

The Transition Towards Zero Emission

A qualitative study on how the use of a sustainability control system in a transportation company is affected by co-existing demands

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Abstract

This paper explores how the use of sustainability control systems (SCS) is impacted by the presence of co-existing demands in an organization operating in the transport industry. As sustainability is becoming an integrated part of organizational strategy, this study argues that understanding the impact of co-existing demands on the use of SCS can enhance our understanding of its complexity and how to grasp its full potential. By drawing upon theory on institutional logics, the paper contributes to the literature on sustainability control by shedding light on how co-existing demands impact the use of SCS. While extant literature has focused on how sustainability control impacts other business practices, we demonstrate the need to look at it the other way around. We also suggest looking beyond the traditional business perspective and demonstrate the impact of social dynamics and situational differences when integrating SCS with other management controls.

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Keywords: Sustainability, Sustainability control, Sustainability control systems, Institutional logics, Situation-specific compromises

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1. Introduction

“It is a hygiene factor nowadays. (...) If you are not sustainable today, and customers expect you to be, you are not on the market. (...) It has gone from being a less important side task to being critical for business. It is super exciting, actually.” - Employee G, LogiCo

Sustainability has become an important topic for organizations in recent years, and there has been an increasing recognition that environmental sustainability plays a large role in achieving corporate success (Crutzen et al., 2017). This recognition has influenced the business world and how companies structure their business with regard to sustainability. There has been a recent increase in sustainability regulations, such as the new EU taxonomy, and the rise of new initiatives, e.g., the Science Based Targets Initiative promoting a reduction of fossil fuels (Science Based Target Initiative, 2023). Even though this trend affects all industries, some appear more affected than others, especially those whose operations are linked directly to emissions. For example, in 2019 the transportation industry represented 17% of the total greenhouse gas emissions globally (Statista, 2023), which made the sector the second largest polluter.

Due to the increasing pressure on companies to adopt environmentally sustainable practices, there has been a rise in the literature exploring the use of sustainability control tools, more specifically sustainability control systems (SCS) also referred to as management control systems (MCS) for sustainability, for integrating sustainability into an organization's traditional business practices (Crutzen et al., 2017; Gond et al., 2012; Beusch et al., 2021; Ligonie, 2021; Jusoh et al., 2021; Wijethilake, 2017; Henri & Journeault, 2010; Arjaliés & Mundy, 2013; Hahn et al., 2015; Parker & Chung, 2018). For example, Crutzen et al. (2017) examine how common it is for companies to have a complete MCS package for sustainability, and Gond et al. (2012) propose a typology to better understand the different configurations of SCS. However, few studies have investigated how various organizational demands influence SCS in the company, such as financial demands in profit-maximizing companies or any additional pressures that some companies are facing, depending on what industries they operate in or certain obligations they might have. To the best of our knowledge, how these

co-existing demands may influence the use of sustainability control has been addressed by few (Ligonie, 2021; Parker & Chung, 2018).

As mentioned, sustainability is becoming an integrated part of organizational strategy in companies, therefore they need to meet several demands simultaneously, and also manage conflicting objectives (Hahn et al., 2015). We argue that understanding the impact of co-existing demands on the use of sustainability control can enhance our comprehension of its complexity. This, in turn, allows the identification of pain points between conflicting demands and the optimization of the use of sustainability control tools. Consequently, this can lead to greater potential for sustainability efforts and a more robust trajectory toward achieving sustainability goals. Hence, this paper intends to investigate the relationship between co-existing demands and their impact on the use of SCS by drawing upon the theory of institutional logics. The main theoretical motivation for this research is that we deem an institutional logic perspective to be missing in the literature domain of sustainability control, as they make co-existing demands on organizations and the interrelationship between these explicit. Thornton et al. (2012) describe institutional logics as “socially constructed sets of material practices, assumptions, values and beliefs that shape cognition and behavior.” They explain take-for-granted social prescriptions of what constitutes legitimate goals of the organization and how they may be pursued (Carlsson-Wall et al., 2016). More specifically, the concept of situation-specific compromises (Carlsson-Wall et al., 2016) will be deployed in this paper in order to analyze how actors enact the relationship between co-existing logics in different situations, by focusing on how compromises are made on the basis of SCS. This, we will do with a case organization operating in the transport industry due to the aforementioned link to the emission of fossil fuels and other environmental concerns.

Conclusively, this research aims to investigate how the use of sustainability control, more specifically, SCS, is influenced by co-existing demands in the company that simultaneously need to be adhered to. This brings us to the following research question:

How is the use of a sustainability control system in a transportation company affected by co-existing demands?

Our contribution to the literature on sustainability control is twofold. Firstly, we observe a temporal dimension between logics in that short-term compromises often are necessary, but

engagement in sustainability is crucial for long-term financial stability. The way these compromises are made depend on situational differences. Secondly, we demonstrate how the field levels of the respective logics impact the use of SCS through, for example, trends related to customer demand and regulations in the external environment and the influence of external stakeholders. Through these contributions, we shed light on on how co-existing demands impact the use of sustainability control and demonstrate that analyzing the co-existing demands on the use of sustainability control requires looking beyond the traditional business perspective and that social dynamics and situational differences may impact the use of SCS in combination with other management controls.

In order to allow for an in-depth analysis, some delimitations have been made. First, our definition of sustainability is limited to environmental sustainability. Hence, going forward, we refer to environmental sustainability when discussing sustainability unless otherwise specified. Secondly, due to the large size of the case company and the scope of this paper, we have chosen to restrict our analysis to one country in which they operate. Third, our research is also delimited to one specific industry, i.e., the transport industry.

This paper is organized as follows. Chapter 2 will develop the theoretical background of our study and our method theory for analyzing our findings. In the following chapter, our methodology will be presented, followed by our case analysis and empirical findings. Chapter 5 will entail a discussion and an analysis of our findings. Finally, chapter 6, provides a conclusion and suggestions for future research in Literature Review and theoretical framework.

2. Literature Review and Theoretical Framework

2.1 Literature Review

As mentioned in the introduction, sustainability control has become more relevant in recent years. As a result, new tools for sustainability control have been developed, as well as increased use of classic management accounting tools related to sustainability. Section 2.1.1 will provide insights into the literature on the different forms of sustainability controls, of which SCS will be further elaborated upon in section 2.1.2.

2.1.1 Sustainability Control

There are various applications of sustainability controls in companies, such as eco-controls, balanced scorecard (BSC), material flow costs, and sustainability MCS (Wijethilake, 2017). A short explanation of the first three can be found below, and sustainability MCS will be explained in 2.1.2.

Eco-controls is the application of financial and strategic control methods to environmental management and is defined as “*the formalized procedures and systems that use financial and ecological information to maintain or alter patterns in environmental activity.*” (Henri & Journeault., 2010, p. 64). The study of Henri and Journeault (2010) demonstrates that eco-control has a mediating effect on environmental performance on the link between eco-control and economic performance and has an indirect influence on financial performance. The study thus highlights the cruciality of sustainability control systems for companies. BSC was introduced by Kaplan and Norton and allowed businesses to supplement a company’s financial measures with three additional perspectives; customer, internal process, and learning and growth, all connected to the vision and mission of the company (Kaplan & Norton, 1995). Companies could use the BSC to help them describe their strategies and implement new strategic systems based on the scorecard measurements (Kaplan, 2009). More recently, the balanced scorecard has started to include the sustainability aspect. In these cases, it is either as a fifth perspective or embedded in the already existing four. Reducing material flow can lead to both improved economic and ecological performance due to an optimized material flow's decreased costs and environmental effects of an optimized material flow. This principle is the fundament for Material Flow Cost Accounting (Schaltegger & Zvezdov, 2015).

Adopting a more high-level approach to management control, Parker and Chung (2018) did a case study regarding social and sustainability control and accountability at a large hotel company in Singapore. It was concluded that the hotel had pursued many sustainability initiatives due to the added sustainability framework implemented by corporate headquarters. More interestingly, the sustainable initiatives had also triggered a level of self-reinforcement control since the employees’ values had started to align with the company’s vision. As a consequence, informal controls and formal controls began to align. They also emerged through bottom-up commitment and actions at the individual employee level.

Ligonie (2021) offers a slightly different approach to sustainability control. She stresses that ideally, a company should have controls that, amongst other things, control for sustainability but not see sustainability controls as separate entities. Ideally, sustainability should be controlled implicitly and naturally without requiring pressure from the sustainability controllers. If this is the case, then the activity would be carried out without sustainability managers knowing, indicating that sustainability teleology had been embedded in the organization's management practice (Ligonie, 2021). Ligonie views sustainability control tools as something organizations do rather than something they have, and refers to the embeddedness of the controls in the companies' day-to-day operations and controls.

In conclusion, we see that sustainability control is making its way into an organization's controls and way of thinking and that there are various tools to measure an organization's sustainability performance. Amongst these are the balanced scorecard, eco-controls, and one of the broader tools: SCS. As our research question is centered around SCS, the remainder of our literature will be centered around sustainability control and how SCS can be used to manage organizations' sustainability efforts.

2.1.2 Sustainability Control Systems

There are various definitions of SCS. Some researchers have named them Sustainability Control Systems and view them as a specific application of MCS (Wijethilake, 2017), whereas others call them social and environmental management control (SEMC). In contrast, others view them as separate from traditional MCS (Gond et al., 2012). Ligonie (2021) decides to examine a set of sustainability control tools without viewing them as an integrated system. Johnstone (2019) defines SCS as *“management accounting tools that connect organizational strategy with operations in a given context by providing information and direction, as well as monitoring and motivating employees to continually develop sustainable practices and procedures for future improved sustainability performance”* (p. 34). The goal of SCS is to measure sustainability goals and targets that are aligned with the strategy of the company (Wijethilake, 2017). Our paper agrees with Johnstone's definition, however, our literature review includes all interpretations of SCS due to their similarity and relevance to the purpose of this research, and thus henceforth, SCS will be used as a collective term. We have identified three different trends within this strand of literature. The remainder of this chapter will be structured accordingly.

Firstly, some studies seem to have been based on a research approach in which sustainability control is not assumed to be extensively impacted by the context in which it operates but rather links sustainability control to other practices within the organization (Wijethilake (2017); Jusoh et al. (2021); Henri & Journeault. (2010); Ligonie (2021)).

