.2 Case Selection**

Since the goal of this study is to find out how mission drift occurs in green start-ups, the target for selecting cases is the presence of mission drift. Therefore, a purposeful sampling approach, i.e., purposively selecting cases in which mission drift occurs in green start-ups, would be appropriate. Purposeful sampling is a common method for data collection in qualitative research to select the most relevant and information-rich cases for the phenomenon under investigation (Patton, 1990). There is a variety of strategies justifying the application of purposeful sampling. For example, criterion sampling aims “to review and study all cases that meet [or do not meet] some predetermined criterion of importance” (Patton, 1990, p. 238), homogeneous sampling “is the strategy of picking a small, homogeneous sample [...] to describe some particular subgroup in depth” (Patton, 1990, p. 235) or extreme-or-deviant-case sampling investigates cases that “are information-rich because they are unusual or special in some way, such as outstanding successes or notable failures” (Patton, 1990, p. 231). For this

study, two other strategies, namely snowball or chain sampling, and theory-based sampling, are the most valid. Snowball or chain sampling “is an approach for locating information-rich key informants or critical cases [that were] recommended as valuable by [other] informants” (Patton, 1990, p. 237), while in theory-based sampling, “the researcher samples incidents, slices of life, time periods, or people on the basis of their potential manifestation or representation of important theoretical constructs” (Patton, 1990, p. 238). The result of the literature review shows that there is some literature about mission drift, but mainly related to research on social start-ups. Thus, the aim of this study is to manifest how and in how far mission drift as described in the theory also occurs in green start-ups. Therefore, selecting green start-ups for the interviews is the first prerequisite for the sampling. Second, in the cases selected, mission drift should ideally be present. However, a full criterion-based sampling approach with the criterion being “mission drift occurred in the start-up” is not possible, as this is something that cannot be assessed prior to the actual conduction of this study. The reason for this is that, as of now, there are no standardized methods to assess mission drift (Chapter 2.2.4). Therefore, as a first approach to identifying cases with mission drift at presence, prior to the interviews, several informal conversations (n=6) have been held with different experts from the authors’ private network, for example with associates of a sustainability consultancy, associates of a sustainability incubator, and lecturers from the field of entrepreneurship and sustainability. Through these conversations, contact has been made with a start-up (Start-up 10) that the conversation partner has attested mission drift to, and which has turned out to be a purposeful case. However, no further purposeful cases have been directly generated from the informal conversations or from the first purposeful case. Therefore, the approach has been changed from searching for start-ups with mission drift that accounted for green start-ups to taking green start-ups as a basis and then identifying whether mission drift occurred. With this approach, the authors of this study are aware that the case might appear in which an interviewed start-up would not report mission drift. However, this is still in line, as Cook et al. (1985) note that for theory-based sampling “we are forced to select on a purposive basis those particular instances of a construct that [...] offer the closest correspondence to the construct of interest” (p. 163-164). In addition, the authors assume that findings can also be derived from the comparison of green start-ups that self-attest mission drift and those that do not.

The authors set certain criteria that the start-ups should fulfill. First, it should be ensured that the included ventures are indeed start-ups. This already poses a challenge, since the term “start-up” used in various practical contexts and is not clearly defined in the literature, but rather a

“fuzzy concept” (Cockayne, 2019, p.78). The authors use the start-up definition of the German Start-up Association as a guide, which declares that (1) start-ups are younger than ten years, (2) have a planned growth in employees and/or sales and/or (3) are (highly) innovative with their technology and/or business model (Kollmann et al., 2022). Criterion (1) comply well with by checking the founding year of the start-up. Also, criterion (3) is well suited, since the focus should be on green start-ups, which, as described in Chapter 2.1.2, typically deal with commercializing innovative environmentally friendly technologies. Finally, the authors determine that the start-ups should be located in Germany, as this offers several advantages. First, through being registered in Germany, the start-ups underly a shared set of external factors, for example, legal form or tax regulations, which increases the comparability of the start-ups. Second, the start-ups would be situated in a common setting when it comes to shared cultural values, for example, uncertainty avoidance or power distance (Hofstede, 1983). This also increases the comparability of the start-ups included in the study. Third, the restriction on Germany-based start-ups promotes accessibility for the authors of this study due to their German origin.

The defined criteria are fulfilled by start-ups listed in a database named “German Climate Tech Map 2022” (Smolinski, 2022) which has been compiled by Prof. Dr. Remigiusz Smolinski together with Pia Sander and Jil Zoé Fuhrman from hy – the Axel Springer Consulting Group. The use of climate tech start-ups as representative of green start-ups is consistent with pre-study informal discussions as well as with the literature, which finds that the terms clean tech, climate tech start-ups, and green start-ups are often used interchangeably or at least closely related. The criteria for inclusion of start-ups in the database are in accordance with the criteria established by the authors and were as follows:

- (1) The start-up is active in the climate tech area in one of the following sectors:  
Banking and Insurance, Buildings, Carbon Tech, Food and Land and Water, Industry and Manufacturing, or Mobility and Transportation.
- (2) The start-up’s headquarters are in Germany.
- (3) The company was founded in 2015 or later.
- (4) The company has funding, may it be equity or debt funding.

In total, 176 start-ups are included in the database. A total of 80 start-ups have been contacted and the fact that 57% have responded demonstrates great traction and confirms the relevance of the topic of mission drift. On the other hand, however, only 13 start-ups agree to be interviewed, which shows that it is also a sensitive topic. Considering the initial interview,

which results from informal conversations prior to the study, a total of 13 interviews are conducted. The start-up from the initial interview meets three of the four database criteria, as it can be assigned to the “Food & Land & Water” industry (1), is headquartered in Germany (2), and has funding (4). The only deviation is that the start-up was founded as early as 2008, in contrast to criterion (3), which states that the company should have been founded in 2015 or later. According to Yin (2009a), a total of 13 interviews is a sufficient number for an effective multiple-case study with a reliable outcome. The next chapter describes the characteristics of the interviewed start-ups, i.e., the selected cases.

### 3.3 Case Characteristics

A total of 13 climate tech start-ups are examined, covering a diverse range of areas within the field. Table 1 provides an overview of the characteristics of each start-up, based on information gathered from the database mentioned in Chapter 3.2 and from additional online research. The names of the start-ups are anonymized for confidentiality reasons. In the further text, the start-ups are referred to numerically as Start-up 1, Start-up 2, etc., as indicated in column 1. The purpose of analyzing this information is to gain a fundamental understanding of the start-ups' configurations, as these factors are believed to have a significant influence on the start-ups and their ability to stay aligned with their mission.

Start-up	Industry	Founding year	Funding (Mio US \$)	Legal form	Role of interviewee	Years employed	Mission statement - length - location on website
1	Mobility & Transportation	2021	Undisclosed CB: Seed	GmbH	CCO, Co-Founder	2	No mission displayed on website.
2	Industry & Manufacturing	2017	10.4	AG	Corporate Development Manager	4.5	- five words - front page of website
3	Carbon Tech	2021	Undisclosed	GmbH	Co-Founder	2.5	- 14 words - subpage “About us”
4	Energy	2020	Undisclosed CB: Seed	GmbH	CEO, Co-Founder	2.5	- 19 words - front page of website
5	Carbon Tech	2020	Undisclosed CB: Seed	UG	Co-Founder	3	- 32 words - subpage “FAQ”
6	Carbon Tech	2021	Undisclosed CB: Pre-seed	GmbH	CEO, Co-Founder	1.75	- ten words - subpage “About us”
7	Food & Land & Water	2016	0.3	GmbH	CEO, Co-Founder	7	- 20 words - front page of website
8	Food & Land & Water	2020	Undisclosed CB: Seed	GmbH	CPO, Co-Founder	2.75	- 16 words - subpage “About us”
9	Buildings	2019	Undisclosed CB: Seed	GmbH	CEO, Co-Founder	7	- 44 words - subpage “About us”
10	Food & Land & Water	2008	Undisclosed	GmbH	CEO, Founder	15.25	- 24 words - subpage “About us”

11	Food & Land & Water	2015	15.2	GmbH	Senior Product Manager	3	<i>No mission displayed on website, only vision statement.</i>
12	Mobility & Transportation	2018	647	SE	Head of Cities Germany	4	<i>- four words - front page of website</i>
13	Energy	2016	1.6	GmbH	Head of Sales	3.25	<i>- 24 words - subpage "climate mission"</i>

Table 1: Start-up Characteristics (own creation)

First, the authors look at the start-up characteristics that can be retrieved from the database, namely the industry that the start-ups are operating in (column 2), the start-up's age (column 3), and funding sum (column 4). The funding is only disclosed for only five out of 13 start-ups. Additional research on the website Crunchbase (marked with CB in Table 1) enables the determination of the funding phase for six additional start-ups. In addition, the legal forms are retrieved from the start-ups' websites (column 5). Moreover, some insightful information about the interviewees is gathered on the website LinkedIn (columns 6 and 7). Finally, the authors also retrieve the start-up's mission statements from their websites (column 8). It is noted where the statements can be found on the start-ups' websites, as this can be used to deduce the significance of the mission statement for the start-up. Furthermore, remarks on the conception are made, i.e., whether they appear rather short and concise (ten or fewer words), mediocre in length (ten to 20 words) long and detailed (more than 20 words).

### 3.4 Data Collection

The study is based on primary and secondary data collection. The overall rich data collection phase took place from March to April 2023. Primary data has been obtained through semi-structured interviews with individuals from the selected green start-ups. In addition, the authors have examined publicly available material concerning the selected start-up cases and thereby collected a comprehensive sample of secondary data. According to Bhattacharjee (2012) and Eisenhardt (1989), using multiple data collection methods is advisable to increase the reliability and validity of observations. The process of utilizing diverse sources for gathering data is referred to as triangulation (Flick, 2004; Mayring, 2001) Following the triangulation approach of using multiple sources of evidence, the authors compare the different types of data to ensure consistent and credible information (Denzin & Lincoln, 2011). Further, the authors follow the principles of Yin's data collection (2009b), which requires the creation of a case study database as well as maintaining the chain of evidence.

### 3.4.1 Primary Data through Qualitative Interviews

Primary data is collected from green start-ups through qualitative interviews to gain access to information on the phenomena of mission drift. For this purpose, the “seven stages of interviewing” according to Kvale (2007) are used, which contain (1) Thematising, (2) Designing, (3) Interviewing, (4) Transcribing, (5) Analysing, (6) Verifying and (7) Reporting. Qualitative interviews are particularly suitable for investigating experiences and perspectives to understand social reality (Döringer, 2021) such as within start-up ecosystems. Moreover, interviews with industry experts are particularly useful when the focus of the investigation is on insider knowledge (Liebold & Trinczek, 2009). In addition, this form of questioning is suitable when a rather new and unknown topic is to be researched (Kaiser, 2014) as the topic of mission drift in the field of green start-ups presents. Since these conditions apply to the present work, an interview is a particularly well-suited technique.

#### Start-up interviews

The qualitative interviews are conducted as semi-structured interviews (n=13). This method combines the advantages of flexibility and rigidity as it “pairs predetermined survey questions with interviewer-initiated open-ended, ad hoc follow-up probes” (Ahlin, 2019). It is particularly suitable for exploratory studies with introductory data collection and analysis on a specific topic, where basic but not yet in-depth knowledge is available (Liebold & Trinczek, 2009). Since the topic of mission drift is a complex social phenomenon that requires interpretation, a semi-structured interview is supportive as it allows for a natural flow of conversation: The typical open-ended questions uncover rich and complex reports from participants (Magnusson & Marecek, 2015). While they are structured thematically, they also leave room for free narrative passages. This makes it possible to react flexibly to the course of an interview and to better capture important background information. In interviews, data is obtained through direct communication. This allows data to be checked step by step so that complex interrelationships can be worked out reflexively (Witzel, 2000).

To support the thematic structuring of the semi-standardized interviews the authors develop an interview guide (Appendix 8.2). This is to ensure that the interviews follow a comprehensible logic of argumentation and cover all important aspects of content and the necessary details to shed light on the research topic (Magnusson & Marecek, 2015). To get a first understanding of the present challenges related to mission drift in practice and what to focus the interview guide on, the authors arrange informal talks with experts (n=6) from the green start-up ecosystem

through their personal networks. In addition, the tool of DIN SPEC 90051-1 (2021), a questionnaire for assessing sustainability, is consulted, and used as an initial starting point to construct robust questions. Based on this as well as the research interest in general four main topics for the interview guide are derived, geared to understand the start-ups' mission (1), the process of mission drift (2), causes of mission drift (3) and the reaction and measures on mission drift (4). A maximum of three items are asked for each topic area, with the possibility of further follow-up questions. However, these detailed questions should only be used if a matter remains open when answering the mandatory questions (Magnusson & Marecek, 2015). By reviewing publicly available secondary case material (e.g., website, press releases) in advance of the interview, follow-up questions can be asked more specifically, and information can be triangulated easily. For the interviews, the authors aim to talk to the founder or a co-founder of the start-up (Table 1). On the one hand, it can be expected that the (co-)founder have the longest possible tenure with the start-up and thus must have experienced all possible changes in the start-up. On the other hand, the (co-)founder plays a significant role in the start-up's mission design and is hence expected to be interested in the mission's maintenance. For 10 out of 13 start-ups, the interviews are conducted with the founder or co-founder. In three cases, the interviews are conducted with other start-up affiliates. Here, it was the aim to talk to employees of high rank and/or long start-up tenure.

Interviews are primarily conducted in German, as this is the mother tongue for the interviewees as well as for the interviewer, and thus allow for a more informal atmosphere, which favors a natural flow of conversation. Due to geographical distance, interviews are carried out digitally and recorded upon consent. The 13 interviews last from 23 to a maximum of 39 minutes and are transcribed afterward, resulting in over 100 pages of transcripts (Times New Roman, font size 12, line spacing single, Appendix 8.3). The authors decide to use authentic transcription of the participant's actual speech, denaturing the transcription only to improved syntax and grammar to ease later analysis. Thus, the transcripts remain in the German language, while only single quotes used for the analysis are translated. During the transcription process, the interviews are already being actively read to become familiar with the narratives and the given context, and thus to search for the meaning behind the narratives so that initial potential patterns and codes can be noted for analysis. The interviews are conducted as a team of two. This had the advantage that while one person is conducting the interview, the other person can directly note down any special aspects, such as non-verbal expressions or situation-related conditions (Witzel, 2000). Additionally, having two points of view can offset a person's bias.



### Investors interviews for triangulated information

As already suggested by the findings in the literature, the first results from the interviews also point out the crucial role of investors as stakeholders influencing the mission of climate tech start-ups. In the spirit of the triangulation approach, the authors decide to gather first-hand information by interviewing investors (n=3) directly and thus integrate a second perspective about the claims the start-ups have made. The additional perspective of this topic allows for a more holistic view of the mission drift issue and goes a long way toward answering the sub-questions regarding stakeholder relationships. The interview guide is strongly oriented to the previously created guide for the start-ups to be able to compare the statements of both perspectives. However, questions were adapted to fit the role of investors: e.g., instead of “What are the long-term goals in terms of sustainability of your start-up?”, the investors are asked, “To what extent do you take sustainability into account in your investment portfolio?”. Since the investors have no relationship to the interviewed start-ups, their statements cannot serve as specific case material, but merely as an additional source, which gives the discussion more input. The investor interviews are transcribed in the same way as the start-up interviews.

### **3.4.2 Secondary Data**

Additionally, to fulfil the triangulation in the data collection step, various sources are consulted (Patton, 2002). The goal is to get a comprehensive picture of the context to build the case for each start-up. On the one hand, this already help during the interviews, as a prior understanding allows for more participatory questioning and answers can be triangulated directly. On the other hand, this allows for a well-informed analysis afterward. While the goal is to build up a good database before the interview, further data is also collected afterward in case of missing information (Yin, 2009b). In addition to information on the company website, press releases, and public presence on social media, the database Crunchbase (2023) is searched to gather secondary data. The data is all structured and clearly organized in a table to present an extensive database (Yin, 2009b). Secondary data collection mainly provides information on the following topics: Funding and financial situation, Investor situation, main stakeholder, and partners; presence, use and public communication of the mission, vision, and purpose; traceability and measurement of the impact as well as interesting details of the start-up’s history (e.g., origin, mergers, etc.). Information is also collected outside of the above categories when relevant to the research question.

### 3.5 Data Analysis

To analyze the rich data collected through the interviews, the authors adopt an abductive analysis methodology. To answer the research question, no pre-existing theory can be used that can be tested through the interviews, this precludes a purely deductive approach (Hurley et al., 2021). At the same time, the first preliminary approaches can be found in the emerging literature, which offers first starting points and therefore would not correspond to a purely inductive analysis. Therefore, the authors opt for an abductive approach, which aims a middle ground between inductive and deductive methods and is neither completely data-driven nor hypothesis-driven (Tavory & Timmermans, 2014). This means that both existing findings from the literature were examined (deductive) and new findings are derived from the data (inductive). Leaning on the inductive grounded theory methodology (Gioia et al. 2013; Strauss and Corbin 1998), the three step-approach of general first-order concepts (1), second-order themes (2), and lastly aggregate dimensions (3) are used. Due to the abductive way of working the steps are adapted accordingly, including several iterative steps going back and forth (Figure 2). The period of data analysis was from 03.04.2023 to 08.04.2023 and was supported using Nvivo, which facilitates the management and analysis of various data sources. For the entire coding and analysis procedure all three authors sat together physically, went through the interview cases, and jointly discussed the coding options.

From the analysis of the existing literature, the authors develop an a priori framework resulting in 12 dimensions (From the analysis of the existing literature, the authors developed an a-priori framework resulting in 12 dimensions (Figure 1), from which six are classified as *Causes* of mission drift (e.g., “*External embedment of start-up*”) and six as *Action Strategies* against mission drift (e.g., “*Stakeholder management and relationships*”). Additionally, those dimensions are further distinguished between the three levels of society, organization, and individuum. At the beginning of the coding process, these 12 dimensions represent the starting point for the analysis and are used as parent codes. By categorizing and color-highlighting specific sentences and paragraphs based on their related characteristics, the coding process condenses the bulk of qualitative data into codes (Coffey & Atkinson, 1996; Saldaña, 2021). After having set up the initial 12 dimensions to categorize and order the codes, the authors start the first round of coding. The primary connection between the raw data and cognitive interpretation (Seidel & Kelle, 1995) is indicated in this step, and the objective is to extract maximum semantic meaning. To achieve this objective, it is crucial to encode every minor point that holds significance for the research questions (Braun & Clarke, 2006; Saldaña, 2021).

For this, the texts are coded in a case-related manner (within-case) first. To derive the first-order categories as “informant-centric terms and codes” (Gioia et al., 2013) a descriptive and detailed coding technique is used, which results in very narrow and specific categories. For example, the text “An ecological vision has simply persisted in the company permanently. Naturally, only people who shared this same vision have joined along the way” is coded to *new people share the same mission*. To stay close to the research question and to find practical examples for the a priori framework, already in this round most of the codes are classified into the 12 dimensions created before. Thus, the mentioned code is in the first step already assigned to one of the 12 aggregate dimension *transparent internal structures*.

