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"ORGANIZING FOR SUSTAINABILITY: TOWARD A COLLABORATIVE APPROACH. INSIGHTS FROM A MULTIPLE CASE STUDY"

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“I need to make a profit but I would like to do it with ethics, dignity, and morals.”

Cit. Brunello Cucinelli

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EXECUTIVE SUMMARY

The notion of sustainability has become a buzzword that characterizes the twenty-first century, gaining significant traction in both the public and corporate sectors. According to what we have observed in Chapter 1, there is a growing consensus that sustainability is no longer an option but a must in today's society. Customers are increasingly influencing businesses' sustainable decisions and corporations that serve as both economic and environmental guarantors view customers as the most significant stakeholder. Furthermore, people's declining trust in governments and NGOs to effectively solve social and environmental issues has strengthened the role of organizations as advocates for social justice. The transition toward a more sustainable economy requires businesses to be active promoters of this change and create new business models with the optimal fit between the increasing demand for a sustainable economy and their organizational design (Obel, Børge, and Kallehave, 2022). In this framework is enclosed both an organizational design and a learning challenge.

The aim of this thesis is to investigate how organizations can effectively structure themselves in order to deal with ESG issues while studying the link between sustainability and collaboration. The "wicked" problems of sustainable development represented by the Sustainable Development Goals (SDGs) of the United Nations Agenda 2030 require companies to undergo a cardinal shift or better, a collaborative shift in order to address properly these challenges. It's essential to unite governments, corporations, academics, and other groups around a shared goal. When handled properly, such a collaborative approach has a tremendous capacity to overcome systemic issues.

There is no one-size-fits-all strategy for achieving sustainability, the thesis highlights the importance of stakeholder participation, internal structural changes, and the unpredictable nature of sustainability pathways. In particular, it elaborates on the importance of collaboration as a driving force for sustainability, stressing the function of Stakeholder Theory and Resource-Based View (RBV) as key theories in strategic management which, if read together and found the synergies between them, allow to shift the focus from a strict competitive advantage logic toward a "collaborative advantage" rationale. This will require companies to develop a new set of capabilities, namely Collaborative Capabilities for Sustainability (CCS), which represent the starting point to achieve collaborative advantage and realize effective inter-firm/multi-stakeholder collaboration which, in turn, it's fundamental in the context of small and medium-sized enterprises (SMEs). An internal focus is also necessary since it's unrealistic to believe that firms can successfully collaborate with

other realities until they have created a collaborative atmosphere within their own walls. Gulati's (2022) framework of Purpose-Trust-Collaboration offers, in this setting, insightful advice for businesses looking to break free from the "iron cage" of bureaucracy and put themselves in a position for flexibility, adaptation, and sustainable growth. Coherently to what is stated by the literature presented in Chapter 2, the future of sustainable development is projected to rely on network-based collaborative settings.

The importance of developing a collaborative approach is further stressed in the last chapter of the thesis where a multiple case study involving two Italian Companies, Sit Group S.p.A. and Carel Industries S.p.A., is handed over examining each company's sustainability pathways, collaborative settings, and stakeholder engagement practices. Additionally, it explores how their organizational structures have changed through time in order to foster cooperation in the pursuit of sustainable goals. The case study shows that sustainability routes vary greatly depending on the individual company and are influenced by factors such as technological advancements, legislative changes, and market trends. Stakeholder engagement is a top priority for both businesses coupled with an innovative reform of their governance structure. Other noteworthy results include strong alignment with market trends, the considerable impact of financial markets, and commitment to high standards of quality.

Overall, the analysis presented on Carel and SIT serves as an example of how leveraging collaborative capabilities is critical to the pursuit of sustainable development strategies. By implementing a cross-functional approach in reforming their governance structure, both companies guarantee that sustainability culture is widely integrated at all organizational levels while also fostering transparency and trust within their business and ensuring an effective communication flow. Even though the two firms' scopes of collaboration may vary, they both place a strong focus on partnerships, especially with academic institutions, industry associations, and research centers, to stay on the cutting edge of technological breakthroughs and market trends.

Stakeholder engagement is a prime concern for both firms, as it is not only employed to perform the materiality analysis but also to target stakeholders according to their sustainability profiles and the company's values. Likewise, their dedication to upholding industry associations and standards is a key component of their commitment to gaining access to funding for sustainable investment projects in addition to being an endorsement of their trustworthiness and credibility.

The value of collaboration and stakeholder engagement in shaping a more sustainable future is reflected in these findings, which also highlight the pivotal role of industry/international partnerships in advancing sustainable development initiatives.

Implications for Practice: This master's thesis adds to the body of knowledge on sustainability and collaboration in organizations in several ways.

First of all, by combining the notions of Stakeholder Theory, Resource-Based View, and "Collaborative Advantage", it provides a thorough understanding of the function of collaboration as a driving force for sustainable business practices. The novel concept of "Collaborative Advantage" is not only explicated through a comprehensive literature review but also through a multiple case study approach. Hence, by offering an extensive overview of how businesses might leverage collaborative capabilities to achieve sustainability goals in different industry settings, this concept contributes to the theoretical landscape.

Second, a nuanced view of how different businesses with various motives and industrial settings embark on sustainability journeys is provided by the multiple case study of Carel and SIT, which give insightful observations into the real-life application of collaborative mechanisms. In addition to this, companies have to cultivate a culture of transparency and openness. Without it, a chance to build genuine connections with stakeholders, both inside and outside the company, is lost. Therefore, coherently to what was stated by Glavash & Mish (2015), creating a new sustainable market requires the collaboration of all stakeholders which, in turn, requires their trust. Additionally, the thesis highlights the importance of cross-functional teams and stakeholder engagement in facilitating successful ESG governance, which advances our knowledge of sustainable business practices in real-world contexts.

Last, the study of inter-firm collaboration, following the call of Harrison et al. (2023), is further expanded via the investigation of network-based collaborative approaches of Carel and SIT to sustainability issues. This analysis suggests stakeholder engagement as a fundamental practice to realize an effective spread of the culture of sustainability both inside and outside the business and provides useful insights into the companies' sustainability plan. We offer experiences that demonstrate how these two companies have developed their collaborative capabilities to open up new sustainable avenues. The most "remarkable" discovery may be that cooperation is essential: to establish a new sustainable market, it takes a system-wide collaboration.

Limitations and Future Research: Despite its contributions, it's crucial to recognize the limits of this research. The study is based on a qualitative investigation of a multiple case study, that might not accurately reflect the diversity of businesses and sectors on a global scale. Therefore, there should be caution when extrapolating the results to a larger group of companies. Nonetheless, this shortcoming is also an opportunity for future research. One of the selection criteria was that firms involved in the study had at least five years of experience

related to sustainability practices, however comparing these “new” ventures to their “old” equivalents would be useful in an effort to identify best practices and elements that contributed to following the sustainability path and leading or not to success.

Future quantitative research may be required to demonstrate empirical links on the effect of collaboration on sustainability results as this study gives only a qualitative overview. Likewise, the conclusions of this elaboration are time-sensitive and could not fully reflect the ongoing advancements in the area because of how sustainability is changing; that is exactly what the learning challenge described in Chapter 1 is about.

Finally, although the companies analyzed have a strong international presence, they are both based in Italy. Hence it might be advisable to consider companies in other parts of the world, as well as their subsidiaries, in order to properly analyze and compare their collaboration practices to examine the many facets of sustainability, collaboration, and stakeholder engagement.

Acknowledgments: Before proceeding with the discussion, I would like to dedicate a few more lines to all those who have been close to me in this pursuit of personal and professional growth.

First and foremost, I thank my parents and their respective partners, and my grandparents for accompanying me on this journey and standing by me, especially during times of despair.

A heartfelt thanks to my thesis supervisor Diego Campagnolo for his advice, patience, and helpfulness while drafting the elaborate. Special gratitude is also due to Marco De Luca Governance, Risk & Sustainability Officer and Ilaria Romano Sustainability & Human Rights Specialist at SIT S.p.A., and Giampiero Grosso Investor Relations Manager at Carel Industries S.p.A. for their valuable input and willingness to be interviewed to carry out the case study. Thank you to all my fellows and friends for the academic journey together.

Finally, I would like to dedicate this little achievement to myself. Aware that sustainability will represent my professional outlook, this thesis also expresses my idea of the future where my main goal will be to follow the footsteps of men and women who have embodied this value and, inspired by their teachings, to contribute to creating a new Human Capitalism. May this be the beginning of a bright and worthwhile professional future. Ad Maiora!

GLOSSARY

AI	Artificial Intelligence
ASHRAE	American Society of Heating, Refrigerating, and Air-Conditioning System
AUM	Assets Under Management
Bop	Base of the Pyramid
CCL	Center for Creative Leadership
CCS	Collaborative Capabilities for Sustainability
CDP	Carbon Disclosure Project
CEO	Chief Executive Officer
CFO	Chief Financial Officer
COP	Conference of the Parties
CSR	Corporate Social Responsibility
CSO	Chief Sustainability Officer
DEI	Diversity, Equity, Inclusion
EPEE	European Partnerships for Energy and the Environment
ESG	Environmental, Social, and Governance
ETI	Ethical Trade Initiative
EU	European Union
FBI	Federal Bureau of Investigation
FLA	Fair Labor Association
GDP	Gross Domestic Product
GMAP	Global Map of Supply Chain Risks in Agro-Commodity
GRI	Global Reporting Initiative
HFCs	Hydro-fluorocarborns
IBC	International Business Council
ICCR	Interfaith Center for Corporate Responsibility
IFC	International Finance Corporation
IMF	International Monetary Fund
IOR	Inter-Organizational Research
IPCC	Intergovernmental Panel on Climate Change

IPO	Initial Public Offering
IR	Integrated Reporting
ISO	International Organization for Standardization
ISS	Institutional Shareholder Services
IST	Instrumental Stakeholder Theory
IUCN	International Union for Conservation of Nature
MDGs	Millenium Development Goals
NGOs	Non-Governmental Organization
NRBV	Natural Resource-Based View
OECD	Organization for Economic Cooperation and Development
RBV	Resource-Based View
R&D	Research and Development
RV	Relational View
SAI	Social Accountability International
SDGs	Sustainable Development Goals
SER	Social and Environmental Responsibility
SFDR	Sustainable Financial Disclosure Regulation
SMEs	Small-Medium Enterprises
SOI	Sustainability Oriented Innovation
SVP	Senior Vice President
TBL	Triple Bottom Line
UN	United Nations
UNDP	United Nations Development Programme
UNGC	United Nations Global Compact
VP	Vice President
VRIO	Valuable, Rare, Inimitable, Organized
WEF	World Economic Forum
WWF	World Wide Fund

1. ORGANIZING FOR SUSTAINABILITY: AN OVERVIEW

1.1 Introduction

Sustainability has gained momentum becoming one of the major buzzwords of this millennium (Obel, Børge, and, Kallehave, 2022). While everyone knows about this word, very few know the real meaning of it linking the same to words like green or eco-friendly. Sustainability is the key to a better future: it is a topic to be known and now is inseparable from the management of organizations, both public and private (Balzan, 2022, p. 10). It is also a very good deal economically. For everyone.

Investments in sustainability are on the rise. So is customer and employee awareness. A strategy is needed in this regard so that companies can maintain a competitive advantage and attract talent and partners. They need to understand that economic development can no longer be separated from social development and environmental protection.

In this chapter, after reviewing very briefly the concept of "sustainable development" and "Triple Bottom Line", the main challenges and trends of sustainability will be explained from an organizational perspective. Careful emphasis will be placed on the values that companies will need to develop in order to embark on this journey and on their ability to develop new capabilities on an ongoing basis. That is because this is not only an organizational challenge but above all a learning one.

1.2 From Sustainable Development to the Triple Bottom Line

Nowadays, the term "sustainability" has reached so many meanings, spanning from economic sustainability to environmental sustainability and many others in between, that is very difficult to actually understand if all related terms (such as sustainable economy, sustainable community, sustainable development...) can be framed around the same view. Given this complexity, it's necessary to shed some light regarding the roots of this term.

According to Purvis, Mao, and Robinson (2019), the conceptualization of this notion appears to be far from simple as there are multiple sources from which it derives, in particular, the academic literature is the most extensive one so that at least six different but related lines of thinking can be identified (Kidd, 1992) suggesting an additional layer of confusion and competing conceptualization.

As the study reveals, the debate started soon after the end of the Second World War, when the sustainability notion emerged in order to create consensus in the Western world that there was

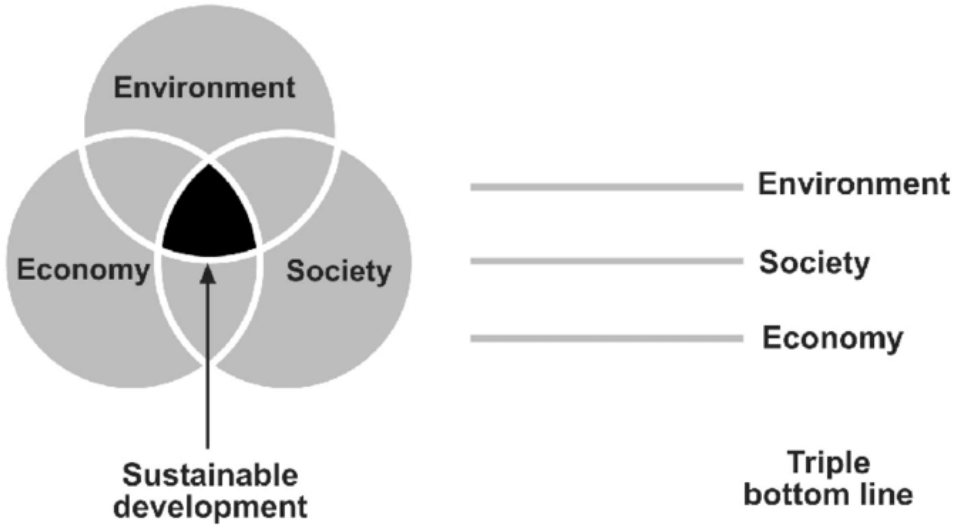
an urgent need to help the "less developed countries" stabilize their economies. Thus, the notion became a synonym for "economic development". Following the critiques a new definition emerged from the 1972 UN Conference on the Human-Environment in Stockholm as "Environmentally Sound Development", which after one year became "Eco-Development". Eight years later, the IUCN (International Union for Conservation of Nature) coined the concept of "Sustainable Development" (IUCN, UNEP, WWF, 1980), which later on has been institutionalized with the Brundtldan Report (1987, p.41) defining it as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". This new definition points out the importance of economic growth as a force that is at the same time socially and environmentally sustainable (UN, 1987).

During the same year, the first appearance of the Venn diagram showing the concept of sustainable development with three overlapping circles (see Figure 1) developed with much probability by Barbier (1987) lays the foundations for the development of a new sub-concept in the business literature: Triple Bottom Line (TBL).

John Elkington (1997) introduced this notion in the book "Cannibal with Forks" with hopes of expanding the conventional accounting-focused business definition into a new comprehensive approach that measures a company's contribution not just taking into account the economic bottom line but also the social well-being as well as the environmental health.

The concept of TBL mainstreams the idea of sustainability as including people, planet, and profit, often referred to as the three "P's".

Figure 1: Triple Bottom Line Framework



Source: Purvis, Mao, and Robinson (2019)

This framework represents a major breakthrough in sustainability research which provides new perspectives for businesses on the rationale for integrating sustainability into who and how they are in the world. The strong interconnection between these three levels forms the ever-changing rules of the games for companies and other organizations to lead the way of sustainable development, the one that the earth is capable of bearing (Hart, 1997).

1.2.1 Economy (Profit)

In today's economy, financial results are extremely important because allow organizations to gauge business performance, but as part of the TBL, these profits cannot come at the expense of the other two dimensions: the economy is a means to an end, and not the end itself.

Businesses have for too long focused on a narrow measure of performance whereas the success of a business is measured as its ability to maximize profits which is closely linked with the value of the business (e.g. share price). When looking at the financial bottom line, the idea is that profits are not necessarily in contrast to people and the planet; quite the opposite, those resulting from practices that are socially friendly or account for environmental impact can be more remunerative.

That's why this dimension is often called prosperity instead of profit because it highlights the overall economic impact of the company on the local, national, or global economies (Montigny, 2020).

Using a business case framework, a garment retailer that decides to concentrate its resources on abolishing child exploitation and shifting towards suppliers that comply with high environmental standards and secure fair trade conditions in terms of child labor would be highly cost-intensive. Even if the company could experience losses in the short run, sure enough, its efforts could pay off in terms of a reliable supply chain, brand reputation, and the higher price paid by the consumers in the long run.

That is the concept of "Shared Value" (Porter & Kramer, 2011) where the authors argue about the synergistic value of financial and social goals.

Several studies confirm the strength of this approach, one in particular carried out by Deutsche Bank in 2012 in which, after reviewing more than 100 papers on sustainable investing revealed that companies with high ESG ratings outperform the market in the medium (3 to 5 years) and long (5 to 10 years) term (Fulton et al., 2012).

The concept of economic capital thus refers to the ability of an organization (at all levels of public activities) to exploit the synergies with the environmental and human capital in order to create profits, intended as economic benefits, which society will also use; for this reason, a

company (as a community member) should supervise the use of natural and social capitals similar to reporting in terms of economic capital (Żak, 2015).

1.2.2 Society (People)

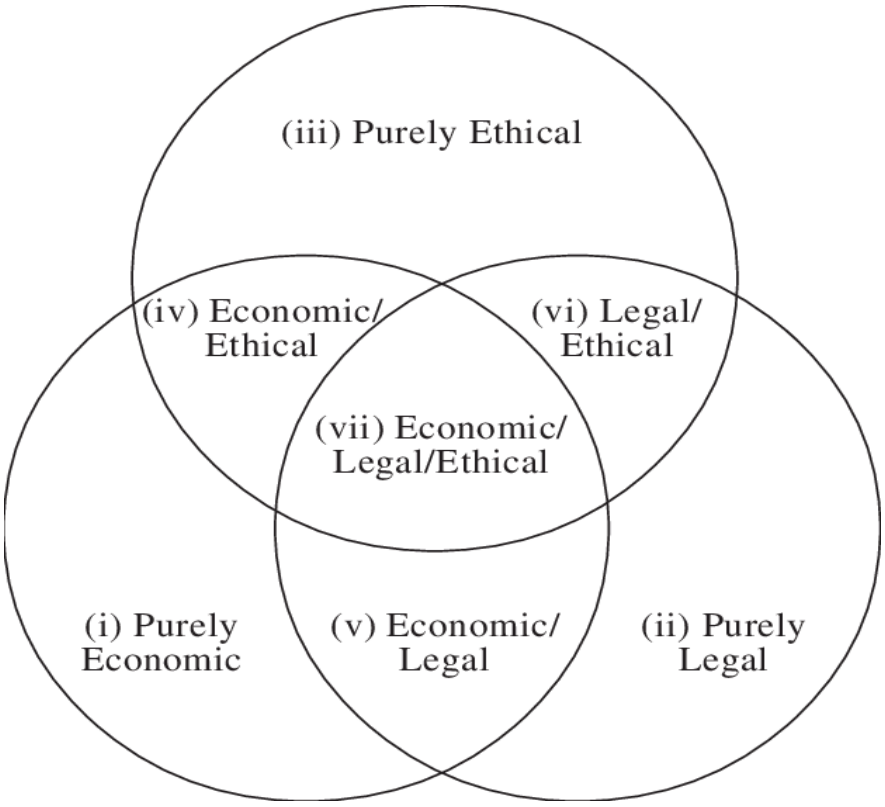
Implicit in the definition of "Sustainable Development" provided by the Brundtldan Report (1987), there is the concept of "social equity" which entails a drastic shift from the view by which the responsibility of an organization is solely towards its shareholders (Friedman, 1970). This line of thinking has been the dominant one over the last 50 years.

