Università degli Studi di Padova

Dipartimento di Scienze Storiche, Geografiche e dell'Antichità

Corso di Laurea Magistrale in Local Development

Transition to Circularity: A case study of the practices in the company "El Ordeño"

Supervisor: Prof. Francesca Gambarotto

Candidate: Lizeth Jackeline Lopez Chavez

Registr. number: 2044814

ACADEMIC YEAR 2022/2023

Il candidato dichiara che il presente lavoro è originale e non è già stato sottoposto, in tutto o in parte, per il conseguimento di un titolo accademico in altre Università italiane o straniere.

Il candidato dichiara altresì che tutti i materiali utilizzati durante la preparazione dell'elaborato sono stati indicati nel testo e nella sezione "Riferimenti bibliografici" e che le eventuali citazioni testuali sono individuabili attraverso l'esplicito richiamo alla pubblicazione originale.

The candidate declares that the present work is original and has not already been submitted, totally or in part, for the purposes of attaining an academic degree in other Italian or foreign universities.

The candidate also declares that all the materials used during the preparation of the thesis have been explicitly indicated in the text and in the section "Bibliographical references" and that any textual citations can be identified through an explicit reference to the original publication.

Table of content

Abstract

This study analyses the changes in practices employed by "El Ordeño" in its transition journey to circularity from 2018 to 2021, focusing on sustainable practices, circular strategies, outcomes and their sustainability implications. The research pursues three goals: comprehending the company's historical background, comparing the B Corporation certification strategies adopted in 2018 and 2021, and comparing "El Ordeño's" 2021 practices with the circular economy framework. Data was acquired from the sustainability reports and CoP submitted to the UN Global Compact. The analysis was conducted using the B Corporation framework (social, environmental, and economic impact) as well as the circular strategy framework developed by Moraga et al. (2019).

The findings illustrate significant improvements, primarily in governance, community engagement, and environmental practices, coinciding with B Corporation certification. However, strategies for employee and customer engagement require further action. El Ordeño makes progress in materials and components within the circular strategy framework, emphasising water recycling, reducing packaging materials, and conserving energy.

This study highlights the strong alignment between the B Corporation certification and the Circular Strategy Framework regarding environmental issues but illuminates differences in their perspectives on resource efficiency and holistic sustainability. The conclusion drawn is that these frameworks should be complementary, rather than competitive, to each other. This approach has the potential to synergistically advance sustainability goals. El Ordeño's journey illustrates the significance of adaptability, self-regulation, and a holistic sustainability perspective in achieving significant change towards a more sustainable and circular future.

Sintesi estesa

Questo studio ha esplorato le pratiche sostenibili e circolari adottate durante la transizione di "El Ordeño" verso la circolarità dal 2018 al 2021. Ha svelato le complessità, le strategie e i risultati di questo percorso, fornendo preziose indicazioni sulle implicazioni pratiche dell'adozione della sostenibilità. La ricerca ha affrontato la domanda centrale: "Quali cambiamenti nelle sue pratiche ha sperimentato El Ordeño nella sua prima transizione alla circolarità dal 2018 al 2021?". Accompagnata da tre obiettivi specifici, ha approfondito il contesto politico e socio-economico dell'azienda dalla sua nascita nel 2002, ha esaminato le aree promosse dalla certificazione B Corporation all'interno di El Ordeño nel 2018 e nel 2021 e ha confrontato gli indicatori chiave delle pratiche implementate a El Ordeño nel 2021 con il quadro dell'economia circolare.

I dati sono stati raccolti dai rapporti di sostenibilità pubblicati dall'azienda e dai rapporti Communication on Progress presentati al Global Compact delle Nazioni Unite. Per la classificazione e l'approfondimento sono stati utilizzati due quadri di riferimento: il B Corporation Framework, caratterizzato da un triplice impatto (sociale, ambientale ed economico), e il Circular Strategy Framework sviluppato da Moraga et al, che definisce sei aree strategiche in tre ambiti e utilizza tre tipi di indicatori. Questa ricerca si è concentrata principalmente sull'ambito 1 del Circular Strategy Framework. Entrambi i quadri promuovono la sostenibilità nelle imprese ponendo l'accento sui fattori di microscala.

I cambiamenti nelle strategie di El Ordeño durante la transizione iniziale verso la circolarità (2018-2021) possono essere riassunti utilizzando ciascun quadro di riferimento. Il quadro di riferimento della B Corporation ha identificato cambiamenti significativi in materia di governance, comunità e ambiente, con notevoli miglioramenti nel coinvolgimento degli stakeholder, nei programmi comunitari e nelle pratiche di approvvigionamento responsabile. Il Circular Strategy Framework ha individuato strategie soprattutto nelle aree dei materiali e dei componenti, evidenziando gli sforzi nel riciclo dell'acqua, nella riduzione dei materiali di imballaggio e nella conservazione dell'energia.

Questi risultati forniscono una comprensione completa della transizione di El Ordeño verso la circolarità. Lo studio sottolinea la fattibilità e i benefici dell'adozione di pratiche circolari, evidenziando il potenziale di cambiamento sostenibile all'interno

dell'organizzazione. Inoltre, il contesto storico dello sviluppo di El Ordeño gioca un ruolo cruciale, illustrando la transizione dell'azienda da un modello di business lineare a uno impegnato nella sostenibilità, soprattutto nella dimensione sociale. Lo studio individua anche un forte allineamento tra la certificazione B Corporation e il Circular Strategy Framework in termini di aspetti ambientali, pur riconoscendo le loro diverse prospettive sull'efficienza delle risorse e sulla sostenibilità olistica.

In conclusione, questa ricerca fornisce approfondimenti sul percorso di El Ordeño verso la circolarità e la sostenibilità, facendo luce sulle sue pratiche iniziali e contribuendo alla più ampia letteratura sull'impresa sostenibile. Identificando l'allineamento e le differenze tra il Circularity Framework e la certificazione B Corporation, fornisce una guida per la loro applicazione integrata. Il percorso di El Ordeño evidenzia l'importanza dell'adattamento continuo, dell'autoregolamentazione e di un approccio olistico alla sostenibilità, aprendo la strada a un futuro più sostenibile e circolare che comprenda le dimensioni ambientale, sociale ed economica.

Preface

Climate change is an undeniable reality that must be prevented at all costs. I was first exposed to the concept of sustainability during my undergraduate studies and its importance was reinforced during my early professional years. It was during this formative time that I understood the significant impact of businesses adopting sustainable practices. My academic pursuits also introduced me to economic circularity, which provided a comprehensive approach to combating climate change. The notion that economic growth can coexist harmoniously with our environment and society resonates deeply with me.

This dissertation intends to pinpoint the modifications in the practices implemented by companies to achieve circularity and sustainability. The process of transitioning is fraught with challenges, which depend not only on the organisation but also on the external circumstances. The underlying objective of this research is to comprehend the evolution of a corporation while gaining invaluable insights into the practical nuances and challenges of adopting circularity and sustainability.

For this purpose, I selected El Ordeño, an Ecuadorian dairy SME with a rich history, a commitment to its community and a drive for sustainable change. The core of this thesis is rooted in the empirical research conducted to illustrate it. El Ordeño's transition to circular practices was an arduous yet meticulous endeavour. Collecting and analysing extensive data and rigorously examining sustainability reports were essential in this study. To achieve this, I studied the B Corporation certification and circularity strategy frameworks to comprehensively understand the efforts of the selected company.

Throughout my academic journey, I have had the privilege of receiving guidance and support from my academic supervisor, Francesca Gambarotto, for whom I am truly grateful for her patience. I would also like to express heartfelt appreciation to my parents, whose unwavering belief in my abilities and support have been instrumental in every decision I have made. Lastly, I want to express my gratitude to my fiancé, Ben, for his constant support and encouragement throughout my years of study and the process of researching and writing this thesis. This achievement would not have been possible without the unwavering support of all of you. Thank you.

1. Introduction

In an age marked by growing concerns about environmental degradation, resource depletion and the increasing pressures of climate change, the concept of the circular economy has emerged as a transformative paradigm capable of redefining the basis of contemporary practice. But what precisely does this concept entail? For decades, the global economy has been rooted in the linear economy, a system that forms the foundation of the world's economic structures. The "take-make-dispose" approach characterizes a linear economy, and its shortcomings become apparent year after year. Why is this model a problem?

Essentially, it relies on excessive extraction of finite resources to produce goods that are used very little before being discarded as waste. This model has caused numerous issues with its processes. It accelerates resource depletion and generates vast amounts of non-biodegradable waste, exerting excessive pressure on ecosystems and surpassing landfill capacities. The linear model has a heavy dependence on fossil fuels, augmenting greenhouse gas emissions and disturbing the planet's ecological equilibrium, jeopardising Earth's support systems for future generations. This issue is not only economic but also social and political, with developing countries bearing the burden of industrial activity in developed countries. For example, in 2015, “just eight nations (France, Germany, Italy, Japan, the UK, the US, Canada and Russia) were responsible for 85% of GHG emissions” (Fraser, et al., 2023). This economic model raises questions not only about environmental degradation but also highlights themes of fairness and justice among international actors.

Taking a broader perspective on our global economic system, it is apparent that over the past half-century, a phenomenon that is reshaping our world has emerged: overpopulation. The population has doubled, and material extraction has tripled, resulting in a relentless cycle of production and waste. However, at what cost to our planet? Affluence, overconsumption, and waste have significantly contributed to the depletion of biodiversity and materials on our planet. The Circularity Gap Report of 2023 highlights the loss of 420 million hectares due to deforestation, half of the earth’s soil being seriously degraded, 85% of the world's fish stocks at risk of collapse, and a 70% decline in the wildlife population over the last half-century (Fraser, et al., 2023, p.

14). The present global pattern of overpopulation, overconsumption, and waste poses an immediate risk to magnify these figures in the forthcoming years. So far, Fraser et al. (2023, p. 14) reported that the global economy uses 100 billion tonnes of materials for a population of 8 billion people facing limited materials and degraded resources. This consumption trend not only stimulates the demand for material extraction but also destroys natural habitats.

The debate about an alternative has been going on for a long time, emphasising the limited capacity of the earth in contrast to the growing number of people. The circular economy presents a compelling alternative, characterised by resource efficiency, waste reduction and the continuous reuse of materials. The approach aims to separate economic growth from reckless consumption of resources, creating closed-loop systems where products and materials are expertly designed for an endless cycle within the economy. Could this paradigm shift lessen reliance on new resources whilst diminishing the environmental impact of waste management? As the world faces growing apprehension regarding climate change and limited resources, the adoption of circular practices emerges as a hope. The latest report from the Intergovernmental Panel on Climate Change outlined in its latest report that “shifting development pathways towards sustainability, and advancing climate-resilient development, is enabled when governments, civil society and the private sector make development choices that prioritise risk reduction, equity and justice, and when decision-making processes, are integrated” (IPCC, 2023, p. 89). This report emphasised the significance of all stakeholders, from individuals to governments, who contribute to the global economic system as essential players in the pursuit of sustainability. Therefore, the circular economy encompasses interdisciplinary topics with the same sustainability goal.

In modern market-based societies, it is crucial to acknowledge that “business administration plays an important role in restricting and supervising the market economy; it can effectively protect the effective operation of the market order and help to promote the development of market economy and institutional norms” (Qin, 2018, p. 185). The private sector, which has business at its core, holds a significant position not just in the market economy, but also in the drive for sustainability. Its influence reaches global resource consumption, production practices and consumer behaviour, making

it a crucial actor in shaping both consumer preferences and the responsible use of our limited resources.

Businesses are an essential element of economic activity, with the potential for innovation, implementing sustainable practices, and driving widespread change across industries. Nonetheless, they can also contribute to accelerated resource consumption. However, when economic, social and environmental factors are integrated synergistically, with a focus on the common good instead of individual interests, the private sector becomes a potent driver for profound change towards a sustainable future. As compelling as the concept of moving from a traditional linear economic model to a circular business approach may be, the path to circularity is complex. The transition is not solely theoretical, but an essential component for a sustainable future in this era.

Circularity presents a twofold challenge: not only to the current global economic system but also to the conventional business model's established norms and strategies. It requires a reassessment of resource utilization, underscoring the importance of optimal and limited resource use (Daly, 1990). The movement towards circularity necessitates a thorough reassessment of existing practices in business, as well as innovative transformations in various areas within a company, including product design, supply chain management, organizational culture, and consumer behaviour. These areas of redefinition could impact short-term profitability, as they require investments into research, development and innovative technologies, as well as the engagement of various stakeholders involved in the value chain. However, if corporate and governmental bodies adopt a Circular Economy (CE) framework without taking due consideration of its wider socio-ecological implications, there is a risk of the term losing credibility and being viewed as greenwashing (Friant, et al., 2020, p. 15). Such a perception could weaken its efficacy in promoting authentic sustainability initiatives, underscoring the necessity for a thorough and diligent approach to implementing the circular economy concept across both public and private sectors.

Although the transition journey requires significant social and human capital for businesses, the potential of circular businesses to promote sustainability at local, national and international levels is noteworthy. While empowering the economic system, circular businesses can also preserve resources for future generations. However, businesses have encountered a significant obstacle beyond the transition

itself as there is a lack of a clearly delineated systematic procedure to facilitate the transition.

The transition from a conventional business model to a circular one lacks a one-size-fits-all approach (Charter & McLanaghan, 2018, p. 93). With businesses being highly heterogeneous, a standard procedure is notably absent. Achieving circularity involves a dynamic process, necessitating comprehensive knowledge of the organization's complete context, its operational procedures and challenges, support from external actors, as well as market dynamics affecting its performance. The complex process of transitioning to circularity requires tailored strategies, experimentation and continuous learning as companies explore and achieve a successful transition to circularity.

There is a key question at the core of circular business theory: How can a company effectively traverse the journey from linear methods to complete integration of circular principles? This essential inquiry is the cornerstone of the study, with "El Ordeño", a dairy SME, serving as a meaningful case study of this transition. The principal research question of this thesis is What changes has El Ordeño experienced in its practices during its initial transition to circularity from 2018 to 2021? To investigate this, the study aims to achieve the following specific objectives: (i) Describe the political and socio-economic context of the company since its creation in 2002. (ii) Identify the areas promoted by the B Corporation certification in "El Ordeño" in 2018 and 2021. (iii) Compare the main indicators of the practices carried out in "El Ordeño" in 2021 with the circular economy framework. This study aims to closely observe and document the strategies, challenges, and outcomes of El Ordeño's initial transition towards a circular economy. The research findings will provide insights into the complex practicalities and implications of implementing circular practices in a real-world context. This study will examine the theoretical basis and practical implications of circularity, offering comprehensive insights into the complexities and potential advantages of employing circular practices in modern business contexts.

The thesis consists of seven chapters, starting with an introduction. The second chapter is a literature review that explores the notions of B Corporation, circular economy, and their interrelationship. It aims to understand the historical development, operational dynamics, outcomes and definitions of these concepts. This study aims to create a strong groundwork for the advancement of this research, providing a basis for a comprehensive examination.

The third chapter provides a comprehensive explanation of the research methodology, including the rationale for using the case study approach and the significance, constraints and benefits of investigating sustainability reports of the company to investigate these themes. It also outlines the guidance offered by the B Corp Framework, outlining the focus of this research on particular strategies. Additionally, the thesis will elaborate on Moraga et al.'s (2019) Classification Framework on Circular Indicators, with exclusive focus on Scope 0. This framework will be utilized in the development of the thesis.

The fourth chapter presents "El Ordeño" as a case study, detailing the political and socio-economic context which has shaped the company since its establishment in 2002. This section aims to untangle the contextual threads that have informed the company's growth trajectory, allowing for a nuanced comprehension of the external factors that have prompted its shift toward circular practices.

The fifth chapter outlines the areas promoted by the B Corporation Certification Framework for sustainable practices in the case study. The aim is to highlight where the company has excelled alongside the certification, exploring areas that have changed due to the certification. This will reveal the company's proactive approach towards sustainability and alignment with globally recognized standards.

The sixth chapter examines the company's circular practices, taking into account its B Corp certification and the circular economy framework presented. The aim is to perform a comparative analysis of "El Ordeño's" key performance indicators using the circular economy framework as a backdrop. It also seeks to comprehend the company's transition process and identify future efforts required to maintain a successful transition.

The concluding chapter summarises the research and analyses the contribution of the study to the literature in theory and practice. It restates the research objectives and explores "El Ordeño's" journey towards circularity, providing valuable insights into the broader discourse of sustainable business transformation.

2. Literature Review

The incorporation of circular economy principles into business operations has gained prominence in recent years as a way for companies to contribute to the environment through sustainable practices in their value chain. In parallel with this trend, the emergence of B Corporations (B Corps) has grown, encouraging companies to create a triple bottom-line impact: environmental, social and economic. B Corp certification recognises companies that have a robust dedication to sustainability and community engagement, demonstrating their commitment to environmental responsibility, ethical practices, and community well-being. (B Lab Europe, 2023).

First, the chapter analyses the fundamental principles and the historical background of B Corp certification, including its connection to corporate social responsibility practices. This will reveal crucial insights into the significance of this certification process for firms striving towards sustainability. Second, it delves into the concept, history and intricacy of the circular economy. This section aims to elucidate the importance of circular economy practices and the transition from a linear economy in promoting sustainability principles. Building on the preceding two sections, which provide its basis, the third section analyses the correlation between B Corp certification and circular economy practices. The previous sections open the discussion on the benefits, opportunities and barriers to promoting circular economy principles for B Corps. Ultimately, the conclusion will outline the primary discoveries.

2.1. B Corporation Certification

The B Corp movement arose in 2006 and became a topic of academic interest around 2009 (Diez-Busto, et al., 2021). Nonetheless, developing a complete definition of B Corps is still being explored, as diverse perspectives reflect the authors' priorities. In general, Certified B Corporations or B Corps are companies verified by B Lab Europe (2023) to meet rigorous standards of social and environmental performance, transparency, and accountability, and are emblematic of a global movement. B Lab, a not-for-profit organization (2023), is widely recognized as a leader in advocating and certifying companies committed to social and environmental responsibility. Similarly, Moroz et al. highlight that “Certified B Corporations are companies that have chosen to accept voluntary third-party social and environmental audits conducted by a non-

profit organisation called B Lab" (Diez-Busto, et al., 2021), emphasising the worldwide acknowledgement of this certification.

In his book, Honeyman notes that "The B stands for "benefit," and as a community, B Corporations want to build a new sector of the economy in which the race to the top is not to be the best in the world but to be the best for the world" (2014, p. 12). This definition defines the B Corp as a group of companies cooperating not solely for financial gain but also for the improvement of services and products for the world. Kim et al define B corporations as "social enterprises (…) based on how they create value for non-shareholding stakeholders, such as their employees, the local community, and the environment." (2016, p. 3). This definition positions B corporations as a form of corporate social responsibility that emphasizes social and environmental impact throughout their value chain.

The definition of a B Corp depends on the positionality of the author; whether it is seen as a movement, certification, community, or corporate social responsibility strategy. However, most authors agree that the ultimate goal for small and medium-sized enterprises involved is to promote environmental sustainability and engage with local communities. These factors significantly contribute to the company's growth and generate economic revenue, ensuring long-term sustainability.

This voluntary certification involves meeting specific social and environmental performance standards. Notably, the scoring system spans from a minimum of 80 points, which is the threshold for certification, to a maximum of 200 points. This range of scores highlights the programme's adaptability and enables companies to exhibit varying degrees of commitment to sustainability and social responsibility requirements. The assessment considers five crucial aspects within each company:

- Governance evaluates "a company's overall mission, ethics, accountability, transparency and how they build their vision and values into their bylaws." (B Lab Europe, 2023). A company seeks to sustain itself over time, and the B Corp philosophy is that it can do so by building a foundation of accountability and transparency that is replicable across all areas of the business. By embedding a robust set of values, principles, and processes within its corporate structure, as well as incorporating them into its mission and employee engagement, the

company provides a superior standard of service for the long term. (Honeyman, 2014, p. 84).

- Workers analyze "a business's efforts to create positive impacts for their workforce." (B Lab Europe, 2023). This area is important because it examines company policies on pay, benefits and training for employees, rewarding companies that attract and retain talent, and making business an essential part of breaking the cycle of poverty in many areas of their countries. (Honeyman, 2014, p. 45).
- Customers aim to examine "how a company serves their customers, offering products or services that support the greater good" (B Lab Europe, 2023). This area reflects how the company contributes to the development of the customer. The traditional business model, which centres on the commercialisation of products, does not alter customers' consumption practices. In contrast, B Corporations not only provide products or services but also educate customers about various options for consumption. (Honeyman, 2014, p. 96).
- Environment scrutinizes "how a company works towards a more sustainable and regenerative planet by reducing their footprint and putting their impact on the air, climate, water, land, and biodiversity first in their business practices" (B Lab Europe, 2023). Environmental protection has far-reaching benefits that extend beyond individual interests. It is inextricably linked to other evaluations, and its objective value is clear. This is most likely due to the increased ability to capture the benefits of environmental protection for the company and its employees. Certain firms, for example, Ben & Jerry's, Method and Patagonia, have reported an increase in profits as a result of the improvement of their environmental performance (Honeyman, 2014, p. 71).
- Community inspects “how a business contributes to the economic and social well-being of the communities in which they operate” (B Lab Europe, 2023). A corporation that prioritises the local community enforces a multitude of tactics to amplify job opportunities, cultural heterogeneity, and civic participation. Additionally, they establish durable and dependable supply chains that intensify the association of the enterprise with its neighbourhood, national, and regional surroundings. This domain holds relevance for the organisation as it sustains and increases customers over the long term. (Honeyman, 2014, p. 57).

Each impact area is assigned a varying number of points to reflect their importance and complexity in assessing a company's social and environmental performance. Regional variations and adjustments to point allocation over time reflect evolving standards and priorities in the B Corp community. The assessment process enhances the values of social and environmental accountability and transparency of the B Corp.

The subject of B Corp is current; hence, scholarship is continuously evolving around the primary concerns of this organisation. “In 2006, Gilbert, Houlahan, and Kassoy co-founded B Lab, a nonprofit organization dedicated to harnessing the power of business to solve social and environmental problems” (Honeyman, 2014, p. 17). B Corps were significantly influenced by the Sustainable Development Goals, which played a fundamental role in shaping their objectives, values, missions, and perspectives. This development stems from the idea that it is crucial for corporations to actively engage, as many academics suggest that achieving the SDGs hinges on corporate involvement. (Diez-Busto, et al., 2021; Rosati & Faria, 2019; Dyllick & Muff, 2016; van der Waal & Thijssens, 2020). The private sector's responsibility in this emerging type of enterprise extends beyond profit maximisation and necessitates that companies consider their impact on society and the environment. The organization's vision engaged various stakeholders across industries who aimed to join forces to promote the replicability of sustainable practices. “The B Lab team worked (…) to create a comprehensive set of performance and legal requirements and they started certifying the first B Corporations in 2007” (Honeyman, 2014, p. 17). The certification for B Corps adheres to rigorous standards of social and environmental performance. The legal requirements for B Corp reinforce the long-term vision of a sustainable company, distinguishing it from companies unwilling to commit to the world.

The expansion of the B Corp community underscores the growing importance of evolving consumption patterns. As a result, many companies are modifying their practices to align with this global movement. According to research by Diez-Busto et al., the Global Sustainable Investment Review shows an increase in socially responsible investment in five significant markets between 2016 and 2018: Europe, the United States, Japan, Canada, and Australia. Similarly, the Annual Report B Lab Spain 2018 reveals that 66% of consumers are willing to pay a premium for sustainable goods (2021, p. 2). In their research study, Marquina Feldman and Vasquez-Parraga compared consumer preferences in two markets: the United States and Peruand they

concluded, “Respondents would be willing to pay higher prices for product quality and a company’s environmental commitment” (2013, p. 107). To comprehend consumer preferences and decision-making tools, understanding the consumer's role in this relationship is crucial. In their research about customers, Wilburn and Wilburn argue that "They will pay more for products that are made by companies with CSR accountability and use social media to identify those that do" (2015, p. 9). In some countries, there has been a shift towards more mindful consumption, paving the way for the growth of the B Corp movement.

The current information on the B Corp website reports that in 2022, their community grew to over 6,000 B Corps consisting of 6,300 businesses located in more than 80 countries and employing over 500,000 workers across 159 industries. Furthermore, over 1,000 companies in Europe are presently certified across the region (B Lab Europe, 2023). Such considerable numbers in a relatively short period can be viewed as an indication of a growing global movement.