Wijethilake (2017) investigates the mediating effect of SCS on the relationship between a proactive sustainability strategy and sustainability performance. While doing so, SCS seems to have been studied without examining other potential influences. Jusoh et al. (2021) also use a mediation model similar to Wijethilake (2017) in investigating the mediating role of sustainability performance management practices in the relationship between sustainability strategy and sustainability performance. Jusoh et al. (2021) support the findings of Wijethilake (2017) by concluding that to realize a sustainability strategy, a broad management control system is necessary, including controls for environmental, social, economic, and governance performance. Thus, they do include other perspectives in their study, as they address that previous research has stressed the need to include more dimensions in sustainability beyond the natural environmental focus, such as the Triple Bottom Line (i.e., social, minimize concerns) as well as governance. However, the impact of these perspectives on the controls for sustainability is not explicitly examined (Jusoh et al., 2021).

Henri & Journeault (2010) use a mediation model to study the direct effect of eco-control on economic performance. However, they do not analyze how eco-control is affected by financial performance. Ligonie (2021) also considers the context of sustainability control into account. She also argues that an organization comprises several distinct so-called “practices” based on shared understandings and that sustainability control tools could favor overlaps between sustainability and organizational practices. However, her study does not consider how these other practices may directly impact sustainability control but instead focuses on how the sustainability practice controls other practices.

Some studies go against this trend and have incorporated how co-existing demands, such as the business perspective and the external environment, have impacted sustainability control in various forms. For example, in their study of the construction of social and environmental strategies (SEMS) and associated management in the hospitality sector, Parker and Chung (2018) highlight that the financial control systems simultaneously constrain and encourage

initiatives to reach social and environmental objectives and that influences from the external environment, such as Singapore's social and environmental government policy facilitate the construction of SEMS. Arjaliés and Mundy (2013) study the role of MCS in managing Corporate Social Responsibility (CSR) strategy. They found that externally imposed standards and disclosing public information about CSR activities play a high level of importance in the selection of appropriate measures and targets. However, they also saw that with the inclusion of external groups, many interested parties must be incorporated into the organizations' processes and plans, complicating the use of MCS. The result of this could be that organizations prioritize the views of the most powerful and influential stakeholders at the expense of others. This raises the question of the extent to which the corporate sector can contribute to society's broader sustainability agenda.

To summarize, although most studies have focused on sustainability control without explicitly recognizing the impact of the other organizational practices or the external environment, a few have considered these points. However, this has mainly been done in relation to the conventional business perspective. This brings us to the second identified trend within this domain of literature: Based on our understanding, those papers that analyze sustainability control in relation to other demands within a company, focus mainly on the business perspective, whereas other competing demands are not given as much attention (Crutzen et al., 2017; Beusch et al., 2021; Gond et al., 2012; Parker & Chung, 2018; Arjaliés & Mundy, 2013).

Crutzen et al. (2017) base their study on companies in various industries, such as food, chemicals, pharmaceuticals, mining, logistics, and more. They discuss how the sustainability control of these companies works in relation to the business perspective. Crutzen et al. (2017) say that the majority of the companies they investigate rely on informal controls to push their sustainability agenda and that informal controls in general are more subtle than formal controls, and therefore cause less resistance. For example, it is pointed out that informal controls are less prevalent than formal controls due to a "*perceived incompatibility with conventional business management [and sustainability issues]*" (2017, p. 1298) and difficulty in measuring and analyzing the sustainability controls. Even though the analysis has benefited from including the business perspective, there is little focus on how the industry in which the companies are operating could have additional demands that affect the use of sustainability control.

In their study on integrating an SCS and MCS, Besuch et al. (2021) also focus on how the business objective and the sustainability objectives can be aligned. Besuch et al. (2021) discuss the financial performance and sustainability concerns as two separate objectives and argue that the configuration of a company's MCS and SCS should facilitate the implementation of a sustainability strategy that seamlessly integrates these two objectives. They also mention that corporate managers tend to perceive financial, environmental, and social objectives to be conflicting. They see that intensive dialogues among managers at different organizational levels and functions can mitigate challenges stemming from technical and organizational integration of sustainability, and also that a committed CEO and strategic-level management can avoid marginalizing sustainability by communicating their beliefs about it. They also conclude that the use of merely cybernetic controls, such as the BSC, is insufficient for successfully implementing a sustainability strategy (Besuch et al., 2021). Beusch et al. (2021) further quote Gond et al. (2012) in saying that since traditional MCS tend to focus on achieving an organization's business and economic goals of an organization, they tend to be viewed as limited regarding addressing environmental issues as well as their interrelationship with financial issues. Building on these observations, the main takeaway is that dialogue between managers approaching sustainability in different business case frames can lead to an avoidance of marginalizing sustainability by subordinating it to financial concerns, however, Beusch et al. (2021) do not pay attention to other factors that could be at play in the subordination of sustainability.

Similar to Beusch et al. (2021), Parker and Chung (2018) investigate the relationship between the traditional financial MCS and the SEMC and saw that in their case organizations, costly investments in line with SEMS had to undergo a "business case test" in which potential financial benefits, based on e.g., payback period and ROI, were examined. They also saw that changes in the external environment on a national level positively impacted the social and environmental orientation of the hotel's employees that they investigated. However, despite conducting their research within the hospitality sector, little attention was given to other potential demands specific to this sector that could have impacted sustainability control.

Since Arjaliés and Mundy (2013) research how CSR is integrated into a company's strategy, they also highlight how CSR is related to the financial performance of the company. They observe that most companies in their study mitigate difficulties with CSR and short-term

financial performance by taking stakeholder needs into account, such as stating that integrating CSR creates a future opportunity for business. They see that this is partly because of the difficulty in measuring future economic benefits due to the uncertainty of sustainability. Furthermore, they observe that the CSR strategy is not equally integrated into all departments and that CSR reporting remains a weak point, yet they do not analyze why the CSR strategy is not equally integrated into all departments and what potential reasons there are for this.

Hahn et al. (2015) contradict this trend by stressing that companies must manage corporate sustainability tensions, including not only economic and environmental dimensions but also social ones. In their study, they adopt an integrative view in arguing that companies should embrace tensions between these objectives without prioritizing one over the others.

As demonstrated, the link between management controls for sustainability and financial performance has been addressed by many articles but seems to dismiss other demands in the case of organizations. Further, many studies within this field have in common that they investigate the integration of sustainability control into the traditional system of control within organizations. This relates to the third trend that we identified within this literature domain; from our point of view, most papers have adopted a mechanistic view on the process of integrating two separate systems of control, while less attention has been given to social dynamics, such as how shared understandings, values, and legitimacy impact the integrated use of two MCS, or how the integration process is reflected in different situations (Crutzen et al. 2017; Henri & Journeault, 2010; Jusoh et al. 2021; Gond et al. 2012; Ligonie, 2021).

Even though some articles somewhat take these aspects into account, we deem it to not be explicitly included in the analysis but rather discussed as a peripheral phenomenon. For example, Crutzen et al. (2017), Henri & Journeault (2010), and Jusoh et al. (2021), seem to view the use of MCS as an automated, straightforward process, and even though somewhat problematized towards financial aspects, the implementation process is not problematized with regards to social dynamics. For example, Crutzen et al. (2017) only observe if sustainability controls exist, but do not discuss thoroughly how social dynamics within an organization impact or relate to sustainability control or how sustainability control is enacted in different situations. In their study of how MCS can lead to a deeper integration of sustainability within the organizational strategy, Gond et al. (2012) view MCS and SCS as separate systems and analyze the relationship and integration of these two separate systems.

While doing so, they refer to different types of integration and stress that integration should be approached through the “social practice” lens. They also include cognitive dimensions in their analysis, such as patterns of thinking and practical viewpoints. However, these social dynamics of the integration of MCS and SCS are not explicitly addressed in-depth in their framework. Gond et al. (2012) also argue that organizational actors may impact sustainability integration into organizational strategy. They demonstrate this by bringing up conflicting situations that are either facilitative or limiting. Gond et al. (2012) hence bring up the complexity regarding the integration of traditional MCS and SCS in relation to the impact of organizational actors, however, this is not the main focus of their analysis and could be problematized further with regards to how social dynamics such as personal beliefs and strive for legitimacy is impacting the integration of MCS and SCS in order to better understand the actions of organizational actors.

Gond et al. (2012) also point out that having sustainability controls does not per definition guarantee a successful sustainability strategy, and that sustainability systems can remain peripheral from the core activities. In this case, two parallel worlds of MCS and SCS can be observed. They also argue that technical, organizational, and cognitive barriers exist which can either facilitate or limit the integration of sustainability and regular MCS. Jusoh et al. (2021) support the findings of Gond et al. (2012), however, just as Jusoh et al. (2021) Gond et al. (2012) focus on the Triple Bottom Line (TBL) when taking relating sustainability performance with other objectives. As mentioned earlier, Beusch et al. (2021) have extended the study of Gond et al. (2012) on integrating SCS and MCS. In doing so, they also devote limited attention to the social dynamics of integrating two systems of management controls.

In her analysis of how the sustainability practice overlaps with other practices within the organization, Ligonie (2021) offers a practice-based analysis of sustainability control. However, the main argumentation on the relationships between the practices is still done on a theoretical level, for example concerning how sustainability controls are being built on existing systems but also constrained by these systems and needed to be adapted, that new sustainability control activities had been embedded in the management practice of, in this case, the organization’s facilities management practice, and that existing “systems” can either limit or encourage the new sustainability perspective. Ligonie (2021) does on the other hand analyze how actors put sustainability control tools into action in different ways and through

different sets of control activities depending on social aspects such as their own vision and understanding.

Slightly deviating from the mainstream trend that we have identified, Parker and Chung (2018) do take into account agents' impact on sustainability control. By using Giddens' structuration theory as their method theory, they recognize that actors within an organization can have an impact on social structures, which can be seen as "*resources and rules that both facilitate (and constrain) how actors behave in social settings*" (2018, p. 995). They also highlight how shared ideas, values, and associated legitimacy of organizational actors were vital for enacting SEMS and SEMC. They also found that accounting and financial decision rules and controls had been embedded in organizational members' shared values, and thus they impacted how the actors approached SEMS and SEMC.