More than ever, consumers are demanding companies to change the way they are doing business, a great push defined by the World Economic Forum (WEF) as "Eco-Wakening"[1]. Given this new perspective, nowadays we cannot talk anymore about business if we don't consider its responsibility towards society. "People" takes into account all stakeholders including the communities in which the company operates, its employees and customers, and above all future generations. That's why, over the last decades, the term "Corporate Social Responsibility" (CSR) has become increasingly important for corporations that want to play a positive role in society driving a new positive (sustainable) change. CSR is defined as the duty among organizations to meet the needs of their stakeholders and, at the same time, the duty among stakeholders to hold organizations accountable for their achievements.

Looking at the meaning of "socially responsible" from a cross-national perspective, it is obvious that the legal context of one country highly influences the way an action is perceived, thus the interpretation of the concept is very wide. However, among the models developed over the years to better define the concept of CSR, one of the leading is known as Carroll's four-part pyramid (Carroll, 1991). This model breaks down the overall expectations that society has of an organization into four different categories in the order of decreasing importance: economic, legal, ethical, and philanthropic. Later on, the model was redeveloped and the fourth dimension (philanthropy) was removed as it had been assumed to be part of all the others (Schwartz & Carroll, 2003). This new framework clearly depicts the interrelationships between the different domains and rejects the hierarchical order of importance as all the variables are in dynamic interplay with each other (see Figure 2).

[1] Close Cristianne, 2021. *The global eco-wakening: how consumers are driving sustainability*. Available at: https://www.weforum.org/agenda/2021/05/eco-wakening-consumers-driving-sustainability/ [Access date: 10/04/2023].

Figure 2: The Three-Domain Model of Corporate Social Responsibility



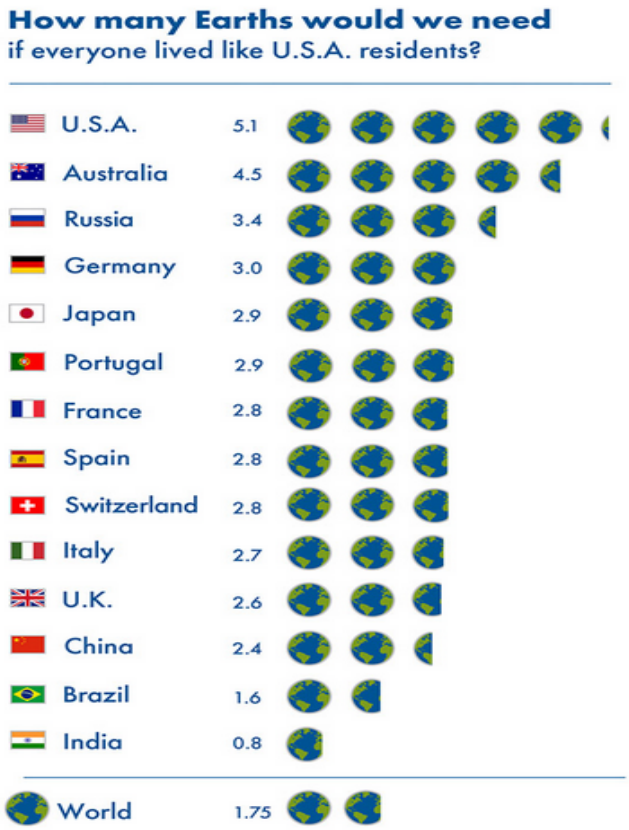
Source: Schwartz & Carroll (2003)

CSR has become an imperative in the present day, companies need to know their consumers and be aware of their needs: today's young people represent the new social context with which enterprises will deal. Since organizations can be considered as social formations operating in a specific social context, in addition to the strictly economic awareness (profit) is necessary to set other goals beyond the economic margin. This is what CSR is all about, combining economic awareness with a renewed environmental and social awareness, understanding what effects our choices will produce for society and consequently for the company itself.

1.2.3 Environment (Planet)

The last but not least dimension of the TBL model is represented by the environmental capital, which takes into account how a company or organization interacts with the natural world and its ecological systems. The concept is described very simply by A. Kisil: "If an organization gives the people jobs so they have money to live, it should not, at the same time, destroy or degrade the environment in which they have to live" (Kisil 2013, p. 98).
The National Footprint and Biocapacity Accounts 2022 depicts the situation more clearly (see Figure 3), showing the number of earths needed if everyone lived like U.S.A. residents.

Figure 3: Earth Overshoot 2022



Source: Global Footprint Network (2022)

The above-displayed data shows how many earths are needed taking into account the ecological footprint per person of US citizens. Based on calculations provided by the National Footprint and Biocapacity Accounts, the ecological footprint of one US citizen is 8.1 while the global biocapacity is 1.6 per person. Therefore, (8.1/1.6) = 5.1 earths are needed to satisfy the demand on nature for US residents. For the other countries in the picture, the calculation doesn't change.

Progress based on the intensive use of resources, with no regard for the environment and the deep inequalities it has produced, is not sustainable. Should this (linear) economic model were to continue, it is globally recognized that by 2050 we will need at least two planets in order to live. Since it supplies the natural resources and ecosystem services that sustain both the economic and social capital, the "Planet" is the most essential dimension of the TBL. It guarantees the necessary conditions for the latter to be able to function. The long-term survival of our economies and societies is contingent upon the wellness and resilience of these resources. This involves lowering greenhouse gas emissions, maintaining biodiversity, preserving natural resources, and decreasing waste and pollution.

This third dimension is also related to one of the biggest challenges our world is facing, which is climate change, and corporations must play an active role in finding innovative solutions to tackle this issue. One relevant example is represented by Patagonia 1% for the Planet which

gathers more than four thousand organizations donating one percent of their annual sales to environmental causes (for further details, see https://onepercentfortheplanet.org/).

Nowadays stakeholders are increasingly aware of the impact of businesses on the environment and this sentiment has gained more and more public attention over the years: according to "The Global Sustainability Study 2021", one-third of consumers rank sustainability as one of the top five purchases criteria, and they are willing to pay an average price premium of 25% for sustainable products indicating that there is a growing market for "mission-driven green" products and services, that is the reason for an increase in sustainable businesses globally[2].

It is clear that this pillar is destined to grow in significance as time goes on, representing an essential strength of consumer purchasing power, however, many companies don't assign the proper attention to this phenomenon because they are not able to see the long-term benefits of taking this effort. Nonetheless, as explained above, it is worth taking the shot as every firm belongs to the business, social, and ecological architecture (Kuraszko, 2010).

The three P's conundrum will continue to evolve no matter which type of organization, sector, or individual role, but it is important to remember that, at the center of the three intersecting circles, before firms there are individuals who, unite around a common purpose, will make firms more productive and innovative.

1.3 Macro Challenges to Sustainable Development

The complexity related to the global interconnectedness of the three dimensions of the TBL is translated into organizational, societal, and economic landscapes hard to forecast, traverse, and regulate. The logic underpinning the concept of Sustainable Development is that development, quality of life, and the health of the overall system shouldn't decline: as correctly pointed out by Susan Mohrman, the "Sustainable effectiveness of each actor depends on the overall sustainability of complex eco-systems of the natural environments, markets, and societies that define the contexts in which we function" (Mohrman, Shani, 2011, p. 4).

Developmental challenges need to be addressed not only from a micro perspective (looking around individual goals) but rather by starting with a macro one, covering the different angles by which these challenges can affect the overall system in which we operate and live. This was the basis for the development of the Eight Millennium Development Goals (MDGs)

[2] Kucher Simon et al., 2021. *Global Sustainability Study 2021*. Available at: https://www.simon-kucher.com/sites/default/files/studies/Simon-Kucher_Global_Sustainability_Study_2021.pdf [Access date 13/04/2023].

which in 2016 they have been succeeded by a new set of goals, called the United Nations Sustainable Development Goals (SDGs).

These 17 points represent the starting point to address the most important macro challenges of our time and even if they might look like a blueprint only for governments and world leaders, the biggest player in realizing an effective transition into a more sustainable economy is the private sector which, according to a survey conducted in 2013 by the IMF, accounts for 60% of GDP in most countries[3]. Results also confirmed by McKinsey show that the overall contribution (value added) of the business sector in the OECD accounts for 72% of GDP (Manyika et al., 2021). Many firms are thus reorganizing their activities in order to realize a sustainable change and in doing so they are guided by the aforementioned goals (Pedersen et al, 2021).

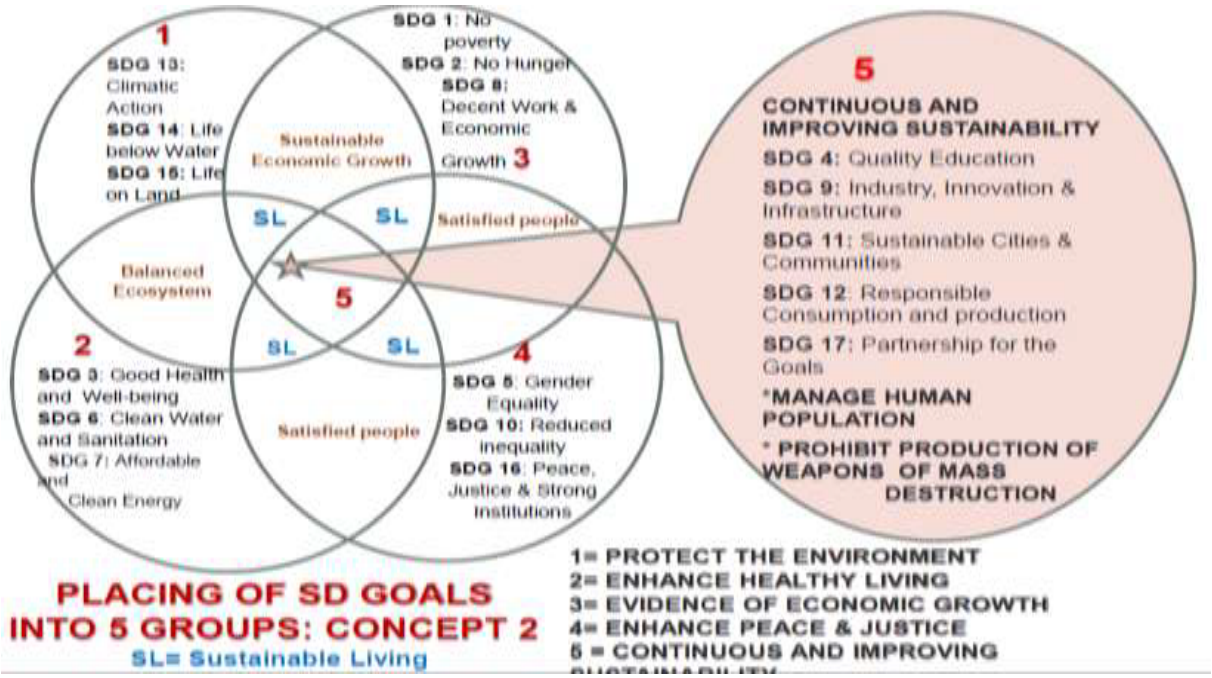
At the macro level, the challenges highlighted by the SDGs should consider all the eventual ramifications inside that specific goal, in other words, how the intervention addresses the issues at hand and how this affects the other goals. Lawrence (2018), using a pairwise comparison approach, shows the strong interrelatedness (99%) between goals and how the latter can be used to regroup the SDGs to further compact them into five main macro challenges: protect the environment, foster economic growth, promote peace and justice, encourage healthy living and enhance transformative capabilities and continuous improvement (see Figure 4). This new regrouping shows the key roles the fifth group plays in making sure the continuous improvement of SDG outcomes and the key players in this sphere are organizations that, recognizing this new reality, can actively lead their businesses to change the way they operate.

Yet it's not enough, during the last five years externalities have proven to be a real threat to macro challenges further increasing the level of complexity and uncertainty about the future outcomes. For instance, the recent outbreak of the war in Ukraine has had a major impact on sustainable development, in particular regarding food sustainability. Russia and Ukraine account for about 30% of the world's wheat and barley exports and supply chains around the world heavily depend on metal and energy export from these two countries[4]. The war has caused food, fertilizers, and fuel prices to skyrocket and has triggered an upward inflation trend of 2.5 percentage points according to the estimates of the OECD.

[3] IMF, 2013. IMF Survey: *IMF Facilitates Debate on Private Sector, Growth, Jobs in Mideast*. Available at: https://www.imf.org/en/News/Articles/2015/09/28/04/53/socar112713a [Access date: 15/04/2023].

[4] IISD, 2022. *What the Invasion of Ukraine Means for Sustainable Development*. Available at: https://www.iisd.org/articles/insight/invasion-ukraine-sustainable-development [Access date: 15/04/2023].

Figure 4: The Five Macro Challenges Inside the SDGs



Source: Lawrence (2018)

Before that, the COVID-19 pandemic erased more than four years of progress in alleviating poverty and deepened growing social and economic inequalities (UN, 2022).

Undoubtedly, modernity and globalization have brought macro-level benefits too, but the macro threats (like the ones described above) are likely to outweigh the former. For decades, we have seen these problems as governmental issues but companies can no longer wait for them to take action. Some predict that governments will likely look to businesses to collaborate in order to find new solutions to achieve economic, social, and environmental objectives (Lacy, Cooper, Hayward, Neuberger, 2010). Companies operate in complex systems that inevitably are self-organizing (Fukuyama, 1999) and governments cannot fully control all the interactions happening inside them. They can rely on them to find new innovative solutions to lead a sustainable transition.

Through new business models and strategies and through the relationships set up among other stakeholders, organizations can have a great influence on the contexts in which they operate and, at the same time, they are constrained and regulated by those contexts.

Different organizations face different sustainability challenges, therefore a unique way to reach sustainability objectives is almost impossible. It is straightforward to understand that behaviors change as the knowledge towards that specific topic changes: achieving sustainable development will only happen if we can accelerate the creation of new knowledge toward that purpose.

1.3.1 Re-purposing and Setting New Values

As mentioned above, the rules change as new issues, ergo new knowledge, come at hand. Issues are constantly evolving and so are the attitudes towards those issues. The weight of responsibility for a sustainable transition is on the choices we make and our choices derive from our purposes. Organizing for sustainability must start by examining the purpose of a business, which has not to be intended simply as the vision or mission, but as an "organizing principle" for the business. Ranjay Gulati defines it as "a unifying statement of the commercial and social problems a business intends to profitably solve for its stakeholders. This statement encompasses both goals and duties, and it succinctly communicates what a business is all about and who is intended to benefit" (Gulati, 2022, p. 11).

This concept goes beyond the narrow economic focus of an organization and it rests on the understanding that "sustainable" companies first need to explicit their reason for being and then infuse it with meaning. The purpose is not a statement but an ideal, in other words, why does the business exist? And when an organization is forced to answer that question, it needs to clarify its strategy, the vision for the future, and what it aspires to be.

Leaders and members in many organizations such as Unilever, Patagonia, Sales Force, and many others have come to take purpose more deeply compared to others, earning profits while addressing some of the greatest problems plaguing future generations (Gulati, 2022, p 20). They are setting principles rather than solutions: different firms may face different challenges according to the context where they are operating, hence different approaches to create a sustainable future are needed. Principles set forth the standards that guide behaviors and lead to several models of sustainable effectiveness, and these, in turn, provide the basis for universal core values which need to be the compass that guides businesses' future decisions.

Here by values, we mean both the firm's mission statement and the value it wants to provide to its stakeholders, and the cultural norms and beliefs that guide the firm's behaviours.

Here below, they are described:

Value to stakeholders. As repeated several times throughout this chapter, in a business environment, society is represented by stakeholders. In this sense, they have a key role in defining the impact of business activities and the course of their actions. Stakeholder engagement is therefore essential to any sustainability approach. Accepting to deliver stakeholder value, firms stop seeing their activities as a cost, on the contrary as part of the value that the firm yields (Figge & Hahn, 2005). It reveals the key areas that need to be addressed and provides insights into a company's innovation strategy. For example, diminishing the CO2 impact of doing business can be seen as added value that contributes to

healthier communities. Anyway, it is when financial imperatives are aligned with societal and environmental ones that this produces the greatest value for both parties (the business per se and its community). Many companies are incorporating this value in their mission statement nowadays, for example, Unilever's Mission Statement is "to meet everyday needs for nutrition, hygiene and personal care with brands that help people look good, feel good and get more out of life". This mission describes the company's attention to sustainability in people's lives and provides the aforementioned alignment that is a direct reflection of the company's reasons for existing (purpose).

Valuing collaboration. Re-purposing the organization towards sustainability means also accepting the fact that this is a collective challenge and only working together can have the greatest impact. For example, Companies like Patagonia or others cannot think of building a reliable supply chain for organic, zero waste, fair trade products without partnering with other organizations along the same. Therefore, cooperation along the supply chain is not only necessary to tackle social and environmental responsibilities (Kovács, 2005), but it is also a way to improve the overall chain value. Based on EY research with the Coalition of Inclusive Capitalism, it shows that investing resources in sustainable supply chains may increase the overall chain value by 12% to 23%[5]. Setting standards, and measuring and improving them are keys to realizing such benefits, nonetheless, it's only part of the story. Many challenges, such as climate change, require forging alliances in order to drive more effective results. Over the past few years, there has been a huge wave of alliances in particular regarding environmental issues: by the end of 2020 the number of environmental alliances was approaching 200, a clear signal that companies are accepting their limitations as stand-alone entities.

Taking into account the TBL system, companies need to look beyond their immediate network and start collaborating with competitors if necessary. An outstanding example is "Every Bottle Back", started in 2019 by well-known companies in the soft drink industry which have been committed to reducing their plastic footprint and improving community recycling. Same reasoning for Nike or Adidas which joined the Fair Labor Association (FLA) to promote fair labor standards and many others that have been joining their efforts to pursue sustainability challenges.

This collaborative approach not only stimulates the development of new capabilities but also influences norms and regulations in the business ecosystem together with opportunities to

[5] EY, 2022. *How sustainable supply chains are driving business transformation*. Available at https://www.ey.com/en_gl/supply-chain/supply-chain-sustainability-2022 [Access date: 22/04/2023].

develop new models of collaboration and integration across the various functions within the alliances (Mohrman, Shani, 2011).

Valuing involvement. High participation and high-performance work environments are necessary for sustainable effectiveness (Russo, 2010). Organizations need to actively engage employees in socially responsible jobs and treat them as stakeholders (Googins et al., 2007).
For example, the clothier Marks & Spencer has sustainability champions in each of its stores, who are people in charge of making sure that each store achieves the highest level of performance on all sustainability goals[6], or Old Mutual Group, a financial services company, which developed an executive coaching program with sustainability as one of its key elements (Bhattacharya, Polman, 2016).
Aligning personal and corporate values is fundamental to achieving sustainability objectives. Paul Strebel (2009) defines "personal compacts" as mutual obligations and reciprocal commitments that describe the relationships between a company and its employees. Those agreements are made up of three components: formal (work description, employment contracts), psychological (rewards, recognition), and social (culture and values). Employees notice if sustainability is included in job descriptions or training programs, as well as whether sustainability objectives are connected to variable pay, in the formal dimension. Employees notice if sustainability performance is rewarded and acknowledged in the psychological dimension. Finally, employees also check for consistency between what the firm claims about its principles in its mission statement and what it actually does in the social dimension. Shortening the gap between corporate and personal value in all three dimensions will result in a more effective shift toward a sustainable business model.

Valuing diversity. Just as involvement, diversity is a building block to ensure a path to a truly sustainable future. Bio-diversity is a necessary condition for the well-being and adaptation of natural ecosystems (Stead & Stead, 2009), cultural and social diversity is the foundation of the social system resilience. Positive cycles of renewal can be achieved only by embedding different approaches coming from different organizations, communities, or other systems. In 2015, McKinsey released a report entitled "Why diversity matters" in which diversity metrics (e.g. the board composition) were studied in correlation with performance metrics, examining 366 public companies across different industries. The main results coming from the study were clear: companies in the top quartile for ethnicity and gender diversity are respectively

[6] M&S website. *Life of a Plan A Champion*. Available at https://corporate.marksandspencer.com/life-plan-champion [Access date: 22/04/23].

35% and 15% more likely to outperform their national industry median, while the inconsistent performance of companies in the same sector and nation suggests that diversity is a competitive differentiation that shifts market share in favor of more varied businesses (Hunt et al., 2015).