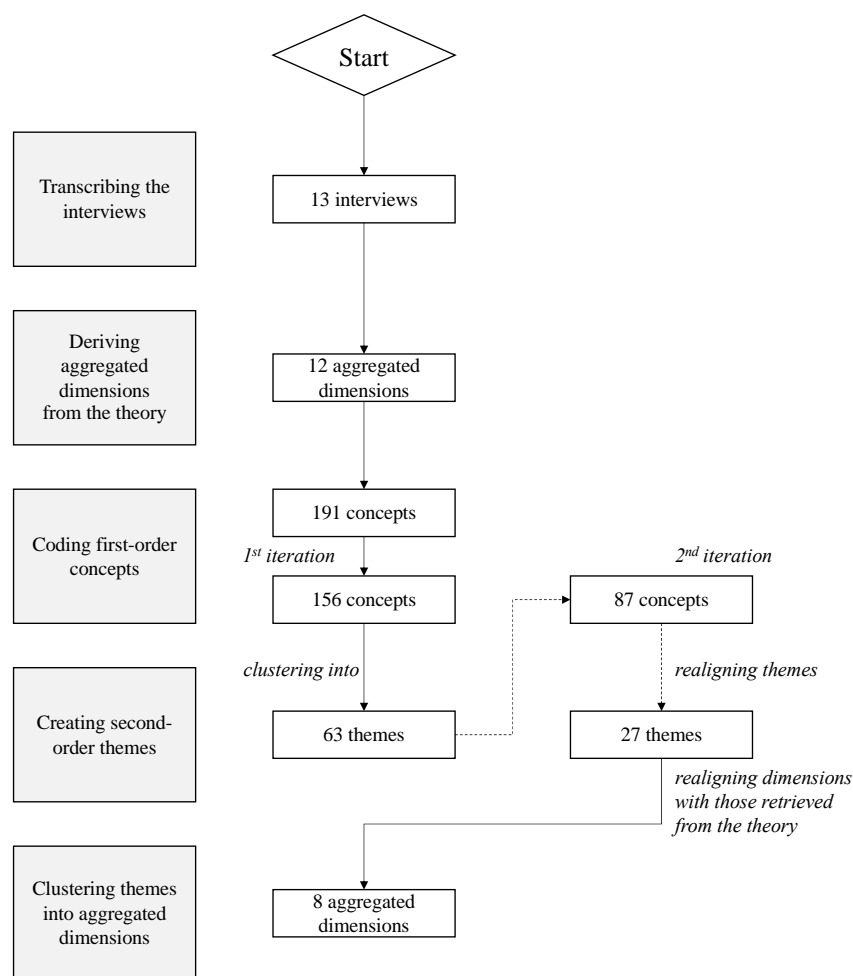


Figure 2: Development Process of the Code Structure (own creation)

However, since a certain openness for new results is maintained, also according to the principle of induction, it is possible to deviate from this. For instance, the following quote “So that’s always the discussion that’s going on a lot in the sustainability industry: Should we not do anything with the old oil and gas companies, or if we make them better, isn’t that actually a

positive effect?” has been raising discussions, how to assign this into the already existing categories of cause and action strategy as it can be clearly viewed as both. Consequently, a new dimension called *Attitude toward conflicting logics* is created. From the question of categorization into pre-defined dimensions, has the biggest point of discussion emerged during the coding process. The authors have felt already during this process that the predefined dimensions from the theory do not reflect reality and thus limit the openness of the result. Thus, they have begun to slowly move away from the dimensions. Since many of the participants do not specifically name mission drift or even speak of mission drift not having occurred in their start-up, the question arises as to whether the authors should limit the coding only to occurrences of the phenomenon of mission drift or also to the absence of mission drift. However, since the research question of this thesis also looks for the perception of mission drift, and it is quite relevant to *how* the participants talk about it, the authors decide to include both sides. This opens new dimensions such as *Changeability of the Start-up's Mission*. Overall, the first round of coding of the 13 interviews results in an amount of 191 first-order concepts. The next step includes a more selective approach, which results in several iterative loops. The initial codes are consolidated thoroughly to be able to remove insignificant codes, merge the same codes, and group similar ones. For example, the initial codes “getting the employees on the right track” and “creating internal clarity for the mission” are summarized as “Leadership”. This first iteration leads to a reduced number of 156 first-order concepts.

The authors of the study synthesize the concepts into 63 second-order themes, aiming to identify commonalities and distinctions among the multiple categories. In the process of doing this first-order concepts are modified through renaming, merging, subsuming, or deleting. Additionally, the authors revise selected code passages to ensure more precise correlations. Ultimately, they organize all the initial first-order concepts by clustering similar ideas together to make them more manageable. This heuristic process enhances a deeper level of comprehension of the patterns in the data as the coded text units are analyzed through axial coding (Strauss & Corbin, 1998). This means when the authors identify new concepts or themes, the already existing codes and respective interviews are checked if the new category or dimension can be coded there as well. For example, the code *Leadership* can be grouped together with the *Onboarding* code, as both are aiming for *Employee alignment*, which is supposed to be the second-order theme. During this process of grouping and summarizing, the naming of the first and second-order themes is constantly revised to make them more precise and comprehensible. For example, the first-order concept “*High quantities are asked, but*

*scaling is capital intensive*” is renamed “*Scaling and growth pressure for start-ups*”. After this continuous iteration, 69 concepts are categorized and realigned into 23 second-order themes. However, the authors are cautious at this point to not create overly abstract themes, which increase the potential of wrong interpretation. Since the variety of codes is very large and summarizing without loss of detail is only possible to a limited extent, the authors decide to reorganize the first-order concepts into a smaller number of second-order themes. Thus, the authors are iteratively processing between theoretical literature and new insight from the data (Eisenhardt 1989; Gioia et al. 2013). This results in “researcher-centric themes and concepts” (Gioia et al., 2013). However, since the authors are facing difficulties during the analysis process to classify the codes into the dimensions predefined by the literature, they decide to become more independent of this to be able to map the representation of reality authentically. Consequently, the 27 themes and the connection to the 12 dimensions of literature are discussed intensively until it is suitable to realign the dimensions. For this visualization is used to show how different themes, categories, and dimensions could be related (Miles and Huberman, 1994). For example, the dimension of *Hybrid identity of the entrepreneur* as a cause is not further considered as no suitable codes is found, while at the same time, *Transparent Internal Structures* and *Monitoring and Controlling the Mission Achievement* are merged into the new dimension *Designing organizational accountability structures (action)*. Finally, the second-order themes are further distilled into eight final aggregate dimensions.

#### Investor Interviews as an Additional Data Source

Since the interviews of the investors shall not be used as valid case material and only three interviews are conducted, the analysis is not processed in the same open code structure as for the start-ups. As the analysis of the investor interviews is deliberately conducted afterward when the results of the start-up interviews had already been determined, it was possible to focus on the already identified codes from the *Satisfying investor demands* theme within the start-up interviews as a starting point. The investors’ statements are then compared with the start-ups’ statements to identify differences and similarities in the perception of mission drift to gain a more complete picture of the phenomenon. Thus, the interviews are mainly analyzed to confirm or refute the statements made by the start-ups. For example, the accusation of exerting pressure to become profitable faster instead of scaling the impact. However, in the spirit of an exploratory study, the authors still remain open to the new and unknown. The results of the analysis of the interviews are used directly in the discussion to bring up additional perspectives. In addition, the results of this triangulation are compared with the findings of the theory.

### Screening of Secondary Material

To validate the interviewees' answers and claims, the authors carry out the final step of triangulation and screen additional material from the start-ups' website, press releases and further information on data bases like Crunchbase. The content of the start-up website help to check to what extent the interviewee is aware of the mission and to perceive differences between the public communication of the start-up and the internalized mission of the individual person. In other cases, where start-ups are in difficult financial situations, such as filing for bankruptcy, press releases provide important context and additional details to better understand the statements made by the interviewee. Information about the funding of the start-ups, which is mainly retrieved from Crunchbase, give indications about the extent to which the start-up is dependent on investors. The verified derived first-order concepts and second-order themes plus the aggregated dimensions form the basis of a data structure, which lays the groundwork for analyzing and interpreting the results.

### **3.6 Research Quality**

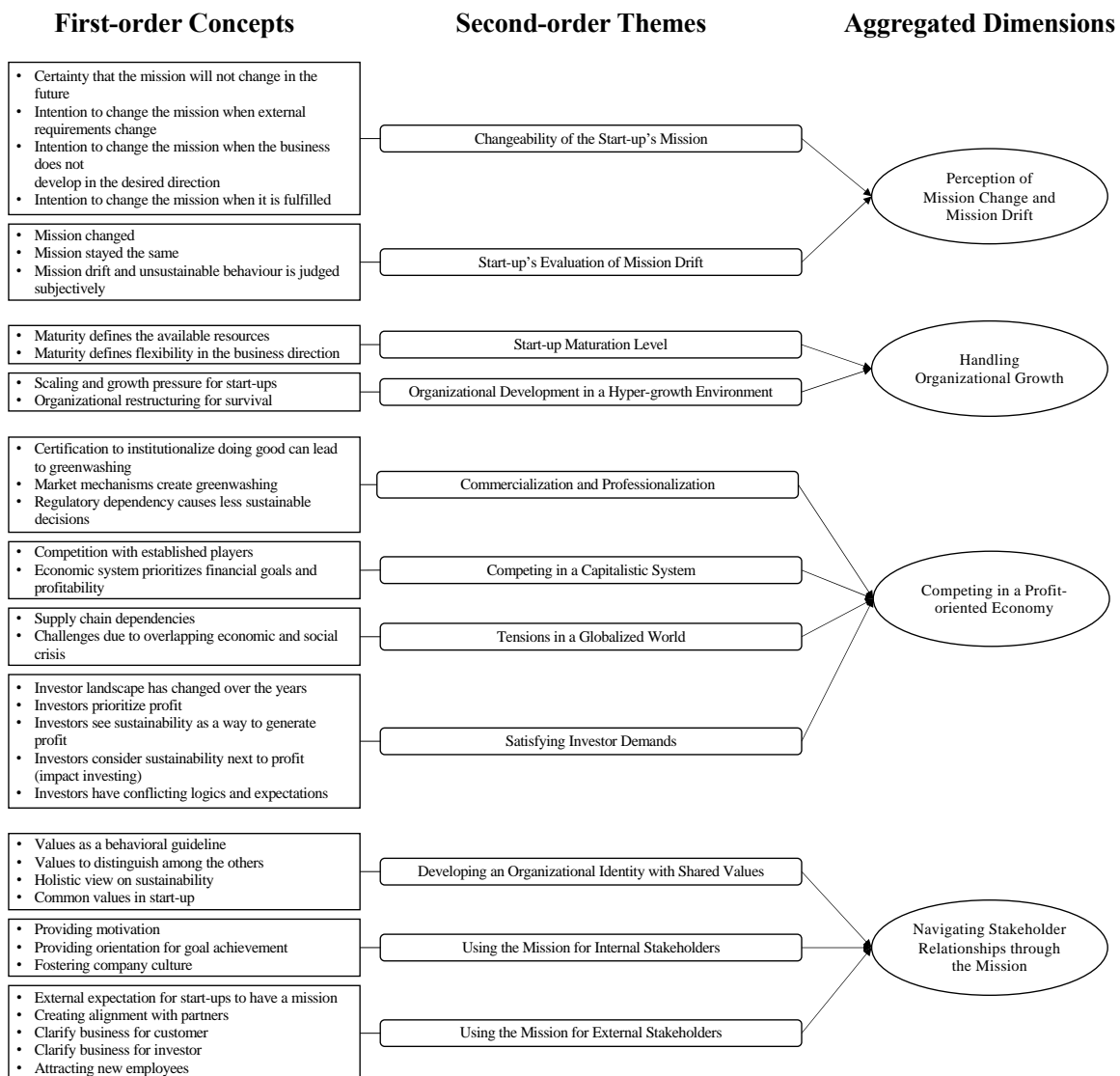
The selected method of multiple case studies proves to be well-suited for dealing in depth with the rather nascent and under-researched topic of mission drift in green start-ups. However, despite numerous strengths of the method and precautions taken, methodological limitations should be considered when evaluating the results. According to Yin (2009b), four logical tests, which are common to most social science methods, can be used to judge the quality of the present case study: Construct validity, internal validity, external validity, and reliability (Kidder & Judd, 1986).

To test the consistency and convergence of the data in terms of *construct validity*, the research technique of triangulation has been applied. Several data sources such as start-up interviews, investor interviews as well as other secondary materials have been used as multiple sources of evidence. This can counter selection bias, for example. Because mission drift is still often viewed negatively, founders may find it difficult to honestly admit to mission drift, they may respond according to social desirability, or they may only participate if they are satisfied with the progress of their mission. In addition, the respondents have been assured anonymity to address potential key informant bias. Besides, data for the case study has been collected using different methods (e.g., qualitative interviews, screening of webpages) which favor methodological triangulation. To further enhance the trustworthiness of the present study the authors have made use of the benefit of working in a team of three (investigator triangulation).

For the interview phase, a rotating system of two people per interview has ensured that any kind of information is captured. To further improve the *validity of the construct*, a chain of evidence has been maintained through (a) in-text quotes and references to the data sets and (b) consistency of the case study protocol with the research questions. As the underlying research question concerns a causal situation (i.e., cause of and action strategy against mission drift), the test of *internal validity* is especially important in terms of making correct inferences (Yin, 2009a). By taking pre-defined dimensions from the literature review as initial support for the analysis, the authors have been able to analyze the data regarding matching patterns. Therefore, also contrary statements were particularly useful for rival pattern matching. The benefit of working in a team of three has also been beneficial for the analysis phase as it allowed for mutual and unbiased reviewing of the coding. For example, while a team of two has conducted the interview, the third person has independently read the transcript and conducted the initial coding, which has then been cross-checked by the other team members independently. By engaging in regular peer debriefings, any varying interpretations or disagreements have been carefully discussed. The generalizability of the case study is addressed in the third test for external validity. Although the principle of purposeful sampling is followed, the authors adhered to clear criteria for case sampling to increase validity. Due to the limited time of six months for this thesis, the authors have decided to follow the path of the most effective accessibility to find as many cases as possible. Due to the accessibility and the already existing network in Germany, mainly German start-ups have been included in the study. This cannot necessarily represent the cases for climate tech start-ups across Europe. In addition, no further restrictions have been made regarding the industries, and start-ups at various stages have been surveyed to obtain as comprehensive a picture as possible for Germany. However, this research would benefit from an expansion of case studies of climate tech start-ups in different European countries for better generalizability. Finally, the set-up of a case study protocol (Appendix 8.1) has enabled a standardized approach to all single cases and has brought the work styles of all three team members to a common ground. To further ensure the quality of the study, the study design has been assessed and challenged by experienced researchers from the field. Moreover, the thorough description of the study process enables the work's transferability to allow other scholars to comprehend and build upon this study.

## 4 Empirical Findings

In this chapter, the findings from the research conducted as described in Chapter 3 are presented. Figure 3 shows the code structure on which this analysis is based. Based on the eight dimensions the second-order themes and first-order concepts are investigated using sample quotes from the interviews to underline the results. This aims to reveal how mission drift occurs in green start-ups by uncovering the perception of mission drift as well as the causes and action measures used in practice to prevent it. The chapter is subdivided, and each subsection refers to an aggregated dimension. The subchapters vary in length, reflecting the prominence of the issues in the interviews and thus indicating the different importance of the issues. In the following, the first-order concepts and the second-order themes are written in italics to give orientation to the reader.





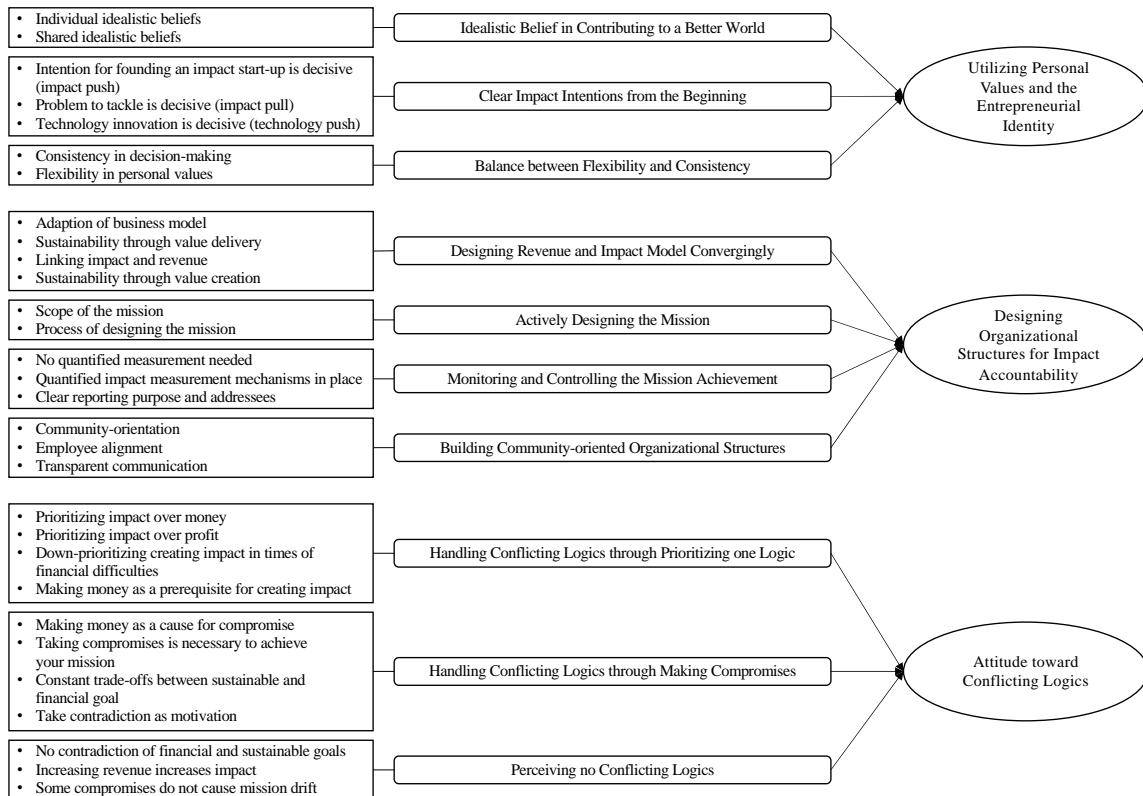


Figure 3: Final Code Structure (own creation)

#### 4.1 Perception of Mission Change and Mission Drift

As a basis for matching the causes for and action strategies against mission drift for green start-ups with those taken from the literature and thus determining how mission drift can occur in green start-ups, it is first helpful to learn to what extent the start-ups understand a *mission to be changeable* (n=7) and whether they *evaluate mission drift to themselves* (n=9) (Figure 4).

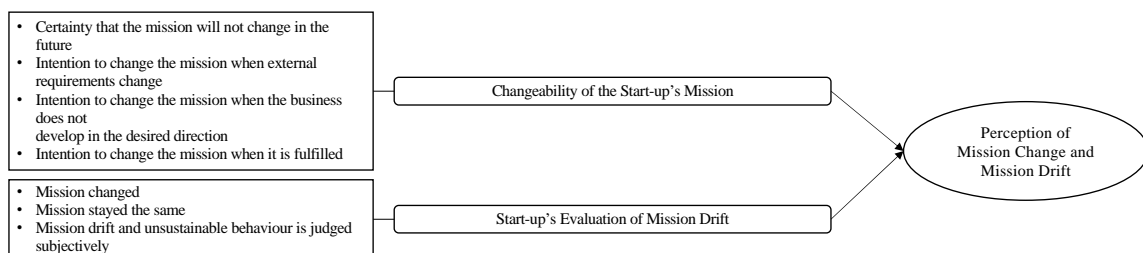


Figure 4: Dimension *Perception of Mission Change and Mission Drift* (own creation)

### Changeability of the Start-ups' Missions

While some start-ups perceive the mission as unchangeable, other believe that the mission can change, for example, if a changing external environment requires it, when the business does not develop in the desired direction, or when the mission is achieved. The first concept describes that the interviewees represent the position, that their *mission will not change in the future* (n=4). One founder is certain, that their main mission will not change, but that additions to it could be possible (Start-up 5). Another founder believes that the start-up has reached a point where there should not be a need to adapt the mission again:

“[The mission] should actually be something that lasts a bit longer than just a few minutes” (Start-up 9).