2.1.3 Research Gap

Extant literature on sustainability control has granted considerable contributions to the general understanding of how SCS can be used to fulfill sustainability goals. However, we deem some important insights to be missing. Based on the three trends identified in section 2.1.2, we have formulated research gaps that this paper aims to fill. Firstly, extant research seems to the best of our knowledge to have focused on how sustainability control impacts other practices within the organization, but not how other practices, or demands, impact the use of sustainability control. Secondly, in those cases in which researchers have incorporated other perspectives aside from the sustainability perspective in their research on sustainability control, the conventional business perspective has been the most common one. However, this choice is usually not motivated but rather seems to rely on an implicit assumption that this is the most important perspective to focus on. Thirdly, we argue that research on the integration and/or relation between companies' traditional MCS and SCS has been carried out with a mechanistic view, which could lead to a lack of analysis with regard to situational differences as well as social dynamics such as organizational actors' agenda, personal beliefs, and legitimacy, and how this impacts the use of sustainability control. Conclusively, our paper aims to contribute to the extant literature by addressing these gaps.

2.2 Theoretical Perspective

Based on our aforementioned research gap, our paper aims to address how the use of sustainability control is impacted by co-existing demands, and how the relationship between

these demands is played out. It has thus far been established that a company usually is subject to several demands apart from the conventional business demands and that the external environment, actors' personal interests, and practical implications should be further investigated when analyzing how the use of sustainability control is impacted by the context in which it operates. Thus, we aim to use theory on institutional logics for interpretation and analysis of our empirical data as we believe that it has the potential of making co-existing demands and the relationship between these explicit.

There are many definitions of institutional logics. For example, Thornton et al. (2012) describe them as “socially constructed sets of material practices, assumptions, values and beliefs that shape cognition and behavior”. They can be seen as a conceptualization of demands put on an organization stemming from the values and expectations of a diverse set of stakeholders (Carlsson-Wall et al., 2016). Institutional logics also guide decision making (Battilana & Dorado, 2010) and “*prescribe what constitutes legitimate behavior in a particular institutional field and provide taken-for-granted templates for what goals are legitimate and in what manner they should be pursued*” (Carlsson-Wall et al., 2016; p. 47).

The presence of multiple institutional logics is common across a wide range of different organizational fields (Besharov & Smith, 2014). Therefore, co-existing institutional logics may impose different demands on an organization, which sometimes conflict. In this case, institutional complexity may arise from the presence of multiple logics with conflicting prescriptions (Nielsen et al., 2019). For example, critical external stakeholders may hold competing expectations about appropriate organizational goals (Besharov & Smith, 2014). However, the presence of multiple logics within an organization does not necessarily lead to conflict, but rather co-existing logics can imply consistent organizational actions (Besharov & Smith, 2014). In the broader setting of sustainability literature, some studies have used an institutional logics approach. Corbett et al. (2018) use the concept of institutional logics to investigate the level of the environmental impact of “green projects”, i.e., projects that incorporate environmental consideration. They argue that green projects must navigate through a complex and competing set of institutional logics, and that such projects are subject to a dynamically occurring process of interaction between competing logics and organizational identities which give rise to windows of opportunity for individual agency (Corbett et al., 2018). On a different note, Vernay et al. (2022) investigate how strategies operate and interact to support mainstreaming of business models for sustainability (BMfS) in

mature industries, and this process can be challenging since BMfS by design incorporate a competing institutional logic to the traditional business logic. In the following section, our chosen theoretical framework within the institutional logics literature will be presented.

2.3 Theoretical Framework

As mentioned, co-existing institutional logics may lead to conflict and tension if they imply incompatible organizational actions, but they may also align and imply coherent organizational actions. Besharov and Smith (2014) have studied the relationship between co-existing logics by investigating to what extent their coexistence may lead to conflict. This is based on two parameters: logic compatibility, i.e., the extent to which the logics imply the same organizational actions, and logic centrality, i.e., the extent to which the logics are manifested in core features in the organization. The relationship between co-existing institutional logics in terms of the level of centrality (i.e., relative dominance) and compatibility is, amongst other factors, influenced by features of institutional fields (Besharov & Smith, 2014). Besharov and Smith (2014) also argue that the extent to which multiple logics manifest in core features central to organizational functioning may vary. Thus, one logic may be dominant within an organization whereas other logics are more peripheral. Schäffer et al. (2015) also emphasize that logics may be complementary even if they are conflicting since all of them are required for organizational survival.

Carlsson-Wall et al. (2016) have extended this strand of research by demonstrating that compatibility between logics may not only vary between organizations and fields but also between situations. They do this by combining research from the accounting field and the institutional logics field to examine the role of performance measurement systems in managing multiple institutional logics within a football organization. Furthermore, Carlsson-Wall et al. (2016) describe three strategies that can be adopted to manage the institutional complexity created by the presence of multiple logics. Our study employs the concept of situation-specific compromises as proposed by Carlsson-Wall et al. (2016) in order to investigate how the use of SCS within the studied case organization is influenced by co-existing demands that the organization simultaneously needs to adhere to. The three strategies for managing tension between logics will also be briefly explained below. Subsequently, the concept of “situation-specific compromises” as coined by Carlsson-Wall et al. (2016) will be further elaborated upon.

Strategies for managing tensions between multiple institutional logics

If an organization is subject to the presence of multiple institutional logics, and these logics create tension insofar that they place competing demands upon the organization, managers need to find ways to resolve this tension (Carlsson-Wall et al., 2016). Three strategies have been brought up as a useful way of doing this in the literature on institutional theory: decoupling, structural differentiation, and compromise.

In a decoupling strategy, there is a gap between what the organization claims to be concerned with and what it actually does. There is only a symbolic effort towards one logic, and the managing of the organization takes place according to the other logic. It could also be seen as situation-specific whenever a concrete institutional demand is set on the organization and the organization would only symbolically react to this particular demand while not changing its practices (Carlsson Wall et al., 2016).

Structural differentiation, also known as horizontal decoupling, refers to separate subunits of an organization acting independently and according to the demands of 'their' institutional logic. As an example, the sustainability department works only with the sustainability logic and the accounting department works only with the business logic. However, as it is an organization, which usually means having interdependencies if there is structural differentiation, there will also be compromises at the organizational level (Carlsson-Wall et al., 2016).

Building on the previous argument, the third strategy is compromise. Compromising implies adhering to one logic, while partially fulfilling the demands of others (Carlsson-Wall et al., 2016). It could also imply adhering to demands from multiple logics, but compromising as they do not implement the entire set of practices in line with each type of logic, but rather take a bit from every logic rather than everything from every logic.

Situation-specific compromises

In their study, Carlsson-Wall et al. (2016) argue that compromises between institutional logics are not always done the same way, but rather they are situation-specific. Further, they argue that managers make priorities between different logics depending on the situation as reflected by the performance measures. They, therefore, analyze situations in which the outcomes of

the performance measures differ. Thereby, they demonstrate that different degrees of compatibility between multiple institutional logics can be found in different situations within an organization, by analyzing several situations in which the outcomes of the Performance Measurement System (PMS) are varying, to determine in what situations the logics conflict or align. This implies that the relationship between logics is situation-specific, meaning that the relationship is not unambiguous (i.e., a matter of fact) but rather ambiguous, in that it is *“subject to how actors enact the logics and interpret the consequences of a given set of actions or events for the logics at hand”* (2016, p. 48). With this, Carlsson-Wall et al. (2016) demonstrate that *“on the organizational level, logics are not compatible or incompatible per se, but are accorded different priorities in different situations”* (2016, p. 48). This *“allows for different ways of enacting a given logic in specific decision-making situations”* (Carlsson-Wall et al. 2016, p. 58). In other words, co-existing institutional logics are sometimes conflicting, and sometimes aligned. Whenever they conflict, managers need to make a compromise between them based on the information from the PMS.

2.3.3 Situation-specific Compromises Based on SCS and three logics

We will deploy the concept of situation-specific compromises as proposed by Carlsson-Wall et al. (2016) on the basis of SCS rather than PMS. In their suggestions for further research, they argue that future studies could look at other management controls apart from PMS. Answering this call, we will focus our empirical analysis on the SCS deployed by the studied case organization. With the help of informal and formal sustainability controls in the case company's SCS, we will investigate in what situations the sustainability logic underpinning their SCS is aligned or not with other logics at play. To better understand the SCS, we will use the same format as Crutzen et al. (2017).

Further, we will investigate the relationships between three coexisting logics in our case organization, as we deem all three logics to be relevant for our analysis as all of them are invoked regularly in the case organization (Thornton et al., 2012), and thus excluding one logic would risk leading to inaccurate conclusions. These are the sustainability logic, the business logic, and the social logic. The logics identified within our case organization represent the institutional demands that they are facing, for example, the presence of a sustainability logic implies an institutional demand of engaging in sustainability. Thus, whenever logic is mentioned in the empirical analysis, we refer to what demands they put upon the organization (Carlsson-Wall et al., 2016). We will specifically investigate how

organizational actors enact these logics, therefore the focus will be on which compromises are being made in the analyzed situations in which all three logics are present (Carlsson-Wall et al., 2016).

As our aim is to investigate how the use of sustainability control is impacted by co-existing demands within the organization, as well as how other logics apart from the business logic is impacting the use of sustainability control, we believe that extending our analysis to include three logics rather than two will provide the most interesting results for our research question. More concretely, the inclusion of the social logic aligns with arguments put forward by Ferry and Slack (2021) on how the business logic usually is dominating in an organization and that more focus should be given to alternative logics, to serve the democratic ideals of organizations that are subject to multiple logics. In order to adapt our analysis to our scope, we will focus on the SCS in the case organization and not investigate the MCS underpinned by the business logic and social logic.

3. Research Methodology

Thus far, it has been established that the literature on sustainability control could benefit from an institutional logics perspective. This paper intends to address this by investigating how the use of sustainability control is impacted by co-existing demands using a theoretical lens derived from institutional logics literature. This chapter will provide insights into how this study has been conducted, and what means have been used to answer our research question. Firstly, the chosen research approach will be presented, followed by an overview of the data collection process. Finally, we will demonstrate how we conducted our data analysis.