Our system is extremely interconnected and global. It should not be surprising that companies and institutions with greater diversity are performing better. Sustainability and DEI (Diversity, Equity, Inclusion) principles are strongly correlated: more diverse companies are more innovative in finding solutions to retain top talents, promoting transparency and empathy, fostering employee satisfaction, and decision-making, forming better policies and strategies both for society and the environment, and all that leads to a positive feedback loop of rising performance (Hunt et al., 2015). Diversity can also evoke conflicts: the Center for Creative Leadership (CCL) reported that 85% of leaders go through conflicts on a weekly basis. Anyway, it has to be seen as an opportunity to learn and develop stronger leadership skills.

While preserving the health of the ecosystem, companies must preserve and stimulate diversity to better steward our sustainable transition.

1.4 Sustainability Trends: Opportunities and Challenges for CEOs

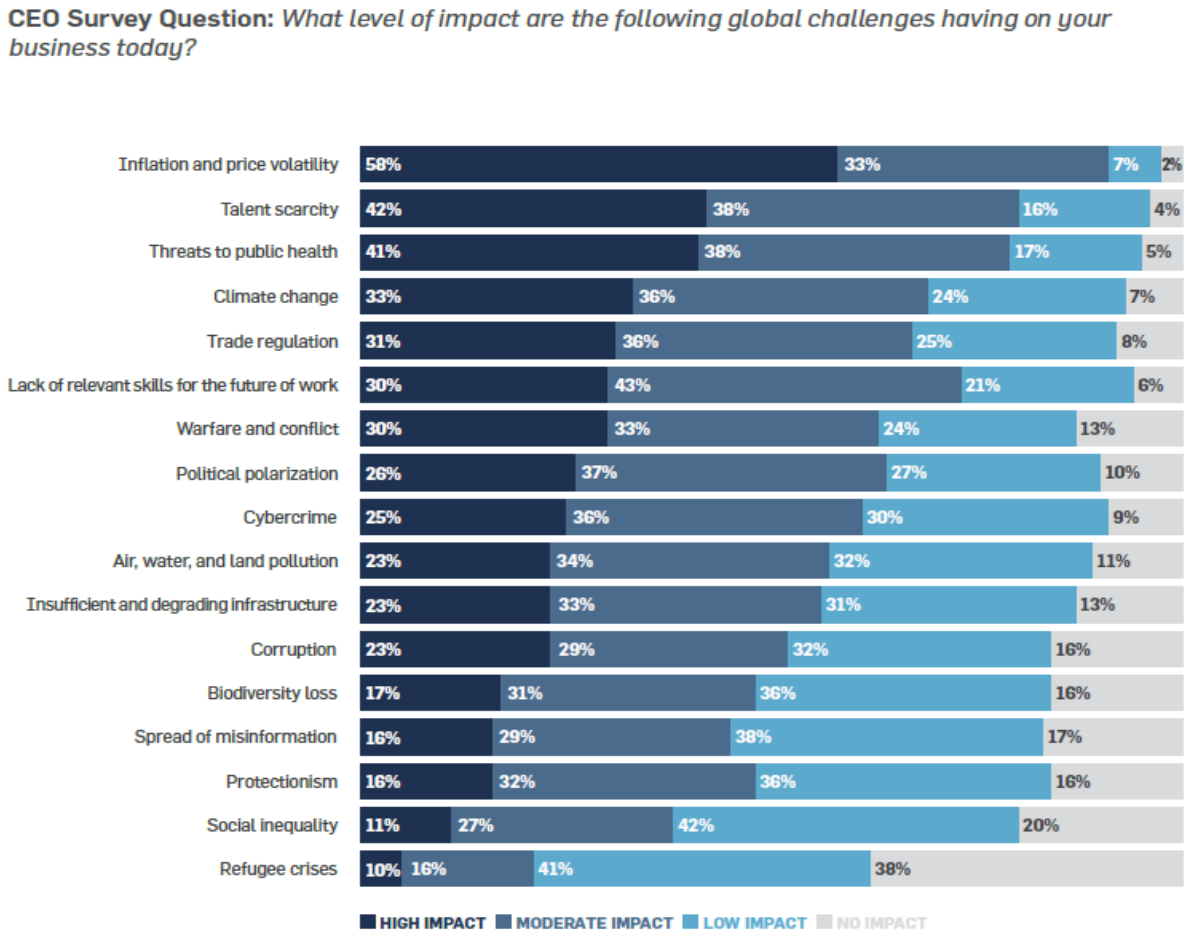
CEOs around the world know that sustainability is no longer just a trend but an imperative. Back in 2013, according to the UN Global Compact-Accenture CEO Study, 83% of the CEOs interviewed saw sustainability as an important driver of their business success. In 2023, this number has drastically increased to 98%[7]. It is clear that sustainability is at the top of boards' agenda and CEOs believe that is their role to make their business more sustainable.

The geopolitical instability of the last three years has erased the progress made toward the 2030 SDGs agenda, and businesses are dealing with the impacts of these events.

As we can see from Figure 5, the main global challenges are affecting the overall business environment and CEOs have to embrace them in order to make their businesses more resilient.

[7] UNGC-Accenture, 2023. *The 12th United Nations Global Compact-Accenture CEO Study*. Available at <https://unglobalcompact.org/library/6103> [Access Date: 02/05/2023].

Figure 5: Global Challenges for CEOs



Source: Global Compact-Accenture CEO Study (2023)

Enterprise-wide sustainability has traditionally been viewed as more of a compliance reporting than as a worthwhile investment in the future. The above-displayed challenges are proof that achieving sustainability involves many of the same stages as developing organizational resilience. To make sure your business is prepared to handle unforeseen situations, sustainability actions and policies must be implemented in order to reduce waste, maximize costs, and enable holistic action. Because they've put in the time and the effort to rethink their business model, practices, and products in order to be able to respond to shifts in consumer expectations, and market fluctuations, and capture future income, sustainable firms will likely prove more resilient when faced with times of instability (Sarma, 2023).

The main trends shaping today's world arena are mostly related to past pandemic events and the recent war outbreak in Ukraine which continues to alter the workplace and its effects above all on supply chains and human rights disruption.

As for the trends, they are described below:

ESG Integration. Environmental, Social, and, Governance principles are getting more prominence in investment strategies: one in every three dollars of the world's Assets Under Management (AUM) are already allocated to funds or strategies that incorporate ESG factors in some form (ERM, 2022). The new EU regulations, such as the Sustainable Financial Disclosure Regulation (SFDR), are further amplifying the need for organizations to embed these principles as a priority in business decisions. Currently, more than 80% of the world's largest companies disclose information about ESG or other sustainability metrics, and along with this, the day-to-day business functions are driven more progressively by these principles, and executive compensation is often tied to exceeding or achieving goals related to it[8].

Despite regulations, applying ESG remains difficult and challenging. Capital Group conducted a survey including more than 1000 institutional and wholesale investors in 2021, highlighting the fact that the main barrier is represented by a lack of consistency in ESG scores mostly due to the existence of several frameworks and approaches[9]. In the near future, a higher degree of integration is required in order to achieve higher consistency regarding ESG data in order to orient more focused sustainability decisions or better, using the words of Rahul Arora: "Rather than having separate sustainability, ESG, and business strategies, it's imperative that businesses develop one strategy which embeds ESG principles and provides a roadmap for the company and its stakeholders"(ERM, 2022, p.8).

Box 1 - Sustainable Financial Disclosure Regulation (SFDR)

The Sustainable Financial Disclosure Regulation (SFDR) is a European policy issued in 2021 that intends to unify ESG disclosure requirements throughout the continent. It offers a thorough sustainability disclosure requirement that includes a wide variety of measurements and standards for the environment, society, and government. The primary objective of SFDR is to include sustainability risks in enterprises' investment processes and to report on such inclusion at both the company and product levels. It was implemented to promote more openness in the markets for sustainable investments and to ward against "greenwashing".

[8] Singh A., 2021. *ESG reporting is becoming increasingly investor-grade — and siloed*. Available at: https://www.greenbiz.com/article/esg-reporting-becoming-increasingly-investor-grade-and-siloed [Access date 03/05/2023].

[9] Roach G., 2021. *Data issues biggest barrier to greater ESG adoption, survey finds*. Available at: https://www.corporatesecretary.com/articles/esg/32759/data-issues-biggest-barrier-greater-esg-adoption-survey-finds [Access date: 03/05/2023].

Banks, insurance companies, investment companies, and other financial organizations such as pension funds, portfolio management institutions, etc. must disclose to investors their sustainable investing practices. Asset managers must illustrate their ESG participation and objectives, as well as how far they go in developing, marketing, and reporting on sustainability measures. They must gather and present ESG data, adopt rules, and make clear how they take sustainability risks into account when making investment choices. The disclosure criteria and implementation timetables vary depending on the type of content information conveyed, such as company websites, periodic reports, and marketing ads.

By complying with the SDFR, investors have an outstanding opportunity to show how committed they are to sustainability and ESG. Moreover, it enhances transparency on the negative externalities related to investment decisions, as well as on the sustainability aspects of financial instruments.

Summing up, SFDR is a step forward to the expansion and advancement of sustainable investing in the EU. By giving businesses a framework to report their ESG practices and policies, it supports investors (both individuals and companies) to better evaluate the many sustainable investment plans that are now offered in the EU as well as increase transparency on the extent to which financial instruments take into account ESG issues.

*Source:*https://finance.ec.europa.eu/sustainable-finance/disclosures/sustainability-related-disclosure-financial-services-sector_en

Valuing Human Capital. The COVID-19 pandemic changed the workplace landscape. A new challenge is emerging for businesses as a result of the large number of individuals working remotely for at least part of the workweek. But it didn't only trigger shifts in ways of working but also in the jobs available. It is estimated that one in sixteen employees will need to change careers by 2030 due to the further push that the pandemic brought to the development of Artificial Intelligence (AI) and automation[10]. These shifts coupled with the growth in scope of regulatory guidelines, such as the Corporate Sustainability Reporting Directive, will require organizations to improve their human capital standards which are most likely to be linked to future business success. On the other hand, improving standards must be coupled with talent retention. Going back to Figure 5, the second most impacting challenge is talent scarcity. CEOs are recognizing the need to attract and retain talents, and creating a culture strongly

[10] Lund S. et al., 2021. *The future of work after COVID-19*. Available at: https://www.mckinsey.com/featured-insights/future-of-work/the-future-of-work-after-covid-19 [Access date: 03/05/2023].

linked to organizational values will be an important distinctive feature. As reported by Gallup (2022), companies with strong organizational cultures showed a 25% rise in the workforce over a three-year span and an 85% increase in net profit[11]. Results were also confirmed by Gartner, which showed a higher employee engagement in organizations implementing initiatives on social issues related to their business[12]. Therefore, providing better alignment to sustainability issues will be a key driver in ensuring business resilience.

Climate Change. The latest IPCC Report and the COP27 Conference call for a compelling reaction by businesses and governments to do more and faster to stop the climate crisis. Climate damages could result in a loss of $23 trillion in economic opportunity without proper intervention[13]. An increasing number of countries are setting zero net goals while almost one-third of the top publicly listed corporations vowed to achieve net emissions by mid-century[14]. This sense of urgency is further amplified by the public awareness revolving around the issue resulting in major attention by consumers in selecting companies that actively take steps to act against climate change (Statista, Consumer Trends, 2023).
All of this, together with new strict regulations issued by central governments, has resulted in a sharp increase in the number of "net zero" citations in corporate reporting from 2019 up to now (ERM, 2022).

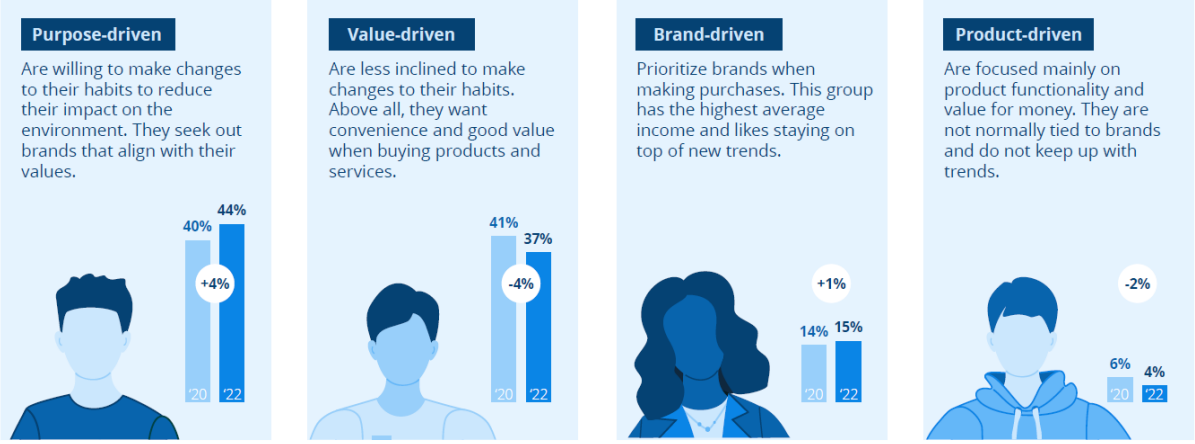
Safeguarding Biodiversity. Despite its importance, biodiversity has been overlooked by CEOs so far: nearly one out of five consider it a priority on their agenda (UNGC-Accenture 2023, p. 24). The New Nature Economy Report issued by the WEF estimates that more than half of the global GDP is either moderately or strongly dependent on biodiversity[15]. Given that all businesses rely on nature to some extent, efforts to improve the environment are likely to pick up speed. For example, one firm seeking nature-positive action is Dow, which has pledged to

[11] Gallup, 2022. *Culture Transformation*. Available at: https://www.gallup.com/workplace/229832/culture.aspx [Access date: 03/05/2023].
[12] Gartner, 2021. *Work Trends That HR Leaders Can't Ignore in 2021*. Available at: https://www.gartner.com/smarterwithgartner/9-work-trends-that-hr-leaders-cant-ignore-in-2021 [Access date: 03/05/2023]
[13] Flavelle C., 2021. *Climate Change Could Cut World Economy by $23 Trillion in 2050, Insurance Giant Warns.* Available at: https://www.nytimes.com/2021/04/22/climate/climate-change-economy.html [Access date: 03/05/2023].
[14] Net Zero Tracker, 2023. Available at: https://zerotracker.net [Access date: 03/05/2023].
[15] WEF, 2020. *Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy*. Available at: https://www.weforum.org/publications/nature-risk-rising-why-the-crisis-engulfing-nature-matters-for-business-and-the-economy [Access date: 03/05/2023].

provide $1 billion in net present value through programs that benefit the environment by 2025[16].

Building Sustainable Supply Chains. Supply chains account for 90% of a company's entire environmental effect in the consumer goods industry, including 80% of the carbon footprint of the majority of these businesses[17]. Stakeholders, investors, and customers, in particular, are the main agents in pressuring companies to respond to supply chain-related issues. According to Statista, a new legacy of consumers is consolidating, and this will lead more companies to make ethical choices concerning their suppliers. Here below (Figure 6), we can see the leading types of consumers worldwide who will guide the transition towards more visible and transparent supply chains.

Figure 6: New Sustainable Legacies of Customers



Source: Statista, Consumer Trends (2023)

For companies, this will be translated into more initiatives to engage their suppliers on ESG issues and help them prioritize supply chain risks by developing new tools and frameworks. For example, the Global Map of Supply Chain Risks in Agro-Commodity (GMAP) Production in the agriculture industry (see Box 2).

[16] Dow. N.D. *Valuing Nature*. Available at: https://corporate.dow.com/en-us/science-and-sustainability/2025-goals/nature.html [Access date: 03/05/2023]
[17] Bove A. & Swartz D.,2016. *Starting at the source: Sustainability in supply chains*. Available at: https://www.mckinsey.com/capabilities/sustainability/our-insights/starting-at-the-source-sustainability-in-supply-chains [Access date: 04/05/2023].

Box 2 - The Global Map of Environmental & Social Risk in Agro-commodity Production (GMAP)

The GMAP is a tool to locate, evaluate, and monitor the main sources of supply chain risk. It has been developed by the International Finance Corporation (IFC) together with the World Wildlife Fund (WWF) in order to identify and manage supply chain risks related to loss of biodiversity, child and forced labor, and disruption of natural critical habitats.

For each country, the GMAP develops a scheme of the specific supply chain network that contains data on all the organizations, suppliers, and people engaged in the supply chain of the particular country or commodity (such as soy). After identifying the major environmental and social risks related to the supply chain, the GMAP also allows companies to perform a leverage assessment helping them to prioritize supply chain partners, governments, and/or industry associations. Overall, it is a useful tool to enhance supply chain transparency and track key sources of supply chain risks. These risks might be related to political or economic instability, interruption of suppliers, climate change, child labor exploitation, and other labor and environmental-related dangers. Each danger may be scored by businesses according to its likelihood and impact, thus giving them a score, and be prioritized based on its rating. Companies can then use scenario planning to anticipate these risks and design proper supply chain plans.

Source: https://gmaptool.org

Going Circular. The linear economic model (make-use-dispose) is no longer suitable for dealing with the aforementioned challenges. Resource scarcity, regulatory developments, and consumer pressure are all factors that call for a circular transition in order to create more value not only for the enterprise per se but also for the planet. Organizations must modify their business models for a low resource-use strategy if they don't want to incur large expenditures or lose their competitive edge. Furthermore, the circular economy for consumer goods is forecasted to sky-rocket generating more than $700B by 2026 through second-hand or rental channels (Statista, Consumer Trends, 2023). This growth is also aided by the increasing attention regulatory institutions pay to circularity: one relevant example is the EU Circular Economy Action Plan[18]. Taking into account these new developments, organizations will gradually implement circularity action plans into their core business, plus rental and

[18] Moore D., 2020. *European Commission adopts new Circular Economy Action Plan*. Available at: https://www.circularonline.co.uk/news/european-commission-adopts-new-circular-economy-action-plan/ [Access date: 04/05/2023].

repair will become key components in business models; in particular consumer electronics, DIY (Do it yourself) and hardware tools, and apparel are the three leading segments that will account for the most sizable revenue pool by 2026 (Statista, Consumer Trends, 2023).

Technology for Sustainability. The digital revolution has undergone a strong speed-up caused by the pandemic. Data has now become crucial to any aspect of business operations. Leveraging digital technologies can help companies to implement more goal-oriented sustainability programs. Difficulties in implementing ESG could be bypassed using AI which can be used to monitor real-time data about CO2 emissions or aggregate unstructured data many times faster than usual techniques[19]. Moreover, since consumers are demanding more sustainable products and services, the use of technology-related solutions is vital to meet customers' needs. For instance, Google Flights now shows the comparison of CO2 emissions of selected flights and allows consumers to choose the "healthiest" route or Visa's Future Card reward program, which stimulates green purchases granting users business-related promotions.

Simple innovations like these will be increasingly used by companies to promote their sustainable brand and to respond to the ever-growing demand for environmentally friendly products and services.

Protecting Human Rights. The letter S in ESG points out a strong expectation that businesses will be promoters of social justice. DEI-focused shareholder proposals have doubled in the last two years, according to Institutional Shareholder Services (ISS)[20].

This rise is coupled with the increasing loss of faith in NGOs and governments, which has seen businesses as the most trusted institutions by people[21]. CEOs are emerging as trusted voices, and their conventional role is expected to include organizational goals as well as broader community roles (see Figure 7). All of this, coupled with regulations such as the "UN Guiding Principles on Business and Human Rights" or the proposed EU directive on human rights due diligence, will require CEOs to elevate to a new standard of "social" leadership.

[19] Meyers K., 2021. *Artificial Intelligence Opens New Frontiers in ESG Data*. Available at: https://www.theimpactivate.com/artificial-intelli-gence-opens-new-frontiers-in-esg-data/ [Access date: 05/05/2023].
[20] Bradford H., 2021. *Investors press companies on DEI*. Available at: https://www.pionline.com/governance/investors-press-companies-dei [Access date: 05/05/2023].
[21] Edelman, 2022. *The Cycle of Distrust*. Available at: https://www.edelman.com/trust/2022-trust-barometer [Access date: 05/05/2023].