Numerous studies have investigated the consequences and ramifications on a company's performance after acquiring its certification. The majority of these studies focus on the five areas of the assessment: governance, employees, community, environment and customers. In the case of Romi & Cook, they suggested that employee satisfaction is higher in B Corps companies than in non-B-certified ones. Additionally, B Corps performed better in terms of sales growth than their counterparts. The authors' general conclusion is that treating employees and consumers well results in higher employer productivity and sales growth for B Corps (2018, p. 408). Equally, ensuring environmental preservation is a mutual obligation of the private sector, public institutions, civil society, and the community. However, private enterprises possess a significant prospect to influence consumer conduct for both eco-friendly outcomes and favourable business gains. In their research about the performance of Italian B corps based on their business model, Gazzola, et al. argue that "this study can be a useful indicator of the business reality and could drive other companies to shift their model choice to the environment and consumers because there is evidence that these variables can improve their firm's performance." (2019, p. 1442)

Although the certification assesses the five main areas, any changes in the overall performance of the business are observed since it is an ongoing procedure. The certification process takes place every three years, enabling the company to enhance

its practices during this period. In a study made by Wilburn & Wilburn, they stand out that “owners of B Corps have said that the certification process has made them more aware of everyday environmental decisions they make, like the type of cleaning supplies they use and their waste policy, as well as their impact on their communities.” (2015, p. 9) The certification process scrutinises the company's daily decisions to achieve sustainability goals. This study confirmed that these organisations advanced towards their CSR objectives, upheld their commitment to social contributions, and earned profits from 2010 to 2015 (in Weber Kirst, et al., 2021, p. 1833). The research indicates that prioritising environmental and social concerns does not impede economic progress but rather fosters gradual economic growth in the long run.

Businesses have adapted to the demands of the market. The concept of Corporate Social Responsibility (CSR) has gained significance and it is closely linked to the duties of a B Corp. Despite the contested nature of the definition of CSR, Caroll emphasises two critical aspects of the concept: protecting and improving. He describes it as “to protect society implies that companies need to avoid their negative impacts (e.g. pollution, discrimination, unsafe products). To improve the welfare of society suggests that companies need to create positive benefits for society (e.g. philanthropy, community relations)” (Carroll, 2015, p. 90). These aspects relate directly, but not only, to environmental protection and community engagement. In the corporate environment, Carroll defines CSR as “as part of the social contract between business and society” (2015, p. 95) while Del Baldo & D'Anghela point it out as "the voluntary integration by firms of social and environmental issues in their activities and interaction with stakeholders” (2020, p. 74). In general, Corporate Social Responsibility (CSR) encompasses economic, social and environmental responsibilities as part of business operations, including the entire value chain with both internal and external actors being crucial for sustainable practices.

The significance of the relationship between business and the environment and society is emphasised by both Corporate Social Responsibility initiatives and the B Corp Certification. Crane, et al (2008) present a framework to understand the core characteristics of CSR, which include:

1. Activities are voluntary
2. Manages externalities
3. Orientated to multiple stakeholders

4. Social and economic responsibilities aligned
5. CSR integrated into the practices and values of the company
6. CSR is part of the core business functions.

In parallel with this, Hiller indicates that a B corp is characterized by:

> “(1) the purpose of the corporation to provide a public benefit, (2) the independent third-party standard to annually review corporate public benefit, (3) the duties of directors to consider a broader spectrum of interests beyond shareholder profit, (4) transparency, and (5) enforceability by means of a benefit enforcement proceeding (BEP)” (2013, p. 291)

Both CSR and B Corp have interdisciplinary characteristics that work horizontally and vertically within companies, and there is no clear delimitation between them. The two concepts are interrelated. Harjoto, et al. argue that "being a B corporation is a corporate social responsibility action” (2019, p. 623), meaning that it should be viewed as part of a wider business strategy. The B Corp certification encourages businesses to enhance their existing sustainable practices, addressing negative externalities and striving for greater transparency within the organization.

Concluding the literature review, valuable insights into the concept, history, and significance of B Corporations for businesses have been obtained. The five areas of evaluation, namely employees, community, customers, environment, and governance, provide a comprehensive framework for businesses intending to implement sustainable practices across their supply chains. Furthermore, the advantages of acquiring B Corporation status go beyond just higher profits. They encompass the comprehensive performance of a company that prioritises long-term effects. This holistic approach has been a driving force behind the increase in companies joining the movement. The implementation of a Corporate Social Responsibility framework aligned with the key characteristics of a B Corp improves the complementarity between these concepts and integrates B Corporation Certification into the Corporate Social Responsibility strategy, despite some limitations in their delineations.

2.2. Circular Economy

The primary objective of businesses has traditionally been to achieve economic growth through the provision of goods or services. However, this model is founded upon a linear economic framework, characterised by the 'take-make-dispose' model, which is fundamentally unsustainable. The linear approach places growing pressure on finite resources and generates significant waste and emissions, which ultimately prove incompatible with long-term sustainability. (2020, p. 498). The earth's resources are limited, and the amount of waste produced is growing at an exponential rate. Over time, there have been several events that aimed to raise public awareness of the impact of excessive energy waste. Sillanpää & Ncibi (2019, p. 14) pinpoint three key historical moments that remind us of the planet's capacity. One of these is Silent Spring (1962), written by author Rachel Carson, which draws attention to the harmful effects of pesticides on food and animals. Two, The Limits to Growth (1972) by MIT investigates major trends related to nonrenewable resources and environmental deterioration. Three, The Common Future Report (1987) introduces the topic of sustainable development and how it can be achieved in the future.

These publications form the cornerstone for advancing research in alternative economies that avoid causing harmful effects to international markets. Consequently, a circular economy emerged, with numerous pioneers who have extensively studied and are credited as being the founders of such an alternative. In Boulding's book (1966), even before the aforementioned wake-up calls, he introduced the term circular systems, claiming, "Circular systems within the global economy are unavoidable in order to guarantee human life on Earth in the long run." (Geisendorf & Pietrulla, 2018, p. 772). Numerous researchers have associated their work with the foundations that Boulding provided. "As a holistic and multisectoral concept, CE is by nature inclusive, which is why numerous studies investigated its relationship with other green concepts" (Sillanpää & Ncibi, 2019, p. 25). Therefore, various studies have explored its correlation with other environmental concepts such as industrial symbiosis, the green economy, industrial ecology, and the bioeconomy. Although each alternative aims to reduce environmental degradation, there are distinctions in their methods and philosophies.

The Ellen MacArthur Foundation is recognised as a leading contributor to the development of circular economy principles through its extensive research, initiatives, and practices. According to the Foundation's definition, "a circular economy is a

systemic approach to economic development designed to benefit businesses, society, and the environment, (…) is regenerative by design and aims to gradually decouple growth from the consumption of finite resources. (The Ellen MacArthur Foundation, 2023). This concept has developed into an opportunity for a sustainable business model that integrates social and economic sustainability, to create a sustainable economy and promote a healthy society (Geisendorf & Pietrulla, 2018, p. 773). Despite the concept having some reference pioneers, it lacks precision regarding the areas that should be involved and the extent to which a company should be circular. This is an area that is still being researched. Moreover, the successful adoption of the circular economy model necessitates corporate acceptance. This transition presents companies with considerable obstacles, namely the financial investment required and the need to fundamentally reassess their practices. Sillanpää & Ncibi indicate that "the transition to the CE model implies: (i) maintaining the value of resources and derived products in the economy for as long as possible, along with (ii) minimizing the generation of unsafe, non-useful and low-value waste" (2019, p. 79). While some research provides guidelines for businesses and consumers, the resulting implications may pose challenges for various industries. The circular economy presents a significant opportunity for society in the long term, as it aligns with global environmental, societal, and sustainable goals. The shift from linear economy (LE) to circular economy (CE) for small and medium enterprises (SMEs) is a challenging process due to numerous obstacles. Nevertheless, it is crucial to attain sustainability objectives (Sharma, et al., 2021, p. 1805).

The literature on Circular Economy has shown that its fundamental principles are reuse, reduction, and recycling, which can be applied globally across a variety of sectors. However, Sillanpää & Ncibi differentiates that not all of them can be used at the same level, "some CE principles such as reuse, repair, and remanufacturing, tend to have a local or regional dimension, other CE concepts such as recycling and resources recovery have a global dimension." (Sillanpää & Ncibi, 2019, p. 64). However, both local and global communities have failed to implement these principles effectively and in line with their environmental objectives due to stakeholder prioritisation of their own needs. The Circular Economy's proposed principles centre on resource decoupling, which highly "depends on the ability to spot opportunities and then extract higher value from reusing assets (including products, components, and their materials at the end-of-use phase) or finding value added from recycling."

(Hopkinson, et al., 2018, p. 73). This principle stresses the importance of conscious awareness and product utilization, not solely at the end of their lifecycle, but throughout the entire value chain. It distinguishes a circular economic business from a linear economic (LE) business, given that the value of the LE business is laid on the final product without considering the energy inputs in the product. Consequently, “CE aims to create multiple types of value with the ultimate goal of achieving a more resource-effective and efficient economic system” (Pieroni et al., 2019, p. 201). CE businesses concentrate not only on the ultimate product but also on the raw materials, supplier, employer, and final consumer whilst taking strong consideration of the social and human capital involved during the process.

The aforementioned factors create a greater need for businesses, especially small enterprises. However, Sillanpää & Ncibi recognize the value of applying such concepts, "adopting, implementing, and promoting CE principles on a global scale will enable economies to benefit from substantial net material savings, mitigation of volatility and supply risks, potential employment benefits, reduced externalities, and long-term resilience of the economy” (2019, p. 70). To achieve these principles on a global scale, it is crucial to first pursue them locally. In this context, businesses play a vital role as pioneers in effecting sustainable changes in their audiences.

The transition from a linear economy to a circular economy necessitates a robust strategy that engages all stakeholders throughout all business phases. Sillanpää & Ncibi indicate that ”most of the proposed business models to generate circular growth are based on five major strategies: i. Circular supply chain ii. Recovery and recycling iii. Product life extension iv. Sharing platform v. Product as a service” (2019, p. 87). These strategies communicate the fundamental principles of the Circular Economy - reuse, reduce, and recycle - while also proposing a novel approach for businesses to innovate their business models and practices. Though shifting a business model can be challenging, it remains a viable option for companies to explore based on their unique needs and circumstances. Schenkel et al. and Wells & Seitz argue that “companies’ fundamental challenge in implementing CE principles is to rethink their supply chains, and as a consequence the way they create and deliver value through their business models” (in Lüdeke-Freund, et al., 2018, p. 37). Given that the supply chain already has a proven record of producing the final product in the market, it forms the backbone of many businesses. Provoking alterations within supply chains could

result in undesirable consequences for numerous companies. Therefore, the shift towards a circular model may not align with their economic interests.

Extensive research has been conducted on the innovative practices adopted by Circular Economy Businesses, which predominantly revolve around the supply chain, customer, and product. The innovation model entails introducing alterations across the entire process chain to mitigate environmental or community impact. The lack of clarity concerning these businesses prompts Evans, et al. to propose three areas with a theoretical foundation for innovation for sustainable business models. These thematic areas include i. Value and Sustainable Business Models, ii. Value Networks and Stakeholder Mutuality, and iii. Product-Service Systems (2017, pp. 601-603). The aforementioned areas highlight the crucial requirement of integrating the economic, social, and environmental factors while developing a singular viewpoint. Additionally, it emphasizes the crucial role of key stakeholders during the inception and creation of this perspective. Moreover, these areas highlight the company's responsibility in establishing sound governance principles and the role of external actors in creating mutual value. This includes effectively managing externalities.

Whilst becoming a Circular Business poses significant challenges and difficulties, particularly for small enterprises, the benefits ultimately outweigh these obstacles.

Firstly, circular businesses benefit not just from community and environmental integration into their chains but also from being part of a business ecosystem crucial to small enterprise survival in the long term. With the support of other companies that share their principles, values, and procedures, businesses are more likely to endure. Aarikka-Stenroos, et al. describe Circular Economy ecosystems “as communities of hierarchically independent, yet interdependent heterogeneous set of actors who collectively generate a sustainable ecosystem outcome.” (2021, p. 260). In this ecosystem, businesses function as agencies that, with support from other companies, produce greater results than they could achieve on their own. The involvement of multiple actors ensures diversity and heterogeneity, allowing for collaborative efforts towards a sustainable outcome. Members are interdependent and share economic and sustainability perspectives, which have the potential to improve overall performance when viewed at a larger scale.

Secondly, circular economy businesses can increase their long-term economic profits by promoting sustainable alternatives, increasing sales, and utilizing materials

throughout the production chain while searching for more sustainable alternatives. Hopkinson et al. mention, “Resource decoupling, therefore, depends on the ability to spot opportunities and then extract higher value from reusing assets (including products, components, and their materials at the end-of-use phase) or finding value added from recycling.” (2018, p. 73). The implementation of a circular economy industry, which prioritises the efficient use of all materials in the production chain, has been found to increase a company's economic profitability in the long term.

Thirdly, Circular Business Models promote technological growth and innovation within their ecosystem. These companies are compelled to adapt their processes and products due to the nature of their operations. “New materials that enable reduced use of natural resources or that allow better recyclability and process technologies that improve and optimize reuse and recycling of products and materials are important” (Aarikka-Stenroos, et al., 2021, p. 263). Technology-driven innovations are becoming increasingly important in enabling businesses to operate efficiently whilst conserving resources and human capital. By leveraging technology, companies are better equipped to manage and govern their operations, with a clear vision enhancing overall performance and improving the company's reputation. However, it must be acknowledged that such innovations are not always accessible to all businesses due to the effort required to achieve a circular business model. Barquet et al. argue that “the government intervention and neotechnological concept in the manufacturing system are playing as a catalyst towards the successful implementation of CE” (Sharma, et al., 2021, p. 1810). In addition to technology, effective government policies are crucial in facilitating the transition towards a CE business model. The government's role in the circular ecosystem is significant because it impacts stakeholders already aligned with circular principles to a greater extent.

Innovation, economy, and technology are powerful drivers for circular economy businesses transitioning from the linear economy model due to the implications arising from the shift. In a research elaborated by Kwarteng, et al, they mention that "from the business case perspective, the circular economy aims to minimize resources for activity and is likely to result in lower production costs for businesses with increased resource productivity and higher economic output and environmental performance" (2022, p. 1317). The collective employment of these drivers advances a business's performance. The authors recognize the complexity of the model, as it encompasses not just production but also external factors within the ecosystem. Specifically, "the

firm's decision to embrace different business models (…) should be seen from the political environment involving rules and regulations, social dynamics both within and outside of the organization and the institutional structures within which the firm operates." (Kwarteng, et al., 2022, p. 1333).

In conclusion, circular economy enterprises make positive contributions to both the environment and society. Nevertheless, this business model also necessitates a greater investment than traditional forms of business. The circular economic approach is focused on separating economic growth from waste and utilizing all resources in the value chain effectively. As a result, alternatives for conserving resources are being explored. Certainly, this model emphasizes safeguarding the environment and integrating with the community, rather than solely pursuing economic growth. Although some may perceive these priorities as obstacles to achieving sustainability, it is crucial to acknowledge that these businesses operate on a foundation that will generate sustainable economic growth in the long term. As a result, a distinctive strategy is being formulated to enhance the sustainability of a business, while simultaneously tackling the critical issue of growth within a more conscious framework. The core principles, namely reuse, reduction, and recycling, present agents with an opportunity to bring about innovative solutions in their respective fields of expertise. These implications typically arise from the advantages of the circular economy. This approach involves a supportive ecosystem whereby profits are generated not only for individuals but also for the business community. Greater economic growth and a technology-driven innovation model are additional benefits. While businesses acknowledge that these factors require greater effort in the short term, they are usually deemed profitable in the long term.

2.3. The relationship between B Corporation Certification and Circular Economy Practices

Integrating circular economy practices within a B Corporation's processes plays a crucial role in promoting sustainable business practices. As mentioned above, sustainability is often linked to the circular economy, which is usually referred to as the umbrella term that connects these economic alternatives. This section examines the interplay between B Corporation Certification and the Circular Economy.

B Corporations embody an alternative economic model compared to conventional businesses and promote sustainable actions across the governance, employee, community, environment, and customer spheres. This certification encourages organizations to operate more efficiently than traditional businesses and implement sustainable strategies such as circular economy practices. Lüdeke-Freund describes sustainable entrepreneurship as a hybrid organizational model that complements the structure of B-Corporations with Circular Economy Practices (in Boffa, et al., 2023, p. 6). As previously stated, these concepts share a firm commitment to ecological practices and corporate social responsibility for environmental and community welfare. The Circular Economy assesses the approach to managing resources, designing products effectively, reducing waste and utilizing closed-loop systems. On the other hand, B Corporation Certifications emphasise making progressive efforts to minimise waste, maximise recycled materials, and increase the lifespan of products or materials used in the supply chain.

Boffa et al. state that this relationship “leads to the assumption that the hybrid organizational model matters for sustainable entrepreneurship because they can raise the likelihood of sustainable value creation in the entrepreneurial ecosystem” (2023, p. 6). Therefore, incorporating a hybrid model can be beneficial for sustainable value creation and ecosystem development. This relationship suggests that the hybrid business model can enhance the value of a circular economy ecosystem by both expanding and strengthening each agent within it. It integrates both horizontal and vertical enhancements, supplementing the varied metrics and indicators that each concept advocates. The notion of a robust hybrid enterprise motivates prevailing circular economy businesses to join the B Corporations, boosting the company's areas of value. Implementing circular economy practices and striving for B Corp certification may encounter hurdles and impediments. B Corps is devoted to sustainability and responsible business conduct. However, the integration of circular economy principles into business operations faces various obstacles. Hopkinson et al. point out that “a circular setup is not a static system, and the volatility of commercial pressures, regulatory change, and faster innovation cycles requires capabilities to manage transitions back and forth as well as to realign the circular model.” (2018, p. 88). Consequently, the model must consistently adjust to new political and economic systems worldwide.

The relationship between B Corporations and Circular Economy is ambiguous and widely debated. However, it is an ongoing association as the Circular Economy constantly advances and incorporates new solutions into its framework. Similarly, B Corporate Certification would continually adjust as the framework and strategies to comply with the certification improve. However, as both concepts are evolving simultaneously, Hina et al assert that "the B-Corporation function plays a crucial role in the CE because leveraging entrepreneurial culture and other exogenous factors, such as sustainability innovations, can increase the circularity of the entrepreneurial ecosystem in which they operate " (in Boffa, et al., 2023, p. 6). This emphasizes that it is not only a unilateral relationship in which circular economy businesses opt for becoming B Corporations, but B Corporations may implement circular economy strategies to be part of the innovative ecosystem. Therefore, their relationship can be characterised as mutual and two-way, which expands as further research is conducted on each subject separately.

Nevertheless, the systematic B Corporation Certification or the Circular Economy practices do not only characterize a hybrid organization, but also the organization is part of an ecosystem full of elements that perform as enablers for the constitution and the incorporation of both aspects. “Scott’s (2008) framework of institutional theory advocates splitting institutions into three pillars—regulative, normative, and cultural-cognitive—that are independently distinguishable but interdependently provide the elasticity of the social structure.” (in Boffa, et al., 2023, p. 9). This theory explores three distinct performance levels for a company: macro-level, meso-level, and micro-level. The company operates not only as an agent but also under state regulation that enhances the implementation of these practices, alongside the existing ecosystem within its development space. B Corporations and the Circular Economy must consider these aspects when referring to sustainable practices in the long term. These pillars drive hybrid organisations as they indicate the rules, norms and principles that influence the behaviour of the actors involved in the process.

The institutional theory legitimates the company's performance within the framework of sustainability by defining the company's values as well as its limits at the three different levels. In this regard, “companies engaged in corporate sustainability activities towards a CE, (…) need to consider also the cognitive perspective of individuals in organizations, which addresses the relevance of potential differences in the mental models of organizations about the business case for corporate sustainability.” (Boffa,

et al., 2023, p. 12). The institutional framework endorses the principles of the circular economy and B Corporations, emphasising the significant role of all the actors in the chain and their potential to support these practices.

Business models that strongly embrace sustainable practices enable business and ecosystem development. For this reason, an increasing number of companies are implementing Corporate Social Responsibility (CSR) strategies. As mentioned earlier in this chapter, B Corporation is a part of the company's CSR, but the efforts towards a circular economy also come under its umbrella. Scarpellini et al researched the relationship between CSR and CE, which concluded with a "positive relationship between CE activities and the level of development of the CSR. They show that a good level of CSR influences the adoption of CE activities, especially on the aspects of communication with stakeholders." (Del Baldo & D'Anghela, 2020, p. 81). This study highlights the importance of Corporate Social Responsibility (CSR) as a key facilitator for implementing Circular Economy (CE) practices, particularly in areas related to communication between companies and customers. The literature review reveals that the boundaries between CE, CSR, and B Corporations are ambiguous, yet they share similar principles towards achieving sustainability. However, in their research, Boffa et al. indicate "the emergence of the B-Corporation as one of the most effective business models for the translation of the entrepreneurial ecosystem from linear to circular" (2023, p. 22). The researchers establish the Circular Economy as the ultimate outcome, with B Corporate Certification serving as the means to achieve its objectives. Moreover, the company journey is guided by Corporate Social Responsibility as its paramount concern.

A B Corporation and a circular economy company share numerous objectives, yet there exist significant differences and challenges that hinder their relationship. The aforementioned hurdles encompass not only economic constraints but also environmental, policy, customer, and community obstacles that may impede the complete realization of this business model. Several researchers argue that a circular economy's basis rests in the creation of a business model innovation (BMI) towards sustainability. However, not all innovative business models address environmental protection or community integration. It is crucial to differentiate between business model innovation towards sustainability and business model innovation in processes. "Not all CE-oriented BMI approaches accommodate sustainable principles and not all sustainability-oriented BMI approaches accommodate circular principles." (Pieroni, et

al., 2019, p. 210). Additionally, various types of BMI exist, and not all of these types adhere to the principles of circular economy as previously discussed in this chapter.

Sustainability is a contested concept within the circular economy because, although most scholars refer to it as the end goal, it is not clearly defined what it encompasses, yet it is often perceived as a far greater achievement of the circular economy. Pieroni et al. suggested that “CE-oriented BMI is not always able to capture the full potential of sustainability. Some CE-oriented BM configurations, even when fully circular, might generate negative secondary effects.” (2019, p. 210). This conflicts with the Circular Economy's goal of eliminating any negative environmental impacts, even if they are indirect. Hence, the promotion of closed-loop systems.

2.4. Conclusion

This chapter examines foundational concepts that significantly contribute to the research scope, including corporate social responsibility, sustainability, circular economy, and B Corporation certification. These concepts enhance environmental degradation awareness while promoting conscientious approaches to production and consumption among community stakeholders.

The chapter aimed to elucidate the key definitions of a B Corporation, its historical development and the certification process for companies. Moreover, it underlined some noteworthy advantages linked to B Corp certification, comprising enhanced business performance, better employee and customer relationships, and increased sales. The chapter delved into the historical background and definitions of the circular economy, emphasising the core principles encapsulated by the 'R' principles. These principles are not only applicable to businesses but also to individuals. The analysis has extended to reveal the considerable advantages of adopting a circular economy model for enterprises, such as fostering community cohesion, increasing economic returns and cultivating a robust circular economy ecosystem that is mutually supportive of participating businesses.

The chapter examines the interactive association between B Corporations and the circular economy, acknowledging their mutually beneficial relationship that progresses with the advancement of research and innovation. Additionally, this research considers institutional theory concerning both B Corporations and the circular economy and emphasises its three principal components - regulative, normative, and cultural-cognitive. A notable discovery from this section is the differentiation between circularity

and sustainability, demonstrating that some sustainable methods do not align with circular principles and vice versa. This nuanced comprehension forms the basis for the subsequent examination of how these ideas interact and their impact on wider research objectives.

3. Methodology

3.1. Research Design and Approach

The case study is a rigorous research approach entailing meticulous investigation and analysis of a specific real-life scenario, happening or entity in its natural context. It requires a comprehensive and thorough examination, frequently incorporating multiple data sources to accentuate details from the perspective of each case in a particular circumstance (Tellis, 1997, p. 1). Case studies aim to attain a refined comprehension of intricate phenomena, bringing to light subtleties and dynamics that may not be effortlessly captured by quantitative methodologies.