One founder confirms that their mission has not changed in the first two years and that he does not see it changing in the future. However, in this case, he believes this because they had started with the same mission, which was rather advanced then, and as they are now ahead of time, it has helped them to become leaders in their sector (Start-up 4). While some interviewees state that their start-ups' missions will not change in the future, others see the possibility of the mission changing. One founder generally does not deny the possibility that the mission might change in the future, for example, when the *mission should be adapted to meet changing external requirements* (n=2). This stems from his recent experience that as the start-up expanded into more countries, the business model requirements grew, and that such an experience could fundamentally “help young companies revisit such fundamental questions” (Start-up 7). Another founder goes further and believes that start-ups should always be prepared to change their mission when challenges occur, or new opportunities arise. For example, when the imagined solution is not technically feasible, he sees a need to change the mission, or, when the overarching vision is to create positive impact and a new option occurs to achieve that better than with the currently pursued solution, the new option should be chosen and “then it is quite legitimate to change [the mission]” (Start-up 6). Other founders report that they would consider *changing the mission if the business does not develop in the desired direction* (n=2). One founder states that at the moment, their venture is going “in the right direction” (Start-up 8), while at the same time, he says:

“If we had worked on it for two years and it did not go in the right direction, then we would probably also consider whether we needed to change the mission” (Start-up 8).

While this founder only states the possibility, this has already become a reality for another start-up. This start-up wanted to use a conventional method of processing agricultural waste materials into packaging materials. However, due to supply chain problems in times of crisis, they could not obtain the ordered machines for this process. Consequently, the start-up looked for alternatives and pivoted toward applying a new, more sustainable method, but had to use conventional materials for this. While they could still make a positive impact by doing so, the interviewee also states that this external shock and shift away from the innovation of brought-in fibers, was a step where the values and mission of “renaturalizing the world of materials” were greatly revised (Start-up 2). The last case refers to the possibility of *changing the mission when it is fulfilled* (n=2). One founder states that the mission fits them now, but that their focus could shift in the future (Start-up 7). Another founder agrees that his hope for the future is that the mission will be fulfilled to some degree and that if that were the case, they would expand it. For them, this would mean taking the company to the next level and looking at what other areas of their industry the start-up could contribute to sustainable change (Start-up 8).

#### Start-up’s Evaluation of Mission Drift

To understand how the start-ups themselves perceive mission drift they were asked about their self-perception of the phenomenon in their company. Based on the question “How has the mission changed over time?” from the interview guide, Table 2 shows whether the interviewee has recognizes mission drift in their own start-up (column 2). Column three shows the corresponding evidence from the transcribed interviews and column four contains further remarks. The table shows that about 30 percent of the start-ups (n=4) perceive a mission drift themselves, while the majority of 70 percent (n=9) cannot identify a mission drift in their own company. The question of whether this self-assessment also corresponds to reality is further elaborated in the discussion section of this thesis (Chapter 5.3).

Start-up	Mission Drift	Citation (I=Interviewer; S=Start-up)	Comments
1	yes	S: “Yes, well, it [the mission] certainly changed.”	Special case in which mission drift was too minor to be successful in the long term.
2	yes	S: “So that was actually [...] a strong turning of the mission.”	While the mission has changed, the vision has remained the same.
3	no	S: “Nope, that [the mission] has remained completely the same.”	
4	no	S: “Nope, it [the mission] actually stayed the same, there’s no change.”	
5	no	S: “Our pivot, if you want to call it that, was relatively obvious and possible without major changes [of the mission].”	Adaptation of the target group was financially motivated, but not perceived as mission drift by the start-up.

6	no	I: “[...] have there been any changes [to the mission]?” S: “Nah, I don’t think so.”	
7	yes	I: “Was the mission different from the mission you are pursuing today as a start-up?” S: “Yes, totally.”	
8	no	S: “Yes, to be honest, it [the mission] never changed since we started.”	
9	no	S: “but at the core, so to speak, it [the mission] has remained very similar.”	
10	yes	S: “Maybe one more thing: the mission has actually changed due to my merger.”	After repeated questioning, the interviewee did recognise a mission drift.
11	no	I: “Was this always the mission of the start-up?” S: “I would say so.”	
12	no	S: “that doesn’t make us turn away from the mission as such.”	
13	no	I: “has [the mission] changed in any way?” S: “No, because the issue is still acute.”	

Table 2: Start-ups’ Perceptions of Mission Drift Occurrence (own creation)

## 4.2 Handling Organizational Growth

*Handling Organizational Growth* summarizes how the *start-up’s maturation level* (n=2) and *organizational development in a hyper-growth environment* (n=3) may cause mission drift (Figure 5).

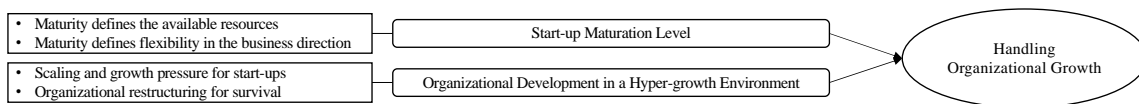


Figure 5: Dimension *Handling Organizational Growth* (own creation)

### Start-up Maturation Level

Depending on its *maturation level*, the start-up has varying degrees of *flexibility in its business direction* (n=2) and – due to the possibly *limited resources available* (n=2) – different means of measuring the sustainability level of the business model. Both limited flexibilities in business activities and in measuring the sustainability level of the business model may lead to mission drift. Concerning the flexibility in business activities, one start-up states that with higher start-up maturity, they were “not 100%, but [...] at least 80% sure of what we are doing” while if talking with an early-stage start-up, “they only know about 10% of what they are doing, and it can be that they will pivot their whole solution again” (Start-up 3). Another interview confirms the view that there will always be pivots with very young start-ups:

“It is certainly easier to always keep a slightly larger company on track” (Start-up 9).

The start-up’s maturation level may also indicate the resources that a start-up has available to measure their impact. While the start-ups claim their sustainable purpose, some also state that especially in early phases, measuring the achievement of the sustainable goals cannot be performed. In one case, this led back to the early development phase of the product (Start-up 6), while in another case, the lack of human resources to perform the potential measurement is stated as the reason (Start-up 10).

### Organizational Development in a Hyper-growth Environment

Besides the sheer maturation of the start-up, also the fact, that start-ups often have to *develop their organization under the demands of a hyper-growth environment* can lead to mission drift. These demands relate primarily to start-ups, which face *scaling and growth pressures* (n=1) that, if they cannot manage them, may lead them to undertake *organizational restructuring to survive* (n=3). As one start-up states:

“[Being scalable is] one thing that many, many start-ups are struggling with right now. [...] Scaling is always very cappa-intensive, [...] every retailer, every brand, always comes directly with extremely high demands on quality and quantity” (Start-up 2).

The concept *Organizational restructuring for survival* shows that not all start-ups can meet the demands of the market and reach a point where restructuring becomes inevitable. While one start-up chose a merger to gain better market competitiveness, for two start-ups, the only option was to file for bankruptcy. For one start-up company, agreeing to a merger was the right decision to manage the demands of competing in a high-growth environment. Here, the start-up states that the mission has indeed changed through its merger. While the pre-merger mission of the start-up had a rather social focus on improving the conditions for the local producers in the global south (Start-up 10), the post-merger mission is more focused on providing global north customers with a certain type of nutrition. The more customer-centric mission originated from the other start-up and was also adopted for the interviewed start-up in the process of finding common ground for the merger. The interviewed founder did not seem to experience any inner conflict with letting go of her previous mission and adopting a new one, as the new mission did not mean to her that the purpose intended by the old mission could not still be realized. Overall, the interviewed founder assesses the merger as “positive, being fun and bringing in some fresh air” (Start-up 10). While for the first-mentioned start-up, the challenge

of competing in the market came to a positive end via the merger, other start-ups experienced a less favorable outcome. In the case of insolvency, one company explains that there was an extreme additional expense for the development of the technology to manufacture the product, which could no longer be prefinanced (Start-up 2). To still realize bringing the product to the market, the start-up chose an insolvency process that allows them to find a buyer for the company. However, the time allowance to find a buyer is very short, and while the start-up claims:

“We would always try to put our mission up front and hold it up” (Start-up 2).

They also state that “in such an extreme situation, [...] one must of course also rather ensure that the company itself continues to exist” (Start-up 2) and is aware that in this case, it might be that a buyer “makes slightly different decisions in the future” (Start-up 2). The other start-up that filed insolvency had stayed very close to its mission and values and not given in to market demands. When experiencing business difficulties, they made small adjustments over the course of eight months, but also state that, in retrospect, “it would have definitely been wise to take more radical steps directly” (Start-up 1).

### 4.3 Competing in a Profit-oriented Economy

Every company operates in an ecosystem with different players and relationships. The uniform consent of all interviewees shows clearly that doing business in a *profit-oriented global economy* may well be an external reason to drift away from the mission. This is examined in more detail based on four identified themes (Figure 6).

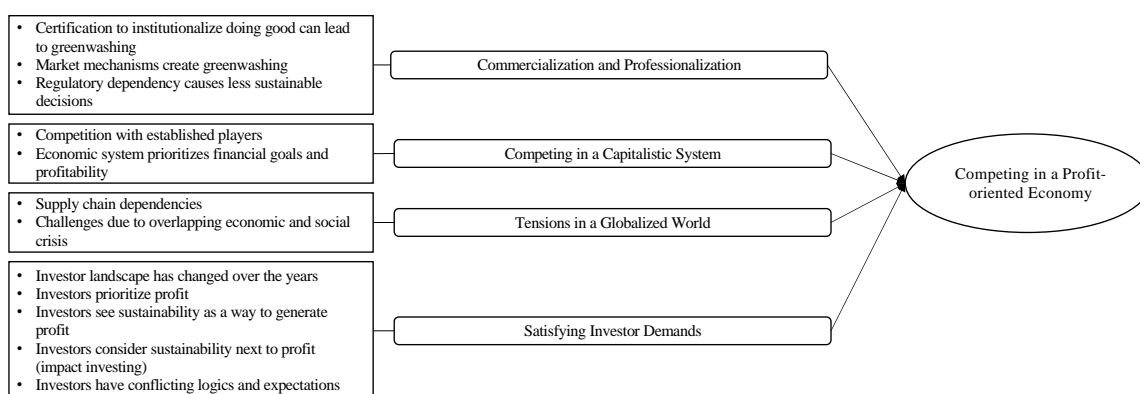


Figure 6: Dimension *Competing in a Profit-oriented Economy* (own creation)

#### Commercialization and Professionalization

Commercialization and professionalization are cited as a challenge by three start-ups to pursue their mission due to three reasons: Greenwashing might occur because of *the*

*institutionalization of certifications* (n=1) and underlying *market mechanisms* (n=1). As “we have the market mechanisms in there, there is a bunch of social washing, greenwashing in these markets“ (Start-up 4). While it is driven by the belief that applying business practices to these organizations can make them more effective and sustainable, the increasing *regulations* (n=1) that go hand in hand with this, which are intended to regulate the market and protect consumers, make it difficult to act sustainably (Start-up 10). For example, when it comes to expiration dates for food products. In addition, one start-up reports how certifications and labels, originally intended to create transparency and marketing advantage for sustainable start-ups, are having a negative impact in terms of greenwashing:

“[Certification agency and start-up] have the same interest – both want to get the certification through because the logo brings money for both” (Start-up 5).

### Competing in a Capitalistic System

Even though the start-ups interviewed all strive for a sustainable mission, at the end they *compete against established players* (n=5) on the market while at the same time taking higher risk because of a new way of doing business. Indeed, three start-ups report that the competitive environment puts a lot of pressure on them: “Surviving” in a market, trimmed for cost reduction, but at the same time following social and ecological principles (Start-up 2, 4, 10). Additionally, some start-ups feel at a disadvantage simply because of their market power: “As a smaller company, you have less market power than a corporation” (Start-up 13). The perceived imbalance becomes even more severe with the present trend, where large corporations are increasingly occupying the world of sustainable market claims themselves: “We had good growth and then of course [...] big ones have also noticed it and today you get it [everywhere]” (Start-up 10). The underlying problem is traced back to the general capitalist *economic system, which prioritizes financial goals* (n=3):

“Ultimately, in capitalism, as long as shareholder value is the only value we actually want to achieve, nothing else can be in first place, [...] that’s why I believe that in the economic system we have, there is no other way than for financial goals to be in the very first place” (Start-up 1).

### Tensions in a Globalized World

Today’s “difficult times” (Start-up 10) oppose a challenge to maneuver the mission for more almost half of the start-ups (n=5). While *supply chain dependencies* (n=2) is seen as a normal

challenge in the globalized world, the majority of start-ups clearly emphasized the *overlapping social and economic crisis* (n=5) of the past years:

“Due to the COVID-19 pandemic and now the Ukraine war, the supply chain problems [...] and then thirdly inflation [...] so this merger was also a bit forced out of necessity because times were difficult” (Start-up 10).

These interdependencies and simultaneous occurrences resulted in increased prices, reduced purchasing power (Start-up 10), and a lack of planning security (Start-up 2). Thus, five start-ups report that this situation had an impact on their mission in opposite ways: While two had to file for insolvency or aimed for a merger (Start-up 1, 10), one adapted the mission “to make the best out of this situation and focus on something completely different” (Start-up 2). Two even perceive the crises as a business boost: “The topic has gained a different relevance in recent years, with the Ukraine war, the energy crisis has got a completely new message and we could stay on the course” (Start-up 9).

### Satisfying Investor Demands

Within the profit-oriented global economy, the dependency on investors is named by almost all the interviewed start-ups (n=11). Recently the *investor landscape has changed* (n=2). Both start-ups agree that the availability of funds has declined in the last two years as increasing interest rates make acquiring funding harder than before (Start-up 1, 9). One start-up sees an increased interest of investors in their investee’s mission (Start-up 9). Another start-up also encounters a particular problem, when it comes to the investors’ expectations: “You get a lot of good advice, but some of it is really the opposite of each other” (Start-up 1), pointing out that they are confronted with a huge array of expectations of different investors within their start-up with potentially big implications for their mission. These varying expectations can be traced back to the main logics the investors operate on. Understanding these logics is crucial to gain insight into how the investor views the relation between profit and sustainability. In the interviews, the start-ups name the three following views: *Prioritization of profits* (n=8), *Sustainability as a way to generate profit* (n=5) and *Considering sustainability next to profits* (n=7). Eight start-ups note *investors are prioritizing profit* (n=8):

“So first and foremost, [investors] are still interested in the money” (Start-up 8).

This is also impacting the start-ups as they are dependent on the investor’s money (Start-up 11). Because some funding strategies include only financial objectives, the mission takes a back seat, making it difficult to focus on environmental goals as investors demand rapid scaling and high growth (Start-up 1). This is in line with one of the start-ups, which argues that



investors are unwilling to accept a lower return to reflect their higher financial needs because of their commitment to preventing climate change (Start-up 4). The lack of interest in certain supposedly less profitable industries also suggests a general prioritization of profits by investors (Start-up 10). Some start-ups also experience, that investors view *sustainability as a way to generate profit* (n=5). According to one of the start-ups, investors stated:

“Sustainability [...] is a trend. I can make money with it, but for me personally it’s not that important at the moment” (Start-up 1).

This supports the statement by another start-up, who points out that some investors see a strong pressure to act and change with regard to their sustainability investment strategy (Start-up 2). It remains important to note that no investor will invest on the basis of sustainability alone; financial viability must also be in place (Start-up 11). While sustainability is a nice-to-have, profits remain more important for investors, enabling investors to be more open (with some even being indifferent) about the scope of the sustainable impact of the venture (Start-up 8). Especially once the start-ups have raised money, this also means that they must work together with these funders with all (possibly also unsustainable) implications (Start-up 1). The final perspective includes the view of *combining sustainability and profit* (n=7), which can go as far as impact investing, where sustainability must be fully integrated into the start-up’s business model (Start-up 2). These types of investors require different KPIs to measure sustainable impact e.g., measuring decarbonization (Start-up 4) or using scientific approaches to quantify impact (Start-up 9). Changes are also observed at the level of traditional investors, who need to prove their sustainable investing ambitions toward their LPs and therefore increasingly demand sustainability KPIs (Start-up 8). Getting investors aligned with the mission, also helps to secure funding from likeminded people, who join the cause because of ideological reasons (Start-up 2, 6, 11). That is why it is important, especially from a start-up perspective, that the financing strategy also includes sustainable aspects (Start-up 1).

#### **4.4 Navigating Stakeholder Relationships through the Mission**

It becomes clear that the development of an *organizational identity with shared values* (n=9) and both *internal* (n=9) and *external stakeholder management* (n=11) are essential for green start-ups to avoid mission drift (Figure ). Organizational values and identity support the way the start-ups portray themselves to the world. Constant interaction with other stakeholders whose diverse needs the start-ups are trying to meet can also impact the mission. By aligning its stakeholder management strategy with its organizational values and identity, a company can act with integrity in the spirit of its mission.

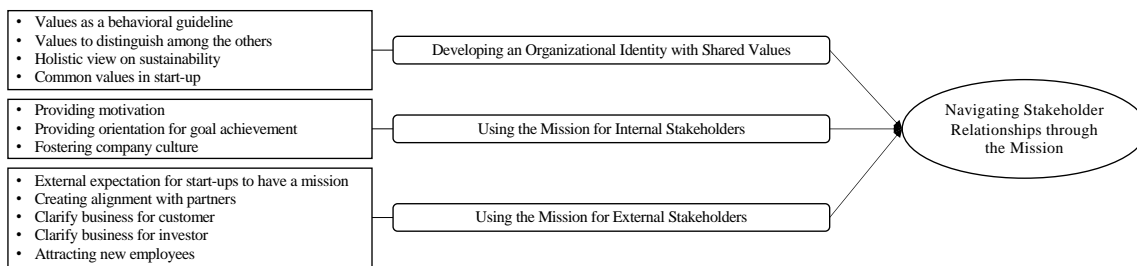


Figure 7: Dimension *Navigating Stakeholder Relationships through the Mission* (own creation)

### Developing Organizational Identity with Shared Values

For the majority of start-ups (n=7), the fundamental requirement for an organizational identity is that the *common values are shared* within the start-up:

“The DNA [of] the company, you define it in the beginning” (Start-up 1).

Here, it is crucial to define the identity as early as possible, for example as a “climate tech start-up, then there is already a very big chance that someone who applies [...] already have that in their thinking” (Start-up 6). All seven start-ups emphasize that organizational identity is composed of the values and mindset of the individuals working in the start-up. In the specific case of green start-ups, this means having a similar *view toward sustainability* (n=3). Through these values and the identity created, the start-up can *differentiate itself from others*: “we embrace our role, we also want this thought-leadership – to always be one step ahead” (Start-up 4). One start-up also reports that organizational values are used as a *behavioral guideline* and thus get further internalized. “Everybody has to have some kind of, let’s call it, blacklist themselves” (Start-up 6), which, in this case, determined, for example, whether to establish business operations in regions where human rights abuses still prevail.

### Using the Mission for Internal Stakeholders

Internally, the mission primarily serves to *provide motivation* (n=4) and *orientation* (n=5) and *foster the company culture* (n=4). Motivation can arise from different levers: For example, one interviewee explains, that comparing the current situation with the envisioned future state creates motivation (Start-up 12). Another founder states that motivation is created by taking up the challenge to achieve the mission. At the macro level, “proving that [we] can build a functioning business model by collecting waste is more of a motivation than a burden” (Start-up 7). Moreover, the common concern that setting financial goals may jeopardize sustainability objectives is “less a form of pressure and more a form of motivation” (Start-up 7). At the micro level, motivation is generated by measuring the start-up’s daily positive impact and tracking the gradual progress towards achieving the mission. (Start-up 7). Communicating the small,

tangible successes (e.g., saved CO<sub>2</sub>) internally, “increases the motivation” (Start-up 3). In contrast, another founder states that their “mission is very ambitious and thought big, which motivates people to always do a little more” (Start-up 9). Next to motivation, several start-ups (n=4) report that they use their mission to *provide orientation for goal achievement*:

“The mission is in any case super important, because you try to derive the goals from it or at least to orientate yourself to it” (Start-up 5).