Figure 7: Business Expected to Fill Void Left by Government

Source: ERM (2022), What's next for Sustainable Business?

Forging Alliances. Given the increasing number of regulations and norms issued every year, businesses are expected to actively engage with regulators in order to help them drive the change. Tackling global challenges alone will be useless due to the complexity of the latter, that's why businesses will have to leverage their influence by forging collaborations or alliances in order to pursue sustainability objectives. Groups, like the UNDP or Valuable 500, are expected to keep up with the increasing growth trend as companies are expressing more interest in sustainability-related issues. The boom in sustainability regulations of the last few years is rapidly pressuring organizations to actively participate in environmental and social duties, also because these norms will surely impact the way companies are doing their business, and at the same time, it is an opportunity for them to influence the wave of new regulations by joining their efforts in common sustainability goals and values.

Stakeholderism. This statement puts an end to Milton Friedman's vision of companies as their only purpose is to increase profits for their shareholders (Friedman, 1970). The Business Roundtable's 2019 "Statement on the Purpose of a Corporation" redefined a new purpose for businesses, now oriented to stakeholder primacy[22]. Despite some critiques of this new approach, evidence suggests that it really pays off. Blackrock found a positive correlation between companies implementing ESG standards and the rise in the premium price of their shares compared to their peers[23], suggesting that, in the future, purposeful companies are likely to improve the long-term value both of their shareholders and stakeholders. Moving forward, ESG roles are expected to increase, in particular the figure of CSO, as the corporate world will continue to strive to maximize the overall value for business and society. This shift will come together with an increasing tendency to include stakeholder-related corporate

[22] Business Roundtable, 2019. *Business Roundtable Redefines the Purpose of a Corporation to Promote 'An Economy That Serves All Americans'*. Available at https://www.businessroundtable.org/business-roundtable-redefines-the-purpose-of-a-corporation-to-promote-an-economy-that-serves-all-americans [Access date: 06/05/2023].
[23] Lee D., 2021. *Here to stay*. Available at: https://www.blackrock.com/us/financial-professionals/insights/sustainability-letter [Access date: 06/05/2023].

reporting, such as the IBC's Stakeholder Capitalism Metrics or the IR Framework, both launched in 2021.

1.5 Conclusions

From what we have seen, the sustainability debate is converging towards a general acceptance that sustainability is no longer an optional but a must. Consumers are increasingly driving companies' sustainable choices and are considered the most important stakeholders by CEOs who have both an organizational and social guarantor role. COVID-19 has sped up technological innovation, as data now are essential to driving any business decision, particularly in implementing more focused sustainability programs and accelerating the ESG integration problems in the company's core strategies. Challenges related to sustainable development are becoming increasingly tougher and organizations alone are no more effective in providing solutions to better manage these issues, for this reason, sustainability alliances have become a critical element in ensuring the most effective engagement in common sustainability goals and in influencing norms and regulations coming from central governments. Furthermore, the role of organizations as promoters of social justice has been enhanced by the loss of confidence of people in governments and NGOs to properly address social and environmental challenges.

The development of new capabilities to address TBL challenges will therefore be crucial to surviving in a complex system characterized by strong interdependencies among all its actors. As correctly pointed out by S. Mohrman and A.B. Shani (2011), there is a dual challenge:

The organizational design challenge. It involves a reconsideration of the company's inner purpose to develop a set of principles which, in turn, set forth the basis for new standards that will allow new capabilities to be embedded in the firm structures and processes. Processes that need to shift from a linear to a circular perspective in order to best deliver triple-bottom-line challenges. New metrics will then be developed to measure the progress toward social and environmental goals.

The reward system has also been experiencing a new development in order to drive a stronger commitment of employees around sustainability principles, moreover, talent scarcity is a major challenge that businesses must deal with using corporate culture as a means to provide better alignment of employees' interest around sustainability issues. Employees, who represent both the structural and social glue of an organization, will increasingly expect companies to apply internal CSR practices including growth opportunities and, environmental and social justice actions.

Global supply chain systems, which account for the majority of the environmental companies' impact, are being redesigned to provide better visibility and transparency following the rise of a new wave of purpose-driven consumers.
Finally, the shareholder view will gradually disappear to leave space for another broader vision which includes all stakeholders. New purposeful leaders are required to lead this transition and set the ground rules for this to happen.

The learning challenge. Developing new capabilities is crucial to handle challenges coming from sustainability issues. The learning process must be continuous and take place at all system levels: individual, collective, and organizational levels (Pawlowsky, 2001). One of the five macro-challenges (Figure 4) is about enhancing transforming capabilities and continuous improvement of SDGs-related outcomes. This will require the conceptualization not only of new organizational routines but also of new learning mechanisms. Purposefully learning mechanisms then can be set in place to improve the possibility that employees will contribute to the creation of new, more sustainable ways of doing business.

To conclude, instead of seeing sustainability as a challenge only, companies have to see it as a strategic driver that allows them to trigger new competitive dynamics and play a prime role in the competitive environment. Adopting sustainability as a business tenet makes it possible to incorporate environmental and social considerations into strategy, processes, and products, that are capable of generating value in a long-term perspective. Challenges and opportunities are clear, but the ways in which companies should embed sustainability into their vital system, that is still unclear.
The complexity of sustainability challenges requires a collaborative approach among stakeholders: bringing governments, companies, academia, and other groups united around a common purpose, it's key to coming up with fresh answers to issues that appear insurmountable. Each collaborator contributes distinct knowledge, abilities, and resources. Such teamwork has a remarkable ability to address systemic problems when it is well-managed. The COVID-19 pandemic, for instance, has shown how the power of collaboration between governments and the private sector is crucial for our collective health and well-being[24].
Given the paradox that companies are expected to take responsibility for their ESG impacts but, at the same time, yet are not able to fully control many of them, this will result in a

[24] ERM, 2023. *The Imperative of Collaboration*. Available at: https://www.sustainability.com/thinking/the-imperative-of-collaboration/ [Access date: 07/05/2023].

stronger corporate engagement with external stakeholders to address sustainability issues. We will go more deeply into the theoretical facets of encouraging collaboration for sustainability in the following chapter.

2. COOPERATION FOR SUSTAINABILITY: FROM COMPETITIVE ADVANTAGE TO COLLABORATIVE ADVANTAGE

2.1 Introduction

In an era in which the effects of social inequality and environmental degradation are becoming more and more apparent, the idea of sustainability has attracted enormous interest from a wide range of industries (Khan et al., 2017). Firms, governments, and communities are looking for answers that will both address their immediate needs and protect the welfare of future generations (Sharma and Henriques, 2005). This coupled with the demand from customers, NGO pressures, and government regulations has contributed to changes in firms' product portfolios, production processes, and supply chains (Hoejmose et al., 2012).

There is a unanimous call in the literature that recommends firms adopt a holistic approach that goes beyond conventional competitive strategies in response to the complexity represented by sustainability issues (e.g. Nonet et al., 2022; Sharma, 2020; Siemieniako et al., 2022). A key factor for attaining sustainable development and having a beneficial influence on society and the environment is to embrace collaboration. In order to include environmental and social factors in economic choices, businesses must work together to address sustainability challenges (Seuring and Gold, 2013).

This chapter explores the importance of implementing a cooperative strategy to address sustainability-related concerns, using Stakeholder Theory as a guiding paradigm. In particular, embracing the synergies between the Stakeholder Theory, the Resource Based View (RBV), and the Relational View (RV), we will examine the revolutionary potential of collaboration and we will argue that the logic of "collaborative advantage" is best suited in dealing with sustainability.

First, we will introduce the concept of Stakeholder Theory and highlight its relevance in Sustainability Management. By integrating the two theories, organizations may foster a culture of shared value where stakeholders actively collaborate to develop sustainable solutions. A framework to place sustainability as a collective value will also be proposed.

Going on, we will examine the key part that collaboration plays in tying the same to long-term competitive advantage. Furthermore, we will establish that the concepts of collaborative advantage and competitive advantage can work together rather than against one another.

Collaboration and competitive advantage can work in tandem to produce results that are advantageous to both the companies involved and the stakeholder community at large. The Gap Inc. case study is a compelling example that shows how collaboration can be a dynamic capability that propels sustainable development efforts.

Next, we will further emphasize the ties between collaborative and competitive advantage drawing on a framework proposed by De Almeida et al. (2021). This will show how collaborative capabilities represent the bridge between sustainability strategies and the sources of relational rents (Dyer and Singh, 1998).

Section 2.6 will be dedicated to the barriers related to sustainability implementation in SMEs as the latter represents 90% of the global organizational tissue (World Bank, 2023), so without engaging them, efforts towards sustainable development will encounter serious difficulties. Moreover, a paragraph regarded internal collaboration is also added to further stress the importance of nurturing a collaborative environment inside the organization. This further reinforces the need to adopt a collaborative approach and recognize inter-firm collaboration as the most effective way to foster sustainable development.

The chapter wraps out envisioning the future of collaboration as a network for sustainability, answering the recent calls of numerous authors who solicit the urgency of approaching inter-firm collaboration not just from a relational/dyadic focus (RV) but from a network-based focus. Thus highlighting, once again, that the future of sustainability relies and will rely on the capacity of companies to engage in collaborative approaches which will drive us to a more sustainable and prosperous future.

2.2 Instrumental Stakeholder Theory and Sustainability Management

The expression “Stakeholder Theory” refers to a broader spectrum of theories that explain the interactions between businesses and their stakeholders along with some of the performance impacts of these interactions. The theory is frequently described as consisting of three interconnected avenues: instrumental, normative, and descriptive (Donaldson & Preston, 1995).

Some other authors including Freeman (1999); Freeman, Harrison, Wicks, Parmar, and Colle (2010); Jones and Wicks (1999); Schaltegger, Burritt, and Petersen (2003) have considered an additional layer called “Integrative Stakeholder Theory” as the latter considers the first three theory to be inextricably linked and useless if not considered together instead as separate ones.

As for the general overview of all theories and the relevant literature, please have a look at Figure 8.

Figure 8: Different Types of Stakeholder Theory

	Focus	Exemplary literature
Descriptive/empirical stakeholder theory	Description of how companies are managed; identification of relevant stakeholders	Agle, Mitchell, and Sonnenfeld (1999); Jawahar and McLaughlin (2001); Sangle and Ram Babu (2007); Wallis (2006)
Instrumental stakeholder theory	Effects of stakeholder management on the achievement of corporate objectives	Berman, Wicks, Kotha, and Jones (1999); Johnson and Greening (1999); Jones (1995); Mathur, Price, and Austin (2008)
Normative stakeholder theory	Discussion of the purpose of business; moral justifications of stakeholder theory	Argandoña (1998); Freeman and Gilbert (1988); Goodpaster (1991); Reed (1999)
Integrative stakeholder theory	Considers the descriptive, instrumental and normative aspects of stakeholder theory to be inextricably linked	Freeman (1999); Freeman, Harrison, Wicks, Parmar, and Colle (2010); Jones and Wicks (1999); Schaltegger, Burritt, and Petersen (2003)

Source: Hörisch, Freeman, and Schaltegger (2014)

Our focus will be on Instrumental Stakeholder Theory (IST) as we are interested in a more pragmatic approach, in particular the strategic advantages for businesses to develop a close collaboration capability with their stakeholders in order to enhance their long-term success in addressing sustainability issues. Specifically, the core premise of IST is that building stakeholder relationships controlled by conventional ethical principles, including fairness, caring, trustworthiness, and loyalty can increase financial performance (Hendry, 2004). Jones (1995, p. 422) characterized IST as follows: "…firms that contract (through their managers) with their stakeholders on the basis of mutual trust and cooperation will have a competitive advantage over those that do not."

Several authors, in recent decades, have frequently used Instrumental Stakeholder Theory linked to Sustainability Management (Frynas & Yamahaki, 2016; Montiel & Delgado-Ceballos, 2014; Perrault and Clark, 2016). That is because the corporate sustainability debate brought new ecological and social factors into the spotlight, which add a new layer of complexity (Hörisch, Freeman, and Schaltegger, 2014). As a result, firms are challenged by corporate sustainability as a goal and sustainability management as the overall general approach for achieving corporate sustainability to interact with stakeholders on a variety of current social, ecological, and governance issues. The recognition that firms must take environmental, social, and governance (ESG) factors into account to ensure long-term sustainable performance is what connects the Instrumental Stakeholder Theory with Sustainability Management.

Moreover, and maybe most importantly, both notions broaden the discussion around business by posing comparable queries regarding its real purpose (Pedersen et al., 2013), in other

words, both concepts emphasize the strong interdependencies between the company and its environment (both natural and social).

According to Tapaninaho and Kujala (2019), there is a general acceptance that Sustainability Management has become and will continue to be an increasingly important topic to be studied in the field of Stakeholder Theory, nevertheless, these two concepts are in no way comparable theories. The following distinctions between the two approaches may be made in terms of the content-related focus:

- ✓ Emphasis on ESG perspectives: The complex interplay of ESG goals and the function of ecosystems and nature are heavily stressed in sustainability management. Furthermore, the necessity of protecting ecological ecosystems is emphasized in order to ensure long-term sustainability.

- ✓ Role of Nature: Sustainability Management integrates a comprehensive overview that goes beyond stakeholder interests per se by combining ideas like footprint analysis, and life cycle assessment. It takes into account how to manage organizational choices taking into account the dynamism of the environment in terms of biodiversity, climate change, and other environmental factors (Boons, 2013).

- ✓ The pursuit of sustainable development: Although the goal of Stakeholder Theory is to maximize value for all parties involved, sustainable development is not a requirement. It only recognizes the need to preserve good relationships while acknowledging the interdependence between stakeholders and the organizations (Jones, Harrison, and Felps, 2018). However, Sustainability Management takes a step further by outright supporting sustainable development as a logical outcome. Nevertheless, according to Hörisch, Freeman, and Schaltegger (2014, p. 336), "it would be irrational if considering the whole range of societal stakeholders did not lead to striving for sustainable development. Thus, if the range of considered stakeholders is not taken too narrowly, the goal of contributing to sustainable development will be a necessary logical conclusion from applying stakeholder theory."

- ✓ Explicit focus on time and durability: Sustainability Management addresses more specifically the issue of long-term preservation of eco-systems (Starik & Kanashiro 2013). Stakeholder Theory has faced intergenerational issues as well (Anderson,

Teisl, & Noblet, 2012), but it doesn't by default place eco-system preservation as a priority.

2.2.1 Integrating IST with Sustainability Management: Sustainability as a Collective Value

Achieving sustainability at scale is challenging. According to Farri, Cervini, and Rosani (2022), most of the time the real barriers, also referred to as "hidden enemies", are concealed within corporations[25]. One of the enemies is represented by companies' stakeholders, in particular changing stakeholders' minds towards sustainability. As reported by the same authors, an alternative strategy based on trust, empathy, transparency, and cooperation is needed to achieve the aforementioned goal (ibid.).

IST can contribute to solving this issue. As suggested by Freeman et al. (2000), stakeholders don't act in a moral vacuum but rather collaborate around values. Applying IST in the context of Sustainability Management requires stakeholders to cooperate around the most important value (sustainability). This results in three main challenges:

1. Establishing Sustainability as a core value for all stakeholders: This further integrates what has been said in the first chapter in the section "Re-purposing and Setting New Values". Moreover, it requires companies to design a culture for sustainability that articulates abstract values like "collaboration", "trust", and "purpose" into real organizational behaviors (Farri, Cervini, and Rosani, 2022).

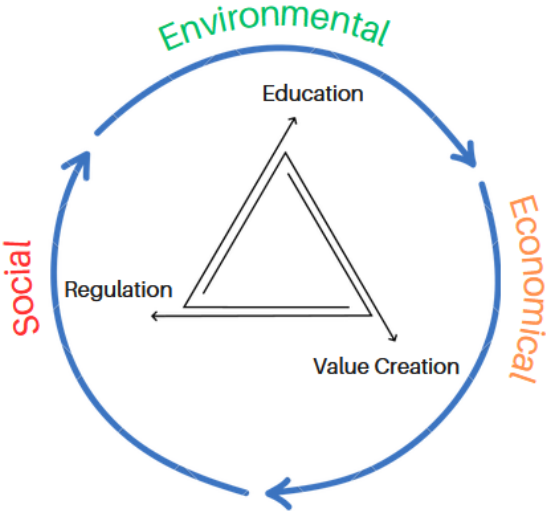
2. Building shared sustainability goals based on the unique sustainability goals of individual stakeholders: After anchoring the pillar of sustainability into stakeholders' mindset, shared interest needs to be created among them. This adds a further layer of complexity as interests often diverge. But, as pointed out by Stead and Stead (1996), jointly addressing sustainability concerns based on shared values will most likely result in success. In other words, the key challenge here is to solve trade-offs and unite all these disparate interests around their core value (sustainability).

[25] Farri, Cervini, Rosani (2022). How Sustainability Efforts Fall Apart. Available at: https://hbr.org/2022/09/how-sustainability-efforts-fall-apart [Access date:10/07/2023]

3. Recognize nature as a stakeholder: Often nature is overlooked by the most immediate stakeholders (e.g. consumers) (Starik, 1995). Civil society has to be recognized as an intermediary between business and nature (Hörisch, Freeman, and Schaltegger, 2014).

In order to deal with the aforementioned challenges, a framework made up of three interconnected mechanisms - education, regulation, and value creation - can be applied (see Figure 9). It highlights the significance of educating stakeholders, putting in place helpful regulatory frameworks, and encouraging sustainability-based value creation.

Figure 9: Framework for Sustainability as Collective Value



Source: Personal re-elaboration derived from Hörisch, Freeman, and Schaltegger (2014)

First of all, by raising awareness and understanding critical sustainability concerns, education plays a crucial role in supporting sustainability (Hörisch, Johnson, and Schaltegger, 2015). Organizations may encourage the adoption of more sustainable practices by their stakeholders through educational efforts. They may also distribute knowledge about sustainable alternatives and encourage behavioral changes that promote sustainability goals by offering training, workshops, and awareness campaigns (Collins & Gannon, 2014). Furthermore, education helps empowerment; in other words, it gives incentives to stakeholders to serve as mediators for the environment (Shriberg, Schwimmer, & MacDonald, 2013).

Second, the capacity of regulatory frameworks to encourage organizations to collaborate on sustainability is key. Regulatory agencies and governments can set rules and standards that promote sustainable practices and hold businesses responsible for their effects on the environment and society. In this regard, ISO certifications offer globally recognized standards for environmental management systems; or programs like the Global Reporting Initiative

(GRI), which establishes standards for reporting on sustainability, and allows firms to assess and share their sustainability performance. It promotes stakeholder confidence and makes it easier to compare performance and share best practices (Global Reporting Initiative, 2013).

Third, corporations must show the (economic) benefits of sustainable practices in order to foster collaboration based on sustainability. Sustainability-based value creation is implied both in IST and Sustainability Management (Hörisch, Freeman, and Schaltegger, 2014). Creating mutual value for stakeholders and linking the former to the individual benefits of different stakeholders is crucial according to IST (Freeman et al., 2010); and this scheme is also valid in the context of Sustainability Management where value is created ensuring collaboration around sustainability. Placing sustainability as a collective value will require companies to recognize the strong interdependencies between the three above-described dimensions: education is critical to drive sustainable behaviors and raise knowledge of urgent sustainability challenges, regulation encourages organizations to work together on sustainability by setting standards and fostering openness, and last but not least, creating value for stakeholders while tackling environmental and social concerns promotes collaboration around important values (Freeman et al., 2000) placing sustainability as the utmost important principle around which to build core business strategies.

2.3 Bridging the Gap: Linking Sustainable Competitive Advantage to Collaboration

Both the Stakeholder Theory and Resource-Based View (RBV) have made enormous contributions to the field of strategic management. The latter, in particular, is continuously undergoing additional refinements. Important recent refinements deal with the role of stakeholders in RBV, especially considering the influence of the Business Roundtable (2019) and the subsequent issuance of the "Statement of Corporate Purpose" according to which more than 180 CEOs of large organizations pledged to "lead their companies for the benefit of all stakeholders - customers, employees, suppliers, communities, and shareholders" (Harrison, Phillips, & Freeman, 2020).