The selection of a single case study holds significant importance within the scope of this thesis, given its aim to gain an in-depth understanding of the practices and efforts made by the chosen case study in its move towards circularity. The thesis examines the company's trajectory, context, past and current practices, and the complex and multifaceted nature of the transition from a business-as-usual approach to circularity. This study aims to investigate the sustainable practices implemented by the company through a specific case study, while also identifying potential challenges and analyzing the impact of corporate strategies on sustainability. This approach goes beyond theoretical frameworks and provides practical insights for a more informed understanding of the issue.

A specific case study allows the thesis to make meaningful connections between a company's practices and its sustainability outcomes within specific areas of the company. Examining numerous sectors within the company allows for a more comprehensive comprehension of the intricate journey towards circularity and the external factors that affect this progress. This study intends to recognise patterns, trends, and divergent results, contributing to the strength of the thesis and ensuring its exploratory nature.

Nonetheless, the current dissertation recognizes the common misconceptions about using the case study methodology, as Yin outlines them as the deficiency of rigour and researcher bias, inadequate grounds for scientific generalization, and that they produce unreadable documents given the amount of time they take (2009, p. 14). However, this dissertation has established specific parameters to enhance the study's rigour and implemented a framework to summarise the case study's information into a

coherent structure. The study's objective is not to provide generalisable results but rather to act as an exploratory study that may serve as a prelude to social research.

3.1.1. Criteria for the selection of the case study

The selection criteria for the case study were thoughtfully constructed to ensure an unbiased investigation and to enable a comprehensive examination of practices and potential circularity in Ecuador.

1. *B Corp Certification:* The primary selection criterion was the company's B Corp Certification, which guarantees a commitment to long-term sustainability.
2. *Diverse Sectors and Industries:* An exhaustive analysis was conducted by including companies from different industries such as manufacturing, technology, finance, agriculture and others.
3. *Sustainability reports:* Companies were selected based on the availability of publicly available sustainability reports, with preference given to companies with both older and more recent reports for a comprehensive assessment.
4. *UN Global Compact membership:* Companies were selected based on their membership status in the UN Global Compact, providing an additional source of validation of sustainability practices. The UN Global Compact is a voluntary programme founded on CEO commitments to adopt universal sustainability principles and provide yearly reports on their sustainability strategies. (United Nations Global Compact, 2023).
5. *Emphasis on SMEs:* The selection process prioritized small and medium-sized enterprises (SMEs) to guarantee diverse representation.

Therefore, El Ordeño was chosen as the case study due to its suitability to the meticulously crafted criteria, allowing for a thorough investigation of circularity practices in Ecuador.

The process of selecting cases may face limitations that must be recognized and overcome to ensure the validity and reliability of the study. One possible limitation is the reliance on the public sustainability reports which may lead to biased reporting of positive and selective aspects while neglecting others. To achieve a comprehensive assessment that maintains objectivity and balance, I will employ a triangulation approach by systematically cross-referencing the assertions made by El Ordeño with publicly available external data. This approach will focus particularly on aspects that

have not been covered in the sustainability reports. The rigorous methodology adopted will identify potential deficiencies and strengths with heightened accuracy.

Furthermore, a noteworthy constraint arises from the dynamic nature of sustainable practices, including circularity initiatives, which are constantly evolving. To overcome this obstacle, a thorough observational strategy will be employed, allowing for consistent and extensive monitoring, tracking, and scrutiny of the company's sustainable practices and circularity initiatives for a prolonged period of time. This will entail monitoring the development of particular procedures over the assessment period. This will provide a comprehensive viewpoint that delivers profound insights into the enterprise's sustainable journey, as well as highlighting potential challenges along the way.

Finally, it is important to recognise that the case study may not include all pertinent sustainable practices and circularity initiatives globally. Nevertheless, by precisely determining the geographical extent and goals, this constraint will be openly communicated, permitting a more concentrated and thorough examination of the particular context in Ecuador. The scope of this study will provide context for the findings, which in turn offer valuable insights and implications for other industries and regions committed to sustainable and circular business practices.

3.2. Data Collection Methods

3.2.1. Overview and collection of data

In 1994, Yin “listed six sources of evidence for data collection in the case study protocol: documentation, archival records, interviews, direct observation, participant observation, and physical artifacts.” (in Tellis, 1997, p. 4). The current thesis will employ documentation as the primary source for data collection. The document analysis will involve a thorough and systematic examination and interpretation of the publicly available sustainability reports of the company under study. “Sustainability reporting refers to the information that companies provide about their performance to the outside world on a regular basis in a structured way” (Rogmans & El-Jisr, 2022). This information is a valuable source of insights into environmental, social, and governance (ESG) practices and sustainability commitment. It identifies and analyses significant sustainability indicators, initiatives, and performance metrics. Examining these sustainability reports enables a thorough comprehension of the organisations'

journey towards sustainability, an assessment of their progression in attaining sustainability objectives, and a recognition of commendable practices that promote circular and eco-friendly business models.

The accessibility of sustainability reports is the main strength of this method owing to the fact that they are standardized documents that are available to the public. This guarantees transparency and consistency in the research data collection process. Sustainability reports frequently comprise quantitative data, performance metrics, and specific circularity goals, delivering useful empirical proof for assessing the effectiveness of sustainable tactics. However, as there are a minimum of seven distinct sustainability reporting frameworks, the reports may differ in detail (Rogmans & El-Jisr, 2022). Additionally, specific circular initiatives could lack explicit disclosure or adequate measurement, potentially resulting in data gaps.

The identification and collection of pertinent documents for this research underwent a meticulous and multi-faceted approach, encompassing an extensive array of document classifications.

1. Sustainability reports were selected as the principal source of information for this thesis, sourced directly from the company's official website. The reports span four significant years, namely 2018, 2019, 2020, and 2021. The study focuses specifically on the years between 2018 and 2021, as they offer enhanced insight into the practices adopted during the transition journey.
2. Information regarding El Ordeño's certification was obtained from the B Corp website, which includes both overall and specific area scores. This permits the tracking of the company's recertification status over the years and provides insights into its long-term commitment to sustainability.
3. UN Global Compact Website: The website's yearly Communication on Progress (COP) reports furnish valuable supplementary information, offering added details on the company's specific contributions toward achieving the UN Sustainable Development Goals (SDGs) and their alignment with global sustainability frameworks. The reports scrutinised pertain to the years 2019, 2020, 2021 and 2022.

By implementing a rigorous approach to gathering documents, the study attained a broad and varied dataset, facilitating a comprehensive assessment of initiatives related

to sustainability and circularity. The precise coordination and administration of the obtained materials required a systematic approach to ensure the efficiency and accuracy of the data analysis.

3.2.2. Data Management and Analysis

The sustainable reports will present the company's transition practices from 2018 until 2021. To analyse this data, two frameworks will be used: the B Impact Assessment and Circular Strategies.

B Impact Assessment Framework

The B Corporation Certification uses the B Impact Assessment, a comprehensive tool to certify companies that adopt an economic, social and environmental approach that surpasses traditional company values. The platform is user-friendly, providing detailed explanations of the information required by the form. It evaluates five areas of the company, namely governance, employees, customers, community and environment, each with specific sub-areas, questions and multiple-choice answers. The questions and multiple-choice answers offer guidance for both applicant companies and external actors to gain deeper insight into the impact area. Upon answering each question, the platform assigns a score with a minimum of 80 required for certification.

In their recent systematic literature review of B Corps, Diez-Busto et al. concluded that “B Corp is a way of publicly claiming an identity as an organization interested in the success of shareholders and other stakeholders, in a way that distinguishes them from traditional companies” (2021, p. 10). This assessment is important in the context of sustainable business models because it encompasses a holistic perspective, assessing not just isolated aspects of a company, but the wider organisational landscape. It mandates tangible proof, compelling companies to move beyond shallow green marketing strategies. The inclusion of the B Impact Assessment framework within this thesis is of paramount importance concerning the theme of sustainable business practices. The B Impact Assessment's trajectory solidifies its credibility as a triple impact (economic, social, and environmental) mission. This criterion aligns with the fundamental principles of circular and sustainable business models, which are characterised by their commitment to delivering comprehensive and beneficial changes across diverse dimensions and multi-stakeholders. For certain companies, the pursuit of a triple impact can act as an intermediary step in their quest for

sustainability. Consequently, becoming a triple-impact business plays a crucial role in bridging the gap between conventional business-as-usual practices and the holistic ideals of circularity. Essentially, the concept of B Corporations represents a period of transition amalgamating conventional business approaches with the broader scope of circular economies, ushering in the latter. This study aims to comprehend the current practices advanced by B Corporation in El Ordeño. By using this framework in this study, the objective is to understand the state-of-the-art of the areas promoted by B Corporation within El Ordeño.

Table 1 outlines B Corporation's focus areas, which will guide the identification of El Ordeño's practices in 2018 and 2021. Annex 1 provides a comprehensive summary of questions for each topic and impact area as laid out by B Corporation, serving as a framework for categorising the practices.

Table 1. Impact Areas and Impact Topics in the B Impact Assessment

Impact Area	Impact Topic
Governance	Mission & Engagement
	Ethics & Transparency
	Governance Metrics
	Mission Locked
Workers	Workers Impact Area Introduction
	Financial Security
	Health, Wellness, & Safety
	Career Development
	Engagement & Satisfaction
Community	Community Impact Area Introduction
	Diversity, Equity, & Inclusion
	Economic Impact
	Civic Engagement & Giving
	Supply Chain Management
Environment	Environment Impact Area Introduction
	Environmental Management
	Air & Climate
	Water
	Land & Life
Customers	Customers Impact Area Introduction
	Customer Stewardship

Circular Strategies Framework

To address the final objective of this thesis, a circular economy monitoring framework will be employed. Resource value retention options, also known as Rs, R-options or R-strategies, have emerged as central principles of the circular economy, in order to understand the complexity behind these practices for companies, consumers and various stakeholders who aim to incorporate circularity into the processes around them. The absence of consensus among academics regarding the concept of CE has resulted in the implementation of different strategies around the world.

Reike, et al. (2018, p. 253) conducted a thorough mixed-methods study of historical literature reviews on over 38 different R-words used to refer to the same strategies. Their findings reveal a problematic practice that causes confusion among scholars worldwide and creates a knowledge gap. The authors have developed a set of strategies to promote circularity, which they have classified into 10R typologies. The typologies focus on two product life cycles, namely "Product and Use" and "Concept and Design," and are part of the Circular Economy 3.0 (Reike, et al., 2022). The strategies encompass Refuse, Rethink, Reduce, Reuse, Repair, Refurnish, Remanufacture, Repurpose, Recycle, and Recover.

However, to provide greater clarity, this dissertation shall employ Moraga et al.'s (2019) classification framework. The framework categorises a series of circular strategies according to specific scopes, which serve as the principal guidelines for measuring company performance. Additionally, the framework differentiates between micro and macro scale indicators. This research will concentrate on the micro-scale indicators as they pertain to company performance. Table 2 displays the authors' grouped strategies with corresponding definitions and employed R-strategies.

Table 2. Classification framework of the CE strategies

CE strategies areas	What do they measure?	R-strategies
1. Function	Preserve the function of products or services provided by circular business models such as sharing platforms, PPS (use- and result-oriented) and schemes promoting product	Refuse, rethink, reduce

	redundancy and multifunctionality	
2. Product	Preserve the product itself through lifetime increase with strategies such as durability, reuse, restore, refurbish, and remanufacture	Reuse, refurbish, remanufacture
3. Component	Preserve the product's components through the reuse, recovery and repurposing of parts	Reuse, repurpose
4. Material	Preserve the materials	Recycle, downcycle
5.Embodied Energy	Preserve the embodied energy through energy recovery at incineration facilities and landfills	Energy recovery, landfilling with energy recovery
6. Reference	Measure the linear economy as the reference scenario or the absence of a preservation strategy to show the status, progress, or regress towards CE. For example, the indicator for waste generation per person in a year might show whether the promotion of CE is generating less waste	Waste generation, landfilling without energy recovery

Adapted from (Moraga, et al., 2019)

The authors classified three types of indicators to measure this framework:

1. Direct CE with Specific Strategies, which focus on one or more identifiable CE R-strategies
2. Direct CE with Non-specific Strategies, which focus on one or more than one R-strategy that is not easily identifiable
3. Indirect CE, which are indicators that may evaluate CE strategies but which the use of ancillary approaches to assess CE. The indicator may provide information on CE but it is not direct to the CE definition.

These indicators are divided into three measurement scopes that consider the Life Cycle Technological approach and modelling level, specifically the technological cycles and their cause-and-effect chain. The following scopes are utilized:

1. Scope 0, refers to measurable attributes of products, processes, or materials without considering the broader life cycle perspective.

2. Scope 1, takes into account the broader life cycle perspective, considering not only the direct inputs and outputs of a specific process but also the upstream and downstream environmental impacts associated with it.
3. Scope 2, which are the indicators that consider the broader impacts of a product, process, or activity throughout its life cycle, including the interconnected environmental, economic, and social dimensions.

Due to the limited information obtained from El Ordeño's Sustainability Reports, this study will specifically concentrate on Scope 0.

The strategies will be obtained from the sustainability reports of the company. The B Corp Framework provides a guideline on the type of strategies this research will focus on, and lately, these strategies will be contrasted using the above-mentioned circular framework to understand the journey transition of El Ordeño towards sustainability during 2021, its last year of report.

4. The history of “El Ordeño”

Developing a circular business model (CBM) poses numerous challenges. While these challenges may be intrinsic to companies designed from inception to be circular, those transitioning from traditional business-as-usual approaches may face significant obstacles. Regardless of its provenance, the successful implementation of a CBM requires a comprehensive examination of the underlying principles and supporting mechanisms that are essential to its implementation.

In the context of this thesis, understanding the historical trajectory of El Ordeño as a company plays a relevant role within the framework of its transition to circularity. This study's exploratory nature has led to an investigation of the company's historical trajectory, as these advancements have influenced the company's ethos, strategies, and organisational behaviour. The progress of the business over time provides a comprehensive view of both the company's ongoing development and the external factors that influence its decision-making. Scipioni, et al. identify three overarching dimensions: external environment, supply chain and the organization (SME) that affect positively or negatively the Organizational learning of the SMEs, which in further detail, encompass second-order themes that shape the company decisions (2021, p. 19). The researchers identified possible enablers for promoting sustainability within the firm by tracing the historical narrative. Enabling factors comprise influential external or internal dynamics and circumstances, which impact the implementation of business models. Such factors enable businesses to fulfil their mission-driven operations, affecting both the initiation and sustained progression of specific actions. De Mattos & De Albuquerque (2018, p. 3) stated that companies, as autonomous entities, decide on the type of business they will conduct according to their mission, values, and strategy. However, certain enabling conditions positively affect the transition towards circularity, including education, governmental legislation that creates incentives, and motivation for corporate social responsibility. This kind of investigation facilitates a well-informed evaluation of the changes in the organization, primary measures taken, obstacles faced, and conditions that facilitated the early introduction of sustainability initiatives in the wider circular practices of the corporation.

The choice of Ecuador as the primary area for this case study is supported by strategic rationales. Situated in South America, Ecuador offers a complex terrain and environment that is well-suited for examining how businesses first transition toward circularity and transform into sustainable entities. Ecuador presents a diverse

economic, social, and ecological landscape, providing a rich basis for investigating the complexities of challenges and opportunities encountered by SMEs. As indicated by the Global Entrepreneurship Monitor (GEM) report, Ecuador recorded one of the highest rates of entrepreneurship in 2019, with 36% of the population establishing business ventures (Lasio, et al., 2020). The entrepreneurial ecosystem in Ecuador is varied, and analysing the first steps towards sustainability of notable businesses could influence the transformation journey of the entrepreneurial population in this country. Additionally, Ecuador has abundant natural resources, which the country has managed to demonstrate respect and accountability for. In August 2023, a referendum was held to determine whether to exploit oil reserves in the Amazon Rainforest. Nearly 60% of voters opted to keep the oil underground, in order to safeguard the area's biodiversity and local communities (Amazon Frontlines, 2023). Ecuador's environmental initiatives demonstrate the country's commitment to promoting circular practices in SMEs, making it an exemplary model for others to follow. Within this framework, El Ordeño, a dairy enterprise based in Ecuador, serves as a case study showcasing the potential of businesses to implement fundamental transformations within emerging economies. By choosing Ecuador as the site for this case study, this thesis aims to enhance the comprehension of the incorporation of circular economy principles and further the discussion of sustainable entrepreneurial practices in developing regions.

The historical narrative of El Ordeño's early ventures into circular practices provides the study with an insight into the strategic choices and cultural adaptations within the organisation and to the external actors that have marked the company's journey. This review will examine the origins and early stages of the company's establishment, its growth, challenges arising from societal, economic, and political transformations in the country, and its preliminary efforts towards sustainability and circularity.

4.1 Establishment and Early Years (2002-2010)

The roots of El Ordeño predate its official establishment as a company. The vision of the founders was to transform the livelihoods of dairy farmers, and the founders' first-hand experience gave them an insight into the needs and growing potential of the sector.

The late 20th century was a challenging time not only for the world but also for Ecuador in particular, with many socio-economic and political difficulties that led the country into a period of division. In 1995, Ecuador was involved in an armed conflict with Peru and the resignation of its vice-president led the country into unprecedented political

instability. Despite sizeable macroeconomic efforts to stabilize the economy, the country confronted surging inflationary pressures. Not only were the pressures economic and political, but they were also environmental. In 1997-1998, Ecuador experienced a shocking El Niño phenomenon, which caused the loss of many lives and destroyed a large portion of crops, mainly affecting small-scale farmers. The flooding also damaged the road infrastructure, resulting in millions of dollars in economic losses (Organización Panamericana de la Salud, 2000). The global collapse in oil prices harmed the Ecuadorian economy, which relies on oil as an export. In light of hyperinflation and currency devaluation, Ecuador decided to dollarize its economy. This shift resulted in significant economic losses for households in Ecuador, as well as years of instability. “Between 1998 and 2000 about 200,000 Ecuadorans left the country in search of better economic prospects.” (Parandekar, et al., 2002, p. 148). the national crisis has worsened the migration of thousands of individuals, both from urban and rural areas.

In this socio-economic context, the pressures faced by milk producers were aggravated by factors such as limited technical capabilities, restricted access to quality inputs, insufficient funding for production, and inadequate business models. These limitations served only to worsen the economic crisis that Ecuador experienced during this period. El Ordeño was established to address the urgent local challenge of revitalising rural development prospects and, in turn, alleviating growing social issues such as poverty, unemployment, and migration. The concept of creating a processing facility linked to an inclusive, secure, and constant supply of raw materials was initially proposed in 2001. The idea emerged from deliberations in two General Assembly gatherings of the Association of Sierra and Oriente Livestock Farmers (AGSO), a non-profit organisation dedicated to advocating for the dairy and livestock industry. Initially, the proposal garnered support from 500 potential stakeholders, who were primarily AGSO members or involved in the value chain as suppliers or actors. However, when its implementation began, only 70 individuals participated in the project. The concept of the milk producer support system was initially proposed as a means of substituting imports, serving as a government program supplier, stabilising local markets, and ultimately, exporting its products (El Ordeño, 2018). In 2002, El Ordeño was established as an agro-industrial enterprise with a definite social vision to mitigate the problems encountered in the livestock industry. The encouragement behind its establishment can be attributed primarily to Carlos Albornoz Barriga and Rubén

Aulestia Donoso. Andrés Borja Holguín, Simón Bustamante Cárdenas, Hugo Grijalva Garzón, Juan Pablo Grijalva Cabo, Nicolás Guillén Alzamora, Adrián Moreano Dávila, Marcelo Peña Durini and Gonzalo Vorbeck Pachano.

The AGSO was composed of members who had witnessed the livestock industry and had a long history of proposing major changes in the agricultural sector. Their primary interest lies in public policy. The forum aimed to harness natural resources and favourable conditions for livestock production, with a particular emphasis on the most vulnerable communities. In many cases, dairy production served as the foundation of the livestock farmers' daily economy. The AGSO scheme aimed to connect the city and countryside, benefiting both. Unfortunately, preceding attempts such as el Ordeño failed due to a lack of comprehensive vision of the context, ultimately resulting in poor quality milk and a lack of optimal sales.

Based on the experience of the previous cases, El Ordeño became the implementing body of the association, maintaining the same objectives. El Ordeño reached out to the most remote rural populations, farmers who were not part of the supply chain, and worked with them to implement technical skills for milk production. These endeavours not only fostered a trustful relationship between the producers and the company but also the development of personal and technical skills. The ongoing efforts in the field have boosted the morale of the producers and altered their perspective towards their daily work (El Ordeño, 2018, p. 24). Additionally, the company has acted as a mediator between the producers and buyers, guaranteeing economic security for the former and quality milk for the latter.

The company's growth began steadily and vigorously, fostering a strong partnership with dairy farmers while simultaneously establishing itself as the intermediary. However, this was not sufficient and the company had to find its way among the established milk production companies. To accomplish this, the company invested in exclusive technical equipment. Their first facility commenced operations in March 2003, manufacturing powdered milk. The initial batch involved approximately 5000 litres of milk, with the primary goal of developing an autonomous plant that could handle internal operations, manage inventory, store products, and explore export opportunities.

In 2004, the company implemented an inclusive associative business model aimed at producers in alignment with objectives initially established in the AGSO forum. The

company fulfilled the registration and qualification requirements as a contract manufacturer and began production processes for other industries. Sales of powdered milk notably accounted for USD 700,000 in the first year of operation. This shift highlighted the company's strategic move towards cultivating cooperative alliances and expanding production sectors, propelling it beyond its original role into diverse operations.

In 2006, El Ordeño successfully exported to Colombia and Venezuela. Additionally, as a socially focused and inclusive company, El Ordeño and a group of small-scale milk producers visited New Zealand in 2007 to learn about best practices. The primary focus of this excursion was to gain valuable insights into successful dairy production management and to project the future of Ecuadorian livestock production from the perspective of producers and business owners. This in-depth experience proved to be highly advantageous not just for the company but also for all the participating producers, as it served to strengthen the associations between the company and its suppliers while simultaneously promoting best practices in the field.

In 2008, the company demonstrated its commitment to producers by participating in government initiatives, including "Nutriendo el Desarrollo" and "Programa Socio Solidario." These programmes aimed to improve the technical capabilities of small-scale milk producers, thus reducing reliance on intermediaries. As a result, the socio-economic conditions of individual producers were improved, in line with the overall objectives of these projects. El Ordeño's commitment to its own expansion as well as the development and empowerment of its associated stakeholders within the milk production industry was highlighted by this initiative. In 2010, El Ordeño, in association with the AGSO, participated in a child malnutrition program to uphold its values of partnership, inclusivity, and social responsibility. The "Programa de Alimentación Escolar" was established in collaboration with the Government, signifying the company's dedication to business and social advancement.

The first few years of El Ordeño (2002-2010) were a transformative journey that involved strategic aspirations and adaptive measures in response to socio-economic conditions. The company's mission was to improve the livelihoods of milk producers in Ecuador, and it was born from a visionary desire for change. The political and economic challenges of the late 20th century required proactive approaches to rural development, reframing challenges as opportunities. During this period, the company established a processing plant, thereby achieving greater autonomy and control over

its operations. In addition, the company participated in partnerships that extended beyond business purposes, actively involving itself in projects that improved the technical skills of producers while also tackling socio-economic disparities.

4.2 Expansion and Challenges (2011-2017)

Between 2011 and 2017, the company consolidated its first wins and established gradual growth by strengthening the company's facilities as well as obtaining certifications that endorse its quality. It was a period also shaped by the political and socio-economic national context.

During this period, Ecuador encountered a varied socio-economic landscape that significantly affected its policy decisions and development path. The era was marked by a nuanced balance between stability and obstacles. The economy of Ecuador relied greatly on oil exports, which guaranteed some degree of stability, while the government boosted its investment in social welfare schemes to alleviate poverty. Amidst global economic uncertainties, including fluctuating oil prices and the European debt crisis, President Rafael Correa's leadership in the early part of this period prioritised investment in health, education and rural infrastructure development, all aimed at improving the well-being of Ecuador's population (Clark & Garcia, 2019). However, this period was also marked by political unrest, evident in demonstrations and conflicts concerning tax reforms and alterations to labour laws, as Ecuador confronted economic difficulties that required a more efficient approach to public expenditure management (Clark & Garcia, 2019).

During this time, environmental concerns came to the fore, particularly regarding deforestation and oil exploration in biodiverse areas of the Amazon. Additionally, Indigenous communities emerged as advocates for environmental preservation and the protection of land rights. This period was marked by efforts to balance economic stability with the political and environmental discomfort felt by the populace, which informed the ongoing changes within the country.