While the vision is seen as the overarching, long-term goal (Start-up 11) and the “summit of any strategy” (Start-up 9), the mission is how the vision can be operationalized (Start-up 11). This means both deriving actions from the mission but also using the mission to regularly challenge activities (Start-up 9). During the growth phase, conflicts can arise, but keeping the mission in mind helps prevent losing sight of the start-up’s purpose in challenging times (Start-up 6). Only one interviewee states that they “have not explicitly derived corporate goals from the mission” (Start-up 13), but that the mission is simply a matter of “navigating and setting a course” (Start-up 13). The use of the mission statement can help create an internal sales narrative, like a “good internal sales pitch” (Start-up 3). Thus, the strength of the mission lies in “people marketing [...] and creating a great corporate culture” (Start-up 3). This is seen especially important in times of increasing remote work (Start-up 12). In the extreme, the mission creates a sense of “us against them”-*company culture* (Start-up 12).

### Using the Mission for External Stakeholders

Externally, the mission is primarily used to communicate the start-up’s purpose to stakeholders such as *customers, partners, investors, and potential employees*. However, the first concept refers to *satisfying the external expectation for start-ups to have a mission* (n=3):

“When you start a business, you have a checklist of what you need to do, and then it [formulating a mission] just comes up at some point” (Start-up 13).

More than an item on the checklist, it was a process with a management coach for another founder (Start-up 9). In general, there is a feeling that having a mission might be “a bit of a start-up thing since it’s kind of cool and hip” (Start-up 11). This also serves to *use the mission to create alignment with partners* (n=5). One founder shares that their previous work experiences with various partnership models taught them the importance of working exclusively with partners who share the same belief:

“They want what we want, and they want it 150%” (Start-up 7).

This should not only avoid greenwashing accusations (Start-up 1, 4) but also clarify in advance if the partnership is a successful fit (Start-up 8), since each company understands impact goals

differently. Further one start-up explicitly states that they *use their mission in investor relationships to clarify* (n=2) their start-up’s purpose (Start-up 8). Especially in early years, when the topic of sustainability was less familiar for investors (Start-up 8). One start-up states that they would only take on new investors that share the same mission (Start-up 2). The fourth first-order concept is about *using the mission to clarify their business to customers* (n=2) to make it “as simple and tangible as possible for an outsider” (Start-up 2). Particularly working in the B2B environment, where you maintain long-lasting customer relationships, it is used to clarify the start-up’s and customers goals (Start-up 7, 8). Unlike other stakeholder groups, however, there does not necessarily have to be the same mission, but only the serious will to go along with the start-up’s mission. For example, one start-up explains that working with “unsustainable” costumers offers a greater opportunity for real impact (e.g., companies in the oil industry) (Start-up 7). As in current times, people searching more and more for purposeful jobs, start-ups *use their mission to attract new employees* (n=3):

“In order to get employees excited about working for a company, it’s no longer enough to pay them a regular salary; people want to know what they’re working for” (Start-up 12).

If the start-up can provide a higher purpose to follow, this plays out beneficial in hiring new talent, which usually “is the biggest challenge for every small company” (Start-up 3).

#### 4.5 Leveraging the Political and Economic Shift toward Sustainability

Even though the start-ups operate in the external economic and social environment and are dependent on external factors, three start-ups have shown how they proactively *leverage the political and economic movement toward sustainability* for their mission. This is seen with equal shares both on the economic side in the sense of *new funding models that support sustainability* (n=2) and through political *regulations that favor sustainable behavior* (n=2) (Figure 8).

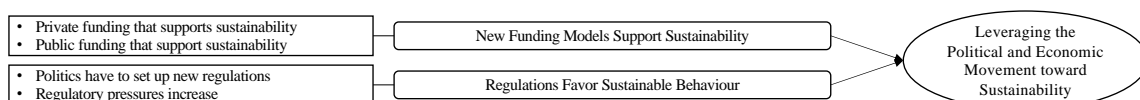


Figure 8: Dimension *Leveraging the Political and Economic Shift toward Sustainability* (own creation)

#### New Funding Models Support Sustainability

According to one start-up, one can clearly see that due to *new fundings models*, money moves in the direction of sustainability: “Something develops [...], there are big funds like

Breakthrough Energy from Bill Gates, for example, where there is a lot of money” (Start-up 6). But also, public funds such as the “Exist Gründerstipendium” (German Entrepreneur Scholarship), saw a start-up as a good opportunity to get financial independence and to fully focus on a “business idea to develop further” without any distraction (Start-up 13).

### Regulations Favor Sustainable Behavior

Public regulations that promote sustainable behavior are seen by two start-ups as an opportunity to keep the start-up on track. Both agree that political pressure should be used to motivate companies to adopt sustainable business practices. While one start-up, which is active in the micro-mobility sector, sees the solution in regulations, i.e., active bans (Start-up 12). For the other start-up, the “solution is clearly political: carbon-tax” (Start-up 13). This corresponds to the approach of indirect behavior control through financial regulation.

## **4.6 Utilizing Personal Values and the Entrepreneurial Identity**

The interviews show that the founder’s identity and personal values serve to avoid mission drift. Hereby, a value that stands out is some founders’ *idealistic belief in contributing to a better world* (n=7) which led them to have *clear impact intentions from the beginning* (n=6). The interviews (n=3) also indicate that a *balance between flexibility and consistency* is advantageous (Figure 9).

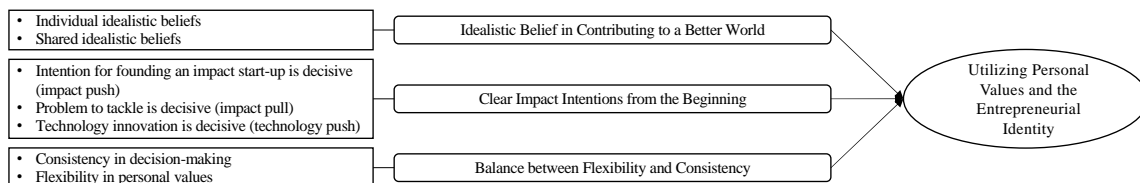


Figure 9: Dimension *Utilizing Personal Values and the Entrepreneurial Identity* (own creation)

### Idealistic Belief in Contributing to a Better World

The founders’ *idealistic belief in contributing to a better world* refers to their strongly anchored conviction to contribute to a better world by founding their start-up. *Individual idealistic beliefs* (n=5) can be created through specific first-hand experience where the founders have been directly exposed to the problem they are aiming to solve (Start-up 7, 10). Other founders did not report these experiences as the trigger to pursue an environmental start-up but nevertheless share the will to “do something good”. One founder explains that the opportunity to make money from his business is secondary to the need for sustainable transformation in the mobility industry (Start-up 1). Other interviewees also report founders’ idealistic beliefs of a better

world as the cornerstone of the start-up (Start-up 2, 4, 10). One founder explains that on the one hand, she believed in plant-based nutrition as an important part of better climate action; on the other hand, her mission was to make plant-based nutrition possible for the Global North under fair conditions for the global south (Start-up 10). Yet another founder directly states:

“[Our mission is] to have a better world, a new world. We want to make it faster, we want to make it more comprehensive, we want to make it more sustainable”

(Start-up 4).

For some start-ups, their personal idealistic beliefs also expand to the internal and external environment creating *shared idealistic beliefs* (n=3). Several interviewees claim their idealistic beliefs to be shared throughout the start-up. One interviewee states that “especially in [his] team, there are a lot of idealists who believe in [the start-up’s] goal and who stick to the mission” (Start-up 12). Another interviewee agrees with having a very idealistic team (Start-up 1) and adds that “having the right people in the team” creates “alignment from the beginning” (Start-up 1). Also, one other interviewee states that everyone working in the start-up has a mindset that would make them refrain from actions just because they “would be opportune and make money” (Start-up 11). In another case, the assumption of the idealistic belief exceeds the start-up boundary, and the idealistic belief is also assumed for the consumers: They “believe in a world where people just are mindful of their environment and only use as much [...] as necessary for their well-being” (Start-up 13).

### Clear Impact Intentions from the Beginning

Having *clear impact intentions from the beginning* describes the founders’ desire for their start-up to make a positive contribution from the very beginning. For several founders (n=3), their internal *Intention for founding an impact start-up was decisive (impact push)* for founding their start-up. One founder states that sustainability had already been overly important for her for over ten years (Start-up 10), while another start-up explains that they had worked on other ventures before “that did not move the world forward in any way” (Start-up 5), which ultimately drained their motivation. Therefore, for them, the decision to launch an impact start-up came first and they began their start-up journey by looking at different markets, analyzing trends, and testing ideas (Start-up 5). A third founder also confirms that deciding on the impact sector comes first and will then reflect in the purpose, vision, and mission of the start-up (Start-up 6). For other founders, the discovery of an environmentally harmful problem led to a desire to create a start-up that would provide a less harmful solution to the problem. For them, the *Problem to tackle was decisive (impact pull)* to start their business (n=3). For one founder, this

problem is the need for more sustainable materials (Start-up 2). This pursuit led to investigating various production methods and technologies, of which one was ultimately seen to have the potential to produce less impactful packaging materials and led to the creation of a start-up to commercialize them. Another founder explains that the purpose of a venture arises from where the needs of the world meet with what the start-up is particularly good at (Start-up 6). One founder also adds that from her experience, it is usually the case that impact start-ups usually do not struggle with designing their mission:

“If the problem you want to solve is clear from the beginning, the question [of how to formulate the mission] does not arise so much” (Start-up 8).

For some founders, the discovery of a new technology in which they saw the potential to offer less environmentally harmful products or services is the driver for launching an impact start-up. Therefore, a new *Technology was decisive (technology push)* led them (n=3) to start their business. This shows, as one interviewee admits that „to be fair, if the question is whether the mission came first or the product, I would say, it was the latter” (Start-up 2). Another founder agrees that they started from the technology they wanted to apply at scale and with great impact, and only later focused on a specific industry that promised to be able to fulfill the ambition (Start-up 6). One interviewee confirms that their product was the result of a research project, and thus it was not the case that they said: “We notice a huge savings potential here, now we will develop something for it” but rather, “Okay, there is a technology that could solve a problem, and, ah yes, this is the problem it solves” (Start-up 13).

#### Balance between Flexibility and Consistency

Keeping a *balance between flexibility and consistency* refers to *consistency in decision-making and flexibility in personal values*. *Consistency in decision-making* is perceived as important for averting mission drift by three founders. In general, the founders perceive freedom of decision-making, despite the possible interest of external stakeholders in decisions affecting the company. For one founder, the ability to maintain freedom in decision-making despite investor interests comes with a certain level of experience (Start-up 1). In general, he perceives it important to stay consistent in one’s decision-making and to have a good basis and good arguments for one’s decisions (Start-up 1). One founder directly states:

“We are entrepreneurs, we can make decisions, we are free, [...] so we don’t have to do everything” (Start-up 4).

For him, that also means that it is possible to counteract potential goal conflicts (Start-up 4). A third founder differentiated different development stages of the start-up when it comes to

decision-making freedom. He believes this freedom to be especially large in the phases before full marked readiness is reached, whereas he suspects that investors to push more toward sales and scaling once marked readiness is achieved (Start-up 5). However, *flexibility in personal values* (n=3) can also be of use to avert mission drift. One founder states that you need to be able to adapt and that “you basically have to have flexibility in your values” (Start-up 1). He bases this point of view on his perception of serial entrepreneurs and that he feels that these “are able to deal with their values in a relatively flexible manner or who can simply define profitability as the top value for themselves” (Start-up 1).

#### 4.7 Designing Organizational Structures for Impact Accountability

Accountability serves as a cornerstone of effective governance, ensuring that individuals within an organization are responsible for their actions and decisions and thus staying on track. This is achieved mainly through *actively designing the mission* (n=10) and *designing the revenue and impact model convergently* (n=12), setting up *monitoring and controlling* (n=13) mechanisms, and *building community-oriented organizational structures* (n=11) that create a foundation for responsible and sustainable growth along the mission while fostering a culture of integrity and trust (Figure 10).

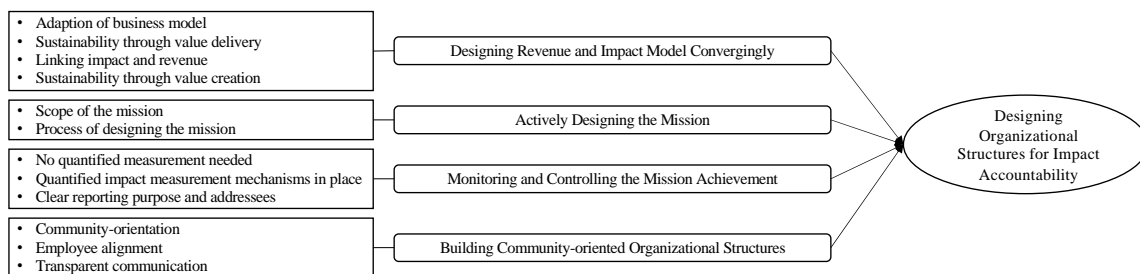


Figure 10: Dimension *Designing Organizational Structures for Impact Accountability* (own creation)

#### Designing Revenue and Impact Model Convergently

The business model is a fundamental aspect of any company’s success, as each of the interviewees stresses. As green start-ups aiming at having a long-lasting impact it is crucial to integrate the sustainable mission into the business model:

“Sometimes the economic goal and the corporate vision can diverge and sometimes they can converge” (Start-up 3).

To achieve this the interviews point out five concepts, which opposes the conflict potential between profitability and impact and “manage to combine it all [...] the more sustainable you work, the better your business works” (Start-up 1). Most are focusing on the typical business



model blocks of creating, delivering, and capturing value: Five start-ups believe it is helpful to anchor the *mission through value creation* by selling a sustainable product. However, the start-up should offer more than just sustainability value: “Combine better profitability with going green” (Start-up 7). Further, it is wise to integrate the *sustainable mission into the value delivery* (n=6) for example by extending the sustainable impact to other stakeholder groups, such as suppliers: “[We] help coconut farmers in the Philippines, [...] through our trade with coconut products they earn more” (Start-up 10). Another emphasis was on linking impact directly to *capturing value* (n=4). In particular, the link between CO<sub>2</sub> and revenue is a frequently mentioned topic: “We earn money with CO<sub>2</sub> storage. [...] In other words, we don't have to differentiate in any way: Do we now concentrate more on earning money or on having an impact, because the two really go hand in hand” (Start-up 8). This is illustrated with the following business model: “1€ means one kilo less waste in the environment. That means our collection performance is of course very closely linked to our revenue targets as well” (Start-up 7). Additionally, three start-ups highlight the *difference between hardware and software-based business models*. There is a general sentiment that software companies find it easier to pivot and adjust their product to different purposes while maintaining its core functionality (Start-up 3, 9, 13).

### Actively Designing the Mission

To stay on track, most start-ups (n=10) stress the importance of *the mission creation process* (n=3) and choosing the right *scope of the mission* (n=7). The process of mission creation is mainly described as a top-down approach (e.g., C-level, CEO or management team). There are different opinions on the right scope of the mission, ranging from complex to simple. One start-up says the mission should be very comprehensive “so that nothing falls short” (Start-up 1), which could ultimately lead to mission drift. The opposite is the opinion of two other start-ups, who are convinced that the key is to have a very simple mission:

“People actually know it [the mission] and it's relatively simple. So, you don't have to remember that much” (Start-up 8).

Another discussion point is the broadness of the mission, where one start-up sees an advantage in not being too specific: “It's basically so broad [...] because it has less potential for conflict” (Start-up 13). This goes hand in hand with the direction of how far the mission reaches into the future. Because “when you feel, we've actually achieved the mission. What comes next? We still have a lot to do. That's why we haven't really had the temptation to move away from the mission yet” (Start-up 8).

### Monitoring and Controlling the Mission Achievement

Not only the mission itself but also sustainability is a vague construct which is difficult to grasp. All interviewed start-ups report that monitoring and controlling the mission achievement is an important but challenging task. Overall, ten start-ups have established *quantified impact measurement mechanisms* within the company, which rather measure the ecological impact than the mission itself:

“Whether you say purpose, mission, or vision, you should ideally derive KPIs from them with which you can measure success” (Start-up 7).

The main measurement criterion (n=7) is CO<sub>2</sub> emissions saved, but also water saved (Start-up 11), saved kilometers driven (Start-up 12) or trash collected (Start-up 7), depending on the business model. The measurement is seen to be a part of doing business, as it is a key contributor to the start-up’s value proposition (Start-up 2). Five start-ups even use the OKR method or comparable method for quarterly measurement and alignment with mission. However, it becomes clear that there is a difference in measuring social or environmental impact: “of course if you’re a climate tech start-up, that’s relatively simply to have tons of emissions saved” (Start-up 6). Only one start-up talks about measuring social or soft factors such as raising awareness for environmental protection or creating safe workplaces for people (Start-up 7). Furthermore, it is important to define a *clear purpose and the addressee* for the reporting (n=6), such as in the course of strategy meetings and goal planning: “Break down the goals to what needs to be done in the next quarter and how does this lead to carry out my mission” (Start-up 6).

### Building Community-oriented Organizational Structures

Creating an organizational set-up supporting mission achievement (n=11) involves implementing *community-orientation, employee alignment, and transparent communication* according to the interviews. The core of *community-orientation* (n=10) is an open culture where employees feel empowered to “always challenge the status quo and see where we can become more sustainable” (Start-up 11) and give the space to “ask again in every weekly meeting, if anyone has any thoughts” (Start-up 8). This not only creates an internal level of accountability but also a second layer of reviewing mechanism. Considering employees as internal auditors of the mission means ensuring that during the hiring process, new individuals align with the start-up's goals and mission: “Especially with the first people it was a very long process, a very personal process, and we also explained to the people in depth what we wanted to do and what we didn’t want to do” (Start-up 1). This ensures that “only people who share the same vision

join” (Start-up 2) creating a: “team-fit so that core values such as sustainability are also present in the people” (Start-up 13). Beyond that the start-ups need to maintain this team-fit over the long term by actively investing in *employee alignment* (n=7). Start-ups fulfill this through a mission-oriented onboarding process of new employees (e.g., through scorecards) (Start-up 9). But also, in the long-run, the founding team is expected to carry the mission into the organization through active leadership:

“So really getting that into the heads of the employees is the hard part and then also implementing it day to day” (Start-up 11).

In particular, due to increasing remote work (Start-up 12) as well as rapid personnel growth (Start-up 7), founders must be able to actively “change the mindset in your team quickly” (Start-up 1). To achieve this leadership style, *transparent communication* is the main tool (n=6). Start-ups often prefer verbal communication over written communication: “Whether I save it as a PDF or not – if this is implicit knowledge and everyone adheres to it, that’s enough, I don’t need to pour every topic into a guideline” (Start-up 13). Continuity is particularly important here, but variations were observed in the frequency and formalization: Some start-ups held monthly team meetings to discuss the mission and stay connected (Start-up 8, 12, 13). Another founder (Start-up 7) emphasizes the significance of weekly one-on-one meetings with employees to ensure alignment and progress together. In addition to verbal communication, two start-ups use the reporting numbers visually to make the mission alignment more tangible: “We have a board like that in the office where then the latest result is, so you can just see that” (Start-up 13).

#### **4.8 Attitude toward Conflicting Logics**

The eighth dimension describes neither a cause nor action strategy against mission drift but focuses on the start-ups’ attitude toward conflicting logics that come along with pursuing a twofold mission. This may mean that start-ups deliberately *choose one logic over the other* (n=8), that they choose to *make compromises* (n=11) to satisfy both equally or, that they *do not see a conflict in pursuing two logics* (n=4) (Figure 11).