Even if the attempt to incorporate a stakeholder perspective into RBV is not something new (e.g. Harrison, Bosse, & Phillips, 2010; Litz, 1996), the role of stakeholders is still quite opaque (Freeman, Dmytriyev, and Phillips, 2021). Similarities aside, the complex challenge to integrate a stakeholder view into the RBV is mostly based on the construct on which the two theories were formulated. The RBV can be read using two lenses, one on the idea that to achieve a sustainable competitive advantage firms must possess or acquire resources that share the characteristics of being valuable, rare, inimitable, and non-substitutable - this is

known as the VRIO framework (Barney, 1991); and, on the other hand, on the concept of dynamic capabilities defined by Teece et al. (1997, p. 516) as "the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments''. Here, the environment is referred to as the competitive market conditions (Barreto, 2010) leaving out the broader social and ecological environment (Hart, 1995).
In contrast, Stakeholder Theory takes into account the contributions and interests of several stakeholders and de-emphasizes the concept of competitive advantage switching its focus rather on the role of cooperation and shared values among stakeholders (Phillips, 2003). This last point is one of the main critiques moved against RBV, which has been claimed to completely ignore the institutional context in which the firm operates (Maurer, Bansal, and Crossan, 2011) and confine the role of resources and capabilities as just reactive (Teece et al., 1997). Barney (2018) also recognized the incompleteness of the RBV and the necessity to integrate it with a stakeholder perspective. The key question here is: "How can Stakeholder Theory complement RBV from a sustainability perspective?"

First of all, starting from the term "sustainable". RBV links it to the concept of competitive advantage specifying that a resource that is easily substitutable and subject to imitation cannot be considered sustainable (Barney, 1991). While using a stakeholder perspective, is the result of creating and preserving strong stakeholder relationships (Freeman, Dmytriyev, & Strand, 2017). This is not confined only inside some organizations, but it extends to the broader business environment (social and environmental) and seen as a resource can be itself a source of sustained competitive advantage if carefully nurtured and organically homegrown (Freeman, Dmytriyev, and Phillips, 2021). Whole Foods is living proof that building an effective stakeholder community is something difficult to imitate[26]. In 1981, a bad flood hit the first Whole Foods shop in Austin (Texas) jeopardizing the survival of its first year of business.
Numerous customers and nearby residents dropped by the store the day after to assist the shop without being asked, employees gave up their salaries until the store could afford to pay them back, and additional funds were provided by investors and the bank (Mackey & Sisodia, 2014).

Second, the role of people as pure economic resources conceptualized by RBV is reductive. Instead, seeing people as actors who bring resources to the firm is what creates value. Using

[26] Gallo, 2023. *This Forgotten Whole Foods Story Offers 1 Valuable Lesson For All Entrepreneurs*. Available at https://www.inc.com/carmine-gallo/this-forgotten-whole-foods-story-offers-1-valuable-lesson-for-all-entrepreneurs.html [Access Date: 12/07/2023]

Freeman's words: "The only contradiction arises if one believes that there are disembodied resources floating around that do not involve stakeholders in their acquisition, processing, and transfer—that is, value creation and trade. All resources come unavoidably with people attached. Another implication of pragmatism is that there is no value without valuers. Stakeholder theory puts these people at the center of the story" (Freeman et al., 2018, p. 12).
Effective stakeholder management doesn't mean that a firm has not to be concerned about its bottom line. On the contrary, attending to the needs of stakeholders has been shown to be profitable for firms in the long term (see for example Choi & Wang, 2009; Ruf et al., 2001).

Last, and perhaps the most important, is the concept of competitive advantage. As argued by Makadok (2011), the greatest limitation of RBV is its (narrow) focus on competitive advantage considered the only causal mechanism. Instead, Stakeholder Theory also recognizes cooperative elements in economic relationships (Freeman et al., 2018). Organizations may work toward new prospects for sustainable cooperative advantage by integrating RBV into Stakeholder Theory. In order to create value for multiple stakeholders while tackling sustainability concerns, this approach entails utilizing stakeholder connections, unique firm resources, and cooperative efforts.
Research showed the benefits of building stakeholder relationships in the institutional context in which the organization operate (Choi & Wang, 2009; Wang & Choi, 2013). Rethinking the role of institutional context or, using a better word, the stakeholder community as itself a source of competitive advantage can create new profitable prospects (Gibson & Gibson, Webster, 2021). Just to give an example, Woodside Energy, a leader in the gas supply industry, considers its communities as valuable resources. The firm has placed a special emphasis on forging relationships with indigenous tribes and learning about the importance of their cultural history and enduring ties to the land. The company operates extensively in Australia where it has established long-term agreements with two of the biggest Aboriginal groups. Additionally, Woodside partners with an Australian non-profit organization to connect qualified workers with communities and companies run by indigenous people. Through this collaboration, Woodside actively contributes to the regeneration and development initiatives that the indigenous people have prioritized by exchanging information, abilities, and experiences. Moreover, the company's community grievance framework allows community members who feel hugely impacted by the company's activities to issue a complaint and receive a solution within five to ten days[27].

[27] Information retreived from the company's website: https://www.woodside.com/part-of-the-community/community-concerns

Woodside Energy goes above and beyond the concept of competitive advantage as theorized by the RBV theory. On the contrary, through the lenses of the same theory, it embraces the community as a valuable resource being itself the source of competitive advantage (Gibson & Gibson, Webster, 2021).

The business actively works to comprehend and address the needs of the communities it serves, building a foundation of cooperation and trust. In the end, Woodside's appreciation of the community as a valuable resource highlights its dedication to ethical and inclusive business methods, assuring a shared and bright future for all parties involved.

Embracing the synergies between RBV and Stakeholder Theory thus provides the basis for the formation of a "sustainable cooperative advantage" where stakeholder relationships are vital for the firm's growth and survival (Freeman, 1984), and RBV perspective is used as a compass to build and reinforce those relationships (Harrison, Bosse, and Phillips, 2010).

2.4 Collaborative Advantage VS Competitive Advantage: does one exclude the other?

Using the RBV perspective to explain the importance of interfacing with the stakeholder community is not new. Several authors, also outside the strategy discipline, have considered stakeholder relationships as valuable resources that can provide sustainable competitive advantage (e.g. Branco & Rodrigues, 2006; Russo and Fouts, 1997; Wright et al., 2001). Some other researchers, instead, argued that achieving competitive advantage through an RBV logic is hardly sustainable in today's business environment (e.g. Kumar, Meena, and Difrancesco, 2021; Chen et al., 2017). In particular, referring to TBL firms (firms committed to measuring their social and environmental impact in addition to their financial performance), their approach contrasted with that theorized by RBV. Glavas & Mish (2015) have explored the dynamics through which TBL firms operate, in particular how firms relate with the institutional context; how they acquire and control resources; and how they reconfigure themselves to handle dynamically changing situations. The following key results emerged:

- ✓ First, as already said earlier, TBL firms integrate with the institutional context and this is central to their mission. Rather than just seeing the environment as reactive (i.e. looking only at what it can do for the firms), TBL firms adopt a more holistic approach actively shaping the context in which they do business. Moreover, their approach towards competition is totally different as they see competitors as important resources to fulfill their environmental and social mission.

- ✓ Second, their approach to resources, building on the VRIO framework, is departed from how they view and define a resource. The concept of "valuable" extends beyond the internal boundaries of the firm, as a resource needs to be valuable both for society and the environment. The concepts of non-substitutability and inimitability are also challenged, as TBL firms consider collaboration as the only way to achieve sustainability issues, thus requiring resources to be shared instead of being kept inside the firm to realize a competitive advantage.

- ✓ Third, TBL firms adopt a powerful market intelligence to scan the economic as well as the environmental and social costs connected to their activities and to understand how these costs can be reduced consequently delivering more value to stakeholders. Once understand what creates/destroys value, it's their concern to share, even with the competition, the information available to educate and create transparency. This, in turn, fuels trust and allows firms to cultivate a breeding ground for collaboration reaching also stakeholders who don't directly relate to the business. Moreover, TBL firms participate in industry standards (e.g. GRI Initiative) that are considered as an opportunity to learn and align with multiple partners, provide accountability tools to monitor and improve social and environmental performance, and help inform stakeholders regarding sustainability practices and greenwashing.

Even though RBV practitioners sustain that to achieve competitive advantage a firm must concentrate on its own resources and capabilities when dealing with sustainability issues it becomes clear that a company cannot achieve sustainability on its own; the partners it works with must also be conforming to ESG challenges (Srivastava et al., 2017). Therefore, collaboration is crucial to overcome internal capability constraints and meet the many-faceted sustainability concerns. When examined through the RBV theory's lenses, the idea of collaborative advantage emphasizes the strategic importance of extending a firm's critical resources beyond a single firm boundaries (Dyer and Singh, 1998). The TBL framework, which combines economic, environmental, and societal priorities, inevitably transcends the confines of a single company and takes into account the interdependence of the entire value network (Vachon and Klassen, 2008). In light of this interconnectivity, regardless of its bargaining power, a firm cannot achieve sustainable performance alone, so effectively addressing sustainability concerns involves collaboration and coordination with partners throughout the whole supply chain (Albino et al., 2012; Dao et al., 2011).

The above-stated considerations made by Glavas & Mish (2015), provide a useful starting point for supporting the idea of using the RBV as a framework to understand the logic of collaborative advantage. The latter, in fact, acknowledges that outside partners can possess unique resources and capabilities that a firm can profitably use in order to achieve sustainable performance (Madhani, 2010; Barney, 2018). Collaboration facilitates the sharing of expertise, new ideas, and best practices which produces creative responses to complex sustainability problems. Furthermore, dynamic capabilities, in the context of sustainability, include the capacity to adapt, learn, and collaborate with stakeholders which, in turn, give firms the ability to develop and nurture a sustained competitive advantage (Vanpoucke et al., 2014). For example, Apple is a well-known company due to its capability of offering a wide range of differentiated products (D'Aveni, Dagnino & Smith, 2010), moreover, it's a very strong company financially. This allows the firm to invest in highly qualified R&D personnel thus creating highly innovative and sustainable products. In addition to this, Apple has shown to be an expert in marketing technology-based merchandise and creating features that people appreciate (Helfat, 2013). On top of that, Apple is always coming up with fresh ideas on how to support collaboration and creativity across the organization. According to the latest Apple ESG Report (2022), since 2018 Apple has invested more than $3B in stakeholders' community initiatives which include learning programs (e.g. Apple Developer Academy), racial equity and justice initiatives in collaboration with several NGOs, responsible labor recruitment practices, and health support programs such as the Apple Heart and Movement Study in partnership with the American Heart Association and Brigham and Women's Hospital. Such capabilities allowed Apple to become one of the top technology companies in the world.

Collaboration is widely acknowledged as being crucial in dealing with sustainability challenges (Kumar, Meena, and Difrancesco, 2021; Seuring and Gold, 2013). Anyway, it's crucial to remember that the logic of competitive advantage is not disregarded by the logic of collaborative advantage. In fact, when examined through the lens of RBV, the synergies between the Stakeholder Theory and the Resource-Based View (RBV) can provide the groundwork for a sustainable cooperative advantage that simultaneously functions as a competitive advantage (Chen et al., 2017). Due to the growing significance of environmental and social concerns, corporations now need to take a more comprehensive and integrated strategy. Firms must work together and make collaborative efforts to address these challenges (Seuring and Gold, 2013). Numerous studies (e.g. Lozano, 2007, 2008; Govindan et al., 2016) have shown the essential role of collaborative approaches in accomplishing sustainability

goals and developing stronger, more-sustainability-oriented businesses. Suppliers, governments, consumers, NGOs, etc. are just a few examples of the stakeholders that firms may work with to achieve sustainable results by combining their resources, knowledge, and skills. Furthermore, collaboration fuels the development of collaboration (dynamic) capabilities (Vanpoucke et al., 2014; Meinlschmidt et al., 2016) which allow a firm to effectively respond to rapid changes in the institutional environment while gaining a competitive edge.

2.4.1 Collaboration Capabilities as Dynamic Capabilities: The Gap Inc. Case

Differently from RBV practitioners, researchers that subscribe to the dynamic capability view have always asserted that firms must constantly improve their internal competencies and tap additional external resources in order to deal with a rapidly changing environment and preserve a competitive edge (Eisenhardt and Martin, 2000; Teece, 2007). The definition of dynamic capabilities, as conceptualized by Teece (2007), implies both an absorptive (internal) capacity perspective defined by Lewin et al. (2011, p. 94) as "the ability of a firm to detect, acquire, assimilate, and transform external knowledge to reorganize internal resources to generate competitive outputs", and an explorative (external) learning perspective which fosters innovation and builds cognitive systems that allow a firm to adapt to market adjustments (Kumar, Meena, and Difrancesco, 2021). Therefore, studies on dynamic capabilities shed light on the importance of firms to focus also on their external thrust which, as noted by Chen & Yu (2022), frequently results from the firm's external connections and stakeholders.

Collaboration requires a common goal (which goes beyond the need for coordination) and implies working together, using shared knowledge, and sharing risk among partners (Beske and Seuring, 2014; MacCormack et al., 2007; Kumar, Meena, and Difrancesco, 2021; Zhu et al., 2019). It implies the development of an organizational culture that may stimulate trust, mutual learning, communication, and openness (Galpin et al., 2015). Plus, it requires a strong commitment both toward the relationship per se (Krause et al., 2007) and the common goal (sustainability) (Pagel and Wu, 2009). Framing in a different (simpler) way, collaboration is a skill that must be learned, and developed and on which it needs to be made investments to improve it over time (MacCormack et al., 2007). When it comes to sustainability, the 2030 Agenda for Sustainable Development (United Nations, 2015) explicitly calls for a collaborative approach. SDG 17 which reads "Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development", acknowledges multi-

stakeholder partnerships as crucial channels for promoting and exchanging information, skills, and financial resources to help all nations achieve the SDGs. Thus, this reinforces once again how a company's capacity to address sustainability challenges depends on the cooperation of stakeholders (Ryan et al., 2012) both inside and outside of its supply chain (Annunziata et al., 2018).

To collaborate with stakeholders to address sustainability issues, companies need to develop collaborative capability for sustainability (CCS) (Van Hoof and Thiell, 2014), which is "the ability to cooperate with other companies and other stakeholders to jointly address sustainability challenges" (Bezerra et al., 2020, p. 9).

Different theoretical perspectives, such as dynamic capabilities (e.g. Jiang et al., 2015; Schilke and Goerzen, 2010; Vanpoucke et al., 2014), have been used in the literature to approach a firm's collaborative capability (CC). Since to collaborate and strategically manage their networks firms need to develop dynamic capabilities (De Clercq et al., 2018; Wu et al., 2015), CC can be deemed dynamic as it can be considered a potential substitute for identifying, integrating, and reconfiguring resources that are needed but beyond the firm's boundaries (Das and Teng, 2000).

Collaborative capability, in the context of TBL, has been studied by the literature using different case studies. For example, Neutzling et al. (2018) pointed out a case of two Brazilian businesses, Braskem and Mercur, operating together in order to simultaneously make improvements in the areas of the environment and society. Both companies used their CC to improve their sustainability initiatives: the second firm was centered on social aims by establishing connections with external partners (such as NGOs) and local communities, whereas the first one responded to local communities' needs by creating new green products. Or, Albino et al. (2012) also spotlight a number of measures taken by well-known businesses such as McDonald's which collaborates with its partners in order to reduce the environmental impact of consumer packaging; or General Electric which closely collaborated with Google to advance the adoption of clean energy in the U.S.

By the way, one of the most compelling case studies regarding CCS is the case illustrated by Worley et al. (2010) centered around Gap's response to sustainability challenges which was sparked by worries about the working conditions in the apparel industry and the growing sway of NGOs promoting a larger role for civil society in 1990s. Worley et al. (2010) described Gap's journey as having three dimensions: compliance and monitoring, stakeholder engagement, and collaborative capability stage.

As a first response to these social concerns, Gap created a specific social responsibility function inside its organizational structure. They hired a Vice President (VP) for worldwide

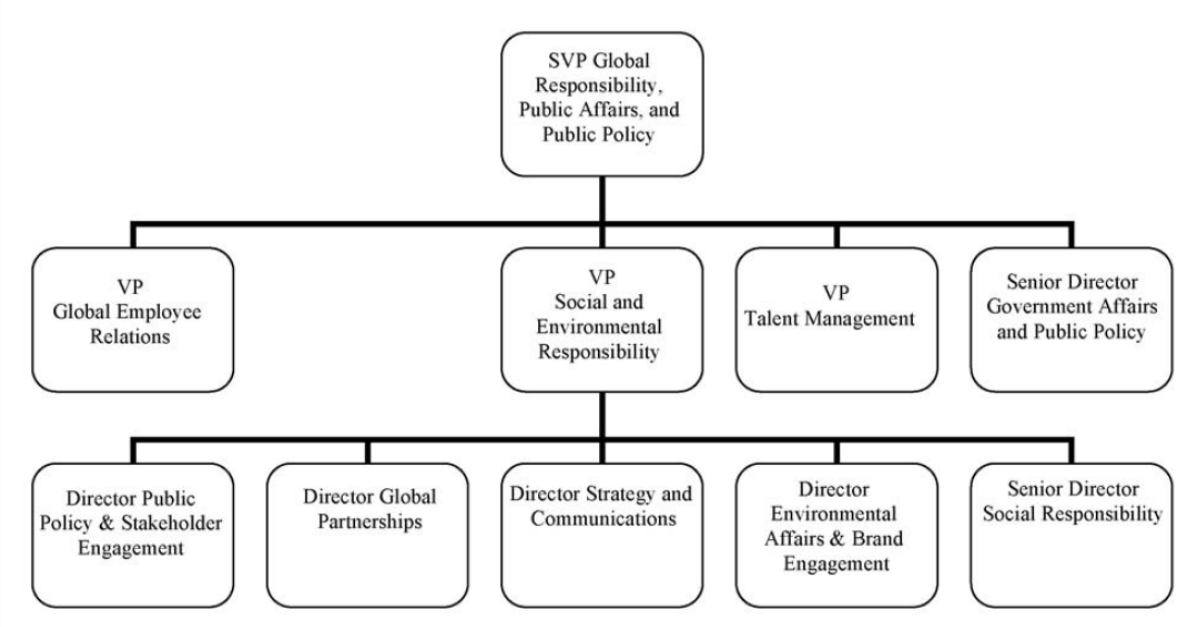
compliance in 1996 to ensure responsibility and advancement, displaying the highest level of dedication to the cause. Additionally, Gap devised and put into effect a vendor "code of conduct" for their vendors to follow. Despite these initial positive efforts, Gap understood that cooperation would be essential to making more significant and long-lasting changes in the sector, ergo they moved to phase two.

Gap Inc. showed a growing dedication to collaborative capability by improving its internal governance and stakeholder engagement procedures. Gap hired a new VP for Corporate Responsibility with the main task of coordinating efforts with internal and external stakeholders. Under the direction of the VP, the company started holding regular monthly meetings with the general managers of its suppliers. These sessions provided a forum for discussing and resolving problems with vendor compliance and sourcing, ensuring that the factories functioned lawfully and morally. Additionally, these contacts attempted to foster sincere connections with suppliers and keep lines of communication open. Moreover, to strengthen its dedication to corporate responsibility, Gap actively sought out alliances and participated in industry-wide initiatives to raise labor and environmental standards with groups including the Ethical Trade Initiative (ETI), the Interfaith Center for Corporate Responsibility (ICCR), and Social Accountability International (SAI). A further move was made in 2002 by creating a new distinct stakeholder engagement division showing the increasing Gap's commitment towards collaboration with external stakeholders such as NGOs, civil society groups, and industry experts. Gap's organizational capability to successfully connect with diverse stakeholders significantly improved as a result of these strategic reorganizations and cooperative initiatives. Gap's social image changed as well, portraying the business as a social pioneer, and it was also helpful for Gap's partner factories.

Finally, Gap decided to expand this collaboration capability further. It experienced another change in its organizational structure: in 2005, the VP for Corporate Responsibility was promoted to Senior Vice President (SVP) of Global Responsibility which came with expanded duties and a direct reporting line to the board (see Figure 10).