During the initial years of this period, the company focused on enhancing its establishment and capabilities within the dairy industry. In 2012, El Ordeño inaugurated one of the most cutting-edge processing plants in Ecuador exclusively dedicated to juices and UHT milk, utilizing Tetra Pak technology. "Tetra Pak packages have a lower environmental impact than equivalent glass and plastic packaging."

(Tetra Pak, 2023). This enables the packages to be recycled while also ensuring responsible forest management. This technology is significant to the company not only due to its beneficial environmental impact but also because it enhances the plant's production capacity. The increased production allowed the firm to serve as a supplier for national school feeding programs, and to provide its products to the entire country through industrial production. In 2014, the company strengthened its production and export model by conducting its inaugural export to Peru. In 2015, the company obtained FSSC 22000 certification (Food Safety System Certification), which conforms to the highest standards and aims to acknowledge the company's food safety management systems, ensuring safe food production (FSSC, 2023). That year, the company broadened its network by joining the Chamber of Industries and Production. This organisation bolsters the business sector and champions the political, economic, and social ideals of the Free Enterprise System (Cámara de Industrias y Producción, 2023).

Since 2017, El Ordeño has actively restructured its internal organization to confront the challenges of the fourth industrial revolution. This strategic adaptation primarily relies on technology and information integration. The company has made considerable investments in technological innovation, with a specific emphasis on enhancing information quality and process efficiency, to enhance organizational areas related to the product and within the company. A significant achievement in this initiative has been the comprehensive integration of the SAP tool into all aspects of the corporation's activities. This deliberate technological transition is intended to have profound effects, including the enhancement of management frameworks, reduction of costs, streamlining of production procedures, and overall improvement of fiscal gain (El Ordeño, 2018). This transformation aims not only to maintain the highest quality standards but also to ensure efficient use of resources throughout the operational cycle.

In addition to utilizing the SAP tool, the company integrated additional tools into its processes, such as the Power BI (Business Intelligence) and Disaster Recovery Plan (DRP), which facilitate the adoption of new processes, enhance the growth of the company in diverse areas of business, and cement its leading position in the industry. Eventually, the company also chose to implement Robotic Process Automation (RPA). This incorporates cutting-edge technology, using digital advancements like connected machinery, mobile applications, and data analysis to improve the efficiency of business

intelligence processes. Investing in this digital technology guarantees a reduction of both time and costs, minimizing errors and assigning analytical tasks to plant employees. This adds value to their management role.

In 2017, El Ordeño underwent a considerable transformation that exceeded technological advancements. This marked the start of the company's public commitment to environmental responsibility, led by the CEO and shaped first and primarily by the prevailing national context. The company began to record its greenhouse gas (GHG) emissions systematically according to the protocols articulated in the GHG Protocol methodology during this critical year. The company's various departments collaborated to minimise emissions. To gain insight into consumption patterns and explore opportunities for reduction, certain emissions data were compared to the emission factor of the national electricity grid. El Ordeño's proactive approach, driven by its CEO, highlighted its commitment to not only measure but also actively manage its environmental impact.

Similarly, during this period, Ecuador demonstrated a stronger commitment to its environmental stewardship. It implemented significant measures to encourage the incorporation and encouragement of businesses to adopt eco-friendly practices. “It has signed important international instruments such as the Paris Agreement and promotes public policy processes at the local level (…) on solid waste management and dialogues on the (…) Action Plan of the National Biodiversity Strategy (2015 - 2030)” (European Union Websites, 2021). These initiatives involve collaborative working groups that focus on efficient solid waste management and dialogues aimed at facilitating the smooth implementation of the National Biodiversity Strategy's Action Plan. Ecuador initiated the discussions to transition from a linear economy to a more sustainable one, taking into account the country's biodiversity and its emphasis on waste management.

This period was marked by further improvements in the quality of the company's products and equipment. The company demonstrated a tendency towards technological innovation in its processes and took its initial steps towards sustainability by recording its greenhouse gas emissions. Meanwhile, the socio-economic context in Ecuador has shown a mixture of stability and vulnerability, while also taking initial steps towards protecting biodiversity through national action plans and waste management.

4.3 Sustainable and circular focus (2018-2021)

The current period's milestones have influenced El Ordeño's sustainable choices. Despite being an Ecuadorian company operating in the food industry, with a primary focus on processing dairy and industrializing milk, El Ordeño has ventured into product diversification. This strategic shift is in close alignment with its associative and inclusive business model, aimed at promoting well-being across its entire value chain. Producers rely not only on milk commercialization but also on the commercialization of other co-produced goods. Through diversification, the company emphasizes its commitment to expanding its business while strengthening an ecosystem that is both sustainable and inclusive of all stakeholders along the value chain. This approach demonstrates an ability to adjust and respond to current market trends, with a particular emphasis on promoting economic expansion and social influence.

In 2018, the company expanded its product range while implementing a diversification strategy through the development of new offerings. The commercial focus lies on the traditional channel and places a strong emphasis on brand enhancement. Additionally, El Ordeño became a member of the United Nations Global Compact - Ecuador Network during the same period. This represents a significant step forward in the company's sustainability journey since the Global Compact is a coalition of entities focused on promoting sustainable development worldwide. Essentially, the company is displaying unwavering dedication towards achieving the Sustainable Development Goals (SDGs) laid out in the 2030 Agenda. This membership necessitates a thorough grasp of the company's procedures to align the company's strategy and operational methods with the tenets of the UN Global Compact. These tenets encompass human rights, labour standards, environmental stewardship, and anti-corruption measures, applicable to its value chain (El ordeño, 2019). These endeavours signify a commitment to ethical and conscientious business practices, promoting sustainable development.

In 2019, El Ordeño became the biggest corporation and dairy company in Ecuador to receive certification as a B Corporation, as well as being the first in the region's industry sector. This certification showcases the company's participation in a global movement that brings together dedicated companies adhering to sustainability and social responsibility standards. The company fosters value creation and well-being throughout their value chains, as well as their environment. According to its sustainability reports, the company upholds the B System's commitment as an

extension of El Ordeño's purpose, enabling participation in collaborative spaces that impact and transform the world (El Ordeño, 2020, p. 22). In addition, the company is granted certification via the B Impact Assessment - a measurement tool - which enables the formulation and implementation of continuous improvement plans aimed at enhancing sustainability.

In that year, a significant development occurred as the TRU brand was established in alignment with "El Ordeño" vision and principles. The TRÜ food line aims to encapsulate the essence of El Ordeño by proposing a sustainable, responsible, innovative and competitive portfolio, allowing it to position itself in the food and beverage industry and further boost its business. An important aspect of this brand's value proposition is the integration of blockchain technology in its milk products. The packaging is furnished with a QR code for consumers to retrieve information about their product's journey from the manufacturer, through quality control and distribution centres, to the ultimate destination. Additionally, the packaging specifies the proportion of renewable materials, like the lid fabricated from sugar cane, alongside the fair trade business model pioneered by the company. The TRÜ brand strives to cultivate conscientious and responsible consumers who make environmentally friendly choices. The project has formed substantial partnerships with the IBM Food Trust and the Food and Agriculture Organization of the United Nations (FAO).

Within the context of Ecuador, there has been a significant shift towards prioritising the adoption of circular economy principles to safeguard our limited resources. A pivotal moment occurred in 2019 when the National Pact for a Circular Economy was signed, laying out a framework for responsible production and resource consumption based on circular economy principles. The initiative is implemented across nine strategic axes. These efforts are focused on industrialisation and sustainable waste utilisation, building resilient infrastructure, promoting sustainable business ventures, and progressively reducing plastic consumption. The combined actions led to the publication of a White Paper on the Circular Economy in 2020, which serves as a primary document for developing a national strategy and action plan to facilitate Ecuador's shift towards a circular economy (Switch2Green, 2023). These external pressures also contributed to the changes within many businesses in rethinking their business-as-usual model.

In 2020, El Ordeño initiated a product diversification scheme with its "white onion" project, which defined the company as a food producer. This project's chief objective

was to diversify product and producer income. It was implemented via comprehensive market analysis, identifying market opportunities and partnerships, as well as granting technical help for onion growing to relevant producers. One of the challenges faced by the project was ensuring a fair price for the producer and direct payment to farmers without intermediaries. Consequently, the clean and packaged long white onion from the small producer network in El Ordeño was sold in major supermarket chains under the fair trade scheme. Another significant achievement was the participation in a Global Compact initiative. In 2021, El Ordeño is leading the implementation of the first Guide to Good Practices for Sustainable Production in Ecuador. The aim is to disseminate sustainable practices and foster collaboration between various companies from both the public and private sectors.

The last period has been characterised by the strengthening of the company's commitment to sustainability. Juan Pablo Grijalva Cobo, the company's general manager, describes these years as both challenging and consolidating in their sustainability reports. The year 2020, during the pandemic period, had a devastating impact on El Ordeño, particularly in terms of production and logistics. However, 2021 is characterised as a year of consolidation and recovery for business activities across the nation (El Ordeño, 2021, p. 6). He additionally reaffirms the company's commitment to promoting cleaner production with an established plan that will enable them to be carbon neutral in the future. A program for behavioural change has been introduced to train staff on sustainable and responsible environmental practices. These initiatives signify an initial move towards sustainability, encompassing not only organizational changes but also a dependence on sustainability networks such as the UN Global Compact, B Corporation, IBM Food Trust and FAO. These initiatives signify an initial move towards sustainability, encompassing not only organizational changes but also a dependence on sustainability networks such as the UN Global Compact, B Corporation, IBM Food Trust and FAO. They seek to enhance current practices and pave the way for a more sustainable business model.

Over the past two decades, the company has undergone significant changes in its infrastructure, strategy and promotion. Nonetheless, it has continued to adhere to its model of integrating and associating its producers with the value chain. Its vision has expanded as a result of its national-level impact. Gradually, it has moved from a business-as-usual approach to embarking on a journey towards circularity and sustainability, incorporating circular practices throughout various areas of the

company. The national context has significantly impacted this shift by incentivising the enterprise to modernise its procedures and contemplate additional stakeholders within its supply chain.

The upcoming chapter will provide a comprehensive overview of El Ordeño's efforts to adopt sustainable practices. These initiatives will be categorized based on the B Impact Assessment and subsequent B Corporation certification, which serve as a stepping stone towards achieving circularity in business.

5. Areas Promoted by B Corporation Certification for Sustainable Practices

The B Corporation Certification Framework represents a relevant initiative in the area of corporate sustainability. It does not only encourage businesses to rethink their purposes but motivates them to shift from a profit-focused model to another that considers the environmental and social impacts of the company's actions. Throughout this certification, businesses play a crucial role in the economic ecosystem, acting as agents of change that contribute to the balance of the system by generating a triple impact through their products and services. Quantifying the economic and environmental impact of business activities represents a bottom-up approach, as they are leading a macro-change. The research considers B Corporation Certification as a precursor to the transition to sustainable business models, which serve as a mechanism to regulate and evaluate corporate behaviour (Poponi, et al., 2019, p. 2). B Corporation Certification enhances conventional corporate social responsibility by publicly declaring an organization's pledge to various fields of sustainability and diverse stakeholders. In this way, it endeavours to foster long-term gains and partnerships.

The purpose of this chapter is to examine the B Corporation Certification Framework in greater detail. This will provide a comprehensive comprehension of its five key domains: governance, employees, community, environment, and clientele. Annex 1 offers a summary of the questions relevant to each of the sub-domains divided by the B Corporation framework. This involves a thorough analysis of its primary constituents and principles, which determine the certification's priorities and prerequisites. Undertaking this thorough investigation will establish a robust basis for comprehending the consequences of B Corporation Certification on sustainable practices. This research will facilitate "identifying the factors influencing the potential circularity offered by the certification system, based on value chains of several sectors." (Ruggieri, et al., 2018, p. 251) Understanding this process is essential for comprehending El Ordeño's path towards circularity and sustainable development. By examining this framework, we can gain valuable insights into the stringent standards and criteria required for a business to obtain B Corp certification. Moreover, it offers a concrete example of the systematic approach adopted by El Ordeño. This inquiry seeks to investigate the noteworthy impact of B certification in advancing sustainability through the criteria and business practices it mandates.

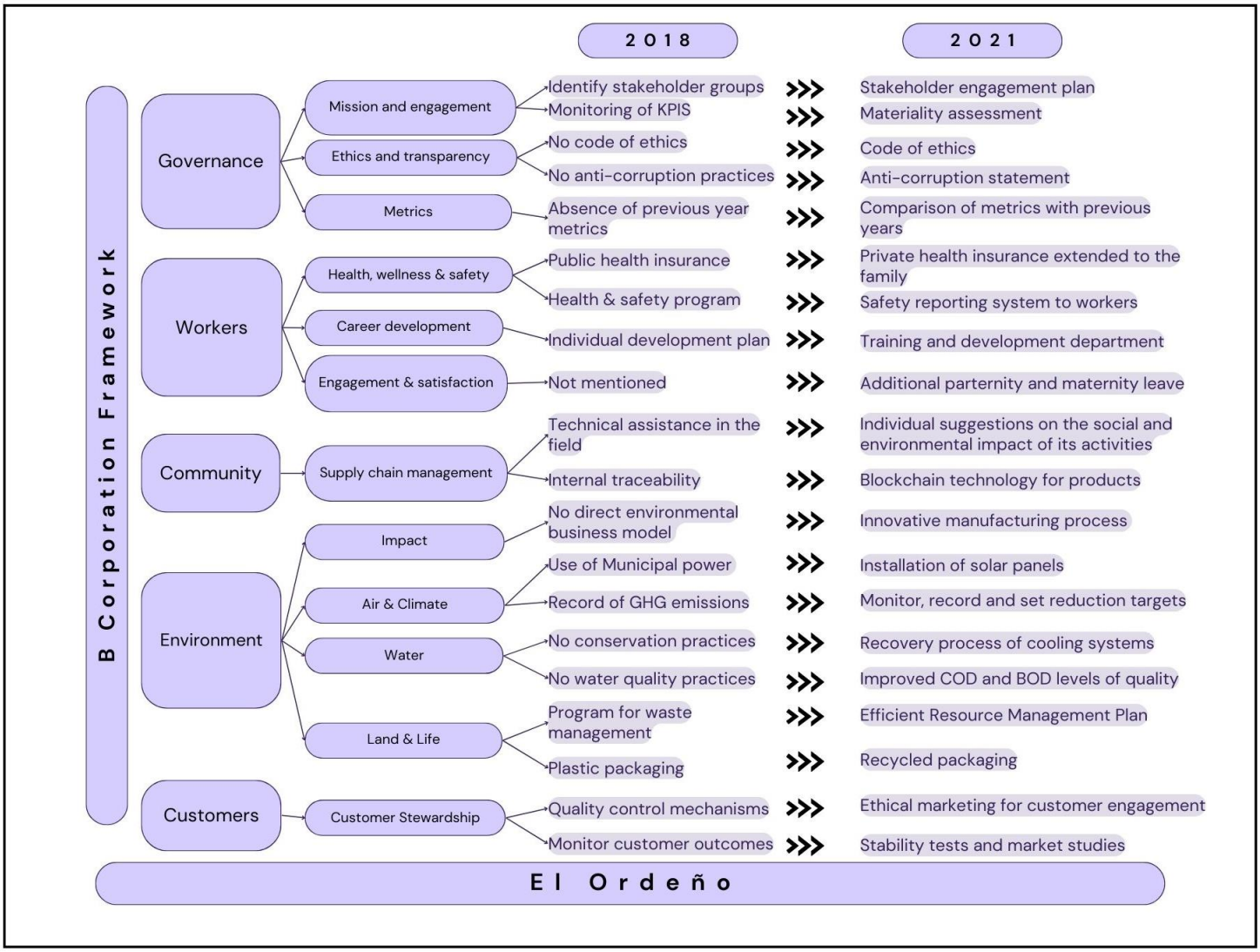
5.1. Comparative Analysis: 2018 vs. 2021

The principal objective of this chapter is to provide a detailed analysis of the sustainable practices implemented by "El Ordeño" in the years 2018 and 2021. The year 2018 functions as a benchmark for comprehending the fundamental practices implemented by the corporation. In contrast, the year 2021 provides valuable perspectives into the company's progress and the influence of both internal decisions and external pressures on its trajectory. Instead of offering a general summary, this study provides an in-depth analysis of particular aspects that have gained recognition from the certification, along with the related procedures implemented by the organisation.

The goal of this comparative study is to comprehend the fundamental changes in the company's priorities as its adaptive strategies have progressed over time. The study seeks to uncover the precise dimensions of sustainable transformation within El Ordeño and their impact on the company's journey towards circularity. It is essential to note the implications for the company's shift towards circularity, as it is crucial for achieving a sustainable future.

Figure 1 provides a brief summary of the primary changes observed during this period. It is essential to emphasise that this figure exclusively illustrates changes and excludes practices that have remained constant throughout. These practices will be explored in greater detail below. The subsequent segments are presented based on the distinct areas specified by B Corporation certification and report the results of the analysis, considering the practices documented in the organisation's sustainability reports. This signifies that the reports lack information on these criteria. 'Not mentioned' practices in sustainability reports are highlighted by this study as a notable observation.

Figure 1. Changes in the practices introduced by El Ordeño during 2018 and 2021



5.1.1. Governance

The B Corporation Framework's criteria assume full disclosure of a company's activities. However, sustainability reports limit this possibility by not presenting detailed business information. Consequently, some criteria have been marked as "not mentioned" in Annex 2. Despite this, the company's journey has been shaped by changes in its practices over the years. This section summarizes best practices that companies can follow during a transition to serve as an ongoing example for others.

Within the "Mission and Engagement" impact section of the company, the sustainability reports indicate a strong emphasis on impact, with a mission that reflects a significant dedication to social and environmental impact. In 2018, the company's mission was more aligned with its associative business model, focusing on poverty reduction, sustainable economic development for producers, and environmentally-friendly activities. However, the mission statement in 2021 places equal weight on

environmental protection and social commitment. This approach aligns well with the goals of B Corporations and enhances their commitment to sustainability.

The governance impact area establishes a significant role for stakeholders in the value chain. Since the inception of its operations, the company has identified and engaged with underrepresented stakeholder groups, predominantly as suppliers. As such, the company has actively contacted rural farmers to participate in its supply chain. However, in 2021, the company enhanced its approach by collaborating with a consulting firm to establish a formal stakeholder engagement plan that encompasses not only suppliers but also other pertinent stakeholder groups. The stakeholder assessment methodology employed as part of the study involved a participative process with diverse areas, which resulted in the identification of ten interest groups. El Ordeño recognised, comprehended, and addressed the concerns and expectations of these groups by prioritising distinct requirements, adjusting communication frequency and channels, and fostering lasting relationships. Salvioni and Almici's study recognises inclusive engagement with stakeholders as a critical requirement for encouraging behavioural shifts towards circular businesses. The authors highlighted the importance of establishing a circular economy culture, incorporating the fundamental values and principles of a business's corporate culture to commence their transition towards circularity (2020, p. 38). A stakeholder engagement plan is crucial for shifting from business-as-usual models to more sustainable ones. It involves supporting the value chain throughout the process and creating a sustainable business vision that recognises the roles and contributions of each stakeholder, thereby enhancing the business's resilience. Although this practice requires further steps towards the consolidation of a circular culture in the future, the establishment of a stakeholder engagement plan marks a definite starting point.

Concurrently with the stakeholder engagement plan, the company introduced alterations to its Environmental, Social and Governance (ESG) materiality assessment - a tool used to rank the most crucial ESG issues for the company. This assessment assists in identifying and comprehending significant sustainability topics that are more relevant to stakeholders and, in turn, the company (Conservice ESG, 2023). Initially, the company measures priorities based on the performance of its key performance indicators (KPIs) established in alignment with the company's purpose, which were not publicly available. However, a materiality assessment was conducted in 2021 with participation from 10 interested groups. The report identified 18 significant topics as

focal points for managing relationships with each interest group. It sought to address their expectations within the business and in transversal processes and successfully identified short and medium-term objectives. These topics provide a foundation for the company to comprehend which areas are pertinent for each group of stakeholders, thereby creating an opportunity for the company to execute and communicate in alignment with these axes, generating shared value. Nevertheless, the sustainability reports lack additional information on how this assessment was conducted at the time. Garst, et al. (2022, p. 67) outline three features of sustainability that impede the materiality assessment, including complexity, uncertainty, and evaluative nature. These factors could potentially complicate the evaluation of sustainable priorities due to the varying opinions of stakeholders, sustainable trends, and the multitude of stakeholders involved. Undoubtedly, a materiality assessment is a valuable tool for the transition journey. However, since there is no standardization in its implementation, there may be biases in the results obtained. As a result, relying on a biased materiality assessment could have adverse effects on stakeholder communication and ultimately undermine the company's purpose. To avoid such consequences, it is crucial to provide clear guidelines and communicate effectively about the materiality assessment employed.

In the sub-area of “Ethics and Transparency”, there are many areas to be improved, however, in the years of comparison, some changes have been implemented. The most remarkable belong to the Ethics and Anti-Corruption Practices. In 2018, there was no mention of a code of ethics. However, in 2021, the company introduced a Code of Ethics to enhance the corporate culture, improve relationships, and offer conduct guidelines to employees, both internally and externally. However, in 2021, the company has taken a positive step forward by publicly declaring its anti-corruption stance. This is following the Communication on Progress requirements for their membership in the UN Global Compact. Principle 10 of the UN Global Compact states that “Businesses should work against corruption in all its forms, including extortion and bribery” (UN Global Compact , 2023). This principle focuses on the actions businesses take against corruption, but making a public statement is an important first step in their journey towards improvement.

The sub-area of “Governance metrics” provides economic indicators about the growth of the company. However, the information is not complete; therefore, it is highly

encouraged that all sustainability reports complement the missing metrics. The sub-area “Mission Lock” pertains to the company's legal commitment to evolving into a B Corporation. Typically, this requirement is mandatory for B Corporations in their initial certification years. This legal part is relevant because “Integrating stakeholder governance into a company's DNA ensures that it stays legally accountable to a broad purpose and a commitment to consider the interests of all stakeholders.” (B Lab, 2023). This approach aims to establish stakeholder governance by legally obliging companies to involve stakeholders in their sustainable decisions. However, none of the sustainability reports of El Ordeño mentions this step.

In conclusion, the company is moving towards sustainability despite occasional gaps in the information contained within its sustainability reports. The evolving mission highlights the company's commitment to the sustainability principles established by B Corporations, as they focus increasingly on social and environmental impact. The establishment of a stakeholder engagement plan illustrates a commitment to cultivating a circular economy culture and enhancing interactions across the value chain. Additionally, the alteration in the ESG materiality evaluation, incorporating input from a range of stakeholders, presents valuable information on sustainability topics. Nonetheless, there is a requirement for ongoing advancements and transparency in these domains. Although there have been significant advancements in "Ethics and Transparency" due to the introduction of a Code of Ethics and a public anti-corruption statement, certain areas still need addressing, such as "Governance Metrics" and the lack of legal commitment underlying the "Mission Lock" sub-section. Overall, although El Ordeño has made impressive progress towards sustainability, it will be crucial to continue striving for transparency, engaging with stakeholders and providing comprehensive reporting in order to consolidate its sustainability journey.

5.1.2. Workers

This area has seen many changes over the period under review, as shown in Appendix 3, but this section describes the most relevant. The worker's area comprises five key impact topics that emphasise the significance of their well-being in a B Corporation. The "Worker's Impact Introduction" sub-area establishes a solid foundation for comprehending the dimension of the enterprise. The monitoring and reporting of the number of employees in the company is crucial to comprehend other operational metrics. The transition in 2021 reflects the company's increased awareness of its

actions through the measurement of employees by the hour and payroll, as well as differentiating between full-time, part-time, and temporary workers. These metrics were not included in the 2018 sustainability report. The monitoring and reporting of the number of employees in the company is crucial to comprehend other operational metrics. However, they aid in measuring employee satisfaction and the rotation rate, contributing to a more comprehensive understanding of the company's workforce.

The sub-area 'Financial Security' needs to be improved in terms of the transparency of the communication activities of the report, as information such as employees below or above the living wage (individual or family) is not included in either report. Moreover, there is no mention of the company's compensation policies towards its workers. The reports only cover the retirement program under a government-sponsored pension, which does not adequately address the issue of worker financial security.