3.1 Research Approach

Given our interest in specific situations in which the different logics are at play within our case organization, we have decided to use a qualitative research method. Previous studies on sustainability control related to SCS have used a qualitative method (Crutzen et al., 2017; Arjaliés & Mundy, 2013). However, when doing this, Crutzen et al. (2017) interviewed the sustainability managers of 17 companies, and Arjaliés and Mundy (2013) used questionnaires as their data gathering. As we are interested in studying the use of SCS and the interrelationship between co-existing institutional logics we also deem that a qualitative method will be the best fit for our purpose. Furthermore, we will answer our research question

through an in-depth single case study based on semi-structured interviews due to two reasons. Firstly, as previous studies have used different data collection methods we deem it relevant to take a different approach and thus contribute with other insights. Secondly, as we are taking an institutional logics perspective we want to fully understand the culture and complexity of the social systems in place in the case organization, and multiple interviews with different departments allow for this better than questionnaires or taking a quantitative approach.

We have ensured that we received insights and perspectives across the organization, by interviewing several teams. This is because it will help us answer the research question (since more perspectives allow for more nuanced analysis), but also since all interviewees did not know the practice of other parts of the organization and hence were only expected to talk about their own practice, which limited the risk of explaining what they think other people do and biases (Kreiner & Mouritsen, 2005). We decided to take an abductive approach to our data gathering to allow for flexibility and adaptivity in our data gathering. As mentioned by Dubois and Gadde (2002), in studies relying on an abductive approach *“the original framework is successively modified, partly as a result of unanticipated empirical findings, but also of theoretical insights gained during the process”* (2002, p. 559). This enabled a constant adaptation to our empirical findings, allowing for an interesting conclusion in the data collection and analysis. In line with the abductive approach, some questions have been adapted to each division of the company, in order to gain a more in-depth understanding of certain expertise within the respective departments. We have identified two potential limitations with our research approach. Firstly, the semi-structured nature of our interviews may have constrained the interviewees' ability to speak freely about the topics being discussed, thereby restricting the insights gathered. Additionally, because we conducted interviews across the organization but did not extensively cover each department, we may not have collected a sufficient amount of information to allow for generalization of insights across the organization.

3.2 Data Collection

For the purpose of confidentiality, the analyzed case organization will from this point be referred to as LogiCo. The case organization was deemed interesting because of three reasons. Firstly, as they operate in the transport industry, their core operations are inevitably going to have a climate impact, the largest being their fossil fuel emissions. Secondly, they are of considerable size, meaning that their actions have a large impact on society, both socially and

sustainably. Finally, they have a rigorous sustainability plan and work on a broad range of sustainability concerns. Thus, they actively engage in the topic.

Primary Data

The interviews have taken place in an online setting and were held in the language that the interviewee was the most comfortable in to eliminate the risk of language barriers affecting the answers in the interview. The interview questions were planned in advance covering the main topics we wanted to discuss, but we also allowed for spontaneity in follow-up questions and wonderings (in line with our abductive approach) (Kreiner & Mouritsen, 2005). In other words, our interviews were conducted in accordance with a semi-structured approach. We did this because we deemed future interviews to be contingent on the answers we received in previous interviews. Thus, we continuously updated our view on what was relevant to discuss during the interviews, and did not focus much on what we previously thought was relevant.

Seven in-depth interviews were held with LogiCo. We had different contact people across the organization to decrease the chain-referral bias (Emerson, 2015). However, there was still transparency towards the interviewees regarding who we had been in touch with. Depending on how the interviews went we adjusted who we wanted to reach out to afterwards. As an example of this, at the start of the process, our intention was to only discuss two logics; the business logic and sustainability logic. However, due to our semi-structured interview approach and abductive research method, we realized that there was also a third logic that we deemed important to include. This led us to find people to interview who worked more closely with the demands influenced by this logic. Similarly, the initial interviews took a broad approach in investigating LogiCo's engagement in sustainability, but after a few interviews, it became clear that fossil fuel emissions were the most interesting topic for us to focus further on.

All interviews were recorded to ensure that both researchers could focus on listening rather than noting down answers. This ensured that the interviews were not centered around asking questions and data collection, rather they turned into a process of knowledge construction that allowed for spontaneous follow-up questions as we were able to hear and process the answers in real time (Kreiner & Mouritsen, 2005).

Secondary Data

As a complement to data collection through interviews, we have also conducted document analysis of public documents such as LogiCo's annual reports and a government report. This, to ensure a more comprehensive and complementary approach to data collection, as the nature of the data collected through document analysis may differ from the data collected through interviews. Neither the external nor the internal documents will be disclosed in the references for the sake of confidentiality.

3.3 Data Analysis

After each interview, the recordings were transcribed manually. This required both researchers to listen to the interviews multiple times to ensure that the transcriptions were correct. This was helpful in our analysis of our empirics as it made us well-informed about the answers. After the data was gathered, we chose a method theory for the data analysis. The method theory is a theoretical lens that refers to another field such as organization studies, which are applicable to the chosen domain theory (Lukka & Vinarri, 2014). To ensure that the conclusions and analysis are viewed as facts we have strived to write authentically, plausibly, and critically (Baxter & Chua, 2008).

In order to theorize empirical data from our findings, an iterative approach has been adopted. This means that verbal discussions amongst the researchers were used as a means of sensemaking shortly after each conducted interview. This helped clarify misunderstandings and aligned our key takeaways from the interviews. Further, the iterative approach entailed a process of going back and forth between data and literature continuously throughout the research period which enabled us to adapt interview questions to better fit our intended purpose, as already mentioned in section 3.2.

After the interviews were transcribed, we used a thematic approach for the categorization and analysis of the empirical data. We did this by using an Excel sheet where we categorized our data under different themes, under which data points in the form of quotes from the interviews were sorted. Keywords were assigned to each data point so we could filter through the data and more easily decide on the intended use of the respective data points. The thematic approach allowed us to see where we had sufficient data and where data was lacking. This way we could also see what we wanted the following interview to address as this was contingent on the data we had gathered from previous interviews. It also allowed for comparison between the interviews, as well as facilitating the process of choosing which data

point to include in the empirical findings. In the following section, we will present our empirical findings.

4. Empirical Findings

In this chapter, we first provide a brief introduction to LogiCo. Thereafter, the various logics mentioned will be further elaborated upon. After that we will present LogiCo's SCS. Following, the various logics mentioned will be further elaborated upon, as well as the strategies used to manage tensions between these (Carlsson-Wall et al., 2016). Lastly, we will analyze the relationship between the logics using the concept of situation-specific compromises (Carlsson-Wall et al., 2016).

4.1 Case setting: LogiCo

LogiCo is a company operating within the transport industry in a European country. They are part of a larger group, operating in several countries. Their main operations include deliveries and transportation. For the sake of confidentiality, their operations will not be disclosed further.

LogiCo has an ambitious sustainability agenda. Further, they have been assigned a public obligation by the state, which requires them to make certain deliveries across the entire country, under several requirements such as lead time. They do not receive any funding from the state for this obligation. Because of this obligation, the state can be seen as one of the most influential stakeholders of LogiCo, as the assigned obligation steers the way in which they operate. Other stakeholders are LogiCo's customers, owners, and employees. There are three prominent logics that characterize the operations of LogiCo: the sustainability logic, the social logic derived from the public obligation, and the business logic. These will be further analyzed below.

4.2 Institutional Logics Influencing LogiCo

In this section, we will elaborate upon the different logics at work in LogiCo. We recognize that there may be other logics existing within the organization, however, the following are those we deem most prominent, and most regularly evoked in the case organization, and thus we will focus our analysis on these (Thornton et al., 2012).

The sustainability logic

The sustainability logic within LogiCo seems to convey a feeling of responsibility among employees with regard to engaging in sustainability. There was a consensus amongst all interviewees that the sustainability goals set out are highly prioritized, and that sustainability is an integral part of the strategy of LogiCo. For example, Employee B said:

“It is part of what we believe in - a sustainable way going forward, long-term, and on a societal level. That’s how we work. And that is our mindset going forward. So this is what permeates everything else, this is the driver”.

Legitimate goals according to the sustainability logic are for example the Science Based Targets (Carlsson-Wall et al., 2016). As Employee F said:

“They [Science Based Targets] create an internal direction, and are used a lot for external communication (...) to have proof that the plans that are set will lead to goal fulfillment. It creates legitimacy in our sustainability agenda.”

LogiCo's interest in sustainability work and adoption of sustainability logic has increased in recent years due to three main factors. Firstly, the number of environmental regulations, such as the EU taxonomy, has been on the rise, putting pressure on LogiCo to comply with new standards. Secondly, LogiCo's customers are demanding sustainable solutions, since fossil-free deliveries have become a competitive requirement in the transport industry. Finally, as one of the largest companies in the country, LogiCo feels an added responsibility to prioritize sustainability efforts. Due to these three reasons, the sustainability efforts were discussed during the interviews as being expected of LogiCo, but that it did not make it less important for them as a goal. In other words, even though there is external pressure for it, the interviewees expressed internal motivation for investing in sustainability. When discussing different reasons for investing in sustainability, Employee C said:

“You need to do it for many reasons. There is partly a financial gain in finding sustainable, smart solutions, it’s partly a responsibility that you have,(...) for our colleagues, it’s a way to inspire and engage but also to attract new talents and new co-workers, and for our customers, to offer sustainable solutions so that they, in turn, can market themselves as more sustainable.

So I would say that it permeates everything. You are not relevant today if you do not work with this.”

The social logic

This logic is mostly recognizable in LogiCo through the public obligation that they have been assigned from the state, as explained in section 4.1. This influences the entire strategy and operations of LogiCo, as it is not up to LogiCo whether they want to fulfill the requirements that come from this obligation or not. Even more so, there is a law requiring LogiCo to fulfill these obligations. Thus, if these requirements are not met, it can be seen as if LogiCo is breaking the law. One interviewee expressed that the strict regulations are more constraining on LogiCo's operations than the lack of state support from the obligation. Due to this, the social logic seems to be the most dominant within the organization. As Employee A said:

“(...) sometimes we need to make certain decisions in order to fulfill our state obligation because that is a top priority”.