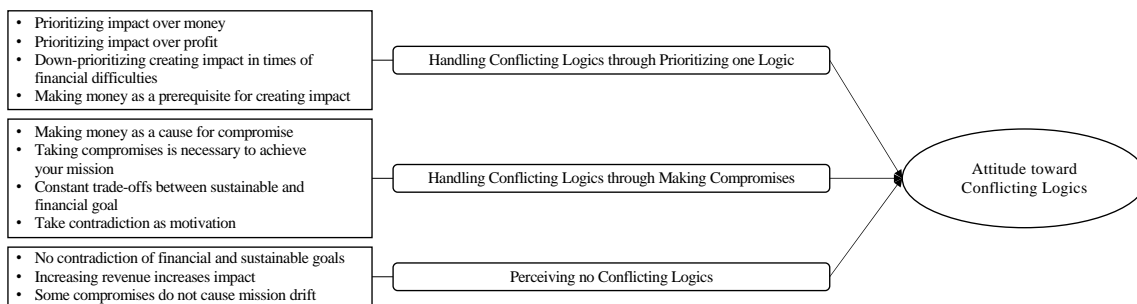


Figure 11: Codes and Themes of the Dimension *Attitude toward Conflicting Logics* (own creation)

### Handling Conflicting Logics through Prioritizing one Logic

Two start-ups state that they *prioritize impact over money*, hence over generating profit: “Because it's not about selling 20,000,000 e-scooters [...] you can offer the same number of journeys with far, far fewer vehicles, if you go into sharing” (Start-up 12). On the other hand, the experience of a start-up that stuck to its mission until bankruptcy shows the possible negative consequences of putting impact before profit: “it certainly would have been good for the start-up’s long-term success if we had decided earlier to go in a different direction” (Start-up 1). Particularly in financially difficult situations like this, three start-ups vote in favour of *down-prioritizing impact*. This means:

“As long as everything is going well financially, you can also take care of environmental issues [but that] the moment things get tough financially, everything else falls by the wayside” (Start-up 1).

During difficult times, start-ups refer to it as “going into survival mode” (Start-up 1, 10). In this mode, the primary focus shifts away from the mission and centers around implementing essential measures to restore the start-up's stability and enable it to resume working towards its mission (Start-up 1): “In such an extreme situation, [...] you must of course [...] pay attention to the fact that the company itself continues to exist” (Start-up 2). As sustainability can be defined in the triple bottom line through the even interweaving of “People, Planet, Profit” *generating profit is a prerequisite for creating impact* (n=6):

“It is perfectly clear that in order to be successful in the mission in the long term, [we] simply have to be profitable as well” (Start-up 12).

As a result, if their business generates profit, they can create a positive impact (planet) and jobs (people) (Start-up 7). In addition, one sees the advantages of financial independence: “as long as you are making money, the investor will never interfere” (Start-up 3).

### Handling Conflicting Logics through Making Compromises

Compromises require finding a balance between conflicting priorities, *such as making money*, to find a middle ground or giving up certain aspects (n=3): This can be for example, focusing on the more willing to pay customer group (Start-up 5) or choosing the less sustainable supply option (Start-up 1). The start-ups accept compromises in the scope of achieved impact to still ensure profitability:

“If you want to earn money of course, sometimes you have to compromise”

(Start-up 10).

In fact, *making compromises is necessary to achieve the mission* (n=4) as one founder states “you cannot do all things at once, it is more of a step-by-step approach” (Start-up 11). An extraordinary case shows a start-up where compromises were made, especially during challenging financial times. As the financial difficulties increase, the compromises become more significant. Eventually, these compromises no longer align with the values originally set by the founders and their team: “we have aligned team very strongly [...] very, very strongly to the environmental aspects – and then to turn around this team again, that has definitely been a problem” (Start-up 1). Excessive idealism led to financial underperformance in this case, and as the founders made compromising decisions to address the situation, the start-up eventually had to declare bankruptcy. As a result, they are no longer able to pursue their mission. For more than half of the start-ups (n=7), balancing the two conflicting logics means making *constant trade-offs between sustainable and financial goals* and hence also an alignment of idealism and realism. While one interviewee does not see “a clear conflict of goals” (Start-up 2), another one sees a dynamic in which the financial goal and the sustainable mission can sometimes diverge and converge (Start-up 3).

“There will always be contradictions, but you discuss it, and, in the end, you find a solution” (Start-up 13).

Moreover, two founders explain how they draw *motivation from finding a good compromise for conflicting goals* (Start-up 7, 12). While one start-up has found a new field of application through emerging compromises (shifting the business model from ocean to river clean-up, (Start-up 7), the other is consistently trying to reduce emissions along its own supply chain: “rather take the contradiction as motivation to find creative solutions” (Start-up 12).

### Perceiving no Conflicting Logics

Some start-ups (n=6) *do not see any conflict between the profit and impact*, as “there are not so many aspects where economic and environmental aspects contradict each other” (Start-up

12). On the one hand, this could be because in their business model, increasing positive impact also increases revenue or vice versa (n=3):

“In fact, it is a quite nice harmony: If you create impact, then that also shows that the solution is well received and, accordingly, the financial side as well. [...] Accordingly, the more impact we achieve, the higher the economic success” (Start-up 5).

On the other hand, the potential contradiction is seen rather as a motivation to *satisfy two logics at the same time: Creating impact and generating profit* (n=2): “proving that we can build a functioning business model by collecting waste is more of an incentive than a burden” (Start-up 7). Further not all *compromises jeopardize the mission*. Constant small trade-offs are considered usual in doing business (Start-up 8). But also, bigger compromises such as adjusting the business model does not always need to endanger the mission (Start-up 5, 7). On the contrary from an initial compromise, a positive opportunity can occur: Working with “unsustainable” customers can, for example, bring greater leverage of impact (Start-up 6, 7).

#### 4.9 Enhancing the Start-up Perspectives through Investor Insight

One of the most important stakeholder groups for sustainable start-ups are investors as they were mentioned by almost all the interviewees (n=11). Therefore, it makes sense to keep a close eye on this relationship to check whether it has an impact on mission drift in sustainable start-ups. This stakeholder relation is further examined by triangulation with data from three investor interviews (Table 3).

Investor	Type of investor	Role	Investment focus	Perception of mission drift	Citation I = Interviewer; IN = Investor
1	BA	BA	Pre-Seed	Yes	I: “[...] the mission of the start-up changes over time?” IN: “Yes.”
2	VC	Head of Research	Seed-/Pre-Seed	No	I: “[has] the mission of the start-up [...] remained the same for the time being?” IN: “Yes.”
3	VC	Venture Partner	Seed-/Pre-Seed	Yes	I: “has the mission of the start-up changed again over time?” IN: “[...] the basic idea, what they once had in mind, usually doesn't change.”

Table 3: Investor Characteristics (own creation)

Despite the small number of investor interviews, the findings are compared to the start-up interviews to assess overlaps in the perception of mission drift. As Table 3 shows, the interviewees only partially perceive mission drift in start-ups. Even in the case of the BA, which

is focused on pre-seed and therefore usually invests in rather immature start-ups. This is reflected in the indifferent attitudes that investors have towards mission drift: At the time the investment has already been made, the investors are committed “in for a penny, in for a pound” (investor 3), as the alternative would be a loss of the investment.

“We essentially invest in teams and solutions, and then basically not so much should happen [as far as the mission is concerned]” (investor 2).

Thus, they invest in start-ups that have already matured to the point where the mission has already been established. Conversely, the start-up interviews reveal a significant dependency on investors, highlighting their prioritization of profits: “As an investor, you want to have some kind of [financial] return” (investor 1). The focus is on growth and scaling to survive in the capitalist system. Nevertheless, “if one invests in something that also creates sustainable added value” (investor 3), this is a positive step towards achieving sustainable profitability. The investor considers the rise in government funding allocated to sustainability as a potential factor contributing to the ongoing shift towards sustainable practices. In addition to the general trend towards more sustainability in business, changes in the investor landscape is also raised as an important point by both start-ups and investors. All three investors describe that the last high phase with “cheap money”, low interest rates and sometimes very extreme valuations, is currently being followed by a phase in which investments are being examined more closely. Causes include the energy problem triggered by the war in Ukraine (investor 1). For example, it is evident, that the already male-dominated VC ecosystem continues to invest based on its established patterns and tends to abstain from investing in ventures led by women or black female founders (investor 2). Because a great deal in this area is based on networks and personal connections, many investors follow the consensus in terms of market development and thus reinforce the “unsustainable” system (investor 3). Moreover, it is also important to ask how investors deal with different logics and how they manage to compromise. From an investor’s point of view, it is particularly easy for start-ups that declare from the beginning that they do not want to be a “capitalist VC start-up” (investor 1) to follow a sustainable logic, because they exclude the strong growth-driven, scaling mindset from the outset. Yet, it is also noted:

“When financial difficulties arise, that is when sustainability goals take a back seat” (investor 3).

Therefore, investors consider it increasingly crucial that sustainability is embedded in the product (investor 2) and is present in the core DNA of the company (investor 3).

#### **4.10 Summary of the Empirical Findings**

The results show that about 30% of the respondents perceive a “mission drift” in their start-ups, while the majority (70%) do not attest this to their start-ups. This assessment does not necessarily agree with the start-ups' assessment of the general changeability of the mission. The results further highlight potential causes for and action strategies against mission drift in green start-ups. In a profit-oriented economy, start-ups face major challenges in maintaining their mission as the profit-focused nature of the capitalist system is seen as a barrier to prioritizing sustainability over financial goals. Growth and scaling pressures in response to market demand can drive start-ups away from their sustainable mission. Here, however, start-ups of higher maturation exhibit more certainty in their mission, while early-stage start-ups may pivot more frequently. On the other hand, too strong an adherence to their sustainable mission led some start-ups to restructure in the form of mergers or sales or to file for bankruptcy. The dominance of financial goals is also reflected in the start-ups' dependence on investors. While some investors agree that sustainability should be embedded strongly in a start-up's business model, they also see that financial difficulties can overshadow sustainability goals. Toward mission drift, the attitude of investors seems to be indifferent, as they have already invested and are committed to the success of the start-up. On the other hand, an increasing political and economic shift toward sustainability allows some green start-ups more leverage. It seems important to design business models in which sustainability and financial goals converge. The mission's design is usually shaped by the founders' personal values and entrepreneurial identity, often characterized by an idealistic belief in contributing to a better world. Internally, the mission is used to build an organizational identity with shared values as it can provide motivation, offer orientation, and foster a strong corporate culture. Externally, the mission support stakeholder management as it is used to communicate the start-up's purpose to customers, investors, partners, and potential employees. Strong alignment with external stakeholders is sought to prevent mission drift. The use of the mission was also mentioned for internal and external reporting on target planning and reporting. Finally, the start-ups' different attitudes toward compromise each have different implications for mission drift. Some start-ups do not perceive conflicting logics as in their business models, increasing positive impact leads to increasing revenue. In contrast, other start-ups constantly have to make trade-offs and align idealism and realism to balance being profitable and creating impact. Hereby, some start-ups prioritize creating impact over profit and growth and are willing to sacrifice profit potential to follow their mission.



## **5 Discussion**

The discussion connects the empirical findings (Chapter 4) with the theoretical background (Chapter 2) to address the research question, specifically focusing on how mission drift may happen in green start-ups, the factors contributing to mission drift, and the strategies used to prevent it. Additionally, the discussion adds value through the application of triangulation data in two ways: Exploring whether certain start-up characteristics indicate the likelihood of mission drift in green start-ups and examining the alignment of investor perceptions with start-ups' views on mission drift occurrence.

### **5.1 Bridging the Gap between Theory and Practice on Mission Drift**

As the theory on mission drift is in general not only scarce but also mainly focuses on social start-ups this chapter investigates how the causes and action strategies for green start-ups in practice are linked to those suggested in theory. The a priori framework (Figure 1) retrieved from the social start-up literature, shows a two-sided, static picture of mission drift focusing primarily on the causes of and the action strategies for mission drift, resulting in six dimensions for each side. On the other hand, the final coding structure (Figure 3) based on the empirical findings from the green start-ups shows a total of eight aggregated dimensions. Combining the two findings results in a new structure (Figure 12) illustrating the similarities and differences between theory and practice. Each identified connection of dimensions is explored in detail in the Appendix 8.4 since it would go beyond the scope of this discussion. This chapter summarizes the findings by giving some general remarks in the following and explaining how the causes and action strategies are intertwined.

First, since there are four dimensions on the action strategy side and only two on the causes side, this implies that in practice the focus lies more on the reactive side taking the start-up in the responsibility. While clearly less attention is paid to the reasons why potential mission drift occurs in reality, green start-ups take up more awareness on how to actively stay on track on the mission and thus prevent mission drift. The focus on action measures could also indicate that start-ups are more obviously seeing and perceiving what they are doing rather than potential threats caused by inaction. For example, in practice, it is clearly seen that the personal identity of the entrepreneur can prevent mission drift, while theory also clearly sees this as a potential cause of mission drift (Vanoorbeek & Lecluyse, 2021).

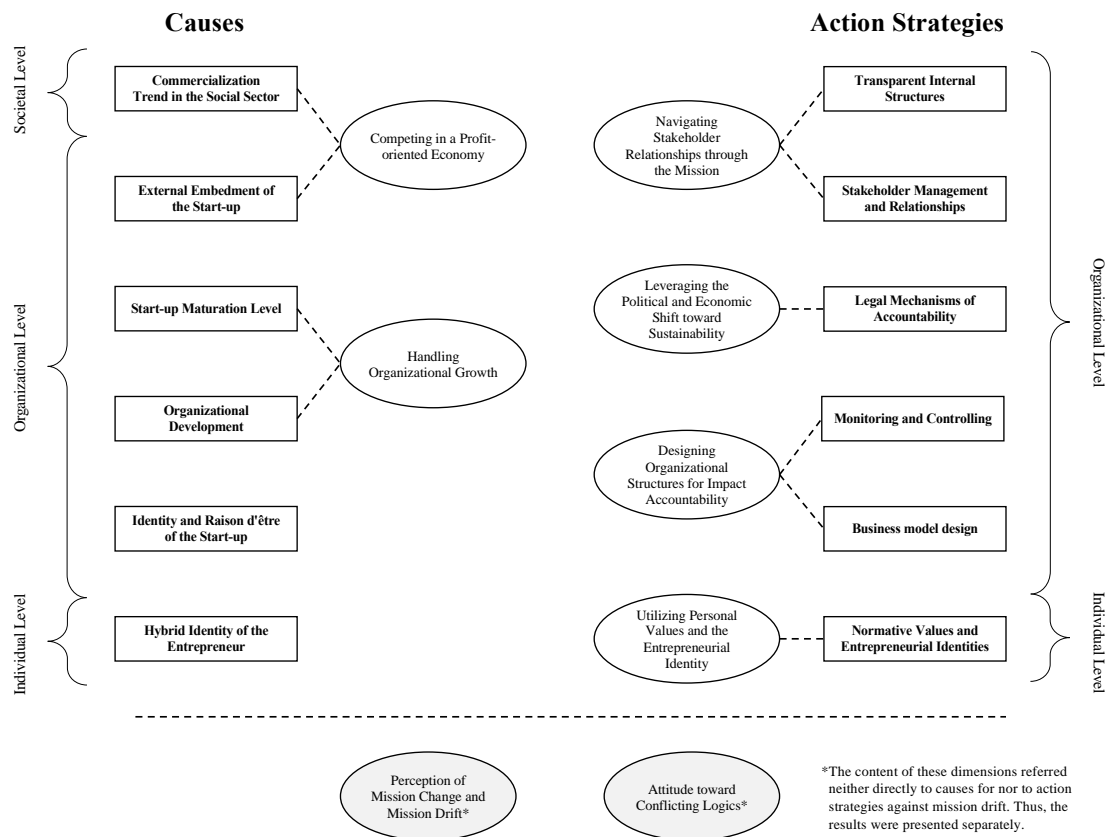


Figure 12: Dimensions from the empirical study compared to the dimensions from the theory (own creation)

Second, the figure shows that two causes found in theory, namely *Identity and Raison d'être of the Start-up* on the organizational level and *Hybrid Identity of the Entrepreneur* on the individual level, are not observed in reality. This implies that in green start-ups, neither the start-up identity nor the entrepreneur is seen as potential causes for mission drift. Instead, both are seen as a way of successfully staying on mission track. Considering that the theory is mainly based on social entrepreneurs, which care about the well-being of people (Peredo & McLean, 2006), whereas green entrepreneurs deal mainly with the well-being of the environment (O'Neil & Ucbasaran, 2016), this might bear stronger personality of change agents. However, it may also be that these causes are less addressed as the authors mostly talked to the founders. Because values and identity are a sensitive issue, it is conceivable that naturally people try to protect their *raison d'être* and rather blame external factors, such as capitalist market structures.

Third, the figure shows that there are two new dimensions that could not be found in theory but discovered in the investigated real-life cases of green start-ups: *Attitude toward Conflicting Logics* and *Perception of Mission Change and Mission Drift*. Since these do not fit directly into the framework of causes and action strategies, they will be discussed in more detail within the further course of the chapter.

Looking at the practice showed that the start-ups have more experience in measures to prevent mission drift and stay true to their mission, rather than strategies designed to counteract mission drift that has already taken place. This finding is also backed by theoretical assumptions, which so far also focus mainly on prevention measures (Mair & Marti, 2006). However, this ex-ante perspective makes it difficult to establish a causal link between the causes of mission drift and the actual effectiveness of the intervention measures. But still, as mission drift is described as a slow, ongoing process (Siegener et al., 2018), which is hard to detect for start-ups (Grimes et al., 2019), it appears logical to focus on prevention in the first place. Contrary to Pache and Santos (2013), who criticize the static nature of action strategies, the practical experiences highlight the benefit of stable guidance in a volatile environment. Especially in the volatile world of start-ups, it's advantageous to pursue a long-term mission rather than get back on track with flexible, one-off action strategies. Start-ups experience intense growth phases while scaling up, which can lead to mission drift (Bocken et al., 2014; Hockerts & Wüstenhagen, 2010). For this reason, it is helpful to *design organizational structures for accountability* from the outset and to integrate them into the business activities to *handle organizational growth*. For example, if the mission and impact promise are already deeply embedded in the business model, then the impact of organizational growth and scaling will be positive as it supports achieving the mission over the long term and at scale. Therefore, it is not to be underestimated to strive from the beginning to create structures that serve as a guideline and put the start-up in the right position to prevent it from drifting.

Many start-ups see *competing in a profit-oriented economy* as an unavoidable choice and as a double-edged sword. With their twofold focus on both impact and profit, they are at a disadvantage in the pure profit-oriented economy and, at the same time, actively choose a for-profit legal and thus expect benefits from playing in the same system. Since entrepreneurship in itself embodies capitalist thinking, it seems fatal to take oneself out of it and put oneself in the victim role. For this reason, it makes sense for start-ups to actively look at the benefits of the system, rather than the drawbacks, by *leveraging the political and economic shift toward sustainability* for their benefit. This also applies in general to the start-ups' *attitudes toward conflicting logics*. However, this can be seen less as a preventive measure and in practice is used much more as a justification when deviating from the mission. Hence, this issue represents both cause and action strategy and cannot be clearly categorized.

In the *profit-oriented economy*, the start-ups also encounter different stakeholder such as business partners or investors, which are especially important for the organizational growth

and scaling. To prevent the mission from drifting in times of growth, when new external demands are made, the active management of relationships with stakeholders undoubtedly plays a key strategy. The long-term management of relationships is recognized in theory as well as in practice.