In the "health, wellness, and safety" sub-area, the company provides numerous additional benefits for employees. In 2018, the company began offering life and health insurance not only for workers but also for their families, after not including mention of worker health benefits prior. Additionally, the company has heightened its health and safety program. In 2018, the measures included prevention, technical training, accident monitoring, random inspections, rectification procedures, job analysis, and the use of protective equipment. In 2021, there were additional safety protocols, including yearly health and safety training, injury accident data recording, and a formal reporting system for employees to report safety concerns. This initiative employed a participatory approach to involve workers in the decision-making process regarding the company's safety measures, allowing them to voice their concerns based on their day-to-day experiences. By doing so, it fosters a collaborative environment where employees can actively contribute to safety discussions.

The sub-area of "career development" demonstrates progress through two relevant practices. Firstly, employees were provided with an individualized development plan that included deadlines and career-monitoring based on their strengths, priorities, and motivations. This approach motivated them to acquire new skills and enhance their work performance. Secondly, the organization further strengthened this practice in 2021 to improve its quality. El Ordeño established the Training and Development department solely to aid workers in their professional development within the company. This initiative facilitated the cultivation of skills among employees, quantified by the average training hours. As part of this endeavour, the enterprise introduced "El Ordeño

University" - an online training platform that all personnel can avail of. Through this platform, the company successfully fulfilled 95% of the annual training plan. The training hours that each employee received increased by 10-14% compared to the previous year. Additionally, the company created the "Creciendo Juntos" programme as part of an internal shared knowledge initiative. In this programme, employees act as facilitators by teaching internal courses and sharing their knowledge with colleagues, which helps to strengthen the association among employees. Similarly, the company enhanced their employee review process via the implementation of a Performance Management Model, in which department leaders offer impartial and unbiased feedback regarding the workers' performance. This enables staff members to develop their skillset and excel in their job roles. Nevertheless, the report omitted other crucial categories, such as the policy on internal promotions and the hiring practices, which are vital for the career advancement of the employees.

Within the sub-area of 'engagement and satisfaction' as a relevant part of stakeholder engagement within the value chain, the company has particularly focused on providing more attractive benefits to employees and making them more visible in its reports. In 2021, the company issued a statement proclaiming a non-discriminatory policy towards gender, age, ethnicity, ideology, and culture. Although the report does not detail the company's policy implementation, the public compromise already indicates progress when compared to the 2018 report. The company now provides additional benefits, including an increased number of days for maternity and paternity leave, covering 70% of food service costs, a supermarket card, and discounts on the purchase of the company's products. Both initiatives are part of the company's caregiver leave program and supplementary benefits. In addition, El Ordeño has introduced a suggestion box to enable workers to share their ideas for improving internal processes, thereby promoting worker empowerment in the workplace. These practices signify a significant shift in the business, as they were non-existent in 2018. However, none of the reports mention the use or existence of an employee handbook. This is relevant as it provides guidelines for employee development in the workplace. It is important to continuously monitor and evaluate the work environment in this regard. Although mentioned in both reports, there is no communicated evidence of the 2021 evaluation. In contrast, the evaluation of the work environment and organizational culture for 2018 amounted to 3.3 out of 4.

The company needs to address several areas to ensure the well-being of its employees. Nevertheless, the practices outlined in this section, particularly those implemented in 2021, indicate some progress compared to the practices in 2018 where most of them were non-existent. In a study conducted by Jayarathna et al., social well-being was identified as one of the three pillars that ensure the transformation of businesses in the logistics sector towards circularity by emphasizing the value of social integration. Social integration encompasses the extent to which individuals feel a sense of belonging to a community or group, provided through health and safety measures, security and welfare, employee grievance management, and reward systems. The study showcases the objective finding that companies aim to socially integrate with their employees through employee well-being practices (Jayarathna, et al., 2023, p. 713). Further analysis by El Ordeño highlights an increasing emphasis on such practices.

These practices highlighted by the B Corporation Certification are aligned with the aim of cultivating long-term value through the internal value chain, which includes the employees. Recognition of these practices impacts not only the workers but also external stakeholders. It improves the company's reputation, increases efficiency in the long term, and highlights the importance of the social dimension, not only for sustainability but also for circularity (Murray, et al., 2017, p. 376). As circularity has faced notable criticism for its limited attention to social dimensions in strategies, CE, as a sustainable approach, should also incorporate the areas brought to light by B Corporations. Workers ought to be included within the supportive network of the company to facilitate its successful circular transition.

5.1.3. Community

The area of community has many categories to improve within El Ordeño as shown in Annex 4. Nevertheless, the most significant factors contributing to the community are El Ordeño's business model and related practices. The company prides itself on promoting the involvement of small-scale producers in the economic cycle and eradicating intermediaries during milk procurement. The business model has been in place since the company's inception and has been consistently maintained for the past two decades. The participatory and associative model and the purchase from small producers provide a strong basis for the consolidation of the business model. Aside

from this particular grouping, four other categories have exhibited promising advancements during the period of comparison.

In the sub-area “diversity, equity and inclusion”, there is a lack of monitoring and evaluation of some of the areas including the diversity and hiring policies not only from the company but also from its suppliers, the diverse ownership and leadership as well as the management from underrepresented populations. The report states that diversity was measured across the comparison period in terms of socioeconomic status, race, ethnicity, gender, and age. However, the results have not been presented in the document. Additional practical activities are required to support these statements and allow the company to demonstrate its commitment to this area. Although the percentage of women in leadership roles has decreased from 18% in 2018 to 12% in 2021, the company is emphasizing its enhanced commitment to inclusivity by carefully monitoring the proportion of females in leadership positions in each department. This data collection effort intends to make the company's policies and dedication to promoting gender diversity known in the future. However, it is worth noting that the company has undergone significant expansion over recent years, resulting in the creation of new divisions and subdivisions for reporting purposes. As a result, tracking the representation of women in specific leadership roles has become more challenging. Additionally, in terms of diversity from its suppliers, the company promotes the empowerment of rural women through training that has allowed them to lead the operations of some collection centres. Seven percent of the company's collection centres, or five out of 72 centres, are currently managed by women, a percentage that has remained unchanged since 2018.

The sub-area “economic impact” primarily encompasses the local consequences arising from the company's operations, such as job creation, local ownership, local purchasing and local customer base. In 2018, there was an increase of 22% in job positions as compared to the previous year. However, as of 2021, a 33% job growth is reported compared to the preceding year. The addition of new local employees not only highlights the company's operational growth but also emphasizes the significance of the local community, promoting job opportunities across the country and strengthening the brand's presence in the region, thereby aligning with local sustainability objectives. Secondly, the company's local ownership leads to local procurement from suppliers within the value chain, with a primary focus on rural producers. These policies have enabled the producers to have a stable income and

diversify their product range. El Ordeño aims to expand its portfolio with food items produced by milk farmers, providing them with additional income opportunities. Thirdly, the product is targeted to the local customers since the communication of the product is addressed to the local characteristics of the area and the local productions, as well as compliance with all the national regulations for offering the product. The communication to the local consumer is clear, supported by evidence and creates value through education and the promotion of positive habits.

The sub-area “civic engagement and giving” is the strongest for the company within the Community area given that it has incorporated giving back as part of the values of the company. The majority of these practices have remained consistent throughout the comparison period. Notably, the company has formed partnerships with charitable organizations to provide complimentary products to individuals, mainly children, from low-income households. In 2021, the organization gifted 250,000 litres of milk, supporting over 12,520 children in its malnutrition prevention programme. Furthermore, it supplied more than 6,200 litres of vital products to over 15 charities and establishments for vulnerable demographics. Similarly, the company collaborated with other major players in the industry to promote social and environmental initiatives. In 2018, the company partnered with AGSO and the national government to enhance children's living conditions. It now aims to expand its initiatives to the network of B Corporation, specifically focusing on sustainable dairy practices, and to the United Nations Global Compact for sustainable development objectives. The company has collaborated with FAO to provide technical training for their suppliers and also with the AEI, contributing to 10 scholarships awarded to young entrepreneurs in the rural sector. These entrepreneurs possess vision and a disruptive mentality and their businesses are oriented towards agriculture to promote the well-being and development of the community. These practices, which demonstrate the company's commitment towards the community, are not quantified as progress. The building and solidification of networks is a relevant step towards the transition to circularity, Susur and Engwall (2023, p. 26) describe network-building as one of the seven innovative mechanisms for transitioning to a circular business model, which involves collaboration, cooperation, coordination, communication, orchestration, ecosystem-building, relationships, partnerships, and stakeholder involvement. The literature concurs on the necessity to investigate internal collaboration within firms as well as external collaborations with other stakeholders. The practices presented aligned “El

Ordeño” in the stage of building its network, relying on the certifications and initiatives they are part of, and to which they have collaborated through the years.

In the sub-area “supply chain management”, El Ordeño reports a code of conduct for its suppliers that assesses their environmental and social responsibility in two comparison periods. Suppliers must comply with this code of conduct to become a part of the company's supply chain. Although El Ordeño follows an established code of conduct, the company falls short in collecting and reporting important information that is necessary to fully comprehend its impact. Specifically, there are no records on the company's outsourced staffing, monitoring of supplier programs aimed at improving impact, or reporting of third-party or self-regulated certifications. El Ordeño has redirected its milk supplier initiatives towards providing recommendations for the improvement of practices in the field, rather than offering training and technical assistance. Their technical team advises and trains on topics such as the rational and appropriate use of chemical fertilisers, adequate waste management, and good pasture management to eliminate excess waste, maximise milk production, and generate more income. Although these suggestions are currently not obligatory, the company is already considering the next steps for evaluating the supplier relationship.

In 2018, the company had a practice that focused on tracing its products. At that time, traceability only involved an internal record that aimed to comprehend the origin of the product in terms of supplier and quality. However, in 2021, the company obtained the BASC international certification to guarantee secure international trade and enhance the control and traceability of its logistics chain, according to worldwide standards. Furthermore, Trü, the new brand, has implemented blockchain technology in their milk products. Customers can access pertinent information about the product's sourcing through a QR code, which not only generates trust in the customer but also guarantees a transparent process for the company.

In summary, El Ordeño's sustainability practices demonstrate a community-focused aspect with both highlighted initiatives and areas for improvement. The company possesses a foundational strength in its business model. However, challenges persist in sub-areas such as diversity, equity, and inclusion. Nevertheless, the company's progressive approach is evident through its commitment to improving these aspects through data collection, departmental analysis, and supplier engagement. El Ordeño's substantial contributions to civic engagement and philanthropic efforts illustrate a sincere dedication to social initiatives. These practices exemplify the company's

commitment to establishing robust networks and collaborations, a crucial step towards transitioning to a circular business model. In the area of supply chain management, El Ordeño demonstrates a positive attitude by implementing a supplier code of conduct that evaluates environmental and social responsibility criteria. Significantly, the change from offering training to suggesting opportunities for improvement in milk production practices demonstrates a commitment to supplier development. In addition, the execution of measures for traceability, such as BASC international certification and blockchain technology, plays a role in ensuring product safety, and openness and building trust among customers. Overall, El Ordeño's sustainability practices exhibit a community focus and dedication to promoting positive impacts and collaborations while recognizing opportunities for improvement.

5.1.4. Environment

The environmental aspect comprises the largest number of categories for evaluation in a B Corporation, divided into five sub-areas. The introduction to the company's environmental actions reveals a significant change in its business model. From a model in 2018 that did not consider direct environmental impact, to one that implements an innovative manufacturing process designed to significantly reduce environmental impact through the company's operations as detailed in Annex 5. The importance of the environment is highlighted, underscoring its key role in circular and sustainable business models. Poponi, et al.consider that circular economy is “based on three rationale pillars: the idea of the reuse of waste as a resource, on the potentials of recycling activities (for the exploitation of waste as raw and secondary materials), and the need to rethink the life-cycle of goods” (2019, p. 2). Therefore, it is crucial to comprehend the environmental aspects of a business model that begins its evolution towards sustainability, in order to review alterations that aid this progression.

In the sub-area of “Environmental Management”, two key practices have played a central role in driving the company's transition towards sustainability. Initially, the company laid out measurable goals for environmental aspects of its direct operations in the year 2018. This action demonstrated a profound consciousness of material and energy consumption that resulted from those operations. Simultaneously, the corporation implemented a verified and certified evaluation method to measure the environmental impact of its activities, using the carbon footprint methodology.

The second practice was to expand the scope of the Footprint assessment. At first, the company monitored greenhouse gas (GHG) emissions that arose from its direct operations exclusively. However, in later periods, the attention was shifted to both direct and indirect operations. The company pinpointed pertinent gases based on its operational undertakings through a consultative process. As a consequence, gases like CO2, CH4, and N2O were chosen for Scope 1 and Scope 3 emissions. Scope 1 incorporated emissions from sources directly owned or controlled by the organisation. This comprised internal fuel usage for energy production in different industrial procedures, fuel consumption in the company's vehicle fleet, and the consumption of refrigerants in facilities.

Scope 3, however, incorporated emissions that were indirectly related to the company's activities throughout the value chain. This encompasses energy consumption at collection centres and external warehouses, transportation to and from these centres, farms, factories, and warehouses. On the other hand, only Scope 2 emissions, or those indirectly caused by the company and resulting from the production of purchased and consumed energy, were considered in relation to CO2. This calculation incorporated information on electricity procured from the National Interconnected System of Ecuador, as well as the energy utilised within administrative premises.

Over time, the calculation process has become more dependable, fitting, and pertinent. This improvement is credited to the employment of more precise calculation approaches in contrast to the earlier period, guaranteeing a thorough and accurate evaluation of the enterprise's environmental influence.

The sub-areas are becoming increasingly technical as the actual consumption of various company materials is measured. Therefore, this section will concentrate on activities rather than consumption recording. Concerning the "Air and Climate" sub-area, three relevant practices exist. Firstly, energy usage was recorded in 2018 as a KPI for operations monitoring. In 2021, the company recorded, monitored and set targets to reduce energy consumption by changing equipment and implementing an energy-saving plan for office and plant activities. This approach to environmental management helps to reduce the company's carbon footprint. Setting reduction targets enables performance comparison with past consumption, providing a more reliable estimate of future goals. Secondly, the transition to using a combination of a municipal power grid and renewable energy sources in 2018 was an exemplary practice as it

shifted a portion of the electricity consumption to a cleaner energy system. The initial phase of the project involved the installation of 374 photovoltaic panels, which produced over 130,000 kWh of energy and prevented the emission of over 78,000 kg of CO2 per year into the atmosphere. The manufacturing processes that utilise solar energy, are also supporting the company's long-term goal of producing low-emission products. Moreover, the company not only monitored and documented its greenhouse gas emissions in 2021 but also set specific science-based targets for reducing them, a notable improvement from the mere emission monitoring in 2018. These actions demonstrate the company's increased dedication to sustainability and their contribution towards achieving the Sustainable Development Goals (SDGs).

The “water” sub-area has enhanced the management of material use data, similar to the previous sub-area. In 2018, the company tracked water usage, which has progressed in 2021 through monitoring and recording, alongside setting science-based goals for attaining sustainable usage. Since it was established, the company has consistently implemented effective policies for wastewater management, continuously monitoring emissions and enacting reduction targets. One commendable practice within this field pertains to the Wastewater Treatment Plant that the company runs, with a daily flow of 300m3 to 500m3. The treatment process entails physical-chemical methods, comprising a grease trap, an aeration tank fitted with micro membranes, and a DAF system designed to treat and eradicate suspended solids in the water undergoing treatment. The company introduced novel practices in 2021 aimed at enhancing the quality of water and conserving it. The plant undertook periodic analyses of effluents generated by external laboratories, resulting in improved COD and BOD levels until reaching the precise quality parameters for water. Similarly, El Ordeño applied a recovery method to the cooling systems in the UHT equipment, effectively saving 15,552m3 of water this year.

The "land and life" sub-area offers three important practices that contribute to the company's sustainability. Waste management has been crucial for the company since its establishment, considering the responsibility of its proper handling. The company employs a private third-party certified organization for responsible waste disposal within its stakeholder chain. To ensure waste traceability, the company has enhanced its partnership with environmental managers. National authorized environmental managers are responsible for the transportation and management of both hazardous and non-hazardous waste. The incineration technique is utilized for the treatment of

hazardous waste. Non-hazardous waste undergoes recycling and weighing procedures before being delivered to the manager. Regarding waste monitoring, the company has shifted practices from recording waste quantities to creating an Efficient Resource Management Plan, which aims to increase the recovery percentage of reusable and recyclable materials in production processes. El Ordeño established an internal recycling initiative to effectively segregate the waste from its operations. During this campaign, the employees attended discussions that emphasised waste handling, management and disposal, as well as training sessions on eco-friendly practices aimed at reducing waste generation both in their workplace and homes. Lastly, El Ordeño has implemented a new environmentally-conscious practice in its product's packaging. Packaging materials have been certified to meet independent environmental impact standards, and the company has installed an eco-efficient Tetra Pak production machine at its plant. These changes have been implemented throughout the company's 2021 product range. Packaging materials have been certified to meet independent environmental impact standards, and the company has installed an eco-efficient Tetra Pak production machine at its plant. This eco-friendly packaging not only maintains the quality of natural products without additives but also reduces environmental impact. Seventy-five percent of this packaging comprises FSC-certified paper sourced from forests. The remaining 20% is polyethylene, while 5% is aluminum. Furthermore, the company has strategically reduced its product sizes to minimize material usage.

The changes in the "environment" area have been mainly characterised by the innovation and investment that the company has made in changing its practices. The involvement of external parties, including GHG emission consultants, procurement of more resource-efficient equipment, and advancements in packaging, support the monitoring and accomplishment of predetermined targets. It is crucial to acknowledge that the advancement of many of these measures involves establishing material consumption goals. However, this is a significant but merely an initial step, as the ultimate aim is to decrease and eventually eradicate carbon emissions. In a study conducted by Hailemariam and Erdiaw-Kwasie, they concluded, “an effective method of mitigating carbon emissions might be to relate them to business objectives and strategies, emphasising that reducing emissions reduces operating costs and increases productivity.” (2023, p. 1960). The setting of consumption objectives is becoming an inherent aspect of business strategy, which necessitates a long-term

examination. These innovative processes form an integral part of the company's practices and business model, which have recently shifted to align with the company's processes and goals. This is crucial in order to maintain the mission of the company during its transition.

5.1.5. Customers

The section on customers in the B Corporation Framework is shorter than the previous sections, only measuring one sub-category: "customer stewardship". The category of "managing customer stewardship" focuses primarily on receiving customer feedback on products, and recording quality controls in adherence to guidelines and external complaints. In 2018, the company employed tools including the Net Promoter Score (NPS) and Power BI to obtain insights into which customers would recommend the brand and analyse the daily management of operations, production, sales, delivery and logistics. Customer satisfaction reached 93.5% in 2018. As part of its efforts to enhance performance, the company has implemented written policies governing ethical marketing, advertising, and customer engagement. These policies aim to boost stakeholder engagement and promote the creation of marketing strategies and ethical, educational communications that benefit society.

In the category of the management of product impacts, the company has secured customer trust through certifications that validate the highest standards of product quality. The company holds BPM, HACCP, ISO 22000 and FSSC 22000 certifications for quality, food safety and safety, renewed every year and audited by third parties. In 2021, the company implemented strategies to further strengthen this category. The commercial department along with the Marketing, R&D, Operations, and Sales divisions consolidated their procedures and established a stronger presence within the organisation. Additionally, new partnerships were formed for the B2B operations, and a fresh range of products broadened the customer base. El Ordeño provides the consumer with pertinent details on its packaging, including information on the nutritional content of its products, the proportion of renewable sources in the packaging, guidelines on how to recycle, and the company's cooperation with producers in the field. By doing so, the company is taking responsibility for imparting knowledge and promoting healthy dietary habits that enhance well-being. The company states that the TRÜ brand has increased awareness amongst the end consumer, educating them on the importance of environmental protection and suggesting methods to contribute towards achieving this objective from home. In 2021,

the company conducted campaigns focused on promoting awareness and encouraging positive consumer habits. During this period, third-party entities were utilized to measure KPIs and assess the success of marketing initiatives, including Brand Awareness, Brand Equity, Market Milk Share, Milk Household Penetration, and Numerical and Concentrated Distribution. The legal department validates all communication disseminated through various media channels to ensure information veracity and maintain transparent communication.

In this area, the company is strengthening the departments of the company that have the most direct relationship with the customer, creating a relationship of trust between the company and the end customer. Additionally, there has been a pivot towards incentivising customer behaviour modification by means of broadcasting and packaging channels. According to the study carried out by Scipioni, et al., the organizational learning of the customer as an external actor is essential in the successful transition of LBM to CBM in which knowledge creation, knowledge transfer, and knowledge retention act as a driver or as a barrier in this journey (2021). The study, conducted in 2021, does not completely address additional barriers that may arise as all actors gradually learn.

5.2. Conclusion

To summarise, the preceding section covered a thorough comparative study of El Ordeño's practices in 2018 and 2021, conducted under the B Corporation Framework for businesses seeking triple impact certification. The analysis regards this certification as a sustainability measure, and as such, the framework offers initial guidance for the company's transitional efforts. Throughout this chapter, the five areas of B Corporation have been examined: Governance, Workers, Community, Environment and Customer. In each section, innovative practices have been implemented over 4 years, emphasising the best outcomes. A comprehensive evaluation of specific categories has helped to comprehend how El Ordeño has strategically adapted and evolved during these initial years of transition.

The B Corporation Certification scheme, however, should not be seen as a mandatory step towards transition, but rather as a self-regulatory pathway for companies. The certification framework is subject to periodic evaluations and modifications; thus, the assessment outlined in this chapter may undergo changes in the coming years. B Lab is scheduled to convene a meeting in the latter half of 2023 to discuss feedback from B Corporations. This meeting will aim to provide a more complete framework that

understands and communicates all areas of a company (B Impact Assessment, 2023). The proposed future framework covers ten areas, as opposed to the current five areas, with greater emphasis on specific topics. Therefore, future research should take these framework changes into account.

This chapter highlights the firm's proactive dedication to sustainability, exemplifying its commitment to improving environmental, social and governance aspects within its operations. Notwithstanding, it has also drawn attention to vital categories absent in the report, which are intrinsic to appropriately record and alter the company's internal and external behaviour. Notably, the alterations witnessed in sectors including stakeholder analysis, waste control, community involvement, and responsible procurement provide a practical suggestion for other firms that are in a comparable situation and wish to commence their shift towards circularity.

To conclude, gaining a comprehensive awareness of how El Ordeño's sustainable practices and shifts relate to the B Corporation Certification framework provides a crucial foundation to comprehend the company's progress towards circularity. This chapter establishes the groundwork for exploring the company's circular strategies and their impact on the wider circular economy landscape.

6. The Circular Strategies of El Ordeño

This chapter aims to investigate the circular strategies and practices that El Ordeño has implemented. Regarding the company's sustainability practices, the preceding chapter enumerated the main areas of action within the B Corporation framework. This is closely linked to the circular practices that the company is implementing in the early stages of its transition to complete circularity. This chapter aims to outline the strategies and indicators implemented by the company in line with the circularity framework discussed in Chapter 3 Methodology. Additionally, it identifies the company's current status and outlines the necessary future steps and efforts required to uphold and enhance its commitment to circular practices.

As this research progresses, it is important to highlight the research question and objectives that form the basis of this investigation. This chapter intends to provide a holistic view of El Ordeño's circular strategies, with a specific emphasis on the year 2021, the most recent year of reporting. This examination will aid in a greater comprehension of the company's noteworthy transition towards sustainability. This contribution is not only a crucial aspect of the thesis but also an important supplement for the wider discussion about sustainable business methods that could prove beneficial to other comparable firms.

The chapter is divided into several sections. It commences with a brief outline of the Circular Strategies Framework to be employed in this research, which will act as the analytical tool for examining the company's practices. The components of the framework, including scopes of measurement and indicators, are explained in detail concerning their significance. The 2021 sustainability reports of the company will be analysed to classify their circular practices based on established frameworks for strategies and indicators. This analysis will facilitate a detailed understanding of the transitional practices towards circularity, serving as an intermediary between business-as-usual and the initial transition process. Thirdly, the chapter will feature a discussion on the interpretation of the primary findings, outlining the positive attributes of the transition and identifying key areas for improvement. Additionally, this section will compare and contrast the efforts of other companies in the industry, serving to provide a broader perspective. Lastly, the chapter will conclude by highlighting the crucial findings of the study on business practices within the context of sustainability.