The SER (Social and Environmental Responsibility) leadership team and the SVP of Global Responsibility started a strategic planning process with a unique focus concurrently with the restructuring. Their strategy was designed to take advantage of the credibility and confidence that Gap enjoys across the ecosystem of external stakeholders by using the huge experiences and knowledge they have amassed over 15 years of fieldwork.

Figure 10: Gap's Global Responsibility Function



Source: Worley et al. 2010

They started forging partnerships with governments, with the U.S. and European ones in particular, to solve the issue of sourcing raw materials focusing on the usage of child labor on farms. This showed Gap's dedication to bringing about change even outside the scope of its direct control and revealed a strong sense of accountability for the whole supply chain. This increase in their capability for collaboration highlighted Gap's capacity to adopt a more comprehensive approach to corporate responsibility, showing that their efforts went beyond simple compliance and were motivated by a sincere desire to bring about significant change.

This case study exemplifies the importance and the advantages of building a collaboration capability in the pursuit of sustainability issues. Coherent with what was stated by Annunziata et al. (2018), MacCormack et al. (2007), and Galpin et al. (2015) respectively, cooperating with stakeholders both outside and inside the supply chain, investing time and money in collaboration, and developing a culture based on mutual learning, communication, and openness were the Gap's drivers for building an effective collaboration capability. Collaboration capability which is also dynamic (Teece et al., 1997) as, through it, Gap was able to create, integrate, and design strategic resources to successfully react to market changes (Hofmann et al., 2012; Kumar et al., 2018). What started as a mere compliance problem triggered by media exposure evolved into a learning journey toward sustainability. Gap, which started by developing a collaboration capability, didn't initially view the entire system; rather, it just saw the problematic components. Sustainability becomes more solid and genuine when stakeholders are involved in decision-making processes, and assumptions are regularly challenged (Worley et al., 2010).

2.5 Collaborative Capabilities for Sustainability: achieving Collaborative Advantage through Relational Rents.

Building on Gap's case study, as well as on the cases pointed out by Albino et al. (2012) and Neutzling et al. (2018), collaboration has emerged as a vital strategy for businesses looking to effectively address sustainability concerns while reaching TBL goals. Nevertheless, developing collaborative capabilities and strong governance structures are also necessary for effective cooperation. These collaborative capabilities, as mentioned in the previous paragraph, relate to a company's "readiness" and capacity to participate in successful collaborations with a variety of stakeholders (De Almeida et al., 2021, p. 2). Furthermore, companies must set up governance structures that support the accomplishment of TBL goals and the growth of these capabilities (Albino et al., 2012; Czakon, 2009).

Niesten et al. (2017) claim that in order to attain and enhance social, environmental, and governance performance, collaborative governance arrangements are frequently required. Inter-firm collaboration, also known as inter-organizational cooperation, has been recognized by the literature as an essential mechanism for promoting sustainable business practices (Adams et al., 2016; Sharma and Kearins, 2011). In addition to markets and hierarchies (Coase, 1937; Williamson, 1998), inter-firm collaboration is seen as one of the three primary governance structures that coordinate ties between businesses (Williamson, 1996). In this form of collaboration, enterprises collaborate with external stakeholder groups such as other firms, NGOs, governmental organizations, etc. to address TBL issues.

Because effective governance has a favorable impact on the overall performance of businesses and alliances, examining inter-firm interactions governance is crucial (Sampson, 2004). Moreover, while some studies (e.g. Hoejmose et al., 2012) have started to examine inter-firm collaboration within a sustainability context, they have also drawn attention to how the complexity of the latter will shape the research agenda for the next years (Govindan et al., 2016).

The research on the advantages of inter-firm collaboration is extensive when taking the network setting into account (Dyer and Singh, 1998; Gulati et al., 2009; Lavie, 2006). According to the Relational View (RV) theory, one benefit of cooperation for businesses is that firms can obtain relational rents by exchanging knowledge and information (Dyer and Singh, 1998). According to Dyer and Singh (1998), relational rents are shared advantages for partners resulting from the combining, exchange, and co-development of specialized (idiosyncratic) resources. These rents are acquired by making investments in relation-specific assets, which entail significant knowledge exchanges that, in turn, result in joint learning, the combining of complementary (rare) resources or capabilities to jointly develop new unique

products, services, or technologies, and the development of more effective governance mechanisms in order to lower transaction costs (Dyer and Singh, 1998). Hence, once again, collaborative capabilities must be developed to include and access the partner's resource base (Helfat et al., 2007).

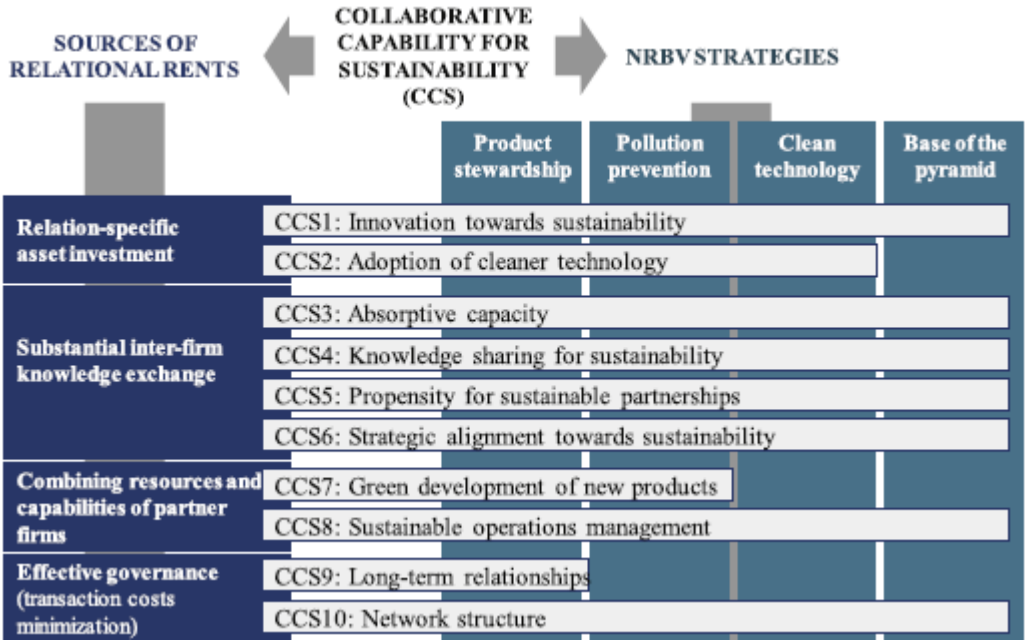
On top of that, firms have to implement sustainability strategies (Van Hoof and Thiell, 2014). For example, as an extension of the RBV, Hart (1995) created the Natural Resource-Based View (NRBV). This framework proposes three strategies in response to the problems that the natural and social surroundings present: product stewardship, pollution prevention, and sustainable development. After a subsequent re-examination of the original framework performed by Hart and Dowell (2011), sustainable development has been divided into two strategies: clean technology and the base of the pyramid (Bop). In order to achieve sustainability, clean technology focuses on how businesses build new competencies while taking innovation and disruptive technologies into account. Conversely, BoP highlights a company's focus on communities that are living in severe poverty and its efforts to engage them in the value chain and support their socio-economic development (Hart and Dowell, 2011).

Drawing on both theories and after conducting a systematic literature review on collaborative capabilities identifying ten specific attributes of such capabilities, De Almeida et al. (2021) build on a framework that demonstrates how businesses might obtain a collaborative advantage through relational rents (Figure 11). Each attribute is linked at least to one source of relational rents. The aforementioned model emphasizes the value of establishing strategic collaborations whose assets and capabilities line up with sustainability goals. The RV considers how collaborative capabilities can generate and sustain a competitive advantage, that is by investing in relation-specific assets (Dyer and Singh, 1998). Plus, collaboration has a greater impact on reaching sustainability goals when sustainability strategies are included, such as the one proposed by the NRBV.

This framework seeks to demonstrate the importance of inter-firm collaboration in developing collaborative capabilities which, in turn, can provide a collaborative advantage and help to overcome the emerging concerns for sustainability (Amui et al., 2017) while, at the same time, realizing relational rents.

Companies may acquire a competitive edge and promote change toward a more sustainable future by harnessing relational rents via cooperation (De Almeida et al., 2021). In addition to that, focusing on individual capabilities (e.g. Galdeano-Gómez et al., 2008) occurs from a weak sustainability point of view as the complexity (trade-offs) of TBL challenges doesn't have a common level of strategic relevance (Albino et al., 2012; Bezerra et al., 2020).

Figure 11: Integrative Framework for Collaborative Capabilities



Source: De Almeida et al. (2021)

Innovation is necessary for the shift to a more sustainable world, along with legitimacy and active engagement from all stakeholders (Niesten et al., 2017). Innovation has to be translated into new forms of inter-firm collaborations (e.g. Fisher and Pascucci, 2017), and stakeholders, whose influence is crucial, especially when dealing with the implementation of sustainability practices in SMEs (Ayuso et al., 2011; Collins et al., 2007).

2.6 Overcoming Barriers to Sustainability Implementation: The Collaborative Roles of Stakeholders

Small and medium-sized enterprises (SMEs) account for 90% of global businesses and are responsible for more than 60% of all employment globally[28]. SMEs together have a considerable environmental impact as well as a significant contribution to economic impact and value creation, 50-60% of value added in OECD Nations according to OECD (2017). Moreover, studies suggest that SMEs are thought to be responsible for 60-70% of industrial pollution (Koirala, 2019). Based on these insights, it is essential to actively include SMEs in order to achieve sustainable development. Without the dedicated participation of SMEs in sustainable practices, efforts to solve social and environmental issues would encounter considerable barriers. To balance economic growth and environmental preservation, SMEs must be encouraged to adopt ecologically & socially sound practices.

[28] World Bank, 2023. *Small and Medium Enterprises (SMEs) Finance*. Available at: https://www.worldbank.org/en/topic/smefinance [Access date: 21/07/2023]

Cognizant of the role of SMEs in pursuing sustainable development, over the past decades, governments and other institutions have increased their efforts in enhancing the social and environmental impact of these companies through focused policies and regulations (e.g. OECD, 2015; ECCC, 2019; European Commission, 2020). Although these policies have been put in place, SMEs still find it difficult to incorporate social and environmental concerns into their operational procedures. According to Calogirou et al. (2010), only 7% of EU companies adopted sustainable business practices. Nowadays, more than two-thirds of SMEs have started adopting such practices but are still restricted to very few activities and, for the majority, investing barely 1% percent of their turnover (European Commission, 2022). Furthermore, according to a survey carried out by Generali in collaboration with SDA Bocconi, still, 37% of European SMEs have not developed a sustainability plan yet[29].

Barriers to sustainability implementation have been examined and highlighted by several authors (e.g. Brammer et al., 2012; Del Brío and Junquera, 2003; Jaramillo, Sossa, and Mendoza, 2019; Johnson and Schaltegger, 2016). Multinationals frequently face pressures from their stakeholders to include sustainability in their operations, but in practice, this does not occur at a scale sufficient to handle present challenges (He et al., 2014). Due to the existence of issues that impact the sustainability of SMEs, the implementation speed is usually very slow (Jaramillo, Sossa, and Mendoza, 2019). Hence, dealing with the barriers affecting SMEs' sustainability implementation pace, it's critical to promoting sustainable development.

Although the literature has identified many barriers related to the adoption of sustainability practices in SMEs, the three main barriers that appeared most frequently are lack of time and resources, lack of skills and expertise, lack of knowledge about the implications and advantages of implementing sustainability programs (Jaramillo, Sossa, and Mendoza, 2019; Journeault, Perron, and Vallières, 2021).

The first barrier is the most straightforward. SMEs have a few employees[30] of whom are usually involved in more than one business function (Johnson and Schaltegger, 2016). This requires them to focus on multiple aspects simultaneously, thus making the inclusion of any additional responsibilities more challenging. Furthermore, as stated by Temtime (2002), the lack of time forces them to focus on core operations leaving strategic planning aside. Plus, the lack of resources or high initial capital cost (e.g. Kurczewski, 2014; Conway, 2015; Hjorth

[29] Generali, 2023. SME EnterPRIZE, Generali & SDA Bocconi Research: *SMEs seek more public support to improve sustainability.* Available at: https://www.generali.com/media/press-releases/all/2023/SME-EnterPRIZE-Generali-and-SDA-Bocconi-Research-SMEs-seek-more-public-support-to-improve-sustainability [Access date: 21/07/2023]

[30] According to OECD (2023), SMEs have fewer than 250 employees. https://data.oecd.org/entrepreneur/enterprises-by-business-size.htm

and Brem, 2016; Malá et al., 2017) prevents SMEs from investing in sustainability practices or tools.

Second, SMEs suffer from a lack of skills and expertise. Several authors including Halila (2007), Heidrich & Tiwary (2013), and Mourtzis et al. (2016) reported this issue also highlighting the limited expertise among management staff. The lack of expertise, in turn, affects also the first barrier as it limits the ability of a company to evaluate the time and resources required to prioritize important concerns, such as sustainability indeed (Roberts et al., 2006). Hence, given the difficulty in acquiring and developing such skills required to effectively manage sustainability challenges, sure enough, it represents a significant barrier for SMEs (Boiral et al., 2019).

Last, the low implementation of sustainability measures within SMEs might also be associated with manager's frequent unawareness of the social and environmental impacts of their companies (e.g. Revell and Blackburn, 2007; Brammer et al., 2012; Hasan, 2016; Johnson and Schaltegger, 2016). This may be connected with the first barrier too, as where managers are unaware of the costs and benefits, they might still think that it's an excessive investment for their companies (Revell and Rutherford, 2003). Or, on the contrary, whereas they are aware of such costs and benefits, their lack of knowledge or information hinders their ability to accurately evaluate them (Friedman and Miles, 2002; Hasan, 2016).

Overall, these three barriers summarize the main difficulties for SMEs in implementing sustainability programs. Given this complexity, collaboration among stakeholders is even more needed to help companies overcome these barriers. A large body of literature has already dealt with the benefits of collaboration or stakeholder partnerships in the context of sustainability within SMEs (e.g. Bos-Brouwers, 2010; Boiral et al., 2019 Klewitz et al., 2012; Tevapitak and Helmsing, 2019), but what has been overlooked is the specific roles that stakeholders can play while helping SMEs to deal with these difficulties (Johnson and Schaltegger, 2016; Boiral et al., 2019). Journeault, Perron, and Vallières (2021), building on thirteen case studies, have discovered that stakeholders can play five different and complementary roles: trainers, analysts, coordinators, specialists, and financial providers.

Stakeholders can serve as trainers by planning particular conferences, and training sessions, or even hiring themselves as employees inside SMEs. Trainers provide SMEs with the skills and information they need to implement sustainable practices through skill development and knowledge transfer. Analysts are essential in spotting chances to enhance social and environmental practices in SMEs. They give essential insights and viewpoints that help direct firms on their sustainable path by providing objectivity and detachment. Coordinators connect companies with other pivotal players in sustainable development, such as consultants or

industry specialists. Additionally, they provide assistance in maintaining partnerships, ensuring quality standards, and managing project phases. Specialists assist companies in overcoming their lack of expertise in sustainability-related fields. Among their duties, they provide tailored technical expertise in specific business areas, evaluate the viability of projects, and propose creative responses to sustainability-related problems. Finally, financial providers such as government investment funds, commercial banks, and environmental organizations give vital funding to SMEs to implement sustainable practices, removing financial hurdles to sustainability adoption.

Together with the roles that stakeholders can assume, the focal point of this study is the importance of building stakeholder networks in order to foster sustainable development. Stakeholder networks that are decentralized and de-localized have been shown to be a successful strategy for generating sustainable learning and solutions within SMEs (Müller and Siebenhüner, 2007). The strength of this approach relies on stakeholders' ability to provide tailored solutions. The heterogeneity of SMEs requires this decentralized approach in order to encourage companies to adopt sustainable practices and increase their commitment towards sustainability (Steurer et al., 2012). And one-way governments can improve firms' sustainable performance is by promoting and facilitating the development of stakeholder networks (Blundel et al., 2013; Brammer et al., 2012; Fernández-Viñé et al., 2013).

2.6.1 Ripping up the Bureaucratic Playbook: The Purpose-Trust-Collaboration Nexus

In the area of sustainability, the literature attention has been focused on forming collaborative relationships with external stakeholders (e.g. NGOs, governments, suppliers, etc.) all in the interest of achieving triple bottom-line objectives. While these external collaborations are unquestionably important, it is also important to focus our attention internally (Galpin et al., 2015). It is straightforward to say that the effectiveness of these external collaborations is inextricably linked to the strength and quality of a company's internal collaboration architecture (Saukkonen and Kirjavainen, 2019). Hence, the question comes as given: "How can companies create a collaborative environment that enables them to achieve their (sustainability) objectives, so increasing their commitment toward external collaborations?"

The speech that Max Weber gave in 1909 about the bureaucracy of organizations (Weber, 1909) frames the problem very clearly. The technical superiority of bureaucratic organizations has rendered them efficient and accurate but, at the same time, using the word of the same author, it has destroyed their "soul". According to Hamel and Zanini (2020), bureaucratic

organizations “waste” 2.6 trillion dollars due to their strict rules, hierarchies, and slow decision-making processes.

Gulati (2022) frames the problem in a different way saying that these kinds of companies have to deal mainly with two big issues: the “Too Many Bosses” problem and the “Entrenched Silos” problem.

The first problem is also known as the principal-agent problem and describes a situation in which an organization has a number of decision-makers in positions of authority which can result in potential inefficiencies in the decision-making process and in conflicts of interests. This problem is rooted in the Principal-Agent theory (Eisenhardt, 1989; Jensen and Meckling, 1976) which by itself explains the reasons and, at the same time, the failures of implementing tall hierarchies inside organizations. The theory states that the principal delegates some authority to the agent who has to perform some tasks on behalf of the principal. Because both parties are assumed to be utility maximizers with divergent interests and information asymmetry exists between them, the agent will not always act in the best interest of the principal, hence some monitoring mechanisms (e.g. hierarchies) must be put into place to prevent the agent from shirking. Using simpler words, when there is no trust between parties, this is translated into (excess of) control. And why is there no trust? Principal-Agent theory. Using the words of Gulati (2022, p. 146): “Built for efficiency and regularity rather than speed and adaptability, bureaucracies languish under their own weight”.

There is an old saying which reads out as follows: “To earn trust, you have to give trust”. As we said in the first chapter, the ignition switch has to be the purpose of the company. Entrusting employees to bring purpose to life fuels the trust of the latter toward the company which, in turn, engages them more proactively on the purpose’s behalf (Serafeim, 2020). Of course, some degree of control is needed but this derives from the purpose itself. Stakeholders collaborate around values (Freeman et al., 2000), so the first step is to create a culture of trust and openness (Galpin et al., 2015) inside the company, infusing it with the principles (values) derived from the purpose, hence setting the rules for the future (sustainable) actions of a business.

Regarding the second problem, Gulati (2022) explains it using the example of how the FBI reorganized itself following the attack on the Twin Towers in 2001. What was an organization made up of fifty-six local offices scattered all over the USA, specialized in different crimes and bearing responsibilities for their own geographies, became a well-coordinated network placing cooperation as the utmost important value among all the offices of the organization, all in line and animated by the new company’s purpose of “preventing future terrorist attacks in the USA”.