In contrast to the enormous attention given to the issue of *personal values and entrepreneurial identity* in practice, it hardly matches any of the reasons for mission drift identified in theory. But even if at first glance, *personal values and entrepreneurial identity* do not address a specific cause, this is nevertheless of great importance, as it can be seen as the foundation of all other prevention measures. Thus, a value-based identity is naturally reflected in the exchange with stakeholders and helps to derive and justify the organizational structures. It turns out that the identity theme has many points of contact and must constantly exist in the context of a volatile environment, so it can only serve as a helpful foundation for avoiding mission drift if it strikes the necessary balance between stability and flexibility. That is, if the identity and value are too solidified, it can still jeopardize mission fulfilment because necessary adjustments are overlooked or external factors cause an identical crisis (Grimes et al., 2019). This refers to the fine line that Klein et al. (2021) describe as mission drift being perceived as either a “perception of inauthenticity or a perception of responsiveness to external institutional environments” (p. 660). After all, it is demonstrated that the two causes of mission drift stated by the start-ups can be addressed through various action strategies at different levels, ranging from the individual to the organizational level. This broad spread of strategies ensures that at least one may address the causes effectively. However, none of the measures is purposely designed for preventing mission drift and matching one of the named causes, which thus appears to be more of a fortunate side effect.

## **5.2 Attitude toward Conflicting Logics**

As green start-ups are per se defined by serving financial goals and environmental goals, these logics are at the core of their *raison d'être* (Meek et al., 2010). Moreover, it is precisely this balance of different logics in their mission that distinguishes green start-ups as a hybrid form from pure for-profit companies and non-profit organizations (Loscher & Kaiser, 2022). For this reason, it is hardly surprising that this topic has received a great deal of attention in practice and all the more remarkable that this topic has been mentioned little in the literature under the aspect of handling mission drift. As mission drift is likely to be present in organizations that operate under multiple competing logics (Pache & Santos, 2021), the attitude toward

conflicting logics is the basic prerequisite for perceiving mission drift in the first place and thus actively counteracting it. The fact that most start-ups do not see a contradiction but rather a competition of different logics makes it difficult to raise awareness of mission drift. Moreover, this competition is actually considered valuable as compromises inspire new ideas. This is also in line with what Jay (2013) and Klein et al. (2021) state. It also shows that the balance between financial and environmental goals sought in theory cannot be pursued generally but consists of the sum of small individual decisions. Within these countless individual decisions, one logic is prioritized over the other, depending on the situation. So, while a conflict may very well be seen for individual decisions, a balance can still be achieved in the long run. This requires a certain flexibility regarding the start-up identity, which should not be fragilely endangered by individual decisions, but should adapt to changing circumstances. This is also strongly related to the way the issue of greenwashing is dealt with (de Freitas Netto et al., 2020). Start-ups must be aware that even such a single decision can very quickly lead to accusations of greenwashing if unauthenticity is perceived by external stakeholders. After all, an identity of integrity always arises from the interplay of how third parties interpret the situation (Klein et al., 2021). That is why the attitude toward conflicting logics should not be considered from a start-up perspective alone and therefore not detached from the complex network of stakeholders and the external environment they are operating in.

### **5.3 The Double-edged Perception of Mission Drift by Green Start-ups**

The findings reveal that out of the 13 interviewed start-ups, four perceive a change of their mission as mission drift, while the others do not attest mission drift to themselves. This is closely linked to the start-up's attitude toward changeability of their mission. As the analysis shows, there seems to be two mindsets, when it comes to changeability: The mission is seen as unchangeable, or the mission can be adapted. This adaptation can be due to external pressures, the general business performance of the start-up or the overall fulfilment of the mission. To understand how and why these two perspectives coexist, it is important to remember the distinction between mission change and mission drift. Mission drift is different because this drift is unintentional, while mission change refers to a more deliberate adaption through a change process (Loscher & Kaiser, 2022). This raises the question of whether start-ups are able to make this distinction and adequately assess whether there is "just" mission change or mission drift in their start-up. Especially since mission drift, which is characterized by the dominance of financial goals over sustainable goals (Cetindamar & Ozkazanc-Pan, 2017), can be perceived as particularly negative for green start-ups and can become a reputational risk due to

greenwashing accusations. Yet, in the complex and turbulent environments in which green start-ups operate, adaptability is seen as essential and it is seen as unrealistic to maintain a one-time established mission (Ometto et al., 2018). It is therefore legitimate to ask whether the nine start-ups that report not experiencing mission drift actually did not. As already shown in Chapter 2.2.4, assessing mission drift is a challenging task and there are currently no standardized methods for doing so. Nevertheless, to get a sense of whether the phenomenon was present in the start-ups surveyed, an assessment regarding mission drift was made (Table 4). This assessment is based on the analysis of the transcribed interviews and the use of secondary data such as the company website. The authors find that the self-assessment of start-ups regarding mission drift (column 2) overlaps with the authors' assessment (column 3). Trying to find a pattern with regards to the industry (column 4), the age of the start-up (column 5), their legal form (column 6), or the amount of funding (column 7), do not reveal any linkage. However, out of the four start-ups that see a mission drift within themselves, three of them are confronted with fundamental difficulties, which may have been the cause for the mission drift. Two of these are ongoing insolvency proceedings and one is a merger. So, it turns out that mission drift is more likely to occur in these extreme situations where the very survival of the start-up is at stake. Particularly interesting here is the case in start-up 1, which shows that if the mission is adhered to for too long and too strongly, it may in doubt be too late to make a mission adjustment and achieve economic success which would allow for the very basic survival of the company and thus for following the mission at all. However, here, the question arises as of which is the better case: Adjusting the actions so much that the actions are potentially no longer in line with the mission, but having saved the start-up or refraining from too many adjustments and not compromising on the original mission, but then giving up the venture?

Start-up	Mission Drift yes/no?		Industry	Founding year	Legal form	Funding (Mio US \$)
	Self-perception	Author's perception				
1	yes	yes	Mobility & Transportation	2021	GmbH	Undisclosed CB: Seed
2	yes	yes	Industry & Manufacturing	2017	AG	10.4
3	no	no	Carbon Tech	2021	GmbH	Undisclosed
4	no	no	Energy	2020	GmbH	Undisclosed, CB: Seed
5	no	no	Carbon Tech	2020	UG	Undisclosed, CB:Seed
6	no	no	Carbon Tech	2021	GmbH	Undisclosed, CB: Pre-seed

7	yes	yes	Food & Land & Water	2016	GmbH	0.3
8	no	no	Food & Land & Water	2020	GmbH	Undisclosed, CB: Seed
9	no	no	Buildings	2019	GmbH	Undisclosed CB: Seed
10	yes	yes	Food & Land & Water	2008	GmbH	Undisclosed
11	no	no	Food & Land & Water	2015	GmbH	15.2
12	no	no	Mobility & Transportation	2018	SE	647
13	no	no	Energy	2016	GmbH	1.6

Table 4: Comparing the Start-ups' and Authors' Perception of Mission Drift (own creation)

In the start-ups where no mission drift is attested, the question arises as to whether the start-ups' attitude toward the changeability of the mission is related to this. As a mission is inherently dynamic and requires a certain degree of flexibility and adaptability (Grimes et al., 2019), adapting its mission has proven to be one of the ways these start-ups meet changing external requirements. They constantly evolve the mission to stabilize the congruence between the organization's actions and the expectations of various external stakeholders (Loscher & Kaiser, 2022). For those start-ups, that do not perceive mission drift, a deliberate change of mission seemed desirable, especially if the company does not develop as expected. They are aware that their mission is changeable, yet they only expect serious adjustments to the mission once the start-up's mission will be realized. An intentional adjustment should ensure long-term success in both logics instead of a barely noticeable drift, where it only becomes apparent later that financial goals have already gained the upper hand and sustainability is pushed into the background.

#### **5.4 The Investor's Perspective on Mission Drift in Green Start-ups**

The investor relationship is emphasized by almost all start-ups, which indicates that there is some kind of tension in this stakeholder relationship. One possible explanation for this is the fundamental tension that green start-ups must balance profitability and the sustainable goals of their start-up (Elkington, 1998). Yet, most investors are primarily motivated by the prospects of financial profits from their investment, which potentially leads them to focus primarily on the economic objectives of their investments while sustainability is given less attention (Bergset & Fichter, 2015). This is also reflected in the results of this study, in which different attitudes among investors in relation to sustainability are observed from the start-up's

perspective (Chapter 4.3). These are: The prioritization of profits, sustainability as an opportunity to earn money and equal treatment of sustainability and profits. As the results show, many start-ups are also subject to these logics, because they are financially dependent on their investors. A possible explanation for this is the significantly longer and deeper “Valley of Death” green start-ups need to overcome (Balachandra et al., 2010) due to the novelty and originality of their business idea (Bocken et al., 2014). The literature points out that the relationship between investors is easiest when they have a similar attitude toward sustainability as the start-up. Because in this case, the information asymmetries in relation to sustainability goals between the start-up and its investors are low, which are considered problematic in the literature (e.g., Cumming et al., 2016; Ghosh & Nanda, 2010). However, the opposite is also reported by one start-up (start-up 5), which poses the question whether there is actually a connection with the investor’s attitude to sustainability.

To further understand the results of the investor interviews, the findings will now be discussed in the context of the results of the start-up analysis and the relevant theory. There seems to be a strong overlap in terms of the investors’ and the start-ups’ opinions. The greatest overlap was found in the dimension *Competing in a Profit-oriented Economy* (including its second-order themes and first-order concepts) and parts of the dimension *Attitude toward conflicting logics* as well as in the themes of *Organizational development in a hyper-growth environment* and *New funding models that support sustainability*. It seems plausible that the greatest overlap is in the dimension *Competing in a Profit-oriented Economy*, because that is the underlying system in which both start-ups and investors operate in. Especially in traditional entrepreneurship, there is a focus on profit (Schumpeter, 1934), which explains why this is a logic that investors follow, and that also sustainable start-ups feel subjected. As one start-up puts it: “In the economic system we have, there is no other way than for financial goals to be in the very first place” (Start-up 1), which is resonated by the investors (e.g., investor 2). However, in sustainable start-ups in particular, sustainable goals in terms of environmental and social sustainability are additional logics that they must consider alongside financial goals (Battilana & Lee, 2014; Pache & Santos, 2013). This points to the dimension *Attitude toward conflicting logics*: In a market that is trimmed to reduce costs to maximize profits, it is extra difficult for sustainable start-ups to follow these “additional” logics (Start-up 2, 10). As one investor puts it: “How much is the issue of sustainability integrated? [...] to what extent is it a “must” or a “can” issue for the company?” (investor 3). This confirms that sustainability should ideally be integrated directly into the business model and thus the business model must be built



around a sustainable value proposition (Porter & Kramer, 2019; Stubbs & Cocklin, 2008), as this is a way to create value that is more resilient and adaptable to changing market conditions, customer preferences and environmental constraints (Bocken et al., 2014). This is also evident in the theme *Organizational development in a hyper-growth environment*, where one investor again strongly emphasizes the interest of VCs in scaling (investor 2), which shows once again how much the focus is on economic targets. But as one start-up notes, “scaling is always very cappa-intensive [capital-intensive]” (Start-up 2), which leads to the problem of financing. Sustainable start-ups are typically facing a more extended commercialization process and higher capital outflows, resulting in a more prolonged and challenging “Valley of Death” (Balachandra et al., 2010). This must be bridged by green start-ups, but traditional investors see funding sustainable start-ups as a risk for precisely this reason, which makes financing this prolonged “Valley of Death” a significant challenge (Lehner & Nicholls, 2014). This is confirmed through the start-up interviews, for example: “Because we manufacture in a completely new process, this means that there is a greater degree of uncertainty in the planning processes” (Start-up 2), pointing toward the originality of sustainable enterprise with regards to their innovative, socially disruptive, and environmentally friendly technologies, processes, and business models (Bocken et al., 2014). This makes it harder for investors to understand these novel concepts (Zimmerman & Zeitz, 2002) and often leads to the extended commercialization periods (Bergset & Fichter, 2015). However, if, as already described, investors are driven by greed for profits, it is difficult for the sustainable start-ups to attract appropriate funding. From an investor’s point of view, a possible change results from *New funding models that support sustainability*, which refers to a new form of funds that can only invest, if it is actually sustainable (investor 1).

## **5.5 Mission Drift – So what?**

Before answering the question of how mission drift occurs in green start-ups, it is important to determine if it occurs at all. Researchers and practitioners should avoid making assumptions and instead focus on collecting objective data and conducting comprehensive analysis. To determine the presence or absence of mission drift in green start-ups (Kwong et al., 2017), a thorough investigation of various factors, including interviews with founders, analysis of organizational documents, and assessment of actual behaviors and outcomes is required. The need to empirically prove the existence of mission drift can move the discussion from speculative assumptions to evidence-based findings, allowing for a more nuanced understanding of the dynamics and facilitating the development of targeted strategies to

effectively address mission drift. During the coding process, the authors encountered difficulties in drawing a clear line between causes and action strategies related to mission drift in green start-ups. This challenge suggests that the relationship between causes and action strategies may not be a straightforward, black-and-white differentiation but rather a more complex interplay (Reeves & Deimler, 2012). As the analysis shows, mission drift in green start-ups is often influenced by a variety of factors such as *competing in a profit-oriented economy*, *handling organizational growth*, *navigating stakeholder relationships*, or *utilizing personal values and entrepreneurial identity*. Even though these factors are assigned to either the causes or the action strategies side in Figure 12, this is based only on the stronger affiliation. In fact, however, it is shown that the factors can simultaneously be causes of mission drift, but also triggers for action strategies aimed at counteracting mission drift. For example, stakeholders such as investors may be the cause of mission drift, while partners who share the same sustainable goals might strengthen the resistance to mission drift (Agrawal & Hockert, 2019). Because of these interdependencies, it is difficult to isolate the individual causes from the corresponding action strategies used to address or adapt to them. Rather than focusing on distinguishing causes and action strategies, a more fruitful approach might be to examine the compromises made by green start-ups (Chapter 4.8). Shifting the focus to compromises acknowledges the dynamic nature of mission drift and the inherent complexities involved in maintaining alignment between mission and goals (Pache & Santos, 2013). It recognizes that green start-ups often face competing demands and must navigate a complex landscape where idealistic beliefs meet practical realities (Leendertse et al., 2020). One possible approach would be to view mission drift in green start-ups as less of an obvious change in the stated mission (Klein et al., 2021) and more as a deviation from the goals associated with the mission. In favor of complying with external interests or restrictions, the goal achievement may be compromised and hence, the fulfillment might also be challenged or delayed, while the overall mission might not change. The applicability of this approach is also strengthened by the fact that most of the start-ups surveyed state that they do not perceive any drift in the mission. Only a few exceptions acknowledge its presence. It seems that the mission itself has remained unchanged in the start-ups, but some of the start-ups have deviated from the goals associated with that mission as already indicated above. Some start-ups are still aligned with their overarching mission but have experienced challenges in achieving the specific goals associated with that mission. That or that start-ups have not attested mission drift may also be due to how start-ups would conceive of mission drift. Is it the obvious change in the mission statement? Or is it rather the increase in compromises, i.e., actions that are no longer in line with the mission? In the latter case, the

question then arises at what point the compromises are so incisive that, viewed from the outside, one would have to say that they are no longer compatible with the mission. However, if the consequence are to abandon the company altogether, the entire mission would also be abandoned. And so, start-ups justify compromises to the point of insolvency by saying that without these compromises, the entire sustainable endeavor would be abandoned. This leaves the question of what is worse: Start-ups that still contribute to the sustainable transformation but must compromise on their mission due to external demands, or start-ups that terminate their sustainable ambitions as they would have to make extreme compromises to fulfill their mission. Hence, it is of question whether the focus should lay on the mission (Klein et al., 2021). The findings rather suggest that while the mission serves as a guiding principle and core value for the start-ups, it is equally important to pay attention to the goals derived from this mission and the actions taken. As it seems unavoidable to the majority of green start-ups to make some sort of compromises, the start-ups would do good by focusing on the trade-offs made and their implications, and by identifying strategies that help to maintain the mission while adapting to changing circumstances.

## 6 Conclusion

This master's thesis sheds light on the complex topic of mission drift in green start-ups. The aim has been to answer the research question of how mission drift occurs in green start-ups and thus provide valuable insight into the start-up's perception of mission drift as well as the interaction of causes and action measures. Despite the acknowledged importance of green start-ups and their mission for promoting sustainable development, research on how they keep their mission on track is still very nascent and presents a fragmented picture. This master's thesis contributes has therefore been to contribute to the scarce body of knowledge in this field by filling gaps in theory and examining the existing theoretical assumptions through practical insight that are especially relevant for green start-ups.

To answer the exploratory research question, the authors are building on an extensive theoretical basis and have conducted their own multiple case study. First, the existing literature on green start-ups within the field of sustainable entrepreneurship has been reviewed, focusing on the particularities and challenges that environmentally driven start-ups face in contrast to social start-ups. Afterward, the different aspects of mission drift that have been described in the literature so far have been presented to bring the fragmented picture together. This has ranged from the definition of the concept to the causes and action measures and different perspectives that literature has taken on mission drift in sustainable start-ups. It has become particularly clear that mission drift has so far only been discussed in the context of social start-ups, as well as through a primarily detached and static perspective of what actually appears to be a very complex process. Since no official framework has been found in the current literature, the authors summarized the results of the theory independently in an a priori framework, which has served as the starting point for the empirical research. Given the present stage of literature, this study has taken an exploratory approach to grasp the possibility of broad but contextualized research on real-life situations like the presented one. That is why the authors have chosen to answer the complex research question through an extensive case study, taking a holistic approach by looking at multiple start-up cases. In total, 13 green start-ups and their experience with mission drift have been investigated within the German ecosystem of environmental entrepreneurship. In-depth interviews and the collection of case-related secondary material, as well as the unique nature of the additional perspective of investors have allowed for triangulation. For analyzing the collected data, the authors have adopted an abductive analysis methodology with the coding structure inspired by the a priori framework. Based on this

emerged coding structure and the triangulation, the authors have been able to develop substantiated findings on the phenomena of how mission drift occurs in green start-ups.

The empirical findings have revealed that mission drift is rarely recognized by the interviewed start-ups and that there is a difference between changing the mission and drifting away from the mission. It has been confirmed that *handling organizational growth* is identified as the main challenge for green start-ups potentially causing mission drift, especially for green start-ups *competing in a profit-oriented economy*. The pressure to scale and the need for resources put investors front and centre as start-ups feel dependent and demanded to meet their financial goals. To prevent and counter mission drift, most start-ups see the active *navigation of stakeholder relationships* as a key strategy for developing an organizational identity with shared values. Therefore, *utilizing personal values and entrepreneurial identity* both individually and collectively is seen as another essential way to maintain the mission. However, most important is to keep the balance between the founder's idealistic belief and realism, which demands flexibility in personal values. This *attitude toward compromise* is the lens on mission drift for most start-ups, showing competing logics and resulting constant trade-offs in even the smallest decisions. Furthermore, *designing organizational structures to hold the start-up accountable*, supports the mission achievement as it serves as control points for various stakeholders like employees, customers, or further business partners. Integrating impact and financial goals convergently within the business model from the start seems to enable green start-ups to avoid making compromises from the beginning. In the discussion chapter, the authors draw on the comparison between the a priori framework from theory and the results from the case studies, which not only reveals how causes and action strategies are linked in a real-life context compared to those suggested in theory but also how mission drift is perceived by green start-ups. This leads to three major findings:

- 1) The interviews with the start-ups show that in practice, mission drift receives little attention and is therefore not on the radar of green start-ups. Although the conflicting goals of financial success and sustainability are acknowledged, there is a natural willingness to compromise rather than a fear of mission drift. Only when start-ups find themselves in extreme situations (e.g., financial crises), and must therefore realign strategically, drifting from the mission is critically questioned in hindsight. This demonstrates that in normal business-as-usual circumstances, recognizing mission drift is impossible since it is not a one-time significant phenomenon but rather an inconspicuous process. It consists of a multitude of small compromises made on a daily

basis, justified by the belief that they are necessary to pursue the mission in the long run. Only a few start-ups are aware that all these small maneuvers can also change the direction in the long term.