It has been further expressed by other employees that if it were not for this obligation, several things would have been done differently at LogiCo, which emphasizes this point. For example, LogiCo needs to drive certain routes in order to cover all geographical areas within the country. Due to the steady decrease in demand for this service, this is becoming more unprofitable and can moreover not be done sustainably in many geographical areas due to a lack of infrastructure for electric vehicles. Yet, they need to drive these routes in all geographical areas due to the public obligation. As Employee C put it:

“It means that we have the responsibility to distribute in [the entire country], others can also do this, it is not a monopoly but we have the responsibility. We are investigated harshly by the state that we reach the goals that the obligation requires, and that we fulfill the law, and quality, and distribution days.”

If the requirements of the public obligation are not fulfilled, LogiCo risks having to give up a share of its profits to the government. But also important to note is that it is costly for LogiCo to have this obligation as it forces them into unprofitable geographical markets and information sharing that they otherwise might have decided not to share, such as being transparent about their pricing.

During the interviews, several employees expressed a sense of pride in having been given this obligation since LogiCo is an essential part of society, but some also expressed that it sometimes can be difficult to make it run smoothly with the rest of the operations. Due to the strict regulations, legitimate goals according to this logic can be seen as fulfilling the public obligation and meeting the requirements for this (Carlsson-Wall et al., 2016).

The business logic

This logic prescribes a market-based mindset, a focus on cost efficiency and profit maximization, and ensuring a sustainable business strategy long-term. LogiCo does not receive any financial support from the state for its public obligation. As Employee C puts it:

“We distribute in all of [country], we do not receive subsidies for this. Many think that we are state-funded and that we receive grants for distribution. (...) This is a big misconception as in many countries, companies receive money for this service. If we would have gotten that, maybe we could distribute every day but if we do not then we need to see it from a cost and revenue perspective.”

The business logic is the fundament for LogiCo’s overarching goal of ensuring a financially stable business model, and in annual reports, there is a strong emphasis on cost-efficiency. This was further emphasized by one of the interviewees not working in the sustainability department, stating that they incorporate sustainability as a dimension in all the projects that they partake in, but that the primary focus is on cost efficiency. In recent years, LogiCo has experienced a period of declining sales as a consequence of the decreased demand for its product. Further, an increasing number of competitors have entered some of the geographical markets in which LogiCo operates. Since these competitors do not have a public obligation, they are not required to make deliveries in the entire country. As Employee A explained:

“They [the competitors] are cherry-picking. They drive a lot in city centers where there is a small area with many deliveries, whereas we [in contrast to them] have the public obligation, that we have to deliver within a reasonable amount of time throughout the entire country, even in [mentions a part of the country] where people live with great distances from each other. And there you can’t go around with a bike. So we do not really have the same conditions [as the competitors].”

Thus, LogiCo is experiencing a high level of competition in the most profitable geographical markets, such as the bigger cities, but not in the other, less profitable, markets. These factors have affected the level of profitability within LogiCo, putting increasingly more pressure on them to be cost-efficient. Hence, legitimate goals according to the business logic are related to cost efficiency (Carlsson-Wall et al., 2016).

4.3 LogiCo's Sustainability Control System

LogiCo manages various sustainability issues besides environmental sustainability. However, as specified in our delimitations, our focus will be solely on environmental sustainability. Furthermore, we have concentrated our empirical findings on their SCS for the emissions generated by their transportation, as this is where the majority of their climate impact lies.

This section will discuss LogiCo's formal controls. LogiCo has an action-oriented approach to their formal control package and thus has formal structures in place to track their sustainability efforts (Crutzen et al., 2017). They have a clear structure of administrative controls, including a sustainability code of conduct and sustainability-related policies. Furthermore, they have sustainability departments working solely on sustainability issues, however, LogiCo ensures that employees working in this department also work cross-functionally. There is a budget for sustainability work, and employees working with sustainability can impact the budget. There are also PMS tracking various engagements in sustainability. The sustainability ambitions are applied in a long-range planning system (e.g., Science Based Targets), but, short-term action planning also exists in the form of yearly goals and tracking. As Employee F said:

"(...) we make very conscious decisions. Conscious, short-term goals that lead to long-term goal fulfillment."

When asked about the Science Based Targets, Employee E said:

"This whole Science Based Target is kind of like a stamp of approval. One part is that it's a stamp of approval, but it also gives us a sense of confidence that we are going down the right path. We are not just doing it just because of the PR. We are sure that the goals that we have are actually going to do something. That is the main motivation." - Employee E

Besides the formal controls, there are several informal controls in place at LogiCo to track sustainability. There is a platform for communication for sustainability in the form of a sharepoint which is continuously updated. There are also workshops and internal events related to the engagement in sustainability. During all interviews, there was a genuine interest observed for sustainability with the same shared vision, also among interviewees who do not directly work with sustainability in their daily work. For example, as Employee E said:

“...but that is also really great when it comes to a company the scale of LogiCo, and one of the reasons why I joined LogiCo, was that this is also where we can affect society. We are huge and we have this obligation.”

In the annual reports, there is an emphasis on sustainability with reporting on their efforts and the amount of emitted CO₂ within the different scopes over the past years. Finally, there are several visual sustainability symbols, such as electric vehicles with exterior design stating that they provide fossil-free delivery. They have CEO examples as the group CEO is the sponsor of LogiCo's sustainability work and is adamant about sharing their vision for sustainability throughout the organization (Gerdin, 2020).

At this point, we have established that an SCS exists at LogiCo and that the controls are multifaceted and interlinked. In order to evaluate how the SCS is used, we intend to examine various logics at play in Logico and analyze their impact on the use of SCS, using the concept of situation-specific compromises (Carlsson-Wall et al., 2016). Table 1 (see below) is showing a more detailed outline of the relevant controls in LogiCo's SCS.

<i>Formal Controls</i>	<i>Informal Controls</i>	
Administrative Controls <ul style="list-style-type: none"> • Sustainability code of conduct • Sustainability related policies • Sustainability department and employees • EU regulations • State regulations • Project selection criteria for sustainability • Instructions regarding good leadership style • Two mission statements • Transformation program for sustainability incl. cross-functional project groups • Initiatives for increasing share of fossil-free deliveries 	Platform for communication for sustainability <ul style="list-style-type: none"> • Sharepoint for trainings and information on sustainability • Online learning tools 	
Budget <ul style="list-style-type: none"> • Budget for sustainability control • Communication between sustainability department and those creating budget • Funding from CEO personally 	Internal company events <ul style="list-style-type: none"> • Cross-organizational sustainability workshops • Seminars 	
PMS Long-term <ul style="list-style-type: none"> • Science Based Targets Initiative • Long-term emission goals • PMS connected to performance on carbon emissions long-term 	Same shared vision towards sustainability <ul style="list-style-type: none"> • Consensus in all interviews • All well informed about the long-term goals regarding emissions • Values 	
PMS Short-term <ul style="list-style-type: none"> • Sustainability KPIs for different teams that are measured annually, semi-annually, quarterly, monthly • Operational sustainability targets • PMS connected to performance on carbon emissions short-term 	Strong emphasis on sustainability in annual reports <ul style="list-style-type: none"> • Transparency regarding emission development within all scopes • Explains initiatives 	
	Visual sustainability symbols <ul style="list-style-type: none"> • Design of electric vehicles • CEO being sponsor of sustainability efforts • External and internal presentations on sustainability 	Table 1 Overview of MCS for sustainability

4.4 Strategies used to manage tension between multiple logics

Thus far, it has been established that LogiCo is influenced by three different logics: the sustainability logic, the social logic, and the business logic, and that these logics are impacting the operations of LogiCo by prescribing different mindsets and legitimate goals to reach (Carlsson-Wall et al., 2016). In the following section, we will investigate what strategies LogiCo deploys to manage potential tension between these three logics (Carlsson-Wall et al., 2016).

Decoupling

The empirical data gathered from the interviews indicate that the sustainability logic is well integrated into LogiCo's strategy, and not only symbolically adhered to whilst in practice focusing on the other logics (Carlsson-Wall et al., 2016). Their comprehensive SCS including formal and informal management controls, as well as committing to the Science Based Targets Initiative increasing the accountability of LogiCo towards its sustainability commitment is one indication of this (see Table 1). When asked about why LogiCo engages in sustainability, Employee B said:

“(...) the market demands it. (...) But we also think it is the right way to go. It's our values and our vision. It's part of what we believe in - a sustainable way forward, in the long term, and also at a societal level. That's how we work. And it's our mindset going forward. It is the

mindset that permeates everything else, it is the driver. Then for this to work, you have these other factors, costs, etc.”

Further, several interviewees mentioned that sustainability is a dimension that is taken into account when doing projects throughout the company, which indicates that the sustainability logic is integrated into the overall strategy rather than being decoupled. Conclusively, LogiCo does not seem to use decoupling as a strategy for managing tensions between the logic.

Structural differentiation

LogiCo seems to some extent deploy structural differentiation as a strategy to manage the existence of multiple institutional logics within the organization. There are different departments steered by the sustainability logic, business logic, and social logic, respectively. For example, there is a sustainability department, and the public obligation is handled separately from the other logistics in the company. This, again, makes sense considering the size of LogiCo and the additional complexity this entails, however, some integration between the subunits exists and is necessary as they are working for the same organization.

In order to ensure integration between the logics, the departments work cross-functionally. Several interviewees mentioned that they communicate closely with other departments. Similarly, one employee described sustainability as “bridging solutions” in which several departments work together with the sustainability department in order to reach the goals and ensure that the entire organization works towards the same goals. Structural differentiation does however not seem to be the main strategy used by LogiCo to manage the tension between logics. Rather, compromise seems to be the most frequently adopted strategy. This will be further elaborated upon in the following section.

Compromise

The main strategy used by LogiCo to manage tensions between logics seems to be compromise. This is because they need to adhere to the demands of all three logics at all times, thus they constantly need to make compromises and adjustments. This is done by adopting a long time horizon and long-term goals for their sustainability logic. This way, LogiCo can incrementally work towards their sustainability goals, by for example continuously decreasing their carbon emissions, while not making an extreme change that would cause them to not fulfill the demands of the business logic and social logic. This

implies a continuous decrease in carbon emissions, by making several changes along the way, such as replacing current vehicles with electric vehicles. When this is not possible, Hydrogenated Vegetable Oil (HVO) is used as fuel rather than diesel, in order to reduce carbon emissions further. Thus, while continuously decreasing carbon emissions, it is still possible for LogiCo to meet the demands of the public obligation by delivering on time, as well as staying on par with the business logic by not taking on too large costs at once. As Employee A put it:

“Long-term sustainability is the core of our values. We want to be sustainable, but at the same time, we are a company and need to make a profit. And it is also a part of sustainability to be financially sustainable. So you can’t forget that part either. So we rather want to gradually change both ourselves and also impact others”.