6.1. Framework of Circular Strategies

As explained by Chapter 3 Methodology, this study will use the classification framework developed by Moraga et al. (2019), due to its ability to provide a clear comprehension of the different components of a circular business. The study's focus is on micro-scale indicators, which offer valuable insights into a company's performance. The framework encompasses six separate areas of circular strategies, each measuring various aspects of circularity. This study considers various areas, such as Function, Product, Component, Material, Embodied Energy, and Reference. Within each area, the authors group R-strategies based on their similarities and contributions. To measure circularity, the authors also introduce three types of indicators as part of their framework. These indicators fall into three categories: Direct CE with Specific Strategies, Direct CE with Non-specific Strategies, and Indirect CE, which will be identified accordingly in the next section.

Similarly, the framework outlines three measurement scopes in line with the Life Cycle Technology approach and modelling level that incorporate Scope 0, Scope 1, and Scope 2. Scope 0 measures attributes of products, processes or materials without considering the broader life cycle perspective. Conversely, Scope 1 considers a broader life cycle viewpoint, accounting for both direct inputs and outputs of specific processes, as well as upstream and downstream environmental effects. Finally, Scope 2 assesses the wider effects across a product, process or activity's lifespan, incorporating linked environmental, economic and social aspects. As El Ordeño's Sustainability Reports provide limited data, this research focuses mainly on Scope 0 metrics. This scope measures quantifiable characteristics pertaining to products, processes or materials without a comprehensive lifespan outlook. The framework will assess the strategies presented in El Ordeño's sustainability reports in the following section.

6.2. Circular Strategies of "El Ordeño"

Throughout its latest sustainability report, the company reiterated its aim of achieving circularity and highlighted its efforts towards that goal. Although some initial and broad steps have been taken, more targeted strategies are needed to achieve true circularity. Poponi, et al. state that circularity in a company should be based on "three rationale pillars: the idea of the reuse of waste as a resource, on the potentials of recycling activities (for the exploitation of waste as raw and secondary materials), and the need

to rethink the life-cycle of goods" (2019, p. 2). Moraga et al.'s (2019) framework provides a comprehensive guide regarding the areas impacted by R-practices.

Through a meticulous selection of practices according to the B Corporation Framework and the Circularity Framework, this study identifies the practices adopted by El Ordeño in 2021 that reflect the characteristics of a circular strategy. Table 3 provides a summary of these practices in line with the Framework's criteria. El Ordeño has an impact on four out of six CE strategy areas. Many CE indicators are directly linked to specific strategies, meaning that most practices can identify one or two specific R strategies. Most of the indicators demonstrate the performance results of specific strategies in 2021. However, some indicators have the label 'N/A', indicating that the strategy was implemented in 2021, and thus the quantification of the indicator is not currently available.

The "Function" CE strategy area involves preserving a product's core functions or utility during its entire lifecycle. This area is significant in the context of CE, as it aims to transition from the conventional linear model of "take-make-dispose" to a more sustainable and circular method. In this context, the functional area underlines the significance of sustaining the usefulness, performance, and value of products over time while implementing a circular business model such as product-service systems (PSS) or sharing platforms. It emphasizes preserving the function of a product rather than accentuating ownership. These practices minimise waste, conserve resources, and promote a sustainable economy by maintaining the functionality and relevance of products and services for an extended period. The practices and indicators presented by El Ordeño do not evaluate product functionality, resulting in their exclusion from the table. Accordingly, the table denotes these practices as "Not mentioned." A transformation in this field necessitates the company to restructure its business model and supply chain, leading to the development of new competencies (Lüdeke-Freund, et al., 2018). Moreover, as the transition towards circular practices from conventional business approaches takes shape, this strategy requires an intensified integration of its circular practices across the organisation. Further research and development of indicators are necessary to assess Strategy 1 and its practices accurately. The strategy area's definition requires this approach to create impactful results.

Table 3. Circular strategies implemented by El Ordeño and their indicators

CE strategies areas	Specific Strategy	Type of indicator of the Scope 0	Indicator	2021
1. Function (Refuse, rethink, reduce)	Not mentioned			
2. Product (Reuse, refurbish, remanufacture)	Not mentioned			
3. Component (Reuse, repurpose)	Reduce the use of materials for the packaging	Direct CE with specific strategies	Amount of material saved by reducing the size of milk powder containers	N/A
		Direct CE with specific strategies	Amount of material saved by reducing the weight of cardboard	N/A
		Direct CE with specific strategies	Amount of material saved by reducing packaging for white-label customers	N/A
		Direct CE with specific strategies	Amount of material saved by changing paper straws to packaging instead of plastic straws	N/A
4. Material (Recycle, down cycle)	Reuse of materials	Direct CE with specific strategies	Amount of water reused as a result of the recovery process of the cooling systems in the UHT equipment	15.552m3
	Recycle water through the physical-chemical treatment of wastewater	Direct CE with specific strategies	Amount of daily flow in m3 from the wastewater treatment plant to be used in the company's operations	300 m3 to 500 m3
	Reduce the use of non-renewable materials	Direct CE with specific strategies	Percentage of materials used to produce and package products that come from renewable materials	85%
	Recycle some materials of the products after their use	Direct CE with specific strategies	Percentage of the product packaging that is recyclable	100%
		Direct CE with specific strategies	Percentage of the packaging that indicates to the final consumer how to recycle it	100%
	Recycle cardboard in the suppliers' practices	Direct CE with specific strategies	Percentage of suppliers that were part of the reverse logistics alliance in the use and recycling of cardboard	N/A
	Recycle of non-hazardous waste	Direct CE with specific strategies	amount of non-hazardous waste that has been recycled before delivery to the manager	N/A

5. Embodied Energy (Energy recovery, landfilling with energy recovery)	Reduce the use of non-renewable energy	Direct CE with specific strategies	Amount of clean and renewable energy (MWh) produced by the installation of solar panels	142
		Direct CE with specific strategies	Reduction of total energy consumption within the organization compared to the previous year	18.68%
6. Reference (Waste generation, landfilling without energy recovery)	Record, monitor and set targets for materials consumed by the company's operations	Indirect CE	Amount of energy consumed from renewable-materials vs energy consumed from non-renewable materials	142 KwH vs 4.705.579 KwH
		Indirect CE	Amount of energy recorded	705.579 KwH
		Indirect CE	Amount of water recorded	303.281m3
		Indirect CE	Amount of wastewater recorded	
		Indirect CE	Amount of gas emissions recorded	Scope 1 6.563,20 Ton CO2e Scope 2 2.121,75 Ton CO2e Scope 3 768,77 Ton CO2e

The second area of CE strategy, Product, concerns the preservation of the physical product and its constituent materials. This aspect plays a vital role in promoting CE because it deals with the fundamental causes of resource depletion and ecological deterioration linked to conventional linear consumption. Preservation of products and raw materials lessens the necessity for new resource extraction and manufacturing while diminishing waste generation and its associated environmental impacts. The promotion of product durability, reuse, restoration, refurbishment, and remanufacturing all foster the extended life of products, components or materials. This ultimately diminishes the demand for virgin resources. Nonetheless, there is no recorded action by El Ordeño to increase the lifespan of their products. Therefore, the area is classified as "Not mentioned," according to the table above. To accommodate the demand for product-life extension products, companies must prioritize customer-centric services, forward and reverse logistics, and continually updated product expertise (Lüdeke-Freund, et al., 2018, p. 45). Although the company has not yet implemented this practice, it remains relevant as it conforms to the tenets of the circular economy, as it prolongs the usefulness of products, maximizing their worth and lessening their ecological impact.

The third area of the CE strategy, known as "Components", seeks to efficiently manage and preserve the different components found in products. This area focuses on resource efficiency and ensures that the components are not wasted, but instead

recycled, recovered, or remanufactured to extend their lifespan and usefulness. This approach primarily comprises design for upgrading, assembling, disassembling, modularisation, and maintenance. Consequently, it enhances disassembly, recycling of product parts, and reusing components in new products. One of the characteristics of a circular product is “the adaptive and flexible cornerstone, which underlines that the framework should be designed with a modular and non-frozen approach in order to be continuously improved through time and feedback” (Saidani, et al., 2017, p. 14). Importantly, the design of the product plays a significant role in encouraging the use of easily replaceable or upgradable modular components.

In this area, El Ordeño is promoting a specific strategy to reduce the amount of packaging, which is considered an important part of the final product. This plan has been consistently put into effect across numerous products, incorporating methods such as scaling down container sizes and cardboard weight, reducing packaging for white-label clients, and transitioning from plastic to paper straws. The primary objective of these initiatives is to decrease the usage of materials such as plastic, cardboard and paper while ensuring high-quality packaging. Additionally, they involve the enhancement of product packaging to increase efficiency. Fundamentally, the component area concentrates on implementing tactics that maximise the utilisation of product components, like packaging, to reduce the environmental impact associated with resource extraction and manufacturing, while preserving valuable properties.

The fourth CE strategy area, "Materials" encompasses the substances utilised in the manufacturing and bundling of the parts forming the item or the finished product itself. The objective is to retain and control their attributes during their lifespan, preserving resources, curbing ecological effects, and enhancing economic efficiency through the judicious management of materials, encouraging firms to institute methodologies that foster actions like recycling, reusing, and materials sourcing that are responsible. El Ordeño has concentrated its circular practices on enhancing the materials sector, comprising four practices that correspond to this objective.

Firstly, it focuses on the reuse of materials such as water as a result of a recovery process of the cooling systems in the Ultra High Temperature (UHT) equipment. This practice implements a water recovery and reuse system in the cooling systems of the UHT equipment. Instead of using fresh water for cooling, the system collects and treats the water used in the cooling process. This treatment ensures that the water meets

quality standards for reuse. In 2021, the plant saved 15,552 m3 of water through this practice. Secondly, El Ordeño also focuses on water reuse through the physical-chemical treatment of wastewater in its wastewater treatment plant. This facility effectively eliminates impurities and contaminants from wastewater, enabling it to be safely reintroduced into the environment or repurposed for diverse uses. The data indicates that an efficient daily water flow of 300 to 500 cubic meters is consumed during the company's operational processes.

The third material practice aims to decrease the utilisation of non-renewable materials. The company encourages the use of renewable materials in the production process. Renewable resources encompass all the inputs consumed in production which are either easily renewable or derived from sources and suppliers that ensure and certify the responsible utilisation of resources, like water, sugar, fruit concentrates, biodegradable straws, vitamins and minerals as well as Tetra Pak® packaging. The company's use of non-renewable materials is limited to inputs required for production that cannot be easily regenerated. El Ordeño still employs some non-renewable materials, including polyethene and composite packaging, consumables, and inputs that necessitate intensive extraction and industrialization, as well as fossil fuels in its production processes. However, the company has successfully utilised 85% renewable materials in its operations by 2021, while only using 15% non-renewable materials.

The fourth strategy centres around recycling as the primary activity, with the company promoting this practice through various channels in its production, supplier relationships and customer communications. The packaging design has been engineered with recyclable materials, complemented by consumer education on proper product disposal. This approach ensures that all of the company's products are 100% recyclable. The company also provides pertinent recycling information and has collaborated with suppliers to promote a circular economy model. The company employs reverse logistics in the use and recycling of cardboard and has improved internal processes by recycling non-hazardous waste before delivery to the waste manager. However, there are no available metrics for these practices as they were implemented in the previous reporting year. CE ensures efficient resource usage and reconciles economic and environmental interests by prolonging the complete life cycle of materials utilised in its production processes.

The fifth CE strategy area, Embodied Energy, evaluates and reduces the energy impact linked to products and materials during their life cycle. Embodied energy denotes the collective energy consumed during the extraction, production, transportation and disposal of materials and products. This area plays a vital role in comprehending the environmental impact of resource usage and consumption patterns, as energy consumption is intrinsically related to greenhouse gas emissions and resource depletion. This approach aims to decrease the energy intensity of products and resources, advance energy-effective manufacturing processes, and nudge the usage of replenishable energy supplies. Practices could include designing products for longevity, optimising manufacturing processes, minimising energy-intensive transport and recovering energy from waste materials. El Ordeño's certain practice is to diminish its reliance on non-renewable energy sources. The organisation monitors entire energy consumption and establishes consumption targets through an energy plan. Compared to the previous year, a decrease of 18.68% in energy was recorded in 2021. Furthermore, the installation of solar panels in the factory is part of the company's clean and sustainable energy plan. The company is now able to produce energy from a renewable source, with the solar panels producing 142 MWh in 2021. While this initiative may not encompass all of the company's activities, its objective is to increase the quantity of solar panels to generate more photovoltaic power. The monitoring and evaluation of embodied energy provide vital information for informed decision-making, which is essential for minimising our environmental impact.

The 'Reference' section of the CE strategy evaluates and comprehends advancements toward circularity. Its significance lies in establishing a benchmark for assessing the sustainability and circularity of a given system or process. Moreover, it helps measure a company's progress in adopting circular practices, relative to a linear enterprise. This benchmark provides a foundation for various sustainability and circularity indicators. These practices enable organizations to monitor their performance and progress in transitioning from linear to circular systems. El Ordeño employs an indirect CE approach in this area, which implies a practice that cannot identify one or more R strategies but is still a vital part of the CE process. This involves recording, monitoring, and setting targets for the materials utilized in the company's operations. This includes the recording of GHG emissions as well as the consumption of wastewater, water and energy (from renewable and non-renewable sources). The objective of sustainability is to reduce GHG emissions, and tracking a company's emissions aids in identifying the

primary emission sources in its processes and supply chain. Circularity is a long-term approach to achieving GHG reductions. By comparing current performance with this baseline, organisations can identify areas for improvement and establish targets to achieve greater circularity. Essentially, the Reference Area permits the quantification and qualification of the transition from conventional, linear economic models to more sustainable and circular approaches.

6.3. Discussion

The company's reports on sustainability highlight its efforts to implement circular practices for long-term sustainability. The shift from traditional operations to circular business is a gradual process, requiring a redefinition of many strategies. As such, these practices are a first for the business, so they are not perfect and may not be applied most efficiently. However, these findings signify the beginning of the transition. The results of El Ordeño's move towards circularity manifest significant advancements. The company's adherence to circular principles, as illustrated by its indicators, establishes a genuine commitment to sustainability.

El Ordeño has made significant strides towards circularity, primarily in materials. The company's focus on recycling some materials in their production processes has resulted in long-term preservation of materials and a reduction in the requirement for plastic, paper or cardboard. The reuse of these materials and the decrease in required amounts demonstrate El Ordeño's commitment to circularity. The reuse of these materials and the decrease in required amounts allow the material to be conserved in the long term, reducing the need for plastic, paper or cardboard. The company's most effective practices have centred around water, encompassing the recycling of water for UHT equipment and the wastewater treatment plant to retrieve water. This closed-loop system significantly reduces the need for new water resources as the same water is continuously recirculated and reused. This not only conserves water but also lessens the expenses involved in water treatment and disposal. This form of recycling is increasingly significant because the company applies the treatment to the materials. It is one more step forward in the process of converting materials according to their type. A pertinent strategy is the installation of solar panels that use non-renewable energy sources, as well as the redesign of product packaging, to reduce material usage. These initiatives have been guided by the recording, monitoring, and setting of targets for material usage and greenhouse gas emissions. Such targets provide a foundation for enhancing the company's practices.

However, the research has highlighted certain areas that require further consideration, such as the function and product of the circular system, where significant advancements have not been made and ought to be taken into account whilst aiming for full circularity. The study emphasizes that the journey towards circularity is a continual and dynamic process, which requires continuous efforts to effectively address these aspects.

El Ordeño's efforts towards circularity are admirable for a company located in a country where circularity is just beginning and where there is no circular network to guide the company on its journey. While there is room for improvement in certain practices, the initial steps taken towards circularity are crucial for their overall transition. The forthcoming phases for the company include reinforcing these approaches, refining their operations, and implementing circular practices that will ultimately result in full circularity. Further challenges and opportunities for a dairy company have been identified in the literature. One of the most significant challenges concerns the greenhouse gas emissions generated by the milk suppliers' farms. Perey et al. (2018, p. 638) have analysed circular practices in various industries, stressing that the local dairy company's transition to circularity necessitates implementing environmental standards not only on the company's own farm but also on the suppliers' farms. The farm's environmental impact was reduced. Similarly, Uvarova et al. highlight the importance of waste management in dairy farms as a resource and argue that “milk processing companies shall develop new recycling CBMs and thus transform production leftovers into new products with added value in order to expand revenue streams.” (2020). Circularity in waste management is a relevant area in the literature, particularly about the inclusion of processes that use waste as a resource and the involvement of suppliers in circularity. This is especially important in the dairy industry, where a significant portion of GHG emissions come from farms. El Ordeño's current practices lack these elements, but the existing practices serve as a foundation for further progress towards circularity.

El Ordeño could improve its circular practices by benchmarking against similar companies in the dairy industry that have made more progress in their transition, such as Arla's Food. This Swedish-Danish dairy company implemented its circular value creation model in 2008, which is based on three pillars: product design, recycling, and waste management. As a result, “Arla’s total climate impact has decreased by 12 percent, compared to 2005 levels, despite increased production” (Kiørboe, 2015, p.

22). This reduction underscores the effectiveness of their practices, including integrating packaging as a component of the product. Skärin et al. point out that “in terms of reduce packaging, circularity practices include setting clear targets to reduce packaging, reducing the number of stock-keeping units, and harmonizing product components, e.g., ingredients and packaging, as in the case of the diary manufacturer Arla Foods.” (2022, p. 11). Arla's sustainability framework highlights the necessity of science-based goals for material consumption and greenhouse gas emissions reduction. To enhance the company's accountability, these objectives must be presented transparently in the sustainability report. Additionally, Arla underscores the significance of assisting farmers in transitioning to circularity to involve the supply chain in the initiative. “From a farm management perspective, a reduction in emissions can also be achieved through increasing animal welfare, carbon sequestration, renewable energy production, resource efficiency and yield optimization for feed and milk production” (Arla, 2020, p. 5). This engages the company in all aspects of its product, as well as the effects it produces. Arla focuses on reducing greenhouse gas emissions, increasing water and energy efficiency, promoting renewable energy, and managing waste. In comparison, "El Ordeño" is pursuing the same approach by prioritising the efficiency of its accessible resources.

Throughout this research, the alignment between the B Corporation certification and a circularity framework was remarkable. Both frameworks align at the micro level in promoting corporate sustainability across numerous domains, with a primary emphasis on environmental matters. The conservation of materials, components, and energy via circulatory efforts aligns with the B Corp certification's focus on mitigating environmental impact. However, there is a notable distinction in the approaches employed to accomplish this. Circularity adopts a more technical and concentrated approach, where specific R-strategies can be implemented within the company's practices. In contrast, the B Corporation adopts a broader perspective. In this context, sustainable practices are not restricted to solely being circular, even though circularity is one of the strategies recognized by the B Corp to achieve sustainability. It is essential to note that various strategies exist to achieve sustainability. Furthermore, circular strategies tend to focus more on the product, which is one of the six categories stated in this section. Both frameworks acknowledge engaging stakeholders' significance in achieving sustainability. The B Corp framework evaluates a company's impact on stakeholders such as employees, customers, communities, and the environment.

Similarly, the Circular Economy Framework underscores the importance of stakeholder collaboration and cooperation to attain resource efficiency and waste reduction goals. Both frameworks acknowledge the crucial role of stakeholder involvement and support in implementing sustainable business practices.

The social dimension marks a contrast between B Corp certification and circularity. B Corp certification prioritises corporate governance, workers, community, and customers, mandating companies to take into account the welfare of stakeholders beyond shareholders. This encompasses codes of conduct, local impact, and inclusivity, to name a few. In contrast, the circularity framework does not strictly consider these elements. El Ordeño's circular strategies indirectly include preserving the value of products and materials and ensuring a common benefit for the community. However, these benefits do not align with the social value implemented in the B Corporation framework. The technical nature of a circular approach results in the framework losing its social dimension. In their study on the social gap of circularity, Mies and Gold emphasized that “the social dimension of sustainability becomes especially relevant within the circular economy context due to the need for close cooperation and interdependence between multiple stakeholders beyond traditional supply chain or network relationships” (2021, p. 2). The inclusion of a social element has the potential to enhance the effectiveness of circularity by engaging diverse stakeholders in circular processes and their upkeep over time. Therefore, Mies and Gold (2021) conclude that the promotion of the social dimension in circularity must be a priority for scholars in order to maintain circularity as a practice that leads to sustainability and, consequently, is highly related to economic and environmental impacts. By contrast, the social aspect of the B Corporation Framework is adequately defined for instructions on enhancement. B Lab has created tools under the framework to better measure social impact, including the Fair Payment Scheme for both suppliers and employees, and it promotes the certification of organisations that validate the working environment by promoting best practices.

The distinction between the two frameworks lies in their social dimension. While both aim to achieve sustainability, each employs its own practices. El Ordeño showcases the existence of synergies between both frameworks in their sustainability journey through their implementation. At the initial stage, the two frameworks do not contradict each other but rather provide insights into more efficient practices. While the B Corporation gives priority to certain categories for companies to improve, circularity

offers strategies to transform products more efficiently. Circularity practices concentrate on the proficient use of resources and waste management, intending to create closed loops that also influence the highlighted areas of the B Corporation. The integration of these two frameworks can significantly enhance corporate practices, ensuring the long-term sustainability of companies. By adopting this approach, firms can mitigate their environmental impact, boost their social responsibility, and facilitate the transition to a circular and sustainable economy. Employing these frameworks in unison is vital in making a tangible contribution to a sustainable and circular economy while promoting responsible and viable business practices.

6.4. Conclusion

This chapter examines "El Ordeño's" circular practices based on the Circular Economy Framework classification. The study reveals a significant correlation between the company's circular strategies and the environmental responsibility principles highlighted by B Corp certification. The efforts to conserve materials, components, and embodied energy align perfectly with the B Corp's objective of minimising environmental impact, even during the early stages of transition. While circularity emphasises resource efficiency, B Corp certification expands its scope to include social dimensions and stakeholder interests. This differentiation emphasises the significance of a holistic circularity approach that necessitates social components. Nonetheless, El Ordeño's endeavour to implement circular practices serves as an inspiring model for moving towards sustainability in its industry. This study offers critical learnings on how the Circularity Framework and B Corporation certification align or differ, contributing to the wider discussion on sustainable business practices.

Furthermore, the Circular Strategies Framework created by Moraga et al. (2019) has been examined in this chapter, which comprehensively captures the intricacy of CBMs. It focuses, in particular, on a set of indicators at the micro level that refer to the performance of the company. The framework encompasses six domains, Function, Product, Component, Material, Embodied Energy, and Reference, evaluating distinctive aspects of circularity. Three categories of indicators are evaluated at multiple levels. Our analysis primarily focuses on Scope 0 indicators due to the limited data in El Ordeño's sustainability reports. This section demonstrates El Ordeño's circular practices performance within this framework, illustrating the company's embrace of circularity by conserving resources, enhancing energy efficiency and reducing environmental impact. This thorough study presents an unbiased analysis of

El Ordeño's current circular strategies in 2021, establishing key knowledge for comprehending the company's progress towards sustainability.

In conclusion, El Ordeño's shift to circularity demonstrates commendable progress in its sustainability journey. The company's attempt to incorporate circular practices in its sustainability framework highlights its genuine commitment to long-term sustainability, with a particular focus on the strategic area of material CE, with efforts to explore three other strategic areas, but without considering two important areas for the company's sustainability: function and product. These initial steps are a crucial starting point. However, certain aspects, specifically the design and function of the products, necessitate further attention and should not be ignored in the pursuit of full circularity. The company's next actions are to strengthen these preliminary practices and bring suppliers on board with the circular transition, as recommended by Arla Foods, a company with comparable industry experience in transition. By incorporating the practices of B Corporation certification and the Circularity Framework, "El Ordeño" showcases the potential for collaborations between these approaches, and ultimately contributes to a more sustainable and circular future.

7. Conclusions and Recommendations

7.1. Conclusions

The study aimed to identify the circular practices utilized during the transitional journey towards circularity of "El Ordeño". It revealed the complexities, strategies, and outcomes involved and clarified the practical nuances and implications of sustainability adoption. The central question for this research was *what changes has El Ordeño experienced in its practices in its initial transition to circularity from 2018 to 2021?* This was conducted along with the following three specific objectives; (i) Describe the political and socio-economic context of the company since its creation in 2002. (ii) Identify the areas promoted by the B Corporation certification in "El Ordeño" in 2018 and 2021. (iii) Compare the main indicators of the practices carried out in "El Ordeño" in 2021 in relation to the circular economy framework.