One thing is to give more autonomy, but this has to be coupled with an increasing effort of business leaders to favor a breeding ground for collaboration among functions, business units, and geographies inside the organization (Lawrence and Lorsch, 1967). If we think of the FBI offices as business units with precise metrics and tasks to follow, it becomes clear that each business unit can be regarded as an independent box (silo) and people belonging to that silo specialize and concentrate their focus on their predetermined tasks while identifying more themselves within the box itself rather than the overall organization. This entails a further backfire effect: according to Sull, Homkes, and Sull (2015) who carried out a survey among thousands of managers, less than 60% of them regarded their colleagues in other departments as reliable, hence preventing collaboration among them. Here is the other big challenge: specialization preempts collaboration; hence business leaders need to build bridges across silos and motivate people to move across these bridges. Again, the starting point has to be the purpose which coupled with trust, may facilitate both coordination and cooperation inside the company. In paragraph 2.3 we have talked about the importance of building a stakeholder community, here the concept is the same. Placing sustainability as the utmost important value and building it into the culture (and consequently the purpose) of the company makes people's interests aligned toward that value (Farri, Cervini, and Rosani, 2022). Plus, nurturing collaboration and coordination fuels even more trust among colleagues which in turn has a rebound effect, that is to create a working environment where employees feel desirable to collaborate with others. This is called by Gulati (2022) the Purpose-Trust-Collaboration Nexus.

Building a stakeholder community around purpose, therefore, facilitates autonomy and collaboration. Moreover, nurturing the latter requires business leaders to invest in it (MacCormack et al., 2007) and reconfigure their organizational architectures to implement that change (Gulati, 2022).

Box 3 - How to develop a Sustainability Materiality Matrix

When talking about sustainability and ESG strategy, the word “materiality” often comes up. Materiality is the process of identifying and prioritizing sustainability issues that matter most for your business and consequently engaging with stakeholders effectively. According to research carried out by KPMG (2022), nearly 80% of companies belonging to the Fortune 500 use materiality in their sustainability reporting. The latter, in fact, represents a growing strategy discipline due to EU directives, such as the SFDR Regulation (see Box 1), ESG investor requirements, and other disclosure rules issued by other sustainability and regulatory standards, such as the SEC climate disclosure rules (KPMG, 2022).

There is no single approach to conducting a materiality assessment. While some businesses with stronger sustainability teams handle the process internally, others depend on outside experts more frequently. Anyway, the general approach to developing a materiality matrix includes the following phases:

1. *Identify key issues, relevant stakeholder groups, and business metrics*: In this phase, companies develop a long list of issues to then identify and prioritize the issues that are most relevant (material) for their business and its stakeholders. Generally, it’s considered a best practice to include a holistic set of stakeholders during the materiality evaluation, so as to track the issues that stakeholder groups care more about and build collaborative relationships to work on such issues. Lastly, the organization defines the pertinent business drivers, such as risk reduction, revenue growth, employee retention, etc. to weigh its issues against.
2. *Obtain information from both internal and external stakeholders*: Stakeholders are asked to weigh the list of issues based on their relative importance and the metrics chosen in the first step.
3. *Mapping and setting priorities*: The data collected from stakeholders are then inserted into a framework (developed by the company itself or developed by other organizations) and converted into a numerical ranking.
4. *Matrix creation*: Plot the identified issues on a matrix. The y-axis represents the stakeholders' concern on such issues while the possible impact on your company is depicted in the x-axis. High-concern issues should be given priority.

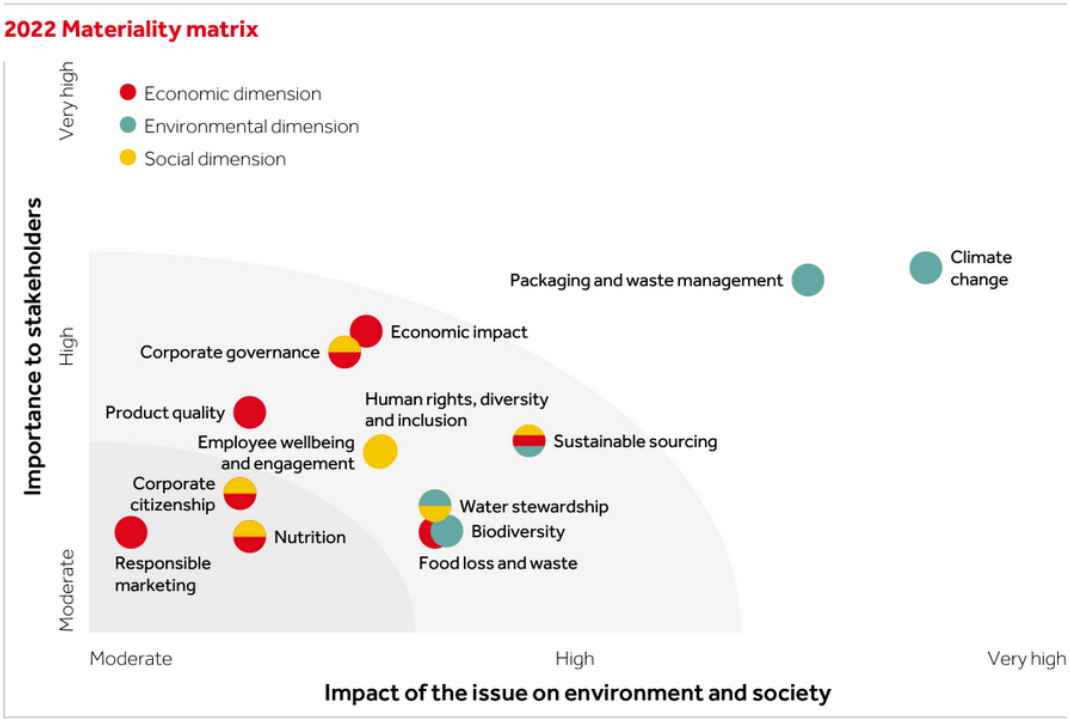
5. *Strategy formulation and key management alignment*: Once the matrix is developed, it is provided for assessment to key executives and managers. Final adjustments can then be made and based on the final framework, the development of the new sustainability strategy starts. The latter then is presented to stakeholders and usually reviewed every two years.
6. *Progress reporting*: Usually companies publish the main results on their annual sustainability reporting. Updates on goals, metrics, and references to the matrix are usually inserted inside the final report which also includes missed deadlines and unmet objectives.

Companies reporting to frameworks such as the Carbon Disclosure Project (CDP) or the Global Reporting Initiative (GRI) usually prioritize and select sustainability issues based on the rules provided by such organizations. Clearly, each framework follows a different purpose and targets a different audience, and therefore the concept of materiality varies.

For a practical example, please have a look at Figure 12 which depicts the Coca-Cola Materiality Matrix.

Source: NYU, 2019. "Sustainability Materiality Matrices Explained".

Figure 12: Coca-Cola Materiality Matrix



Source: https://www.coca-colahellenic.com/en/a-more-sustainable-future/our-approach/materiality

2.7 The Future of Collaboration: Networking for Sustainability

To create a sustainable society, our economies must undergo a fundamental restructuring (Elkington, 2018). The transition to sustainable economies necessitates change inside and across several businesses (Díaz et al., 2019). SMEs, as already said in the previous paragraph, are the key players in this transition, as they account for the majority of global businesses (European Commission, 2020; World Bank, 2023). Given their limited resources, it's even more important for them to engage in cooperation with other organizations. Recognizing inter-firm collaboration as the best way to foster sustainable development is consistent with contemporary requests in several literature fields, including B2B Marketing (e.g. Bolton, 2022; Sheth & Parvatiyar, 2021), supply chain management (e.g. Chen et al., 2017; Martins & Pato, 2019; Vurro, Russo, and Perrini, 2009), and inter-organizational (IOR) research (e.g. Howard-Grenville & Lahneman, 2021; Jarzabkowski, Dowell, & Berchicci, 2021).

Working in networks for SMEs has been shown to be very positive, if not essential, by the academic literature. Networks enable businesses to find best practices and offer a learning environment, fostering the growth of innovative products and services (Jenkins, 2009). Businesses may overcome obstacles and successfully incorporate circularity into their plans by increasing contact between the various network participants and building collaborative ways (Eikelenboom & de Jong, 2022). Moreover, firms working in networks demonstrated greater awareness of environmental (Biondi et al., 2002; Collins et al., 2007) and social issues (Hassan et al., 2019; Kraus et al., 2017) than non-member firms.

Studies also show that collaboration has a good impact on the introduction of sustainable innovations (e.g. Inigo et al., 2020; Chen & Yu, 2022; Frey et al., 2013). From the Sustainability Oriented Innovation (SOI) point of view, Inigo et al. (2020) demonstrated through a quantitative study how alliances and networks involving several partners allow firms to incorporate more effectively social and environmental goals into the innovation process. Collaborative capabilities, in the paper called alliance capabilities, are seen as fundamental resources to mediate innovation and complement a firm's knowledge and activities. In the green economy sector, according to Frey et al. (2013), collaboration is one determinant factor in influencing innovation. Collaboration with research institutes and universities, who are regarded as trustworthy partners and can provide experience and specialized expertise, stands out.

In terms of R&D efforts and collaboration, Chen & Yu (2022) analyzed the indirect effects of the latter on firm growth capability and took into account R&D as a mediating role in 94 Chinese top-ranking innovative companies finding both the positive and direct relation

between collaboration and growth capabilities, and the positive correlation between cooperation and R&D efforts, thus fostering more innovation.

Going on, studies also highlight the positive impacts of government-promoted initiatives towards collaboration for corporate sustainability. For example, a waste minimization project promoted by the UK Government that resulted in financial savings and training for SMEs was described by Phillips et al. (2002). Granek and Hassanali (2006) reported a project promoted by the Canadian government focused on pollution prevention highlighting how trustworthy business networks are necessary for gaining access to the market, plus the participation of non-profit organizations was welcomed since they keep confidentiality. A more recent study on government incentives based on financing vouchers for collaboration between SMEs and research institutions conducted by Spiesberger and Schönbeck (2019), came to the conclusion that this is a useful tool for promoting environmental innovation.

Other two factors that stand out from the literature are the formality of collaboration and the mediating role of academia and NGOs. Several authors including Lewis et al. (2015), Looser and Wehrmeyer (2015), and Lee (2019) found that SMEs when engaging in collaboration did so through informal contracts. Trust, in particular, stands out as a critical factor. This corroborates the claims of Galpin et al (2015) whereas collaboration requires the development of a corporate culture based on trust, mutual learning, and openness. Regarding the role of NGOs and academia, the former is considered more beneficial with respect to governments and non-profit organizations (Harangozó and Zilahy, 2015) and more effective in developing social requirements (Stekelorum et al., 2020). Moreover, they act as "meta governors" facilitating the process of collaborative innovation (Mariani et al., 2022). While the latter proved to be more effective in overcoming learning barriers to implementing environmental innovations (Sáez-Martínez et al., 2014; Halila & Tell, 2013) and in mediating between several stakeholders, many of whom have diverse ideas about what constitutes sustainable development (Emilsson et al., 2020).

Because of the size and complexity of the changes required, business networks face enormous obstacles in reorganizing and innovating to attain sustainability (Harrison et al., 2023). Studies on inter-firm collaboration are breeding in this sense, as there is an increasing need for research that addresses sustainability issues from an inter-organizational perspective (Donges et al., 2021). While most of these studies approach the subject using a relational/dyadic (Dyer and Singh, 1998) focus (Huang et al., 2022; Sharma, 2020), a network-based focus is still lagging behind (Siemieniako et al., 2022). In their recent editorial, Harrison et al., (2023) performed a literature review on sustainability in business networks showing that most of the studies dealing with this area of research have been carried out in the

last decade. Hence, showing the recent trend toward this new field of study. Moreover, the impact of new models of production and consumption (i.e. circular economy) has gained momentum in existing business network literature (Ingstrup, Aarikka-Stenroos, & Adlin, 2021; Narayan & Tidström, 2020). It has also been discussed how to integrate "sharing" business models, for instance, how to transform interactions between new and current partnerships in order to promote product sustainability (Melander & Arvidsson, 2021). This is important as it adds a new layer of complexity: the logic underpinning is that to manage sustainability challenges, it's pivotal to recognize the interplay of production and consumption (Bennett et al., 2015). Engaging in new models of sustainable economies thus means using a network-based focus in order to understand how to link the processes of production and consumption, but also of communication and distribution (Harrison et al., 2023). In other words, we must be able to comprehend, analyze, and model economies within a comprehensive framework, according to Raworth (2017). The last SDG report (United Nations, 2023), in particular regarding goal number 17, calls exactly for this.

Sustainable development is a broad notion that takes into account several temporal and geographical dimensions, as well as numerous stakeholders (Mariani et al., 2022). Stakeholder networks or multi-stakeholder collaboration are seen as the best approach to address the SDG challenges both by the inter-organizational literature (e.g. Howard-Grenville & Lahneman, 2021) and the SOI literature (e.g. Inigo et al., 2020). SMEs or Multinationals it doesn't matter, addressing sustainability challenges is beyond the individual company's capabilities (Nidumolu et al., 2014). Moreover, according to a survey conducted by Granskog et al. (2021), companies that get most of the value from sustainability are more likely to engage customers, business partners, and other stakeholders in their sustainability agenda. Results corroborated by Ukko et al. (2022) who argued that collaboration between businesses may help them to become more sustainable, and sustainability involvement has been recommended to boost future company value.

Overall, there is an increasing convergence toward this collaborative (network) approach to deal both with sustainability implementation and capturing value from sustainability. Sure enough, it represents a new breeding field of study (Harrison et al., 2023). These findings underscore the transformative impact of networks since the research suggests an increasing emphasis on collaborative efforts to promote sustainability.

If networks will become the new "normal", "the good of the common will truly become the common good of businesses" (Nidumolu et al. 2014, p. 19).

2.8 Conclusions

In dealing with sustainability challenges, the relevance of collaboration is undisputed (Nonet et al., 2022). The Global Agenda 2030 explicitly calls for this approach: "Sustainable development decision-making requires broad participation of all. The Division, therefore, aims to support the effective participation of major groups and other stakeholders in the UN political process, including through efforts to build their capacity, knowledge, and skills base" (UN, 2015a). One of the main reasons why progress on the SDGs has been delayed is that multi-stakeholder collaboration is complex and "collaborative advantage" is difficult to create and exploit (Bryson et al., 2016). Thus, one of the major obstacles to the SDG agenda's practical implementation relies on the effective implementation of multi-stakeholder partnership strategies (Nonet et al., 2022). As confirmation of this claim, Geddes, Nuttal, and Parekh (2020) and UN Global Compact (2020) depict a situation in which, respectively, nearly 60% of CEOs place stakeholder engagement as one of their top priorities and only 52% of UN Global Compact participants currently participate in multi-stakeholder collaborations.

Starting with stakeholders is the first step to act on the change. Sustainability Management literature, in the last decade, has been widely linked to Stakeholder Theory as the debate around corporate sustainability has brought to light new social and environmental issues as well as economic ones. Therefore, companies are challenged to interact with multiple stakeholders around these issues toward their query for achieving corporate sustainability. Most of the time, the real barrier to sustainability strategies implementation is represented precisely by them, not for nothing they have been referred to as "hidden enemies" by Farri, Cervini, and Rosani (2022). In this sense, the first challenge requires placing sustainability as a collective value that, in turn, calls for other three challenges (look at Figure 9): educating stakeholders about sustainability issues; putting in place frameworks and standards to promote stakeholder confidence, comparing and share best practices and hold stakeholder accountable for their impact; unveil the economic benefits of sustainability strategies in order to foster collaboration around sustainability.

Since sustainability is a collective value, the focus has to be shifted from a more comprehensive and integrated strategy which requires re-framing the logic of competitive advantage (Barney, 1991) into a "collaborative advantage" approach. In this sense, the Stakeholder Theory can complement the Resource-Based View (RBV) to include cooperative elements into consideration. In particular, recognizing the role of the institutional environment not just as reactive (Teece et al., 1997) but, rather proactive, can create new profitable avenues and be itself a new source of competitive advantage (Gibson & Gibson, Webster, 2021). In this regard, Glavash & Mish (2015) in their research, explored exactly this. They

showed that sustainability-oriented organizations (in the paper called TBL firms) adopt a more holistic approach actively shaping the context in which they do business. Moreover, their definition of valuable, rare, inimitable, non-substitutable (VRIO framework) resources, contrasts with the one conceptualized by the RBV as the attributes that define a resource need to be framed not only in relation within the firm environment but also beyond its internal boundaries. In this sense, when examined through the RBV theory's lenses, the idea of collaborative advantage emphasizes the strategic importance of extending a firm's critical resources beyond a single firm boundaries (Dyer and Singh, 1998). So, the logic of collaborative advantage per se doesn't exclude a competitive advantage avenue, on the contrary, collaboration itself can be the source of competitive advantage (Chen et al., 2017).

To achieve collaborative advantage, collaboration needs to be nurtured and requires a strong commitment by all the parties involved (Krause et al., 2007; Pagel and Wu, 2009). Companies need to develop Collaborative Capabilities for Sustainability (CCS) (Bezerra et al., 2020). These capabilities can be framed as dynamic (Teece et al., 1997) since they represent the firm's ability to identify, integrate, and configure resources that are needed to successfully react to market changes (Das and Teng, 2000; Kumar et al., 2018). The Gap's example, described in section 2.4.1, embodies the importance and the advantages of building a collaboration capability in the pursuit of sustainability issues. It also shows the importance of building an effective collaborative governance structure, which is a consequence coming from the development of CCS. In this setting, inter-firm collaboration has been recognized by the literature as an essential mechanism for promoting sustainable business practices (Adams et al., 2016; Sharma and Kearins, 2011). Furthermore, drawing on the Relational View (RV) theory (Dyer and Singh, 1998), De Almeida et al. (2021) proposed a framework (see Figure 11) through which they demonstrate how collaborative advantage can be achieved through relational rents, thus proving that pursuing collaborative advantage does not preclude achieving competitive advantage.

Multi-stakeholder collaboration is even more important when dealing with SMEs. They not only represent the majority of global business (90% according to World Bank, 2023) but also account for a considerable environmental and economic impact (OECD, 2017, 2018). Thus, achieving sustainability at scale requires effort to help these companies overcome barriers to sustainability implementation. Three in particular: lack of time and resources, lack of skills and expertise, and lack of knowledge about the implications and advantages of implementing sustainability programs (Jaramillo, Sossa, Mendoza, 2019). For this purpose, inter-firm collaboration represents an effective way to deal with these barriers. It has also been claimed as the best way to foster sustainable development by several literature fields. An internal

focus is also required as it is difficult to think that firms can achieve inter-firm collaboration effectively if first, they have not yet developed a collaborative environment inside them. The framework Purpose-Trust-Collaboration proposed by Gulati (2022) represents valuable guidance for companies that wish to escape from the "iron cage" of bureaucracy and position themselves for agility, adaptability, and (sustainable) growth. Moreover, following the call of Harrison et al. (2023) and Sharma (2020), future studies on inter-firm collaboration will need to approach the subject not only using a relational/dyadic perspective (Dyer and Singh, 1998) but at a network level thus recognizing how systemic interdependence across organizations is key in shaping sustainable markets (Harrison et al., 2023).

In conclusion, organizing for sustainability necessitates a break from siloed approaches (Gulati, 2022) and an unwavering commitment to inter-firm collaboration. Business networks for sustainability represent an effective avenue through which businesses can amplify their impact and drive meaningful change on a larger scale, as required by the SDG goals (United Nations, 2015). Developing collaborative capabilities therefore will be a crucial step to pave the way for sustainable development.

3. MULTIPLE CASE STUDY

3.1 Introduction

In this chapter we will present the companies analyzed using a "multiple-case study" approach. In the sections that follow, we'll conduct a comprehensive analysis of each business, including details on their history and growth paths. We also explore the pivotal time when they adopted sustainability as a key strategic priority and the remarkable transformation that followed.

As already argued in the second chapter, sustainability is not an isolated pursuit but is collaborative ecosystem-based endeavor. With a strong emphasis on stakeholder engagement, we will dive deeply into the significance of collaboration as the catalyst behind sustainability activities. Moreover, we will examine how these firms modified their internal structures to promote collaboration in dealing with sustainability objectives in the final section of each case study. By examining changes in organizational structures, governance models, and decision-making processes, we will reveal the complex interplay between structural changes and the achievement of sustainability objectives.

Finally, we will compare the analyses made for each company and suggest a few insights from the qualitative study.

Through their experiences, we aim to shed light and learn insightful lessons that add to the larger debate on ethical business practices and the necessity of collaboration as a cardinal tenet in building a sustainable future.