Similarly, when discussing the use of HVO as fuel the same employee said:

“HVO is a very good transition phase. We can get a lot of fossil-free [fuel] and decrease our carbon emissions quite quickly, but at the same time, we can deliver as usual. (...) So I think it’s a good strategy, to gradually try to phase out, and still be able to deliver as planned and not challenge that in any way.”

There is also a perceived business risk of investing too quickly in certain sustainable solutions, which implies a compromise in which the business logic is prioritized over the sustainability logic. According to Employee G, this is because there is still not yet a clear manual of how to be “sustainable”, as the topic is still quite new and unexplored compared to other investments. Regulations are changing often and new requirements are presented. Hence LogiCo states that to e.g. invest in a 100% electric fleet means a lot of risk since it is still unclear whether this is the best way to go in the long run. According to LogiCo, the technology within these areas thus needs to develop. LogiCo hence follows the technological development of the industry and is cautious of their investments made currently. This was brought up by several employees:

“It is so uncertain. How do you invest billions in technology that is [untested] and that is very uncertain? So you go with the tried and tested, and what do we know that will reduce emissions quickly? It is HVO.” - Employee G

“The more innovative and in the future, it [a sustainability investment] is, the harder it is to give heed to” - Employee C

This strategy of long time horizons for the sustainability logic does also seem to be related to the size of the company. As Employee B said:

“We are such a large player that when we are about to do something, it takes more time. It’s a large ship that you need to steer in another direction. It’s not a small motorboat. We are a big ship with thousands of employees (...) As with everything else, it’s not like we in two years will go from one day to another and drive [a certain number] of new vehicles, but rather this is done in smaller steps, to ensure that you adjust along the way, adjust in the right way and become better.”

Succeeding with this strategy, which allows LogiCo to meet the demands of all logics at the same time, requires constant compromise. For example, some investments may need to be done in sustainability even if they are currently not financially viable. As Employee B put it:

“You need to make trade-offs. And we are aware that this trade-off might become less profitable than the other [option], but that you still take that decision. Because maybe it is the right way to go, because maybe it is more sustainable, because it in the future will give us that edge and because with time it will become better”.

These compromises on the basis of the three logics are not always done the same way, but rather they differ depending on the situation. This will be further elaborated on below, where different situations will be discussed in which compromises have been made between the three logics that we have analyzed at LogiCo (Carlsson-Wall et al., 2016). These situations have been identified on the basis of what management controls have been the most prominent.

4.5 Situation-specific Compromises on the Basis of SCS

In total, four situations were identified in which the relationships between the three logics were enacted in different ways. Different management control tools were relevant in those respective situations, and the relative importance of the business logic versus the social logic

is specific to the respective situations as well. These four different situations will be presented below.

4.5.1 Situation 1: All three logics aligned based on informal controls

The informal management controls related to values within LogiCo's MCS seem to align the social logic and the sustainability logic as they provide a sense of pride in both the sustainability engagement and the public obligation. LogiCo's values imply a feeling of responsibility towards society, in that they are a needed, vital part of society. For example, one employee expressed that there is a democratic value in the public obligation, in that it ensures that each citizen of the country is not excluded from society. This, in turn, seems to have led to a feeling of responsibility related to being sustainable as well. For example, when asked why LogiCo engages in sustainability Employee B answered:

“One [reason] is that we are such a large player, we are one of the largest employers in the country. And with that comes responsibility towards society. We have historically had a social function, the [organizational operations] have been important, because the [organizational operations] need to function for a part of society to function. (...) So what we do at LogiCo has a big impact.”

There are other informal controls in place at LogiCo that aim to indirectly influence the behavior of employees, by steering their work towards the main organizational goals. Examples of these are the values for a certain leadership culture and two mission statements. The goals that these informal controls aim to steer towards, by permeating the entire organization, include all the main organizational goals. Thus, we argue that these controls are not related to one specific logic, rather they apply to all three. As Employee G said:

“I think [the values for the leadership culture] is a way of creating a company culture in which you aim towards the same goals. And one of these goals is to be fossil-free in the future, that's important to us. But it is not only because we want to be a kind player, we will not be able to make money if we don't.”

As seen in the quote above, the sustainability logic is aligned with the business logic. The sustainability logic and public obligation is also aligned on the basis of these informal

controls, as they are not specific to any logic but rather encourage employees to work towards the overarching goals.

4.5.2 Situation 2: Sustainability control affected by the public obligation

The rigorous formal controls aimed at fulfilling the public obligation lead to LogiCo making decisions that they otherwise may not have taken, thereby also influencing the use of their SCS. As Employee C puts it:

“Depending on the requirements set on us we need to examine how we reach these goals in the best possible sustainable way. It is always in our interest to do it as sustainable as possible but we cannot compromise the law.”

Relevant controls for this are the overreaching controls for the public obligation including the set time on lead times for delivery, and the required quality of delivery. Furthermore, they have a requirement to drive certain routes every day which according to LogiCo are costly, inefficient, and unnecessary. As Employee D stated:

“A problem we still have is that we [need to drive certain routes] every day, and that is no problem in [urban areas] but it is not sustainable in [rural areas].”

If LogiCo wants a change in the controls, a request to do so has to go through the state. An example of when this became a compromise was when LogiCo chose a transport method using fossil fuels. Reasons for this were that it was more effective to fulfill the public obligation, but also limited the risk of a fine placed if the public obligation was not met. However, it leads to a decreased adherence to their sustainability controls. As Employee A said:

“Because of the public obligation for better or for worse, we need to deliver [in a certain amount of time], and we need to use air freight to succeed with that. This can sometimes go against sustainability so sometimes we unfortunately need to make some decisions in order to meet the requirements of our obligation because that is our first priority after all. And then, of course, you need to instead make [the routes] more fossil-free in some areas and less in others, to still be able to succeed with what we agreed to, make the customers happy, and deliver on time but still, protect the climate”.

Conclusively, in this situation, the strict controls for the social logic, as well as the financial arguments, lead to a compromise at the expense of the sustainability logic, firstly in favor of the social logic, and secondly in favor of the business logic.

4.5.3 Situation 3: Customer demand for fossil-free deliveries

One main reason why LogiCo is investing as rigorously as they do in sustainability is that they have recognized a shift in the market, in which customer demand for fossil-free deliveries has increased a lot. As Employee G said:

“The greatest pressure [to become more sustainable] comes from our corporate customers. If they would not have supported our sustainability engagement we would not have a company to run. All big customers demand this. It's billions of [local currency] in revenue that would go away if we did not work with sustainability. This is a strong incentive of course (...).”

One situation was brought up by Employee E when a customer requested the use of fossil-free fuel for their deliveries. At that time, LogiCo was unable to offer this, and the customer replaced LogiCo with a competitor that could. The public obligation inhibits LogiCo to go fully fossil-free with all deliveries today since the obligation requires them to make deliveries even in rural areas, in which fossil-free alternatives cannot provide for the required commitment. Thus, after this incident in which LogiCo noticed that this is an important requirement for customers, they launched an initiative in which they could offer fossil-free delivery in the geographical areas in which the conditions for fossil-free delivery existed, such as between larger cities. This initiative can be regarded as part of LogiCo's SCS, as it aims to increase the total share of fossil-free deliveries. After starting to provide this service, said customer came back to LogiCo.

In this situation, the sustainability logic and business logic are in harmony as the market demand and competition from competitors reinforced the sustainability logic. The social logic is not constraining the sustainability control in this regard either, since the requirements for the public obligation could still be met despite LogiCo launching the initiative of fossil-free deliveries in certain geographical areas. Moreover, the sustainability logic was affected positively by the business logic.

4.5.4 Situation 4: Large investments in long-term assets inhibiting sustainability controls

LogiCo owns a large fleet of trucks. As LogiCo explains it themselves, the large number of long-term assets with set economic lifetimes inhibit a quick transition to fossil-free emissions as it would not be financially wise to simply dispose of them and purchase electric vehicles from one day to another. When discussing how quickly LogiCo is able to transition to electric vehicles, one aspect brought up as important was *"Capital utilization - depreciation periods and residual values you want to use the best possible way (...)"* (Employee F). As Employee F further explained:

"My take on it is that a financially sustainable business is also environmentally sustainable. If we lower our direct costs for our vehicles, if we plan to use our vehicles in another way, we will have higher capacity per vehicle, which in turn means that we don't need as many vehicles as we did historically. (...) By trimming and optimizing and rethinking (...) we could increase our margins and at the same time decrease our emissions".

This has led to LogiCo shaping its transition towards lower emissions in a different way. As mentioned in 4.4, the goal is to slowly phase out the trucks and replace them over time with more sustainable alternatives. In the meantime, the remaining diesel trucks are using HVO as their fuel. As the number of diesel trucks is continuously reduced the need to compromise between diesel and electric vehicles will decrease over time and emissions can be further reduced.

An additional aspect as to why LogiCo is changing its fleet gradually is that conditions like weather and long-haul transportations do not allow LogiCo to use the same smaller electric vehicles that are used in urban areas, rather large trucks need to be used which, according to LogiCo, do not yet exist in electrical form. Additionally, as mentioned previously, the infrastructure needed for electric vehicles is not yet established in all the geographical areas that LogiCo needs to deliver to. This supports LogiCo's argument of transitioning slowly. As Employee A states:

"Even if we were to do [convert to electric vehicles directly], it is not certain that we would be able to charge the cars, and then our public obligation disappears a little, or there is a risk that we will be challenged for not being able to do it."

Conclusively, LogiCo is from a financial perspective not able to replace all current vehicles at once and is required to deliver in areas in which the needed infrastructure for electric vehicles does not yet exist. Due to this, there is a compromise in favor of both the social logic and business logic over the sustainability logic. The four situations that have been analyzed are summarized in Table 2.