- 2) In general, it has been deduced, that in reality, there is very little awareness of the causes of mission drift. Instead, there is a much greater focus on how start-ups can stay true to their mission and thus how to prevent mission drift in the first place. This also means that there is few insight into mitigation measures that start-ups are taking to counteract mission drift. At the same time, the difficulty of clearly distinguishing between causes and prevention strategies calls into question the rationale behind the clear separation that takes place in theory so far. Rather, in practice, a dependency and interplay can be seen in which no clear distinction is possible anymore and a dynamic process blurs the boundaries. For example, the lack of a preventive measure may also lead to mission drift and can thus be seen as a potential cause at the same time.
- 3) While the literature addresses the topic of mission drift particularly in the case of social start-ups, the topic is not very present in the case of green start-ups, both in theory and in practice. Nevertheless, the approaches derived from theory of social start-ups have been proven to be applicable for green start-ups as well. It is noteworthy that green start-ups are more successful in integrating sustainability into all aspects of their business models. From the very beginning, most manage to incorporate the mission into their business models, resulting in a convergence of impact and profit rather than a divergence. Especially when the revenue model is tied to impact, they can achieve positive reinforcement effects. In this regard, a notable difference is observed between green start-ups and social start-ups. When start-ups operate primarily in the B2B sector, they have the opportunity to offer additional value by assisting their customer base in meeting government regulations and requirements regarding sustainability. This crucial competitive advantage over conventional, cheaper competitors is not available to start-ups operating in the B2C sector, as individual consumers are not obligated to comply with government regulations, making cost the decisive factor. As a consequence, green start-ups, which operate dominantly in the B2B sector are less likely to take compromises between financial and sustainable goals than social start-ups operating in B2C.

## 6.1 Contribution

The findings of the present master's thesis contribute to the topic of mission drift in green start-ups, particularly on how the complex process is perceived in practice, and how causes and action strategies are intertwined. With this, the results expand the scarce literature on mission drift and fill research gaps by incorporating practitioners' experience to complete the fragmented picture.

### Contribution to Existing Research

The findings synthesize the fragmented picture and especially add to the entrepreneurship literature on sustainable start-ups and mission drift. As a theoretical contribution, this analysis is the first comprehensive study that specifically addresses the topic of mission drift in green start-ups. As this thesis has been specifically dedicated to the existing theoretical blind spot of environmentally driven start-ups, it forms a counterpart to the research on social start-ups. This expands the research of Engbring & Hajjar (2022) and Van der Byl & Vredenburg (2015), who were the only ones considering green start-ups in the bigger picture of sustainable start-ups so far. On the other hand, the intertwined view of causes and action strategies as well as the comparison between theory and practice expands the dominating one-sided perspective either focusing reasons or prevention measures of mission drift (Cetindamar & Ozkazanc-Pan, 2017; Ramus & Vacarro, 2014). The ability to examine the process of mission drift through in-depth case analyzes is also consistent with Siegner et al.'s (2018) call for a more dynamic perspective on mission drift. Overall, this results in a holistic picture, which the authors present in a framework. This framework represents the first specific concept on mission drift in the literature and thus contributes to the nascent literature on mission drift in sustainable start-ups.

### Practical Implications

The findings of this thesis have valuable implications for practitioners. First, it sensitizes green start-ups to consider mission drift as a possible phenomenon that can also affect them. Since most start-ups are very convinced that mission drift would not happen to them and downplay potential conflicting goals, a precautionary mindfulness can be helpful, and, in the end, will help start-ups to scale the full potential of their impact. To recognize mission drift and address it in good time, this thesis helps to identify potential reasons in advance. At the same time, appropriate measures and action strategies have been identified with which start-ups can counteract mission drift. Since it has been shown that it is easier to prevent mission drift than to act on it, measures must be taken actively in advance at the organizational level. The mission

should not only be considered from the beginning when the business model is created, but also needs to be maintained continuously through a shared identity and common values throughout various stakeholder relationships. Since the mission engages with the perception of other stakeholders and is actively used in navigating the relationships, implications can also be derived for them. Employees of start-ups in particular make a major contribution to authentically pursuing the mission. Founders need to be aware of this responsibility when selecting and leading their team, as the overall mission is being fed by the many single missions of each individual employee. In this way, the employees also bear a responsibility. Likewise, investors are relevant influencers in terms of pursuing the mission, as they can cause mission drift but also have the power to hold the start-up accountable to their mission. With the ongoing trend and expectation of shifting to a green economy, it will become increasingly important to authentically pursue the green mission in the future and not get involved into accusations of greenwashing.

## **6.2 Future Research**

While the results of the present study highlight important implications for theory and practice, they also give rise to further research endeavors. First, the results of the thesis imply that there is a lack of theory in the field of mission drift in sustainable entrepreneurship, particularly within environmental entrepreneurship. This means that the academic community needs to fill this gap and develop research in this area. While the authors have taken the first step to set up a framework that unifies the causes of and action strategies against mission drift, this should serve as a starting point and be expanded and approved by further research. Second, this thesis has tried to do justice to the dynamics of reality through a case study that enables an in-depth analysis of the complex process as mission drift is. Nevertheless, based on a one-time observation and on the narratives of those affected, this reaches its limits. A long-term study that accompanies start-ups over an extended period would probably do justice to the dynamic approach and thus offer a future research possibility. Here, the findings of the present work can be advantageous, for example, to consider the different perceptions of various stakeholders such as employees, founders, or investors. In addition, a clearer picture could emerge that shows iterative interplay and smooth transition between causes and action strategies, which has been indicated by the results of the study. Third, the results have shown that the topic of mission drift in green start-ups has received relatively little attention in practice and that there is therefore limited awareness. This has made the data collection of the present work more difficult, as interview partners were not familiar with the concept. At the same time, this also



raises the question of how relevant the issue of mission drift is in real life. It should therefore be examined where the lack of attention comes from: Is the topic not regarded as important in practice and is therefore hardly researched? Or is the topic thus unknown because it has not yet received academic attention? This is accompanied by the question of whether mission drift even exists and is not just a necessary adjustment to external factors to ensure the survival of the company. With this study, the authors encourage other researchers to further explore mission drift in green start-ups that address environmental challenges of global concern, as the drifting away or neglecting of these can affect the value creation for society and the environment.

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## 8 Appendix

### 8.1 Case Study Protocol

#### **Case Study Protocol based on Yin (2009), Eisenhardt (1989)**

**Name of Research Project:** Master Thesis on *Mission Drift in Green Start-ups* at NTNU  
Norwegian School of Science and Technology

**Name of Authors:** Philip Dervedde, Hannah Blanke, Franziska Maisack

#### **1. Background**

##### **a) Previous research on the topic**

- The current literature still offers limited insight into mission drift in sustainable start-ups. So far, a fragmented picture emerges, with existing research focusing on specific contexts of mission drift: Some researchers focus on the settings in which mission drift occurs, such as non-profit organizations, microfinance companies, or large corporations (Jones, 2007; Caserta et al., 2018; Loscher & Kaiser, 2022). The view studies which deal with mission drift of sustainable start-ups focus mainly on social start-ups (Barinaga, 2020; Ebrahim et al., 2014; Gopakumar, 2022) and thus neglect the environmental-driven start-ups. Also until now a rather static view (ex-ante and ex-post) was taken to categorize mission drift, lacking a process perspective.

##### **b) Research question of the present study**

- How does mission drift occur in green start-ups?

##### **c) Additional research questions that will be addressed**

- How are the causes and action strategies in practice linked to those suggested in theory?
- How do green start-ups perceive mission drift?

#### **2. Design**

##### **a) Case Study Type**

- This study will follow the design of an embedded multiple-case study. Investigating multiple cases instead of one single case, will deliver more convincing evidence and thus makes the study more robust. Since the phenomena of mission drift depend on the situation of the start-up, different stakeholders and a variety of internal and external factors, an embedded analysis is performed as treat the single unit as a sum of its parts.

##### **b) Object of Study**

- To answer the research question, green start-ups and their dealing with mission drift will be investigated.

##### **c) Sub-questions derived from research question and the measures to be used to investigate**

- How does mission drift occur in green start-ups?
  - How are the causes and action strategies in practice linked to those suggested in theory?
    - What does the literature say about mission drift's causes and action

strategies?

- Literature review resulting in a priori framework
  - What do green start-ups report on causes and action strategies of mission drift?
- Multiple case study with interviews resulting in a coding schema and further secondary material collected to triangulate
  - How do causes and action strategies interact?
- Assessment of (mis)match and fit of identified topics
  - What are the differences and similarities between theory and practice?
- Assessment of (mis)match and fit of theoretical and empirical findings using the a priori framework and coding schema
  
- How do green start-ups perceive mission drift?
  - How do start-ups talk about their mission?
- Multiple case study with interviews resulting in a coding schema and further secondary material collected to triangulate
  - What is the significance of the mission and how is it used?
- Multiple case study with interviews resulting in a coding schema and further secondary material collected to triangulate
  - To what extent is the phenomenon of mission drift known?
- Multiple case study with interviews resulting in a coding schema and further secondary material collected to triangulate
  - How do start-ups reflect on possible changes to their mission?
- Multiple case study with interviews resulting in a coding schema and further secondary material collected to triangulate

### 3. Criteria for case selection

- a) The venture fulfills the criteria of being a start-up, which is
  - start-ups are younger than ten years
  - have a planned growth in employees and/or sales
  - are (highly) innovative with their technology and/or business model
- b) The start-up is active in the climate tech area, dealing with commercializing innovative environmentally friendly technologies
- c) The start-up's headquarters are in Germany.
- d) The company was founded in 2015 or later.
- e) The company has funding, may it be equity or debt funding

### 4. Case Study Procedures and Roles

#### a) Procedure and Roles and of case study research team members

- To identify cases with mission drift at presence, several informal conversations (n=6) were held with different experts, for example with associates of a sustainability consultancy, associates of a sustainability incubator, and lecturers from the field of entrepreneurship and sustainability.
- Then, according to the criteria, suitable start-ups were contacted by one of the team members via email or LinkedIn.
- The following tasks are performed on a rotating basis so that no pre-approach or habituation effects jeopardize objectivity. The interviews are conducted in a team of two people, with one person conducting the interview and the other taking additional notes. The first coding is done by the third uninvolved person to ensure

neutrality. In the further course, the data was processed under joint discussion and exchange.

- During the process the team was supervised by experienced researcher from NTNU.

## 5. Data Collection

### a) Data to be collected

- Primary data through interviews with founders or similarly involved persons of the start-up
- Secondary data such as organizational data obtained through the company website, marketing materials, press releases, social media accounts. External data was obtained from publicly available media, newspaper articles, blog posts or third party websites such as crunchbase.
  - Organizational data: founding year, sector, funding, investor, further partners
  - Data on the interviewee: Position, working period
  - Data on the mission: mission stated on website, location of mission on website, mission related website content
- Primary data through interviews with investors to triangulate the information

### b) Data collection plan

- Interview period with start-ups from 06.03.23 until 07.04.23.
- Before each interview secondary data on the start-up's case has to be collected
- Interview period with investors from 07.04.23-14.04.23

### c) Data storage

- The interviews will be recorded and transcribed afterwards. This data and all other material will be stored in the NTNU Cloud, registered by the document log of the study.

## 6. Analysis

### a) Criteria for interpreting case study findings

- Derived dimensions based on the a priori framework from the literature review
  - Causes: Commercialization trend of social sector, External embedment of start-up, Start-up maturity, Organizational development, Start-up identity, Entrepreneur
  - Action strategies: Transparent internal structures, Stakeholder management and relationships, Legal mechanisms of accountability, Monitoring and controlling, Business model design, Normative values and entrepreneurial identities

### b) Data elements to address research question/sub-question

- How does mission drift occur in green start-ups?
  - Resulting from the joint data from the two subquestions.
- How are the causes and action strategies in practice linked to those suggested in theory?
  - secondary data retrieved from the literature review
  - primary data retrieved from the interviews with start-ups and investors
  - secondary data on the organization retrieved from web content
- How do green start-ups perceive mission drift?
  - primary data retrieved from the interviews with start-ups

### c) Range of possible outcomes

- How are the causes and action strategies in practice linked to those suggested in theory?
  - practice and theory do not match at all and the interviews yield many new insight
  - practice and theory agree; thus the interviews do not provide new insight
- How do green start-ups perceive mission drift?
  - there is no mission drift identified or perceived in all cases
  - mission drift is a common phenomenon in green start-ups and thus a occurs frequently

## 7. Validity

### a) Construct validity

- Data triangulation: Several data sources such as start-up interviews, investor interviews as well as other secondary materials were used.
- Methodological triangulation: Besides the data for the case study was collected by different methods such as qualitative interviews, screening of webpages.
- Investigator triangulation: To further enhance the trustworthiness of the present study the authors made use of the benefit of working in a team of three.

### b) Internal validity

- Pattern matching and explanation-building approaches were used to make the internal work valid while taking pre-defined dimensions from the literature.

### c) External validity

- Replication logic with clear criteria for purposeful case sampling
- Open to all industries in addition to the limitation to Climate Tech Start-ups, as well as different stages of start-ups (Early-Stage, Mature, etc.) the Multi-Case Study results can examine different contexts.

## 8. Study limitations

The following issues can be seen as key boundary conditions for generalizability:

- First of all, most study objects were located in Germany, whose socio-economic context and ecosystem is rather advanced for sustainable start-ups compared to other countries.
- Thematising the process of a changing mission of the start-up, which includes most of the time experiences from the past could lead to retrospective biases. In addition, a start-ups mission opposes a very sensitive topic for passionate founders, at the same time mission drift is cognized negatively most of the time which could lead to social desirability The study could also have a selection bias, since it is possible that respondents who agreed to take part of the study, feel comfortable on speaking about the sensible topic of their mission

## 9. Reporting

### a) Theoretical contribution

- Research from Ph.d. candidate Meike Siefkes at NTNU on the topic of Green Angel Investors

- Expands the research of Engbring & Hajjar (2022) and Byl & Vredenburg (2015), who were the only ones able to consider green start-ups in the bigger picture of sustainable start-ups so far.
- expands the dominating one-sided perspective either focusing reasons or prevention measures of mission drift (Cetindamar & Ozkazanc-Pan, 2017; Ramus & Vacarro, 2014).

**b) Practical target audience**

- Green Start-ups in general
- Investors interested in Green Investing
- Accelerator, Incubator, policy maker or other institutions which have a vested interested in the mission balance of green start-ups

## 10. Schedule

- Theory Building: 01.02-28.02.23
- Planning of the study design 16.02-28.03.23
- Data Collection 06.03-14.04.23
- Data Analysis 17.04-05.05.23
- Reporting 08.05-01.06.23

## 8.2 Interview Guides

The German interview guides for start-ups and investors can be found in the digital appendix.

### Interview Guide Start-up English

<b>Welcome and warm-up phase &lt; 3 min</b>
<ul style="list-style-type: none"><li>• Acknowledgments</li><li>• Introduction: personal information and topic of the study</li><li>• Declaration of consent: data protection</li></ul>
<b>Guiding questions</b>
<b>I Mission of the start-up &lt; 5 min</b>
<ul style="list-style-type: none"><li>• <b>Could you briefly describe what the mission of your start-up is?</b></li><li>• <b>Can you give us examples of how you use your mission in your start-up?</b><ul style="list-style-type: none"><li>- Internally: How are your mission and goals related?</li><li>- Externally: How do others react to your mission?</li></ul></li><li>• What are the long-term goals (social, environmental, economic) of your start-up and how do you measure them?<ul style="list-style-type: none"><li>- To what extent do these goals conflict with each other? (Keyword: Conflict of objectives)</li><li>- What internal or external factors could interfere with the achievement of impact?</li></ul></li></ul>
<b>II Mission Drift &lt; 5 min</b>
<ul style="list-style-type: none"><li>• <b>Did you have a mission when the start-up was founded?</b><ul style="list-style-type: none"><li>- If so, can you describe it?</li></ul></li><li>• <b>How has your mission changed over time, can you talk me through the process?</b><ul style="list-style-type: none"><li>- Was it multiple times? Was it an ongoing process?</li></ul></li><li>• Can you talk about the moment, you recognized the changing mission?<ul style="list-style-type: none"><li>- When was that, and how did you feel?</li><li>- Can you recall any special conversations or thoughts?</li></ul></li><li>• Can you use an example of how the mission drift affected your start-up?<ul style="list-style-type: none"><li>- Positive or negative?</li></ul></li></ul>
<b>III Causes of mission drift &lt; 5 min</b>
<ul style="list-style-type: none"><li>• <b>From your perspective, why do you think the mission drift occurred?</b><ul style="list-style-type: none"><li>- Can you give examples of remarkable events?</li><li>- Internal factors?</li></ul></li></ul>



- External factors?
- Which stakeholders were involved along the way and how?
  - Anyone else next to customers and investors?
- *Optional: To what extent are potential conflicts of interest between your stakeholders and your start-up taken into account when designing the relationship?*

#### **IV Reaction and measures toward mission drift < 5 min**

- **How has the start-up dealt with the changing mission?**
- **How has the mission change affected the relationship with stakeholders?**
  - What reactions have you experienced?
- Can you give examples of measures that were taken?
- What further conclusions or consequences have you drawn from the mission drift?
  - Prevention measures?

#### **V Conclusion < 5 min**

- Outlook: How will the journey of their mission evolve in the future?
- *Optional:* Have you ever heard the term "Mission Drift"? What do you understand by this term?
- Are there any aspects from your side that we have not yet addressed in the interview, but that you would like to mention?
- Can I come back to follow upon the questions?
- Is there anyone else we should talk to on this subject?

#### **Thank you and goodbye < 2 min**

## Interview Guide Investor English

<b>Welcome and warm-up phase &lt; 3 min</b>
<ul style="list-style-type: none"><li>• Acknowledgments</li><li>• Introduction: personal information and topic of the study</li><li>• Declaration of consent: data protection</li></ul>
<b>Guiding questions</b>
<b>I Mission of the investor and investment activity &lt; 5 min</b>
<ul style="list-style-type: none"><li>• <b>To what extent do you yourself follow a mission with your investment activities?</b><ul style="list-style-type: none"><li>- Can you give us examples of how you use your mission in your investment activities?<ul style="list-style-type: none"><li>- Internal: How are your mission and goals related?</li><li>- External: How do others respond to your mission?</li></ul></li></ul></li><li>• <b>To what extent do you take sustainability into account in your portfolio?</b></li><li>• <b>What claims do you need to meet with your funders?</b><ul style="list-style-type: none"><li>- Also sustainability requirements?</li></ul></li><li>• What specific <b>selection criteria</b> (especially in terms of sustainability) do you consider when choosing a start-up? How do you measure them?<ul style="list-style-type: none"><li>- To what extent do you control/monitor the sustainability of the start-up after the investment?</li></ul></li></ul>
<b>II Involvement &lt; 5 min</b>
<ul style="list-style-type: none"><li>• <b>To what extent are there potential conflicts of interest in the relationship between a start-up and you as an investor?</b><ul style="list-style-type: none"><li>- Examples?</li><li>- Conflicts between sustainable and financial goals?</li></ul></li><li>• <b>To what extent have they ever observed a start-up's mission changing over time?</b><ul style="list-style-type: none"><li>- Can you describe the process in a little more detail?</li><li>- Did this take place on a one-time basis or continuously?</li></ul></li><li>• <i>Mission change</i>: can you give an example of how the mission change has impacted the start-up?<ul style="list-style-type: none"><li>- Are there positive or negative unintended effects?</li></ul></li><li>• <i>Mission change</i>: can you talk about when you recognized the mission change?<ul style="list-style-type: none"><li>- When was that, and how did you feel?</li><li>- Can you recall any particular conversations or thoughts?</li></ul></li><li>• <i>No mission change</i>: How did the start-up manage to stay true to its mission and what influence did you as an investor have on it?</li></ul>

- *Optional: Have you ever heard the term "Mission Drift"? What do you understand by this term?*

### III Causes of mission drift < 5 min

- In our interviews, we also talked to start-ups who reported that the **investor landscape** has **changed recently** (*hints: Money cheap for a long time, large sums available; war, energy crisis, inflation; now profitability demands*).
  - Can you confirm this?
  - What changes would you name from your perspective?
- **What do you think were the reasons for the mission change?**
  - Can you give examples of special events?
  - Internal factors? / External influences?
- **What role did you play in this as an investor?**
- Which other stakeholders were involved in the process? What exactly did their support look like?