The data was gathered from the company's publicly available sustainability reports and their annual Communications on Progress submitted to the UN Global Compact. To categorise its practices and gain a comprehensive understanding of its efforts, two frameworks were employed. Firstly, the B Corporation Framework is distinguished by its triple impact areas: social, environmental and economic. The circular strategy framework developed by Moraga et al (2019) classifies 6 strategic areas into 3 different scopes with 3 types of indicators. This research focuses only on Scope 1 due to the availability of information. Both frameworks aim to promote sustainability in businesses, with a focus on developing micro-scale factors.

The strategies implemented by El Ordeño during its initial transition (2018-2021) towards circularity can be summarised according to each framework. The B Corporation Framework recognises significant changes related to governance, community, and environment. Effective governance benefits from clear stakeholder analysis engagement, enabling the creation and implementation of focused strategies for product development and company communication. This approach creates a cascade effect with other practices in the framework, improving their performance by defect. The community sector has experienced a change in community involvement through the establishment of programs, effective communication, and education initiatives that foster community development. Additionally, this field emphasises

responsible sourcing practices with local-scale farmers, which actively contribute to the local economy. The environmental sector has observed a change in responsible waste management protocols, which were reported not just within the organization but were also supported by authorized environmental managers. Nevertheless, the worker and customer domains exhibit a lack of impactful strategies in the reference years.

Secondly, the Circular Strategies framework facilitated the identification of strategies based on the six circular areas of impact. El Ordeño has implemented practices in the Material area to align with its circularity strategy. Consequently, the company has emphasised the recycling and reusing of water through the recovery process of cooling systems in their equipment, as well as the treatment of wastewater. This practice has also led to a decrease in the use of non-renewable materials and the recycling of some materials from their final products, as well as the recycling of non-hazardous waste and cardboard in supplier practices. The component area has experienced a reduction in packaging materials for the product, while the embodied energy area has aimed to decrease the use of non-renewable energy sources. The reference area has been the focal point of intervention, with the primary strategy being to record, monitor and set targets for material consumption in the company's operations. This establishes a baseline for future interventions to compare indicators. However, the company has neglected two areas: function and product.

These findings enable a deeper understanding of the company's transition towards circularity. The empirical evidence collected throughout this study highlights the practicality and advantages of implementing circular practices, emphasizing the potential for sustainable change and positive impact within the case study company, El Ordeño. Recognising the effectiveness of these strategies and their versatility across diverse contexts, the company can successfully navigate the complex route towards a sustainable and responsible future.

The historical context of the years of "El Ordeño" is a significant aspect of this study as it assists in identifying the company's linear business model, highlighting key events in its history, and situating the business within a socio-economic context that affects its circularity decision. This fosters innovation and promotes the consideration of other actors within the value chain. During this time, there were major changes made to the company's infrastructure, strategy, and promotional activities. Despite this, the company remained committed to social sustainability by integrating producers into the value chain and engaging with the local community. The company's vision grew to

encompass the entire nation, leading to a shift away from a traditional business model towards a greater focus on sustainability, demonstrating a significant progression in its efforts.

The study highlighted a significant concurrence between the B Corporation Certification and the Circular Strategy Framework in the environmental aspect. El Ordeño's circular endeavours, which intend to conserve materials, components, and embodied energy, align with B Corp's goal of minimizing the environmental impact. However, there is a notable difference in their approach. While circularity prioritises resource efficiency, B Corp certification takes a broader perspective that includes social dimensions and stakeholder interests. Acknowledging this distinction highlights the significance of a holistic approach to circularity that integrates the social dimension. El Ordeño's commitment to circular practices sets a promising example of transitioning towards sustainability in its industry. The compatibility and divergence between the Circularity Framework and B Corporation Certification can be explored through their approach, offering valuable insights. Rather than viewing these frameworks as mutually exclusive, they should be seen as complementary tools for the pursuit of sustainability. They do not require each other's presence, but, as exemplified by El Ordeño, using them together can strengthen the path towards sustainable practices and emphasize the advantages of their synergistic application.

In summary, this study offers insights into El Ordeño's journey towards circularity and sustainability, highlighting its initial practices and contributing to the broader literature on sustainable business practices. This research has identified the concurrence and variances between the Circularity Framework and B Corporation Certification, providing helpful guidance for their gradual integration. The case study of the transitional journey of El Ordeño highlights the significance of continuous adaptation, self-regulation, and a holistic approach to sustainability in driving meaningful change in the business sphere. Overall, this research highlights the potential for companies like El Ordeño to lead the way towards a more sustainable and circular future, with responsible practices that encompass environmental, social and economic dimensions.

7.2. Recommendations

The data gathered for this thesis builds the foundation of the research work as it represents the empirical analysis of the case study. Nonetheless, the utilization of sustainability reports poses a limitation since companies are not mandated to disclose every measure they undertake within both frameworks employed.

For future research, it is recommended to supplement the company's published sustainability reports with interviews in order to gain a deeper understanding of their practices. Additionally, it would be beneficial to obtain scores assigned by B Corporation to the company's submitted practices, providing a broader perspective on the weighting of each area and the priorities of the case study.

To achieve a comprehensive understanding of the diverse impacts of a company, the research covering Scope 1 and Scope 2 should also be included within the Circular Strategy Framework.

For the B Corporation Framework, it is advised to evaluate the latest version since the areas of impact and their scores can potentially alter in upcoming years, as mentioned earlier.

Finally, it would be advantageous to compare the circular and sustainable strategies adopted by "El Ordeño" with those of a comparable company in the same industry. Such a comparison could offer valuable insights into the priorities of each company and the effectiveness of their transition to sustainable practices.

Glossary

AEI	Alianza para el emprendimiento e innovación - Alliance for entrepreneurship and innovation
AGSO	Association of Sierra and Oriente Livestock Farmers
BASC	Business Alliance for Secure Commerce
CBM	Circular Business Model
CE	Circular Economy
CoP	Communication on Progress
ESG	Environmental, Social, Governance
FAO	Food and Agriculture Organization
GHG	Greenhouse Gas
KPI	Key Performance Indicators
LBM	Linear Business Model
SME	Small-medium size enterprise
UHT	Ultra High Temperature

Bibliography

Books

Charter, M. & McLanaghan, S. (2018). Business models for a circular economy. In: *Designing for the circular economy.* s.l.:Routledge, pp. 89-101.

Honeyman, R. (2014). *The B Corp Handbook: how you can use business as a force for good.* First edition ed. San Francisco: Berrett-Koehler Publishers,.

IPCC (2023). Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)]. In: *Climate Change 2023: Synthesis Report.* Geneva: s.n., pp. 35-115.

Kiørboe, N.(2015). *Moving Towards a Circular Economy: Successful Nordic Business Models: Policy Brief.* s.l.:Nordic Council of Ministers.

Organización Panamericana de la Salud (2000). Ecuador. In: *Crónicas de Desastres: Fenómeno El Niño, 1997-1998.* Washington D.C.: OPS, pp. 174-230.

Parandekar, S., Vos, R. & Winkler, D. (2002). Ecuador: Crisis, Poverty, and Social Protection. In: P. Beckerman & A. Solimano, edits. *Crisis and Dollarization in Ecuador: Stability, Growth and Social Equity.* Washington DC: The World Bank, pp. 127 - 176.

Reike, D., Vermeulen, W. J. & Witjes, S. (2022). ´Conceptualization of Circular Economy 3.0: Synthesizing the 10R Hierarchy of Value Retention Options´. In: A. Alvarez-Risco, M. A. Rosen & S. Del-Aguila-Arcentales, edits. *Towards a Circular Economy: Transdisciplinary Approach for Business.* s.l.:Springer, pp. 47-70.

Sillanpää, M. & Ncibi, C. (2019). *The Circular Economy. Case studies about the Transition from the Linear Economy.* s.l.:Academic Press.

Yin, R. K. (2009). *Case study research: Design and methods.* Vol 5 ed. s.l.:Sage.

Articles

Aarikka-Stenroos, L., Ritala, P. & Thomas, L. D. (2021). ´Circular economy ecosystems: a typology, definitions, and implications´. *Research handbook of sustainability agency,* pp. 260-276.

Boffa, D. et al (2023). ´Boosting circular economy via the b-corporation roads. The effect of the entrepreneurial culture and exogenous factors on sustainability performance. *International Entrepreneurship and Management Journal,* pp. 1-39.

Carroll, A. B. (2015). ´Corporate social responsibility: The centerpiece of competing and complementary frameworks´. *Organizational Dynamics,* Volumen 44, pp. 87-96.

Clark, P. & Garcia, J. (2019). ´Left populism, state building, class compromise, and social conflict in Ecuador's citizens' revolution´. *Latin American Perspectives,* 46(1), pp. 230-246.

Crane, A., Matten, D. & Spence, L. J. (2008). ´Corporate Social Responsibility: In Global Context´. *Corporate Social Responsibility: Readings and cases in a global context,* pp. 3-20.

Daly, H. E. (1990). ´Sustainable development: from concept and theory to operational principles´. *Population and Development Review,* Volume 16, pp. 25-43.

de Mattos, C. A. & de Albuquerque, T. L. M. (2018). ´Enabling Factors and Strategies for the Transition Toward a Circular Economy (CE)´. *Sustainability,* 10(4628), pp. 1-18.

Del Baldo, M. & D'Anghela, M. (2020). ´Circular Economy and Corporate Social Responsibility: A Literature Review´. *Symphonya. Emerging Issues in Management (symphonya.unicusano.it,* Volume 1, pp. 70-87.

Diez-Busto, E., Sanchez-Ruiz, L. & Fernandez-Laviada, A. (2021). ´The B Corp Movement: A Systematic Literature Review´. *Sustainability,* 13(2508), pp. 1-17.

Dyllick, T. & Muff, K. (2016). ´Clarifying the Meaning of Sustainable Business: Introducing a Typology From Business-as-Usual to True Business Sustainability´. *Organization & Environment,* Volume 29, pp. 156-174.

Elisha, O. D. (2020). ´Moving Beyond Take-Make-Dispose to Take-MakeUse for Sustainable Economy´. *International Journal of Scientific Research in Education,* 13(3), pp. 497-516.

Evans, S. et al. (2017). ´Business Model Innovation for Sustainability: Towards a Unified Perspective for Creation of Sustainable Business Models´. *Business Strategy and the Environment,* Volume 26, pp. 597-608.

Fraser, M., Laxmi, H. & Soria, C. A. (2023). ´The Circularity Gap Report 2023´. pp. 1-75.

Friant, M. C., Vermeulen, W. J. & Salomone, R. (2020). ´A typology of circular economy discourses: Navigating the diverse visions of a contested paradigm´. *Resources, Conservation & Recycling,* Volume 161, pp. 1-19.

Garst, J., Maas, K. & Suijs, J. (2022). ´Materiality Assessment is an Art, not a Science: Selecting ESG Topics for Sustainability Reports´. *California Management Review,* 65(1), pp. 64-90.

Gazzola, P., Grechi, D., Ossola , P. & Pavione, E. (2019). ´Certified Benefit Corporations as a new way to make sustainable business: The Italian example´. *Corporate Social Responsibility and Environmental Management,* pp. 1435-1445.

Geisendorf, S. & Pietrulla, F. (2018). ´The circular economy and circular economic concepts- a literature analysis and redefinition´. *Thunderbird International Business Review,* 60(5), pp. 771-782.

Hailemariam, A. & Erdiaw-Kwasie, M. O. (2023). ´Towards a circular economy: Implications for emission reduction and environmental sustainability´. *Business Strategy and the Environment,* Volume 32, pp. 1951-1965.

Harjoto, M., Laksmana, I. & Yang, Y.W. (2019). ´Why do companies obtain the B corporation certification?´. *Social Responsibility Journal,* 15(5), pp. 621-639.

Hiller, J. S. (2013). ´The Benefit Corporation and Corporate Social Responsibility´. *Journal of Business Ethics,* Volume 118, pp. 287-301.

Hopkinson, P., Zils, M., Hawkins, P. & Roper, S. (2018). ´Managing a complex global circular economy business model: Opportunities and Challenges´. *California Management Review,* 60(3), pp. 71-94.

Jayarathna, C. P., Agdas, D. & Dawes, L. (2023). ´Exploring sustainable logistics practices toward a circular economy: A value creation perspective´. *Business Strategy and the Environment,* Volume 32, pp. 704-720.

Kim, S., Karlesly, M. J., Myers, C. G. & Schifeling, T. (2016). ´Why Companies Are Becoming B Corporations?´. *Harvard Business Review,* pp. 1-5.

Kwarteng, A., Simpson, S. N. Y. & Agyenim-Boateng, C. (2022). ´The effects of circular economy initiative implementation on business performance: the moderating role of organizational culture.´ *Social Responsibility Journal,* 18(7), pp. 1311-1341.

Lüdeke-Freund, F., Gold, S. & Bocken, N. M. (2018). ´A Review and Typology of Circular Economy Business Model Patterns´. *Journal of Industrial Ecology,* 23(1), pp. 36-61.

Marquina Feldman, P. & Vasquez-Parraga, A. Z. (2013). ´Consumer social responses to CSR initiatives versus corporate abilities´. *Journal of Consumer Marketing,* 30(2), pp. 100-111.

Mies, A. & Gold, S. (2021). ´Mapping the social dimension of the circular economy´. *Journal of Cleaner Production,* 321(128960), pp. 1-17.

Moraga, G. et al (2019). ´Circular economy indicators: What do they measure?´. *Resources, Conservation & Recycling,* Issue 146, pp. 452-461.

Murray, A., Skene, K. & Haynes, K. (2017). ´The circular economy: an interdisciplinary exploration of the concept and application in a global context´. *Journal of Business Ethics,* Volume 140, pp. 369-380.

Perey, R., Benn, S., Agarwal, R. & Edwards, M. (2018). ´The place of waste: Changing business value for the circular economy´. *Business, Strategy and the Environment,* Volume 27, pp. 631-642.

Pieroni, M. P., McAloone, T. C. & Pigosso, D. C. (2019). ´Business model innovation for circular economy and sustainability: A review of approaches´. *Journal of Cleaner Production,* Volume 215, pp. 198-216.

Poponi, S., Colantoni, A., Cividino, S. R. & Mosconi, E. M. (2019). ´The Stakeholders' Perspective within the B Corp Certification for a Circular Approach´. *Sustainability,* 11(1584), pp. 1-15.

Qin, C.-Z. (2018). ´On the Role of Business Administration in Promoting Economic Development´. *2018 International Seminar on Education Research and Social Science (ISERSS 2018),* Volume 195, pp. 185-188.

Reike, D., Vermeulen, W. J. & Witjes, S. (2018). ´The circular economy: New or Refurbished as CE 3.0? — Exploring Controversies in the Conceptualization of the Circular Economy through a Focus on History and Resource Value Retention Options´. *Resources, Conservation & Recycling,* Issue 135, pp. 246-264.

Romi, A. & Cook, K. A. (2018). ´The influence of social responsibility on employee productivity and sales growth´. *Sustainability Accounting, Management and Policy Journal,* 9(4), pp. 392-421.

Rosati, F. & Faria, L. G. D. (2019). ´Business contribution to the Sustainable Development Agenda: Organizational factors related to early adoption of SDG reporting´. *Corporate Social Responsibility Management,* Volume 26, pp. 588-597.

Ruggieri, A., Mosconi, E. M. & Poponi, S. (2018). ´The B Corp certification as a standard of the entrepreneurial pathway towards the circular economy perspective´. *Proceedings of the XXVIII National Congress of Commodity Sciences, Firenze, Italy. ,* pp. 247-255.

Saidani, M., Yannou, B., Leroy, Y. & Cluzel, F. (2017). ´How to Assess Product Performance in the Circular Economy? Proposed Requirements for the Design of a Circularity Measurement Framework´. *Recycling,* 2(6), pp. 1-18.

Salvioni, D. M. & Almici, A. (2020). ´Circular Economy and Stakeholder Engagement Strategy´. *Emerging Issues in Management,* Issue 1, pp. 26-44.

Scipioni, S., Russ, M. & Niccolini, F. (2021). ´From Barriers to Enablers: The Role of Organizational Learning in Transitioning SMEs into the Circular Economy´. *Sustainaibility,* 13(1021), pp. 1-31.

Sharma, N. K. et al. (2021). ´The transition from a linear economy to a circular economy for sustainability among SMEs: A study on prospects, impediments and prerequisites´. *Business Strategy and the Environment,* Volume 30, pp. 1803-1822.

Skärin, F., Rösiö, C. & Andersen, A.-L. (2022). ´An Explorative Study of Circularity Practices in Swedish Manufacturing Companies´. *Sustainability,* 14(7246), pp. 1-23.

Susur, E. & Engwall, M. (2023). ´A transitions framework for circular business models´. *Journal of Industrial Ecology,* Volume 27, pp. 19-32.

Tellis, W. (1997). ´Application of a Case Study Methodology´. *The Qualitative Report,* 3(3), pp. 1-19.

Uvarova, I. et al. (2020). ´Transition to the circular economy and new circular business models – an in-depth study of the whey recycling´. *IOP Conference Series: Earth and Environmental Science,* 578(1), pp. 1-7.

van der Waal, J. W. & Thijssens, T. (2020). ´Corporate involvement in Sustainable Development Goals: Exploring the territory´. *Journal of Cleaner Production,* Volume 252, pp. 1-11.

Villalba-Eguiluz, U., Arcos-Alonso, A., Pérez de Mendiguren, J. C. & Urretabizkaia, L. (2020). ´Social and Solidarity Economy in Ecuador: Fostering an Alternative Development Model?´. *Sustainability,* 12(17), pp. 1-17.

Wilburn, K. & Wilburn, R. (2015). ´Evaluating CSR accomplishments of founding certified B Corps´. *Journal of Global Responsibility,* 6(2), pp. 262-280.

Webliography

Amazon Frontlines (2023). *Ecuador becomes the first country in the world to halt oil drilling through direct climate democracy.* [Online]
Available at: https://amazonfrontlines.org/chronicles/ecuador-becomes-the-first-country-in-the-world-to-halt-oil-drilling-through-direct-climate-democracy/
[Last accessed: 26 August 2023].

Arla (2020). *Sustainable financing framework.* [Online]
Available at: https://www.arla.com/company/investor/sustainable-financing-framework/
[Last accessed: 01 September 2023].

B Impact Assessment (2023). *Frequently Asked Questions about the Evolution of the Standards for B Corp Certification.* [Online]
Available at:
https://kb.bimpactassessment.net/support/solutions/articles/43000651678-frequently-asked-questions-about-the-evolution-of-the-standards-for-b-corp-certification
[Last accessed: 7 September 2023].

B Lab Europe (2023). *About B Lab Europe.* [Online]
Available at: https://bcorporation.eu/about/about-b-lab-europe/
[Last accessed: 15 May 2023].

B Lab Europe (2023). *What is a B Corp.* [Online]
Available at: https://bcorporation.eu/what-is-a-b-corp/what-does-b-corp-certification-mean/
[Last accessed: 02 May 2023].

B Lab (2023). *The legal requirement for Certified B Corporations.* [Online]
Available at: https://www.bcorporation.net/en-us/about-b-corps/legal-requirements/
[Last accessed: 31 August 2023].

Cámara de Industrias y Producción (2023). *Somos CIP.* [Online]
Available at: https://www.cip.org.ec/somos-cip/
[Last accessed: 20 August 2023].

Conservice ESG (2023). *The strategic value of ESG materiality assessments.* [Online]
Available at: https://esg.conservice.com/esg-solutions/strategic-value-of-esg-materiality-assessments/
[Last accessed: 30 August 2023].

El Ordeño (2018). *Memoria de Sostenibilidad 2018.* [Online]
Available at: https://www.elordeno.com/descargas.php
[Last accessed: 5 July 2023].

El ordeño (2019). *Memoria de Sostenibilidad 2019.* [Online]
Available at: https://www.elordeno.com/descargas.php
[Last accessed: 20 June 2023].

El Ordeño (2020). *Memorias de Sostenibilidad 2020.* [Online]
Available at: https://www.elordeno.com/descargas.php
[Last accessed: 15 June 2023].

El Ordeño (2021). *Memoria de sostenibilidad 2021.* [Online]
Available at: https://www.elordeno.com/descargas.php
[Last accessed: 30 June 2023].

European Union Websites (2021). *Ecuador goes circular: discover the strategy behind.* [Online]
Available at: https://www.eeas.europa.eu/eeas/ecuador-goes-circular-discover-strategy-behind_en
[Last accessed: 21 August 2023].

FSSC (2023). *FSSC 22000 Development Program.* [Online]
Available at: https://www.fssc.com/development/developmentprogram/
[Last accessed: 20 August 2023].

Lasio, V., Amaya, A., Zambrano, J. & Ordeñana, X. (2020). *Global Entrepreneurship Monitor Ecuador 2019 - 2020.* [Online]
Available at: https://www.gemconsortium.org/report/gem-ecuador-20192020-report
[Last accessed: 18 August 2023].

Rogmans, T. & El-Jisr, K. (2022). *Designing Your Company's Sustainability Report.* [Online]
Available at: https://hbr.org/2022/01/designing-your-companys-sustainability-report
[Last accessed: 27 July 2023].

Switch2Green (2023). *Ecuador goes Circular: The strategy behind.* [Online]
Available at: https://www.switchtogreen.eu/ecuador-goes-circular/
[Last accessed: 20 August 2023].

Tetra Pak (2023). *Packaging for the future.* [Online]
Available at: https://www.tetrapak.com/campaigns/future-packaging
[Last accessed: 20 August 2023].

The Ellen MacArthur Foundation (2023). *The circular economy in detail.* [Online]
Available at: https://ellenmacarthurfoundation.org/the-circular-economy-in-detail-deep-dive
[Last accessed: 18 May 2023].

UN Global Compact (2023). *Questionnaire Guidebook: Communication on Progress.* [Online]
Available at: https://unglobalcompact.org/library/6107
[Last accessed: 31 August 2023].

United Nations Global Compact (2023). *About the UN Global Compact.* [Online]
Available at: https://unglobalcompact.org/about
[Last accessed: 27 July 2023].