<i>Situation</i>	Management controls affected	Enacted relationship between the institutional logics	Compromising behavior
1. Mutual informal management controls	Values implying sense of pride Mission statements Instructions for leadership style Shared vision	Sustainability, public obligation, and business logics are in harmony: in the long-term vision of the company, they align and complement each other	No compromise needed
2. Constraining requirements	Quality, route and lead time requirements of public obligation Measures for reducing CO2 emissions Measures for cost efficiency	Relationship between the three logics enacted as conflicting: Difficult for LogiCo to prioritize sustainability logic while adhering to the business logic as the public obligation did not allow it	Compromise in favor of social logic and business logic at the expense of sustainability logic
3. Customers demand fossil-free deliveries	Measures for reducing CO2 emissions Revenue measures Initiative for fossil-free deliveries Customer retention Requirements of public obligation: coverage in geographical areas	Business logic and sustainability logic are in harmony: lower emissions implies higher revenue. social logic allows for this in certain geographical areas	No compromise needed between sustainability logic and business logic, but some compromise with the social logic
4. Large investments in long-term assets	Share of electric vehicles Measures for CO2 emissions Measures for capital utilization, depreciation, and residual value Measures for share of HVO as fuel Requirements of public obligation: coverage in geographical areas	Relationship between the three logics enacted as conflicting: increasing share of electric vehicles partially constrained by public obligation and financial performance	Compromise in favor of social logic and business logic at the expense of sustainability logic

Table 2
Summary of situations

5. Analysis and Discussion

By using the concept of situation-specific compromises as our theoretical lens we have demonstrated that there is an ambiguous relationship between the sustainability logic and the two other logics present within LogiCo, as the relationship between the logics differs depending on the situation, and is dependent on how actors interpret the consequences of these situations (Carlsson-Wall et al., 2016). Since we base the situations in which compromises are made on LogiCo's SCS, we also answer to the call for future research by Carlsson-Wall et al. (2016) on their study being conducted looking at management controls other than PMS.

A general observation is that decoupling as a strategy for maintaining multiple logics might no longer be accepted by the public. We observed no decoupling in LogiCo as the interviewees were all very informed regarding LogiCo's sustainability controls, and pointed out that it is a genuine concern from employees as well as customers. They also showed that

they were taking formal action toward the sustainability goals. This goes against previously observed literature as a large part of the literature seems to imply that there is a certain level of decoupling between the sustainability work and the business logic of the company (Gond et al., 2012; Crutzen et al., 2017).

Our research has primarily investigated how co-existing demands, that is, co-existing institutional logics, have impacted the use of sustainability control in the case organization. More specifically, we have investigated how the use of sustainability control is impacted by other business practices, a third logic in addition to the business logic, as well as how social aspects and situational differences impact the use of sustainability control in combination with other management control tools. In doing this, we have found two main contributions, which we will discuss below.

5.1 The Impact of the Temporal Dimension between Logics

Previous literature has oftentimes analyzed the impact of sustainability control on other business practices (Wijethilake, 2017; Jusoh et al., 2021; Henri & Journeault, 2010; Ligonie, 2021). In doing the opposite, that is, investigating how sustainability control is *impacted* by other business practices, a temporal dimension could be found in the relationship between sustainability control and other business practices, defined by the sustainability logic and the business logic.

In the long run, both of these logics are compatible, as they prescribe the same organizational actions (Besharov & Smith, 2014). For example, our empirical findings show that investing in sustainability is vital for the long-term survival of LogiCo, as customer demand for fossil-free deliveries has been steadily increasing in recent years (see situation three). If LogiCo would not adhere to this pressure for sustainability, they would lose customers. In the long run, this could, according to several interviewees, potentially lead to LogiCo not being able to survive. This demonstrates that the business logic and the sustainability logic are compatible with regard to the long-term vision of the company and that the business logic is reinforcing the sustainability logic. However, despite this, LogiCo has made short-term compromises between the two logics in favor of the business logic. In situations two and four, a compromise was made in favor of the business logic, at the expense of the sustainability logic. Even though we see that the logics align in the long-term, short-term compromises were made in which the logics were not compatible. This is also noticeable as LogiCo has

consciously adopted a long time horizon for their sustainability engagement, allowing them to meet the demands of all logics simultaneously. Thus, we argue that the relationship between the sustainability logic and the business logic is affected by a temporal dimension, in that the business logic is long-term enabling but short-term constraining on the sustainability logic.

The impact of this temporal dimension on the use of sustainability control can specifically be noticed in the difference between formal and informal controls. When comparing the four situations in the empirical findings, the only situation in which all three logics align is situation one, which is based on informal controls. This may be because the informal controls in the case of LogiCo relate more to the long-term vision of the company, and hence they are easier to align (Besuch et al., 2021). Crutzen et al. (2017) further argue that informal controls are the most common controls for controlling sustainability. We found several formal controls within the SCS within LogiCo that are not as aligned with other formal management control tools underpinned by the other logics. Compromises become more evident on the basis of formal controls as LogiCo needed to change how they operate in order to achieve their formal sustainability controls, rather than just adhering to informal controls, such as values. This can be seen in situation three where there is an alignment, but also in situations two and four when the business logic and sustainability logic are conflicting. It seems as if when ways of working are changing and the use of formal controls is established, the tension and incompatibility between logics becomes evident.

Elaborating on this, the short-term compromises as illustrated above show that the compatibility between the logics, and thus, the compromises made between them are varying in different situations (Carlsson-Wall et al., 2016). In situation two, LogiCo faced the challenge of adhering to several management controls underpinned by different logics, which prescribed different priorities, goals, and organizational actions. On the other hand, in situation one this integration of controls could happen much more seamlessly (as they were based on informal controls). This highlights that contextual differences in short-term compromises provide help in understanding the situational differences when using SCS in combination with other management controls. This is because it showcases that sustainability control is not a mechanic process, as previous literature, in our opinion, has suggested (Crutzen et al., 2017; Henri & Journeault, 2010; Jusoh et al., 2023; Gond et al., 2012; Ligonie, 2021).

5.2 The Impact of the Field Level

In section 5.1, we demonstrated that there is a temporal dimension between the co-existing logics in LogiCo, mainly between the sustainability logic and the business logic in that the business logic is long-term enabling but short-term constraining on the sustainability logic. Elaborating on this, we argue that this temporal dimension is mainly created by the field level of the respective logics and that the field level impacts the compatibility between them (Besharov & Smith, 2014). The compatibility long-term between the sustainability logic and the business logic has emerged due to changes in the field level of the business logic, as the business environment is seeing an increase in customer demand for sustainable products and services, and more regulations for sustainability (Parker & Chung, 2018). Hence, not only other business practices within LogiCo, but also the external environment, impact the use of sustainability control.

We deem previous literature to have limited themselves consciously, or subconsciously, by only discussing the business logic in relation to the sustainability logic (Crutzen et al., 2017; Beusch et al., 2021; Gond et al., 2012; Parker & Chung, 2018; Arjaliés & Mundy, 2013). The impact of the field level of the social logic would not have been observed if we had limited our research in a similar way. This insight will be further discussed below. The situation-specific compromises brought up in our empirics show that the use of sustainability control is affected by the field level of the social logic as well. The state assigning the public obligation is influencing through strict regulations affecting the compromises made (see situation two). The external stakeholders are part of setting the strategic direction of LogiCo (Arjaliés & Mundy, 2013; Parker & Chung, 2018). This insight also indicates that the relative dominance of the logics is impacted by the relative power of external stakeholders. The state assigning the public obligation seems to be the strongest stakeholder of LogiCo, and its public obligation is therefore given priority which could limit the extent to which LogiCo can contribute to its sustainability agenda (Arjaliés & Mundy, 2013). In addition, several interviewees restated that the social logic is the most dominant one, due to the mentioned strict regulations for the public obligation. Conclusively, the social logic is more constraining upon sustainability control than the business logic.

Another example of how the field level is impacting the use of SCS relates to the third identified trend within our literature domain, in that extant literature has not included social

dynamics when analyzing the use of SCS in combination with other management controls (Crutzen et al., 2017; Henri & Journeault, 2010; Jusoh et al., 2021; Gond et al., 2012; Ligonie, 2021). As logics prescribe what goals and behaviors are seen as legitimate (Carlsson-Wall et al., 2016), the changes in the field level of the sustainability logic seem to have impacted the view on legitimacy amongst employees at LogiCo. Due to Science Based Targets becoming more renowned in the industry, their legitimacy at LogiCo has increased to become one of their most important organizational goals and formal control of sustainability. Our empirical findings of LogiCo further demonstrate that the business logic, social logic, and sustainability logic prescribe different legitimate goals, respectively. Therefore, in those situations in which SCS and other management controls, underpinned by the other logics, were combined, this might have influenced the enactment of the logics, and thus the compromises made. For example, in situation two, the organizational actors within LogiCo that were highly influenced by the social logic did not to the same extent seem to view the goals prescribed by the sustainability logic as important as actors who were primarily influenced by the sustainability logic. We hence agree with Parker and Chung (2018) that values and associated legitimacy of organizational actors are vital for enacting management controls for sustainability and that the values prescribed by other logics have an impact on how actors approach management controls for sustainability (Parker & Chung, 2018).

6. Conclusion

The rising importance of sustainability in the business world has led to an explosion in research related to sustainability control in recent years. This study showcases how LogiCo, a large organization within the transport industry, combats various demands that are not always compatible with the demand that they face for engaging in sustainability, but that all need to be adhered to. Drawing on a single case study with in-depth interviews and using the concept of situation-specific compromises (Carlsson-Wall et al., 2016), we have shed light on how decision-making is made based on SCS in relation to co-existing, and sometimes competing, demands within our case organization.

Our contribution to extant literature regarding SCS is dual. Firstly, we observed a temporal dimension in the relationship between the logics, in that the business logic is short-term constraining and long-term enabling on the sustainability logic. The situations analyzed in the empirics demonstrate that the compromises needed to be made between the logics are not

related to the long-term vision, but rather to short-term commitments, as well as the use of SCS in combination with other management controls not being a mechanical process, but rather situation-specific. Secondly, we saw that the field level of the respective logics is impacting the use of SCS, by influencing the compatibility between the logics. We also found that the field levels of the logics impacted the use of SCS via the influence of external stakeholders, the relative dominance of the logics, and the prescription of what constitutes legitimate goals and behavior. Conclusively, the answer to our research questions is that co-existing demands impact the use of sustainability control with regards to the temporal dimension and impact of the external environment. Practical implications of these contributions are that the complexity of the situational context in which sustainability control is deployed is better understood, which may lead to a deeper understanding of why certain decisions are made or certain outcomes take place, as well as how the full potential of sustainability control can be grasped.