### IV Reaction and measures toward mission drift < 5 min

- **Start-ups told us that when financial difficulties arise, sustainability goals take a back seat.**
  - Can you agree with this as it stands?
  - To what extent do financial goals take precedence?
  - What is the relationship between financial and sustainability goals?
- **How did you deal with the change in mission?**
  - How has the change in mission affected your relationship with the start-up?
- Can you give examples of actions you have taken?
  - Preventive?
  - Downstream consequences, learnings?

### V Conclusion < 5 min

- From your side, are there any aspects regarding the trade-offs between sustainability and profitability that you would still like to mention?
- Can get back to you if needed?
- Is there anyone else we should talk to about this issue?

### Thank you and goodbye < 2 min

### **8.3 Interview Transcripts**

The transcripts of the interviews with start-ups and investors can be found in the digital appendix.

## 8.4 Supplements to Chapter 5.1: Gaps between Theory and Practice

Since it would go beyond the scope of the discussion, the identified links of the individual dimensions between theory and practice will be addressed here. The results of this discussion are summarized in Chapter 5.1.

### Profit-oriented Economy: Commercialization Trend and External Embedment of the Start-up

The case studies show that *competing in a profit-oriented economy* (Chapter 4.3) is perceived as one of the major reasons for mission drift. This is also reflected in the literature, where the theoretical findings were all backed by the interviewed green start-ups. Although commercialization is clearer in the social start-up sector, as start-ups begin to take on the role of social services, this phenomenon can be seen for environmental issues as well. Commercialization and professionalization are often driven by policy measures and regulation, as the state tries to regulate the market and protect consumers (Staessens et al., 2018; Sarma, 2019). Start-ups perceive this as an additional obstacle, as they increasingly need expensive certifications to transparently prove their sustainable value or have to comply with strict regulations (Start-up 10). Meeting these requirements can distract from the fulfilment of the actual mission and even lower standards, as only good enough work is done to fulfil the certification. In addition, start-ups question the impact of certifications (Start-up 4, 5), which are intended to signal environmentally friendly practices and products, as they can be susceptible to greenwashing (Chen & Chang, 2013). On the other hand, third-party certification is also cited in the literature as a tool that can help start-ups turning their environmental performance into a unique selling point, and increase consumer confidence (de Boer, 2003). The issue of greenwashing and certification therefore remains a double-edged sword that green start-ups must manage. Even though start-ups primarily see commercialization and professionalization as obstacles to pursuing their own mission, at the same time the business models of the green start-ups are built to help other companies comply with environmental regulations such as carbon budgets (Start-up 5, 3, 9, 13). Many start-ups complain that the capitalist system makes it difficult for them to pursue their environmental mission, as the markets have been deliberately trimmed only for cost reduction (Start-up 2, 10, 11). This was mentioned both in theory and in practice as a reason for mission drift, but also at the same time as a starting situation and defining feature of sustainable entrepreneurship (Wolf & Mair, 2019). While green start-ups have to compete by replacing conventional competitors, social start-ups take on the role of an additional market player replacing the social services of government (Start-up 2, 10, 13). However, the capitalist idea is precisely the *raison d'être* of a

start-up, which distinguishes it from a non-profit charity (Schumpeter, 1934). Contradictory to the before mentioned criticism of regulation, the call that only the state has the power to change this profit-oriented system is evident here in practice (Start-up 12, 13). Consequently, this would have to be implemented with regulations and laws and takes away the responsibility of the single player. Additionally, the case studies have shown that especially external and unexpected factors of the global economy (*tensions in a globalized world*) pose challenges for the start-ups and thus was named as a reason for mission drift (Start-up 1, 2, 10). While the topicality of events like War in Ukraine, Covid-19 is certainly the reason for the lack of reference to them in the literature, economic uncertainties, supply chain disruptions and market volatility are omnipresent in today's globalized world and are part of the economy. Due to their high capital requirements, green start-ups are more reliant on external financial resources than social start-ups (Marcus et al., 2013). Consequently, they must meet the demands of investors and align their strategies to satisfy their expectations. Because of the high relevancy this will be discussed in more detail in Chapter 5.4.

#### Handling Organizational Growth: Start-up Maturation and Development

Despite organizational growth being one of the main goals of business endeavors, in reality it was mainly seen to pose the risk of mission drift (*handling organizational growth*). This also was backed by the literature, which further distinct between *Start-up Maturation Level* and *Organizational Development* (Chapter 4.2). The start-up's maturation not only defines the resource availability to monitor and measure sustainability (Wolf & Mair, 2019) but also defines how flexible the start-up is regarding the business activities and business model as the insight from practice add. However, a major distinction between theory and practice was the perspective with which Maturation was viewed. The interviews with the start-ups focused on the fact that with a young level of maturity, mission drift is more difficult to grasp (Start-up 3, 9). This can be seen as both a disadvantage and an advantage, for example in the young phase of product development, where one can still easily adjust or pivot in both directions. However, this may largely be due to the fact that quite young start-ups were interviewed. In contrast, the literature focused on "matured" start-ups and state the phenomenon of "reverse mission drift", referring to start-ups allocating newly available resources toward social aims once they achieved economic success (Staessens et al., 2018). Together, practice and theory paint a picture that does not clearly identify the maturation level as the cause of mission drift, but that the different phases in which a start-up finds itself have different mission requirements, which might end up as a cause if not handled correctly. The internal maturity level of a start-up is

placed in a *hyper-growth environment*, where start-ups experience accelerated expansion, often driven by high demand, market opportunities, or disruptive innovations as insight from practice showed (Start-up 2). Scaling while effectively manage resources, maintain operational excellence, and balance growth with long-term sustainability was stated as the key challenge in theory (Agafnow 2013; Miller & Wesley, 2010; Ometto et al., 2018) as well as in practice. For the start-ups it was particularly hard to have scalable business models that can rapidly accommodate increased demand without significant constraints and balance the resource intensity (Start-up 2). They focus on scalability to meet market needs, capture new customers, and leverage economies of scale, while at the same time, this rapid growth requires substantial resources, including financial capital and operational capabilities. Especially for green start-ups, which are active in promising markets such as climate tech investors have high expectations for returns on investment. Start-ups must deliver sustainable growth and profitability to satisfy investor demands. Managed well, the hyper-growth environment could promise rapid success and impact, but it takes a lot to authentically keep the mission. Lastly, restructuring was mentioned in terms of mission drift. Here, the interviews were able to offer insight that go beyond the literature. The literature mainly considers the outcomes when transforming into a for-profit organization taking on both, the positive and negative side of restructuring. It underlines the benefit of stabilization but the danger of jeopardizing the maintenance of its original mission and values (Suykens et al., 2018). The practical insight, however, see organizational restructuring only as a survival measure for the start-up, when the start-up is facing serious financial problems. As all three cases, which faced organizational restructuring (such as a merger, bankruptcy, insolvency), were also the only cases where the start-ups consciously perceived mission drift, it indicates a close connection (Start-up 1, 2, 10). This correlation suggests that mission drift is only perceived when an extreme situation prevails, forcing the start-up to refocus its strategic direction. However, in none of the cases could restructuring be specifically identified as the cause of mission drift. Instead, the start-ups were more of the opinion that organizational restructuring helps to secure the survival of the start-up and thus also to carry the mission forward in parts. However, due to the exceptional situation, the start-ups were now also somewhat more open to adapting the mission accordingly. A special case emerged when one of the start-ups argued that it was not the organizational restructuring that was the reason for mission drift, but the organizational restructuring that was necessary because they had held on to the mission too long, too rigidly, without taking the necessary steps to ensure the financial survival of the start-up (Start-up 1). This illustrates very well that mission drift is a gradual process rather than a finite state, and it

is difficult to determine at what point the deviation of actions from goals and values can be called mission drift.

#### Navigating Stakeholder Relationships: Transparent Structures and Conscious Management

As sustainable entrepreneurship is generally described to focus on stakeholder instead of shareholder (Ramus & Vaccaro, 2017) it does not surprise that the *Navigating Stakeholder Relationships* (Chapter 4.4) is a highly relevant topic both, in theory and practice to approach mission drift. The practical insight helps to clarify the vague explanations, which the literature provides and thus gives valuable hands-on examples which go beyond stakeholder management. While the theoretical recommendation to build a community-oriented organization with an organizational identity (Michaud & Tello-Rozas, 2019), sounds rather complex to prevent mission drift, the start-ups showcase on real life examples, how this challenging task might be done. The founder is responsible to create a DNA as the core of the company (Start-up 1) and build a strong community around it (Start-up 6, 10), internally as well as externally, which then can serve as control and check points. Stakeholders can make their contribution to this and hold start-ups accountable to the mission (Lin et al. 2014). This is best done by using the mission as a means to an end to provide leadership and guidance through its internal processes and external structures as the empirical findings have shown. In contrast, the theoretical principle of spaces for alignment and debating opens up room and freedom, which could possibly endanger the benefit of a stable mission and thus should be managed wisely. Further, none of the start-ups reported an established stakeholder management process, such as Kurland (2022) suggested, including Stakeholder scan, stabilization, and reinforcement. Rather, the relationship was handled naturally and in practice, it seemed more like a happy coincidence that the mission was being used deliberately. Theory and practice (Start-up 3, 9) underline both the importance of the mission for the employees as internal stakeholders of the start-up, which contribute to their daily work toward the common goal (Cesinger et al., 2022). While the literature mainly explains how the mission creates a common identity, which motivates the employees, the experiences in practice have further stressed the point that a single mission is not enough. Rather there should be a whole narrative created around the mission (Start-up 3), which fosters the company culture and a shared identity to follow. Further, the theory neglected so far, how to maintain this in the long-term, while the practical insight recommended the regular review of the step-by-step fulfillment of the mission (Start-up 9). Start-ups often feel the pressure of external expectations to have an authentic mission (Start-up 11, 13), which is why several start-ups reported on a proper mission design



phase as their maturity level increased. This pressure arises from various factors such as influence of investors, talent attraction, consumer preferences and the need for market differentiation. In contrast the theory does not see the perceived demand. Investors, especially impact investors or those focused on sustainable business practices, often prioritize start-ups with a genuine and purpose-driven mission. Start-ups may feel compelled to align their mission with societal and environmental values to attract investment and secure funding (Start-up 8). In contrast the theory, does not take it as an important criterion as this is supposed to come up naturally in the due diligence phase when disclosing goals and targets (Agrawal & Hockert, 2019). Further, the theory neglects the value of talent attraction. Start-ups often rely on attracting top talent to drive innovation and growth (Start-up 3, 5, 12). Talented individuals, particularly younger generations, seek workplaces that align with their values and offer a sense of purpose beyond financial success. An authentic mission thus becomes crucial in attracting and retaining skilled employees. As the mission helps to create alignment with partners, it creates a common understanding – an orchestrated commitment – toward the mission: “(Our partners) want what we want” (Start-up 4). The mission thus functions as a mechanism to align multiple stakeholders (Cesinger et al., 2022), whereas the theory stresses the point of monitoring the mission alignment (Van der Byl & Vredenburg, 2015), in practice the mission was rather seen as a single checkpoint, which is matched at the beginning of the relationship but then loses focus over time. It also helps if the start-up keeps itself accountable by seeing the mission as consumer preference and using it as market differentiation. Start-ups recognize the importance of building trust and loyalty with consumers by showcasing an authentic mission that aligns with their values (Start-up 2). Meeting these consumer expectations can drive market demand and give start-ups a competitive advantage. Neither theory nor practice mention any other stakeholders, such as suppliers or politicians, who are in the focus of the mission use. It becomes clear that stakeholder management is not only about keeping the mission on track, but also that the mission is a means to an end and is used as a connecting element in the stakeholder relationship. For this reason, from a start-up perspective, the importance should be more recognized and the process of stakeholder management in terms of mission should be better planned and not happen randomly.

#### Organizational Accountability: Monitoring Practices and Business Model Design

*Designing organizational structures for accountability* (Chapter 4.7) to hold the start-up itself accountable for meeting its mission was not only shown in theory in items *Monitoring and Controlling* and *Business Model Design*, but was also supported by the results of this study.

When it came to *monitoring and controlling the mission achievement*, the reality could not meet the scope suggested in the literature. Ebrahim et al. (2014) did not only suggest monitoring social and commercial activities but also putting those two measurements into relation. In addition, they recommended monitoring on a departmental or personal level as well instead of only the performance of the start-up as a whole. However, most start-ups were already struggling to monitor only the impact of their venture (Start-up 2, 10, 11, 12), which raises doubts about whether monitoring the link between impact and commercial activities or extending monitoring to the individual level can even be a manageable task. Ultimately, monitoring should take place, as it ensures transparency and creates a feeling of accountability, but monitoring alone does not lead to change. In practice, the start-ups emphasized that first, there must be “something” to measure, hence the product or service a certain level of maturity (Start-up 6). In addition, they raised the question of how to best utilize their limited resources: To measure every step perfectly or rather use the resources to create more impact. To avoid time-consuming monitoring and thus save resources, but still be able to track goal achievement, the start-ups aimed for a business model in which sustainability and profit converge. In practice, more importance is attached to business model design than in theory, which merely stated that it is important to incorporate the mission in the business model to not let it diverge from the original mission (Muñoz & Kimmit, 2019). In contrast to Alberti and Garrido (2017), who state the impact proposition as a competitive advantage, the start-ups declare that the impact proposition should be integrated into every part of the business model, such as value delivery, value creation, and value extraction, to allow for long-term success (Start-up 3, 4, 6, 7). Consistent with theory, start-ups emphasize the importance of building community-based organizational structures to maintain the mission, however, focusing on employees (Start-up 1, 3) rather than beneficiaries as theory suggests (Ebrahim et al., 2014; Engbring & Hajjar, 2022). *Transparent communication, employee alignment, and community-orientation* are key tools for achieving downward accountability, as supported by theory (Engbring & Hajjar, 2022; Smith & Besharov, 2019) and practice. The start-up interviews showed that founders recognize the ongoing governance task of implementing these practices, while employees often perceive the mission as intuitive. The leadership’s responsibility in purposeful governance to ensure the mission maintenance throughout the start-up is often overlooked. There further exists disagreement on how the mission should be designed to ensure governance toward mission maintenance. While Muñoz et al. (2018) point out that defining a mission too broadly can jeopardize its fulfillment and even create room for drift, as the start-up could easily lose focus,

in practice it occurs differently: Here, start-ups see the perceived “unattainability” as motivation and an opportunity to work toward a long-term goal (Start-up 11).

#### Political-economic Shift to Sustainability and Legal Mechanism of Accountability

Both in theory and in practice, remarks were made on how the political-economic setting (Chapter 4.5) may support green start-ups in adhering to their mission. However, while the literature points to the *legal mechanism of accountability* for adherence to the sustainable mission at the start-up level, start-ups saw a greater advantage in the *political-economic shift to sustainability*. While both, theory and practice, consider using legal mechanisms to ensure keeping the mission on track, the types of legal mechanisms addressed do not show any overlap. In theory, the start-up was given more responsibility for creating and using the legal mechanisms to ensure sustainability. However, in practice, agreements or other contractual terms that should ensure the continuation of the mission were not considered (Sarason & Dean, 2019). Instead, the practice revealed a greater focus on how start-ups use policy-level constraints to their advantage (Start-up 10, 11). Contrary to the general belief of a free market, start-ups found political regulations in favor of sustainable behavior especially important, which would put them in a better position than their “unsustainable” competitors (Start-up 12, 13). However, none of the 13 start-ups has chosen a legal form that more easily captures hybridity, as suggested by Ebrahim et al. (2014). They all operate as for-profit companies with the usual legal form of GmbH, AG or UG. However, this can be explained in so far that Germany does not offer a suitable legal form that is allows to capture the hybridity of sustainable start-ups. Still, none of the interviewees brought this topic up as an issue, which shows either, that they are not even aware of other possibilities or that they do not feel limited by their legal form. Instead, start-ups have shown more interest in harvesting public and private funds, which are also raising increased requirements toward sustainability because of the political agenda (e.g., EU taxonomy). While this might be a challenge for common for-profit organizations, green start-ups have the advantage of using their sustainable value proposition to fulfill the demands of the societal players easily.

#### Values and Identities: Utilizing Entrepreneurial Capacity

The analysis of the results poses *Utilizing Personal Values and the Entrepreneurial Identity* as a potential cause of mission drift (Chapter 4.6). This also goes along with the literature, where it is mainly discussed in the dimension *Normative Values and Entrepreneurial Identities*. First, the literature states that normative values are one of the core motivations for founding a

sustainable venture and help to preserve the mission in the long term (Dees, 2012). Hence, these values are typically embodied by key members of the start-up, such as the founder, and thus have a certain person-related dependency (Michaud & Tello-Rozas, 2019). Here, the analysis of the results can contribute to how these values might have developed. While some founders report that their individual idealistic belief in contributing to a better world was created through direct exposure to real-life challenges (Start-up 7, 10), others simply state their inner conviction of “having to do something good” (Start-up 1, 2, 4, 10). While the literature focuses on the fact that by imprinting their personal values into their business, they build competencies to align sustainable and commercial goals (Kummitha, 2022), the analysis of the results also shows another consequence. Various founders stated that also their team members, employees, and assumingly even customers shared their idealistic beliefs (Start-up 1, 11, 12, 13). This contradicts, at least in part, the arguments of embodiment by key individuals of start-up and person dependency. It seems that the founders see the greater benefit in averting mission drift in creating values that are shared and lived throughout the start-up. An aspect that can be closely related to the values of the entrepreneur as a measure to counteract mission drift, but that was not mentioned as such in the literature, is the initial intentions for founding a green start-up. From the three intentions derived from the results, impact push (1), impact pull (2), and technology push (3), the first and second intentions show overlap with normative values described above. Impact push refers to having the intention to start a green start-up from the beginning due to their perceived need of making a positive contribution. Impact pull refers to becoming aware of a problem that needed solving, and thus can be connected to the direct exposure that some founders stated as sparking their desire to launch a green start-up. The third intention, technology push, however, says that there was a technological innovation and only afterward, its commercialization potential became apparent. In the analysis, however, no difference in the occurrence of mission drift showed in relation to the different intentions. A second important aspect is the entrepreneur's ability to make dynamic identity shifts that enable a transition from an idealistic assessment to a more balanced and rational assessment of the environmental, social, and economic benefits of a venture (Cesinger et al., 2022). This is confirmed by the empirical findings, as also one founder states that certain flexibility in personal values is helpful to balance profit and sustainability goals (Start-up 1). This is perceived as a measure to counteract mission drift as the founder states “We are entrepreneurs, we can make decisions, we are free, [...] so we don't have to do everything” (Start-up 4). While other founders do not disagree with this statement, they also cite certain limitations to decision-making, such as the co-determination of external stakeholders, the development stage of the

start-up (Start-up 5), or that the ability to make consistent decisions only comes with a certain level of experience (Start-up 1). Hence, it may be important to find a balance of value flexibility and consistent decision-making.