Annexes

Annex 1. Impact area, topic and question summary of the areas implemented by the b corporation certification

Taken from: B Lab (2023)

Impact Area	Impact Topic	Question Summary
Governance	Mission & Engagement	Level of Impact Focus
Governance	Mission & Engagement	Mission Statement Characteristics
Governance	Mission & Engagement	Social and Environmental Decision-Making
Governance	Mission & Engagement	Stakeholder Engagement
Governance	Mission & Engagement	Management of Material Social and Environmental Issues
Governance	Ethics & Transparency	Governance Structures
Governance	Ethics & Transparency	Code of Ethics
Governance	Ethics & Transparency	Instruction on Code of Ethics
Governance	Ethics & Transparency	Anti-Corruption Practices
Governance	Ethics & Transparency	Monitoring Ethics and Corruption
Governance	Ethics & Transparency	Financial Reporting Standards
Governance	Ethics & Transparency	Reviewed / Audited Financials
Governance	Ethics & Transparency	Financial Controls
Governance	Ethics & Transparency	Company Transparency
Governance	Ethics & Transparency	Crop Sales Information
Governance	Governance Metrics	Last Fiscal Year
Governance	Governance Metrics	Reporting Currency
Governance	Governance Metrics	Revenue Year Before Last
Governance	Governance Metrics	Revenue Last Year
Governance	Governance Metrics	Net Income Last Year
Governance	Governance Metrics	Net Income Year Before Last
Governance	Governance Metrics	Payments to Government
Governance	Mission Locked	Mission Lock
Workers	Workers Impact Area Introduction	Majority of Hourly vs. Salaried Workers
Workers	Workers Impact Area Introduction	Use Of Contracted Labor
Workers	Workers Impact Area Introduction	Workers Impact Business Model Introduction
Workers	Workers Impact Area Introduction	# of Full-Time Workers
Workers	Workers Impact Area Introduction	# of Full-Time Workers Last Year
Workers	Workers Impact Area Introduction	# of Part-Time Workers
Workers	Workers Impact Area Introduction	# of Part-Time Workers Last Year
Workers	Workers Impact Area Introduction	# of Temporary Workers
Workers	Workers Impact Area Introduction	# of Temporary Workers Last Year
Workers	Financial Security	Lowest Paid Wage

Workers	Financial Security	% of Employees Paid Individual Living Wage
Workers	Financial Security	% of Employees Paid Family Living Wage
Workers	Financial Security	% Above the Minimum Wage
Workers	Financial Security	Compensation Policies and Practices
Workers	Financial Security	% Participation in Employee Ownership
Workers	Financial Security	Retirement Programs
Workers	Financial Security	Financial Services for Employees
Workers	Health, Wellness, & Safety	Government Provision Of Healthcare
Workers	Health, Wellness, & Safety	Healthcare Coverage
Workers	Health, Wellness, & Safety	Benefits for Seasonal Workers
Workers	Health, Wellness, & Safety	Supplementary Health Benefits
Workers	Health, Wellness, & Safety	Supplementary Health Benefits Eligibility for Part-Time Workers
Workers	Health, Wellness, & Safety	Worker Safety Practices
Workers	Health, Wellness, & Safety	Health and Safety Program
Workers	Health, Wellness, & Safety	Handling Hazardous Materials
Workers	Health, Wellness, & Safety	Machinery Practices
Workers	Career Development	Formal Employment
Workers	Career Development	Professional Development Policies and Practices
Workers	Career Development	Employee Review Process
Workers	Career Development	Internal Promotions
Workers	Career Development	Rate of Seasonal Workers Re-hiring
Workers	Career Development	Intern Hiring Practices
Workers	Engagement & Satisfaction	Employee Handbook Information
Workers	Engagement & Satisfaction	Non-Discrimination Policy
Workers	Engagement & Satisfaction	Paid Secondary Caregiver Leave
Workers	Engagement & Satisfaction	Supplementary Benefits
Workers	Engagement & Satisfaction	Worker Empowerment
Workers	Engagement & Satisfaction	Worker / Management Conflict Mediation
Workers	Engagement & Satisfaction	Surveying and Benchmarking Engagement and Attrition
Workers	Engagement & Satisfaction	Labor Practices Review
Community	Community Impact Area Introduction	Community-Oriented Impact Business Model
Community	Community Impact Area Introduction	Sourcing From Small-Scale Farmers or Coop Members
Community	Diversity, Equity, & Inclusion	Inclusive Hiring Practices
Community	Diversity, Equity, & Inclusion	Diverse Ownership and Leadership
Community	Diversity, Equity, & Inclusion	Inclusive Work Environments
Community	Diversity, Equity, & Inclusion	Management of Diversity, Equity, and Inclusion
Community	Diversity, Equity, & Inclusion	Measurement of Diversity
Community	Diversity, Equity, & Inclusion	High to Low Pay Ratio
Community	Diversity, Equity, & Inclusion	Female Management
Community	Diversity, Equity, & Inclusion	Management from Underrepresented Populations
Community	Diversity, Equity, & Inclusion	Supplier Diversity Policies or Programs
Community	Diversity, Equity, & Inclusion	Supplier Ownership Diversity

Community	Economic Impact	New Jobs Added Last Year
Community	Economic Impact	Job Growth Rate
Community	Economic Impact	Non-accredited Investor Ownership
Community	Economic Impact	Local Ownership
Community	Economic Impact	Local Purchasing and Hiring Policies
Community	Economic Impact	National Sourcing
Community	Economic Impact	Spending on Local Suppliers
Community	Economic Impact	Focus on Local Customers
Community	Economic Impact	Training Community Farmers
Community	Civic Engagement & Giving	Corporate Citizenship Program
Community	Civic Engagement & Giving	Civic Memberships and Partnerships
Community	Civic Engagement & Giving	Charitable Giving and Community Investment Policies and Practices
Community	Civic Engagement & Giving	Advancing Social and Environmental Performance
Community	Supply Chain Management	Significant Supplier Descriptions
Community	Supply Chain Management	Social or Environmental Screening of Suppliers
Community	Supply Chain Management	Outsourced Staffing Services
Community	Supply Chain Management	Outsourced Staffing Screening Topics
Community	Supply Chain Management	% of Outsourced Services Accountable to Code of Conduct?
Community	Supply Chain Management	Screening / Monitoring for Services
Community	Supply Chain Management	% of Outsourced Staffing Services Screened / Monitored
Community	Supply Chain Management	Supplier Code of Conduct
Community	Supply Chain Management	Improving the Impact of Suppliers
Community	Supply Chain Management	% of Suppliers with Programs to Improve Impact
Community	Supply Chain Management	Length of Supplier Relationships
Community	Supply Chain Management	Supplier Certifications
Community	Supply Chain Management	Third-Party Traceability and Labeling Standards
Community	Supply Chain Management	Crops with Environmental Certification
Environment	Environment Impact Area Introduction	Land Under Cultivation
Environment	Environment Impact Area Introduction	Sourcing Ag Products
Environment	Environment Impact Area Introduction	Environmental Business Model
Environment	Environmental Management	Facility Environmental Efficiency
Environment	Environmental Management	Environmental Management Systems
Environment	Environmental Management	Environmentally Certified Products
Environment	Environmental Management	Type of Footprint Assessments
Environment	Environmental Management	% of Products with Type of Footprint Assessment
Environment	Air & Climate	Monitoring Energy Use
Environment	Air & Climate	Monitoring Energy Usage
Environment	Air & Climate	Total Energy Use
Environment	Air & Climate	Total Renewable Energy Use
Environment	Air & Climate	Electricity Sources
Environment	Air & Climate	Renewable Energy Usage

Environment	Air & Climate	Low-Impact Renewable Energy Use
Environment	Air & Climate	Environmentally Efficient Equipment
Environment	Air & Climate	Energy Use Reductions
Environment	Air & Climate	Monitoring Greenhouse Gas Emissions
Environment	Air & Climate	Total Scope 1 GHGs
Environment	Air & Climate	Total Scope 2 GHGs
Environment	Air & Climate	Total Scope 3 GHGs
Environment	Air & Climate	Carbon Intensity
Environment	Air & Climate	Carbon Intensity
Environment	Air & Climate	Greenhouse Gas Emissions Reduced
Environment	Air & Climate	Shipping Policies
Environment	Air & Climate	Sourcing % of COGS from Local Suppliers
Environment	Air & Climate	Sourcing % raw materials from Local Suppliers
Environment	Air & Climate	Managing the Impact of Transportation
Environment	Air & Climate	Types of Carbon Credits Purchased
Environment	Water	Monitoring and Managing Water Use
Environment	Water	Total Water Use
Environment	Water	Water Conservation Practices of Suppliers
Environment	Water	Water Conservation Practices
Environment	Water	Monitoring Toxic Wastewater
Environment	Water	Water Quality Practices
Environment	Water	Water Quality Practices
Environment	Water	Irrigation Wastewater Remediation Practices
Environment	Water	Irrigation Wastewater
Environment	Land & Life	Monitoring and Reporting Non-hazardous Waste
Environment	Land & Life	Waste Disposal Methods
Environment	Land & Life	Non-hazardous Waste Generated
Environment	Land & Life	Total Waste Disposed
Environment	Land & Life	Total Waste Recycled
Environment	Land & Life	Recycling Programs
Environment	Land & Life	Waste Reduction Programs
Environment	Land & Life	Organic Waste Disposal of the supplier
Environment	Land & Life	Organic Waste Disposal of the company
Environment	Land & Life	Environment Impact Packaging
Environment	Land & Life	% of Environmentally Preferred Input Materials
Environment	Land & Life	Monitoring Hazardous Waste
Environment	Land & Life	Total Hazardous Waste Produced
Environment	Land & Life	Reducing Waste
Environment	Land & Life	Hazardous Waste Disposal
Environment	Land & Life	Hazardous Materials On-Site
Environment	Land & Life	Suppliers Sustainable Land Management
Environment	Land & Life	Organic Fertilizer
Environment	Land & Life	Pest Management Policies
Environment	Land & Life	Prohibited Pesticide Compliance

Environment	Land & Life	Prohibited Pesticide Compliance
Environment	Land & Life	Pesticide Use of your company
Environment	Land & Life	Pesticide Use of your suppliers
Environment	Land & Life	Sustainable Land Use Practices
Environment	Land & Life	Suppliers Sustainable Land Management
Environment	Land & Life	Soil Management Policies of your company
Environment	Land & Life	Soil Management Policies of your suppliers
Environment	Land & Life	Soil Productivity Practices of your company
Environment	Land & Life	Soil Productivity Practices of your suppliers
Environment	Land & Life	Seed Usage of your company
Environment	Land & Life	Seed Usage of your suppliers
Environment	Land & Life	Sustainable Farm Certification
Environment	Land & Life	Monitoring Biodiversity
Environment	Land & Life	Monitoring Biodiversity
Customers	Customers Impact Area Introduction	Customer Impact Business Model Introduction
Customers	Customer Stewardship	Managing Customer Stewardship
Customers	Customer Stewardship	Managing Product Impacts

Annex 2. Practices implemented by El Ordeño in the Governance area according to the B Corporation Framework

Impact Topic	Question Summary	2018	2021
Mission & Engagement	Level of Impact Focus	Consider the social and environmental impact.	Consider the social and environmental impact.
	Mission Statement	Commitment to social and environmental impact	Commitment to social and environmental impact
	Social and Environmental Decision-Making	Not mentioned	Not mentioned
	Stakeholder Engagement	Identify and engage traditionally underrepresented stakeholder groups or demographics	Formal stakeholder engagement plan that includes identification of relevant stakeholder groups
	Management of Material Social and Environmental Issues	Measure the material social and environmental outcomes produced by the performance on its KPIs over time	Conducted a materiality assessment of the company using stakeholder engagement mechanisms or research
Ethics & Transparency	Governance Structures	Governing board	Governing board
	Code of Ethics	No Code of Ethics	Code of Ethics based on values
	Instruction on Code of Ethics	Frequency not mentioned	Frequency not mentioned
	Anti-Corruption Practices	Not mentioned	Anti-corruption statement mentioned
	Monitoring Ethics and Corruption	Not mentioned	Not mentioned
	Financial Reporting Standards	Not mentioned	Not mentioned
	Reviewed / Audited Financials	Not mentioned	Not mentioned
	Financial Controls	Not mentioned	Not mentioned
	Company Transparency	Beneficial ownership, financial performance and social and environmental performance	Beneficial ownership, financial performance and social and environmental performance
	Crop Sales Information	Not mentioned	Not mentioned
Governance Metrics	Last Fiscal Year	31-12-17	31-12-20
	Reporting Currency	USD dollars	USD dollars
	Revenue Year Before Last	Not mentioned	40’511.648
	Revenue Last Year	34’130.104	76’255.942
	Net Income Last Year	Not mentioned	76’067.653
	Net Income Year Before Last	Not mentioned	Not mentioned
	Payments to Government	Not mentioned	Not mentioned
Mission Locked	Mission Lock	Not mentioned	Not mentioned

Annex 3. Practices implemented by El Ordeño in the Workers' area according to the B Corporation Framework

Impact Topic	Question Summary	2018	2021
Workers Impact Area Introduction	Majority of Hourly vs. Salaried Workers	Not mentioned	24% vs 76%
	Use Of Contracted Labor	Not mentioned	Not mentioned
	Workers Impact Business Model Introduction	Not mentioned	Not mentioned
	# of Full-Time Workers	Not mentioned	252
	# of Full-Time Workers Last Year	Not mentioned	237
	# of Part-Time Workers	Not mentioned	6
	# of Part-Time Workers Last Year	Not mentioned	5
	# of Temporary Workers	Not mentioned	28
	# of Temporary Workers Last Year	Not mentioned	1
Financial Security	Lowest Paid Wage	Not mentioned	Not mentioned
	% of Employees Paid Individual Living Wage	Not mentioned	100%
	% of Employees Paid Family Living Wage	Not mentioned	Not mentioned
	% Above the Minimum Wage	Not mentioned	Not mentioned
	Compensation Policies and Practices	Not mentioned	Not mentioned
	% Participation in Employee Ownership	Not mentioned	Not mentioned
	Retirement Programs	Government-sponsored pension	Government-sponsored pension
	Financial Services for Employees	Not mentioned	Not mentioned
Health, Wellness, & Safety	Government Provision Of Healthcare	Government-provided health insurance	Government-provided health insurance
	Healthcare Coverage	95%+	95%+
	Benefits for Seasonal Workers	Life insurance	Life insurance
	Supplementary Health Benefits	Not mentioned	Life and health insurance extended to the family
	Supplementary Health Benefits Eligibility for Part-Time Workers	Not mentioned	Not mentioned
	Worker Safety Practices	A worker health and safety committee helps monitor and advise on health and safety programs	A worker health and safety committee helps monitor and advise on health and safety programs

	Health and Safety Program	Prevention, technical training, monitoring of work accidents, random inspections, corrective actions, job analysis, use of protective equipment	Annual safety and health training, data on injury, accident, lost, or absentee days are recorded, formal safety reporting system for employees to submit their safety concerns as well as committees for preventing accidents. A documented standard procedure for investigating the root causes of accidents and major incidents and the implementation of corrective actions after an incident is investigated
	Handling Hazardous Materials	Training, protective gear, awareness and annual check-up	Training, protective gear, awareness and annual check-up
	Machinery Practices	Not mentioned	Not mentioned
Career Development	Formal Employment	Not mentioned	Not mentioned
	Professional Development Policies and Practices	Each employee has an individual development plan with deadlines and career-monitoring	Creation of the Training and Development department that supports the workers in its professional development
	Employee Review Process	Not mentioned	Performance Management Model for providing feedback
	Internal Promotions	Not mentioned	Not mentioned
	Rate of Seasonal Workers Re-hiring	Not mentioned	Not mentioned
	Intern Hiring Practices	Internship programme	Not mentioned
Engagement & Satisfaction	Employee Handbook Information	Not mentioned	Not mentioned
	Non-Discrimination Policy	Not mentioned	non-discrimination and respect for diversity of gender, age, ethnicity, thought and culture.
	Paid Secondary Caregiver Leave	Not mentioned	Additional days of maternity and paternity leave
	Supplementary Benefits	Not mentioned	Food service covered at 70%, Supermarket card, Benefits in purchases of the company's own products
	Worker Empowerment	Not mentioned	Suggestion Box, a tool to share their ideas to improve internal processes
	Worker / Management Conflict Mediation	Not mentioned	Human resources representative
	Surveying and Benchmarking Engagement and Attrition	Evaluation of the work environment	Evaluation of the work environment
	Labor Practices Review	Not mentioned	Not mentioned

Annex 4. Practices implemented by El Ordeño in the Community area according to the B Corporation Framework

Impact Topic	Question Summary	2018	2021
Community Impact Area Introduction	Community-Oriented Impact Business Model	Associative and inclusive model for producers	Associative and inclusive model for producers
	Sourcing From Small-Scale Farmers or Coop Members	Sourcing from small-scale farmers	Sourcing from small-scale farmers
Diversity, Equity, & Inclusion	Inclusive Hiring Practices	Not mentioned	Not mentioned
	Diverse Ownership and Leadership	Not mentioned	Not mentioned
	Inclusive Work Environments	Not mentioned	Not mentioned
	Management of Diversity, Equity, and Inclusion	Not mentioned	Not mentioned
	Measurement of Diversity	Through Socioeconomic status, Race or ethnicity, Gender, and Age	Through Socioeconomic status, Race or ethnicity, Gender, and Age
	High to Low Pay Ratio	Not mentioned	Not mentioned
	Female Management	18%	12%
	Management from Underrepresented Populations	Not mentioned	Not mentioned
	Supplier Diversity Policies or Programs	Not mentioned	Not mentioned
	Supplier Ownership Diversity	7%	7%
Economic Impact	New Jobs Added Last Year	Not mentioned	65
	Job Growth Rate	22%	33%
	Non-accredited Investor Ownership	Not mentioned	Not mentioned
	Local Ownership	Yes	Yes
	Local Purchasing and Hiring Policies	Yes	Yes
	National Sourcing	Not mentioned	Not mentioned
	Spending on Local Suppliers	Not mentioned	Not mentioned
	Focus on Local Customers	Yes	Yes
	Training Community Farmers	Not mentioned	Not mentioned
Civic Engagement & Giving	Corporate Citizenship Program	Partnerships with charitable organizations or membership with community organizations	Partnerships with charitable organizations or membership with community organizations
	Civic Memberships and Partnerships	Chamber of Commerce	Chamber of Commerce
	Charitable Giving and Community Investment Policies and Practices	Formal statement on the intended social or environmental impact of our company's philanthropy	Formal statement on the intended social or environmental impact of our company's philanthropy
	Advancing Social and Environmental Performance	Worked with other industry players on a cooperative initiative on relevant social and environmental standards for our industry	Worked with other industry players on a cooperative initiative on relevant social and environmental standards for our industry
Supply Chain Management	Significant Supplier Descriptions	Farms	Farms
	Social or Environmental Screening of Suppliers	Not mentioned	Not mentioned
	Outsourced Staffing Services	Not mentioned	Not mentioned

	Outsourced Staffing Screening Topics	Not mentioned	Not mentioned
	% of Outsourced Services Accountable to Code of Conduct?	Not mentioned	Not mentioned
	Screening / Monitoring for Services	Not mentioned	Not mentioned
	% of Outsourced Staffing Services Screened / Monitored	Not mentioned	Not mentioned
	Supplier Code of Conduct	Evaluation of environmental criteria and social responsibility to suppliers	Evaluation of environmental criteria and social responsibility to suppliers
	Improving the Impact of Suppliers	Training and technical assistance in the field	The company provides suggestions on the social and environmental impact
	% of Suppliers with Programs to Improve Impact	Not mentioned	Not mentioned
	Length of Supplier Relationships	Not mentioned	Not mentioned
	Supplier Certifications	Not mentioned	Not mentioned
	Third-Party Traceability and Labeling Standards	Internal traceability	Blockchain technology, IBM Food Trust
	Crops with Environmental Certification	Not mentioned	Not mentioned

Annex 5. Practices implemented by El Ordeño in the Environment area according to the B Corporation Framework

Impact Topic	Question Summary	2018	2021
Environment Impact Area Introduction	Land Under Cultivation	No	No
	Sourcing Ag Products	Source from farmers	Source from farmers
	Environmental Business Model	No direct environmental business model	Innovative manufacturing process designed to significantly reduce environmental impact
Environmental Management	Facility Environmental Efficiency	Electricity reduction practices and a sewage treatment to optimize the waste management	Energy Plan, sustainable use of water resources, and waste management
	Environmental Management Systems	Quantifiable targets for environmental aspects of the organization's operations	Assessment undertaken of the environmental impact of the organization's business activities
	Environmentally Certified Products	Not mentioned	Not mentioned
	Type of Footprint Assessments	Registration of GHG emissions related to its operations	An assessment conducted for the company's operations
	% of Products with Type of Footprint Assessment	Not mentioned	Not mentioned
Air & Climate	Monitoring Energy Use	Not mentioned	Not mentioned
	Monitoring Energy Usage	Record energy usage	Monitor, record and set reduction targets
	Total Energy Use	8 747,352 Gigajoules	96.807,57 Gigajoules
	Total Renewable Energy Use	NA	0,5112 Gigajoules
	Electricity Sources	Municipal power grid	Municipal power grid, renewal energy
	Renewable Energy Usage	Not mentioned	Not mentioned
	Low-Impact Renewable Energy Use	Not mentioned	Not mentioned
	Environmentally Efficient Equipment	Not mentioned	Not mentioned
	Energy Use Reductions	Not mentioned	Not mentioned
	Monitoring Greenhouse Gas Emissions	Monitor and record emissions	Monitor, record emissions and set specific science-based targets necessary to achieve global goals
	Total Scope 1 GHGs	6.730,80 Ton CO2e	6.563,20 Ton CO2e
	Total Scope 2 GHGs	1.596,34 Ton CO2e	2.121,75 Ton CO2e
	Total Scope 3 GHGs	345,19 Ton CO2e	768,77 Ton CO2e
	Carbon Intensity, not including the carbon credits or offsets	Not mentioned	0,000128783
	Carbon Intensity, including the carbon credits or offsets	Not mentioned	Not mentioned
	Greenhouse Gas Emissions Reduced	Not mentioned	Not mentioned
	Shipping Policies	Not mentioned	Not mentioned
	Sourcing % of COGS from Local Suppliers	Not mentioned	Not mentioned

	Sourcing % raw materials from Local Suppliers	60%	60%
	Managing the Impact of Transportation	Not mentioned	Not mentioned
	Types of Carbon Credits Purchased	Not mentioned	Not mentioned
Water	Monitoring and Managing Water Use	Record of water usage	Monitor and record usage and set science-based targets to achieve sustainable usage
	Total Water Use	25,419,522,000 liters	303,281,000 liters
	Water Conservation Practices of Suppliers	Not mentioned	Not mentioned
	Water Conservation Practices	Not mentioned	Recovery process of cooling systems in UHT equipment
	Monitoring Toxic Wastewater	Monitors emissions, and sets specific reduction targets	Monitors emissions, and sets specific reduction targets
	Water Quality Practices of your company	Not mentioned	Improved COD and BOD levels
	Water Quality Practices of your suppliers	Not mentioned	Not mentioned
	Irrigation Wastewater Remediation Practices	Wastewater Treatment Plant	Wastewater Treatment Plant
	Irrigation Wastewater	Not mentioned	Not mentioned
Land & Life	Monitoring and Reporting Non-hazardous Waste	programs for adequate waste management and goals to reduce consumption and emissions	Efficient Resource Management Plan
	Waste Disposal Methods	Private third-party disposal with certified responsible disposal that can be documented	Private third-party disposal with certified responsible disposal that can be documented
	Non-hazardous Waste Generated	Not mentioned	28.356 kg
	Total Waste Disposed	105,075	2.234.176 kg
	Total Waste Recycled	Not mentioned	Not mentioned
	Recycling Programs	Reuse and recycle at the office, and reuse pallets at the plant	Reuse and recycle at the office, and reuse pallets at the plant
	Waste Reduction Programs	Not mentioned	Not mentioned
	Organic Waste Disposal of the company	Not mentioned	Not mentioned
	Organic Waste Disposal of the suppliers	Not mentioned	Not mentioned
	Environment Impact Packaging	Not mentioned	Packaging materials are certified to meet independent standards for environmental impact
	% of Environmentally Preferred Input Materials	Not mentioned	75%
	Monitoring Hazardous Waste	monitors and records emissions	monitors and records emissions
	Total Hazardous Waste Produced	350 kg	2234147.64 kg
	Reducing Waste	Not mentioned	Not mentioned
	Hazardous Waste Disposal	Private third-party disposal with certified responsible disposal that can be documented	Private third-party disposal with certified responsible disposal that can be documented

	Hazardous Materials On-Site	Not mentioned	Not mentioned
	Suppliers Sustainable Land Management	Not mentioned	Not mentioned
	Organic Fertilizer	Not mentioned	Not mentioned
	Pest Management Policies	Not mentioned	Not mentioned
	Prohibited Pesticide Compliance	Not mentioned	Not mentioned
	Prohibited Pesticide Compliance	Not mentioned	Not mentioned
	Pesticide Use of your company	Not mentioned	Not mentioned
	Pesticide Use of your supplier	Not mentioned	Not mentioned
	Sustainable Land Use Practices	Not mentioned	Not mentioned
	Suppliers Sustainable Land Management	Not mentioned	Not mentioned
	Soil Management Policies of your company	Not mentioned	Not mentioned
	Soil Management Policies of your suppliers	Not mentioned	Not mentioned
	Soil Productivity Practices of your company	Not mentioned	Not mentioned
	Soil Productivity Practices of your suppliers	Not mentioned	Not mentioned
	Seed Usage of your company	Not mentioned	Not mentioned
	Seed Usage of your suppliers	Not mentioned	Not mentioned
	Sustainable Farm Certification	Not mentioned	Not mentioned
	Monitoring Biodiversity	Not mentioned	Not mentioned
	Monitoring Biodiversity	Not mentioned	Not mentioned

Annex 6. Practices implemented by El Ordeño in the Customer area according to the B Corporation Framework

Impact Topic	Question Summary	2018	2021
Customers Impact Area Introduction	Customer Impact Business Model Introduction		products address a social or economic problem for the customers
Customer Stewardship	Managing Customer Stewardship	Third-party quality certifications, formal quality control mechanisms, feedback or complaint mechanisms, monitor consumer satisfaction	Third-party quality certifications, formal quality control mechanisms, feedback or complaint mechanisms, monitor consumer satisfaction, written policies in place for ethical marketing, advertisement, or customer engagement
	Managing Product Impacts	Monitors customer outcomes and well-being	Measure and evaluate the innovation of a product through KPIs, industrial tests, stability studies and market studies.