It is important to note that this research is contextual in that the findings may not be applicable to organizations that i) are not subject to multiple institutional logics ii) do not invest heavily in sustainability and have a clear sustainability logic that governs behavior, and iii) operate in an industry that is not directly related to sustainability and thus not extensively impacted by external pressures such as customer demand and EU regulations. Further, as sustainability is subject to the constant development of new regulations, trends, and innovations, a second limitation of our study could be that it is colored by the current conditions for sustainable engagement.

Building on the above identified limitations, an avenue for future research would be to investigate how the use of sustainability control is affected by co-existing demands in organizations that operate within other industries, subject to other demands, in order to see if our conclusions can be translated to other contexts. Furthermore, due to the constant developments made within the topic of sustainability, it would be interesting to see whether the same conclusions would be made in future studies that are conducted a few years ahead from now, once the conditions for sustainable engagement have been changed. One could, for example, investigate the impact of co-existing demands on the use of sustainability control once updated EU regulations for sustainability are in place, and how this will affect the relative dominance of co-existing logics.

7. References

- Arjaliès, D., & Mundy, J. (2013). The use of management control systems to manage CSR strategy: A levers of control perspective. *Management Accounting Research*, 24(4), 284-300.
- Baxter, J., & Fong Chua, W. (2008). The field researcher as author-writer. *Qualitative Research in Accounting & Management*, 5(2), 101-121.
- Battilana, J., & Dorado, S. (2010). Building sustainable hybrid organizations: The case of commercial microfinance organizations. *Academy of Management Journal*, 53(6), 1419-1440.
- Besharov, M. L., & Smith, W. K. (2014). Multiple institutional logics in organizations: Explaining their varied nature and implications. *Academy of Management Review*, 39(3), 364-381.
- Beusch, P., Frisk, J. E., Rosén, M., & Dilla, W. (2022). Management control for sustainability: Towards integrated systems. *Management Accounting Research*, 54, 100777.
- Carlsson-Wall, M., Kraus, K., & Messner, M. (2016). Performance measurement systems and the enactment of different institutional logics: insights from a football organization. *Management Accounting Research*, 32, 45-61.
- Corbett, J., Webster, J., & Jenkin, T. A. (2018). Unmasking corporate sustainability at the project level: Exploring the influence of institutional logics and individual agency. *Journal of Business Ethics*, 147, 261-286.
- Crutzen, N., Zvezdov, D., & Schaltegger, S. (2017). Sustainability and management control. Exploring and theorizing control patterns in large European firms. *Journal of Cleaner Production*, 143, 1291-1301.
- Dubois, A., & Gadde, L. (2002). Systematic combining: an abductive approach to case research. *Journal of Business Research*, 55(7), 553-560.

Ferry, L., & Slack, R. (2022). (Counter) accounting for hybrid organising: a case of the Great Exhibition of the North. *Accounting, Auditing & Accountability Journal*, 35(3), 681-705.

Fisher, J. G. (1998). Contingency theory, management control systems and firm outcomes: past results and future directions. *Behavioral Research in Accounting*, 10, 47.

Gerdin, J. (2020). Management control as a system: Integrating and extending theorizing on MC complementarity and institutional logics. *Management Accounting Research*, 49, 100716.

Global GHG emission shares by sector. (2022). Statista. Retrieved May 14, 2023, from <https://www.statista.com/statistics/241756/proportion-of-energy-in-global-greenhouse-gas-emissions/>

Gond, J., Grubnic, S., Herzig, C., & Moon, J. (2012). Configuring management control systems: Theorizing the integration of strategy and sustainability. *Management Accounting Research*, 23(3), 205-223.

Government (2022). Government Report

Hahn, T., Pinkse, J., Preuss, L., & Figge, F. (2015). Tensions in corporate sustainability: Towards an integrative framework. *Journal of Business Ethics*, 127, 297-316.

Henri, J., & Journeault, M. (2010). Eco-control: The influence of management control systems on environmental and economic performance. *Accounting, Organizations and Society*, 35(1), 63-80.

Johnstone, L. (2019). Theorising and conceptualising the sustainability control system for effective sustainability management. *Journal of Management Control*, 30(1), 25-64.

Jusoh, R., Yahya, Y., Zainuddin, S., & Asiaei, K. (2021). Translating sustainability strategies into performance: does sustainability performance management matter? *Meditari Accountancy Research*, (ahead-of-print)

Kaplan, R. S. (2009). Conceptual foundations of the balanced scorecard. *Handbooks of Management Accounting Research*, 3, 1253-1269.

Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard: measures that drive performance. *Harvard business review US*.

Kreiner, K., & Mouritsen, J. (2005). The analytical interview. *The Art of Science*, , 153-176.

Ligonie, M. (2021). Sharing sustainability through sustainability control activities. A practice-based analysis. *Management Accounting Research*, 50, 100726.

LogiCo (2023). Annual Report 2022.

LogiCo (2022). Annual Report 2021.

LogiCo (2021). Annual Report 2020.

Lukka, K., & Vinnari, E. (2014). Domain theory and method theory in management accounting research. *Accounting, Auditing & Accountability Journal*, 27(8), 1308-1338.

Nielsen, J. G., Lueg, R., & Liempd, D. v. (2019). Managing multiple logics: The role of performance measurement systems in social enterprises. *Sustainability*, 11(8), 2327.

Parker, L. D., & Chung, L. H. (2018). Structuring social and environmental management control and accountability: Behind the hotel doors. *Accounting, Auditing & Accountability Journal*, 31(3), 993-1023.

Schaltegger, S., & Zvezdov, D. (2015). Expanding material flow cost accounting. Framework, review and potentials. *Journal of Cleaner Production*, 108, 1333-1341.

Science Based Targets Initiative. Science Based Targets. Retrieved May 14, 2023, from <https://sciencebasedtargets.org/>

Thornton, P. H., Ocasio, W., & Lounsbury, M. (2012). *The institutional logics perspective: A new approach to culture, structure and process*. OUP Oxford.

Vernay, A., Cartel, M., & Pinkse, J. (2022). Mainstreaming business models for sustainability in mature industries: Leveraging alternative institutional logics for optimal distinctiveness. *Organization & Environment*, 35(3), 414-445.

Wijethilake, C. (2017). Proactive sustainability strategy and corporate sustainability performance: The mediating effect of sustainability control systems. *Journal of Environmental Management*, 196, 569-582.

8. Appendix

8.1 Interviewees

<i>Number</i>	<i>Date of interview</i>	<i>Interviewee</i>	<i>Setting</i>	<i>Length (h:mm:ss)</i>	
1	17.03.2023	Employee A	Online	53:49	
2	17.03.2023	Employee B	Online	48:46	
3	24.03.2023	Employee C	Online	1:00:26	
4	31.03.2023	Employee D	Online	56:34	
5	31.03.2023	Employee E	Online	59:07	
6	04.04.2023	Employee F	Online	1:02:46	
7	19.04.2023	Employee G	Online	52:24	
			<i>Average</i>	<i>56:04</i>	Table 1 Details of interviews

8.2 Interview Guide 1

This interview guide was used for interviews with the sustainability department. The original interview guide has been translated to English for the purpose of this paper. Some details have not been disclosed due to confidentiality issues.

Introductory

- What is your role at [company name] what do you do in your daily work?
- Why does [company name] engage in sustainability?
- How are you affected in your daily work by the company's engagement in sustainability?

Sustainability in general

- What are your main sustainability goals? Why?
- Which goal do you think is the most important? Why?
- Can you tell us a bit about your [sustainability goal related to climate]?
- What is the purpose of this sustainability goal?
- How do you link this to the UN:s global goals? (SBTi)
- How do you decide which sustainability goals to set? Is there a specific process for this?
- Do you have specific guidelines or standards that you work towards regarding sustainability?
- How well integrated is the sustainability work at [company name] at large?
- To what extent would you say that the sustainability goals are prioritized at [company name]?
- What would you say are the largest challenges regarding sustainability?
- Which risks and opportunities do you see regarding your sustainability engagements?

Management control

- How is sustainability discussed among your nearest colleagues at [company name]?
- How are sustainability issues communicated to you internally?
- What are your nearest colleagues' attitudes toward the sustainability goals you have at [company name]?
- What are [company name] values when it comes to sustainability? Are there any mission statements, values, or similar that you work according to?
- What values does [company name] have with regard to sustainability?
- What KPIs does [company name] use to follow up on sustainability engagement?
- Are there any difficulties related to creating goals and targets for the company's sustainability engagement?
- How do you choose sustainability targets? Is there a certain process for that, and what department is governing that work?

Institutional logics

- How much cooperation occurs between the different departments with regards to the sustainability engagement at [company name]?
- What is your view on relating sustainability targets to the company's financial targets?
- Do you sometimes need to balance these?
- How do you relate the public obligation to the sustainability targets?

Other

- Is there something else that we did not ask about, that you think is important to know?

8.3 Interview Guide 2

This interview guide was used for interviews with other departments not directly working with sustainability, this example guide was used for an interviewee working primarily with the public obligation. The original interview has been translated to English for the purpose of this paper. As with interview guide 1, some details have not been disclosed due to confidentiality issues.

Introductory

- What is your role at [company name] what do you do in your daily work?
- Why does [company name] engage in sustainability?
- How are you affected in your daily work by the company's engagement in sustainability?

Public obligation

- You have received a public obligation from the state. Can you tell us more about this?
- Which demands does this put on you?
- How does your department work towards these demands?
- Which department primarily works with the public obligation?
- Are there any guidelines regarding how decisions are made or is it common sense? E.g. Do you observe certain KPIs, values, etc for these decisions?
- What KPIs does [company name] use to follow up on the public obligation?
- How do you follow up on goals related to the public obligation?
- When working with projects or initiating new projects, how do you relate them to the public obligation? What aspects of the public obligation are the most important ones to take into account?

Management control

- How is the public obligation communicated internally?
- What are your nearest colleagues' general attitudes towards public obligation?
- What values do you have with regards to the public obligation? Are there any mission statements, etc. that you use as guidance?
- What is the company culture with regards to the public obligation?

Other

- Is there something else that we did not ask about, that you think is important to know?