3.2 Methodology

The research was conducted using a "multiple-case study" approach (Yin, 2009). Information was gathered using a variety of qualitative methods: scheduled interviews with managers of each company, document reviews published on the companies' websites, and other articles or press conferences.

The criteria used to choose the organizations included in the study were the following:

a) An existing organization that can prove its own sustainability for at least five years;
b) Commitment to environmental and social goals with evidence of assessing or reporting on such issues;
c) Belonging to different industries;
d) The organizations and the information related to the cases were in the public domain.

Two organizations, according to the aforementioned criteria, were selected and consented to take part in the study. Their characteristics are reported in Table 1.

Table 1: Case Study Organizations

Organization	Year established	Location	Type	Main acitvity
SIT Group	1953	Padua	Public Company	Heating & Ventilation Gas and Water Metering
Carel Industries	1973	Padua	Public Company	Air Conditioning (HVAC) Refrigeration (HVAC/R)

Source: Author

An interview lasting 90 minutes was scheduled with each of the managers. The sustainability background was first discussed, and after that, the discussion focused on the following topics:

- ✓ Sustainability Strategy (values, goals, sustainability plan);
- ✓ Collaboration for Sustainability (alliances, partnerships, adherence to industry standards);
- ✓ Stakeholder Engagement (materiality, key stakeholders, partners selection);
- ✓ Organizational Structure (governance, decision-making, hierarchies).

The interviews were audio recorded and subsequently transcribed by the author. Each manager received the same set of questions before the meeting and further questions were asked taking into account the information provided in the Sustainability Reporting and the company's website, and the answers provided during the conversation. Further clarifications were requested where necessary, as well as by arranging an additional interview with managers.

In the next paragraphs, the cases are presented. A final inter-case comparison is carried out to highlight differences and similarities and identify any recurring or distinguishing themes or traits.

3.3 SIT Group: Made to Matter

3.3.1 Background and Development

SIT Group, an Italian company specializing in cutting-edge technology and precise engineering, bears witness to its extraordinary expansion and diversification throughout the years. Founded in 1953 by Pierluigi and Gianfranco de' Stefani under the initial designation "SIT La Precisa" in Padua, the company's initial focus was on precision mechanical engineering.

With the creation of its first overseas branch in the Netherlands in 1974, SIT's journey gained momentum. The subsequent establishment of subsidiaries in England, France, Turkey, Poland, Germany, and the Czech Republic, conveyed the start of SIT's global development. Later on, with the establishment of a further division in the U.S. in 1989, the company hit a significant turning point - the creation of its first electronic board for gas-powered appliances. The expansion in this market continued in the 1990s with the acquisition of ENCON, a Dutch business that specialized in electronic boards for gas appliances.

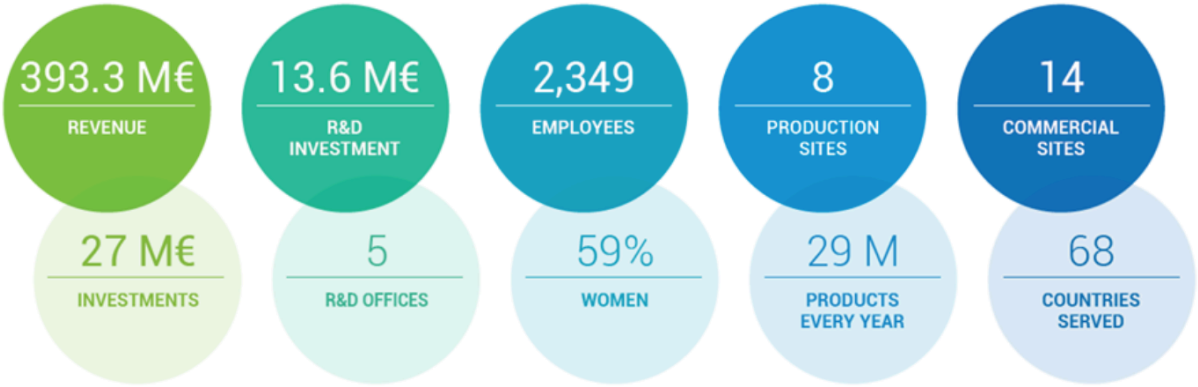
The millennium brought forth a period of explosive expansion for SIT Group. The company added to its quest for diversification and expansion three new businesses to its portfolio: an Italian company named OMVL, which specialized in gas appliances for automotive systems, which was later resold in 2009; OP Controls, another Italian business specialized in gas control systems; and Natalini, an Italian producer of fans and flue gas kits for boilers. In the meanwhile, the company's global reach was further expanded with the opening of new branches in Argentina, Romania, and China along with the additional expansion of the production sites in Rovigo and in the Netherlands.

A pivotal point in the company's history was marked by the merger of SIT La Precisa with the affiliates Gasco, Imer (Rovigo), and Natalini to establish SIT S.p.A. in 2015. This tactical move allowed the organization to innovate and work together even more effectively. Furthermore, SIT increased the scope of its business by founding MeterSit, a firm that provides smart gas meters for remote monitoring to gas distribution companies.

In addition to this, the business entered the water meter industry by acquiring the Portuguese business Janz in 2020. In the year after, SIT furthered the diversification of its product range with the acquisition of the NGA product line (electronic valves for gas storage water heaters) from the U.S. company Emerson Electric. Recently, the company also engaged in a strategic partnership with GWF in order to develop, produce, and distribute smart ultrasonic home water meters.

Nowadays, SIT, through the Heating&Ventilation, Smart Gas Metering, and Water Metering Business Units, creates intelligent solutions for the control of environmental conditions and consumption measurement for a more sustainable world.

Figure 13: SIT Group in a Nutshell 2022



Source: SIT Group website, https://www.sitcorporate.it/sostenibilita/introduzione/

3.3.2 Road to Sustainability

In SIT's history, sustainability has always been somewhat at the center of the organization, even at the strategic level. The spring that triggered the mechanism, using the Governance, Risk & Sustainability Officer's words:

"In a period of transition and over time with the emergence of new European policies but above all with the spread of the culture of sustainability in general and with the situation related to the shortage of natural resources and the overexploitation of fossil fuels, we were beginning to see a new energy transition that involves, at all levels, the abandonment of fossil fuels on which SIT's business has been based from the 1950s to the present."

The cornerstone was the European Directive on Non-Financial Reporting (SFDR). In 2018 SIT published its first Sustainability Report and this, according to the manager,

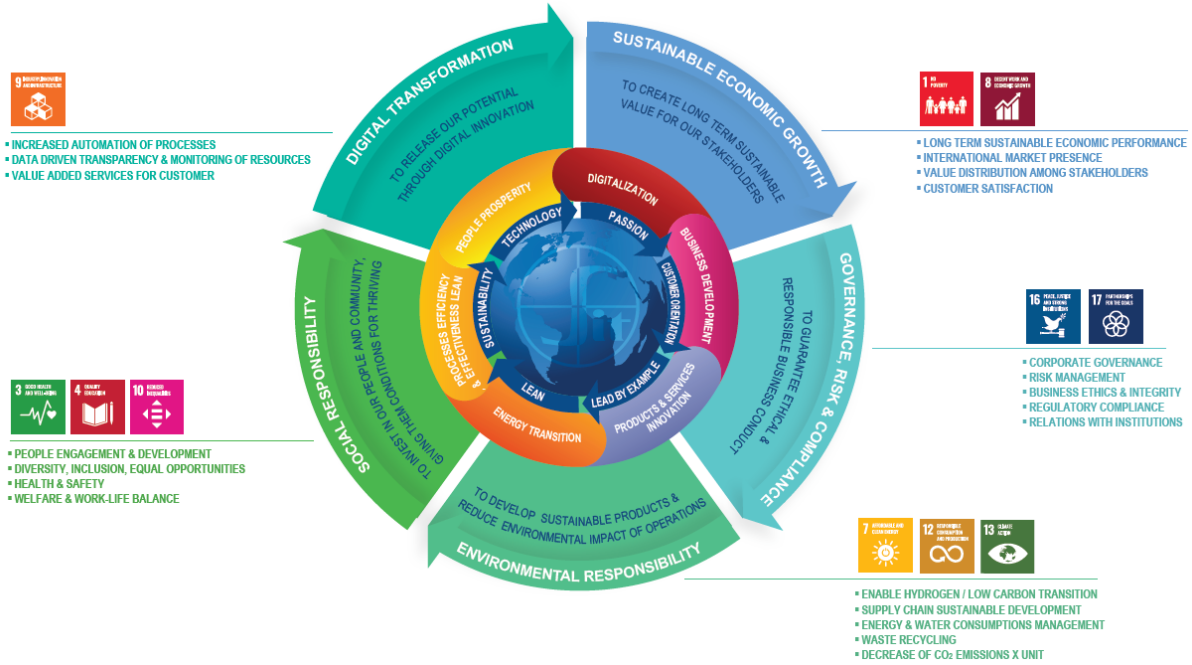
"Made us more aware of the direction in which things were going, even in terms of business strategy. From there we wondered how the company would evolve...".

Subsequently, the group developed a new sensibility towards ESG themes and this resulted in a new mission and vision with which new values related to sustainability were associated alongside the old values such as customer care, collaboration, etc.

Then, "Things actually started to go even much faster than we expected... The company could no longer be seen as a world unto itself but as a part of systems that contributed to the achievement of certain goals, and that's also what the EU especially wanted because at first, it relied on public bodies or international organizations, then it realized that the key to actually ensuring sustainable change was also private companies so it gave input in that sense".

The SIT's commitment toward sustainability increased and this resulted in the definition of its sustainability manifesto, called the "Green Paper", on which 5 pillars of development have been defined (see Figure 14).

Figure 14: SIT's Sustainability Pillars



Source: SIT's Sustainability Report 2022

This was a fundamental step for the company as from there sustainability began to be integrated with the strategic aspects of the business. This culminated, in 2021, with the drafting of the first business plan that fully integrated the company's sustainability goals and projects. The three classical ESG aspects, namely Environmental Responsibility, Social Responsibility, and Governance were coupled with sustainable economic growth because

"We are a private company and we still have to be profitable and ensure added value for our stakeholders in the long run" and with digital transformation as "a transversal factor necessary for the development of a sustainability strategy."

At the same time, it was important to develop a new culture within the company imprinted with change toward this new approach. For this reason, in the same year, a new governance was created; in particular, a small group of managers called the "Mission Leaders" was instituted in 2022 to ensure full synergy between the five drivers of development of the Green Paper and the group's sustainability strategy.
SIT's commitment to this path of change has been further strengthened by the development of a new sustainability plan called "Made to Matter" where the five drivers of change have been reorganized into the three ESG domains that represent the future goals and projects the Group wants to implement to drive change toward a more sustainable and ethical world.

3.3.3 Collaboration and Stakeholder Engagement

The group considers collaboration as fundamental to achieving its sustainability objectives. For a company that wants to be aligned as much as possible with the EU directives and the UNGC Agenda 2030, the path surely passes through this approach. Using the words of the manager:

"We are in the midst of a highly articulated supply chain that has a whole series of suppliers upstream and a whole series of manufacturers downstream. It's a little harder not to find this kind of configuration in companies of our type." Plus, "we have seen that we can also reduce our energy to zero and make it all renewable, however is a drop in the ocean. To seriously impact these issues, the optic of collaboration with our supply chain must be followed in its entirety."

To carry out its activities, SIT relies on the contribution of more than 600 companies located in 30 countries around the world. Moreover, in the countries where it is present and operating, SIT collaborates with various associations, such as the European Clean Hydrogen Alliance and HY4HEAT, intending to promote industry norms, standards, and best practices. The group also joined the United Nations Global Compact last year and has adhered to the Carbon Disclosure Project (CDP) to contribute to its de-carbonization journey. Other than that, in the R&D and sustainable innovation area, SIT has undertaken numerous collaborative activities with universities and research institutes related to specific projects and the recruitment of resources with specific technical skills. Additionally, SIT's commitment is reinforced by its awareness in the local area in which it does business, hence fostering initiatives to strengthen

ties with educational, scientific, and cultural institutions. For this purpose, the SIT Foundation (Fondazione SIT – Sport Inclusione Talento – ETS) was established last year.
In this framework, the stakeholder engagement process represents a key step in ensuring fruitful results. The group performs a materiality analysis every two years (see Box 3) with this aim. The last analysis, in particular, was done using a "double-impact" logic:

"Changed the GRI criterion of defining materiality analysis, we had to understand not only how the company impacted these issues but also how these issues could impact society... Everyone was asking how much does SIT pollute but no one was asking how much pollution could impact the activities it does."

However, the analysis revealed basically an unchanged picture from the one conducted in 2018, prioritizing suppliers, customers, investors, and employees as key stakeholders.

"A company that wants to reduce its environmental impact or otherwise contribute to the maintenance of natural resources as ours does, cannot disregard the actions of its customers and the actions of its suppliers."

Furthermore, being a public company, shareholders' instances are fundamental and therefore to be prioritized.
A very important point made clear by the manager during the interview is the importance of transparency and communication of the sustainability goals that the company pursues since, in his view, *"the company was better at doing than communicating."* With the drafting of the new sustainability plan, the engagement has become more effective and SIT has been targeting stakeholders with a better sustainability profile and has started evaluating its suppliers (and it's evaluated itself) with the support of EcoVadis, an independent international rating company that aims to improve companies' environmental and social practices. Again from this, we can see how collaboration also figures prominently in the evaluation process.
At the same time, the participation of the company in the industry/international standards (the ones that we mentioned above) represents another key step during the engagement process. It's a matter of trust and reputation, but sometimes it's also a necessary action. According to the manager,

"In part, memberships are pushed from our stakeholders who can be customers or suppliers, as for example right now banking and lending institutions are asking us to fill out a profile

related to sustainability-related concerns... or, in other cases, we still continue to receive requests for emissions data, as Bosch asks us our CDP certification, so we adhere based on input provided by our stakeholders."

Public companies, but gas companies in particular, are more under the magnifying glass because of the nature of their business, and "investors' investment choices are also increasingly driven by sustainability-related assessment". Moreover, memberships are also the product of the commitment of the company's toward the sustainability cause. It comes from the Group's desire not to be *"self-referential and seek outward feedback"*.

3.3.4 Organizational Structure Changes

Beginning in 2021, as a demonstration of its commitment, and taking up the pleas of the Company and its key stakeholders about the need for accurate and systematic management of ESG issues, as well as the definition, implementation, reporting, and monitoring of the Sustainability Plan, SIT created a Sustainability Governance Structure. At the top, there is the Board of Directors which is responsible for pursuing sustainability success, hence the long-term value creation for its stakeholders. A fundamental contribution, within the board, is made by the role played by the Control Risk, Risk & Sustainability Committee, within which there are directors with full independence and a marked sensitivity to ESG issues, able to guide ESG strategies. The committee is kept constantly updated on the progress of the Sustainability Plan and reports to the board in the official avenues.

The Corporate Sustainability Director is responsible for the planning, coordination, and execution of the plan as well as the management of stakeholder relations. Moreover, she is the head of the Mission Leaders, a selected group of managers created in 2022 who have assumed specific responsibilities for the definition of appropriate policies and objectives, the execution of specific projects, and the reporting of their results. The Mission Leaders group reports periodically to the Steering Committee on its activities and ongoing projects.

Furthermore, Sustainability Local Units have been instituted throughout the company and are responsible for the deployment of ESG policies at the local level and dissemination of the culture of sustainability.

Besides that, in the organization there have been no particular organizational changes according to the manager but

"We simply identified people who also had the right attitude toward sustainability issues."

Hence, not a change in the organizational structure but more awareness and broadening of skills in the sustainability compartment of each department.
The only "innovative role" that has been instituted is the Head of Carbon Management, the reference point for carbon footprint assessments and the definition of emission reduction actions as part of the group operations.
The Sustainability Governance structure has been devised with a logic completely disengaged from hierarchies but using a cross-functional/departmental approach in order to favor the collaboration between all realities inside the company.

"We are a group of people who define and propose initiatives without hierarchical constraints trying to be open-minded."

The final objective of this governance, according to the manager, is to stop existing in the future, because:

"We hope to reach a level of maturity on ESG topics that will guide all our choices so there will be no need for anyone to further spread or promote sustainability initiatives, as they will be part of our DNA."

3.4 Carel Industries: Driven by the Future

3.4.1 Background and Development

The company's consistent dedication to innovation, quality, and worldwide expansion is demonstrated throughout the course of its history. When Carel was first established in 1973 in Padua, its primary product line was steam humidifiers. Their expertise in temperature control technologies was based on this early experiment. But Carel didn't stand out as a true innovator in the business until the 1980s.

Carel started a path of rapid growth and advancement in the 1980s. They started a ground-breaking initiative to create custom microprocessor-based control systems for industrial and commercial air conditioning. This resulted in a notable improvement in the accuracy and effectiveness of temperature and humidity control systems. Carel expanded its reach beyond simple control technologies by developing monitoring tools for air conditioners showing their dedication to providing complete control solutions. Along with their product improvements, the company also started deploying cutting-edge production methodologies in order to improve the dependability of their products.

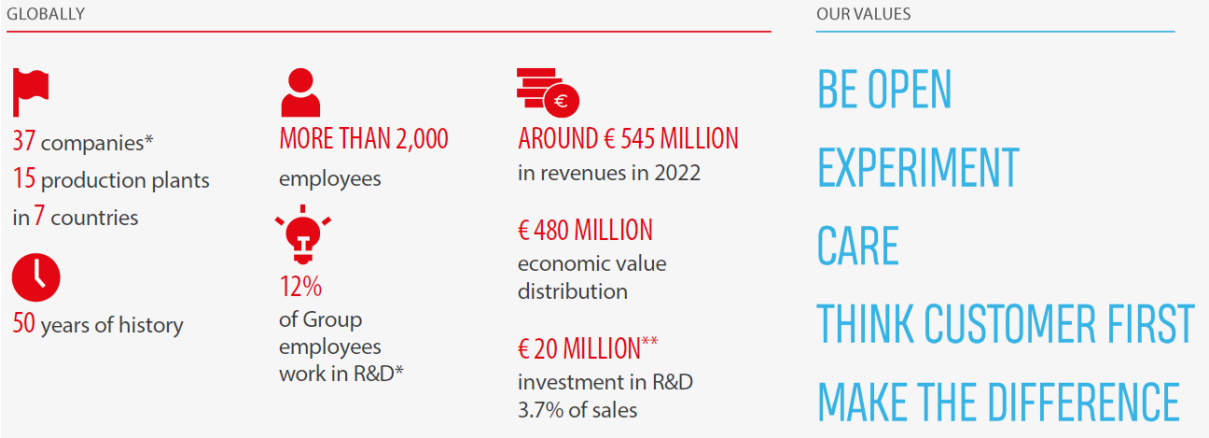
Subsequently, Carel broadened its focus beyond air conditioning to include the creation of controllers for refrigeration systems. The release of the "CAREL EasyTools", a new configurable electronic board with unique programming capabilities, was one of the decade's most notable accomplishments.

As the 1990s dawned, the company continued its expansion by introducing serial connectivity across its whole range of control systems. Their commitment to providing high-quality goods and services was demonstrated by their achievement of ISO 9001 certification during this period. Moreover, Carel started expanding internationally with the creation of its first subsidiary in Lyon followed by the establishment of other subsidiaries in Germany, the UK, and South America in later years.

From the 2000s onward, the Group embarked on a journey of remarkable growth. The expansion continued with the the opening of other branches in China, the USA, and Australia reaching a turnover of 55 million euros. Throughout this journey, Carel received numerous honors: they were given the Italian designation of "Azienda eccellente" and garnered illustrious awards like the F.I.O.R.E. Award and the Rotary Club's "Premio per l'Innovazione". They have also been granted the 2009 Marco Polo award as a company that distinguished itself for its commitment and important achievements in the field of international trade and they received the environmental certification ISO 14011:2004 in 2012.

In the following years, the company made smart acquisitions to broaden its product offerings and established subsidiaries in other nations such as Russia, Brazil, and Mexico. Furthermore, recent years see the company's IPO in 2018 and the beginning of a new sustainable path with the approval of the multi-year plan called "Driven by the Future" in late 2021, which will mark the company's roadmap to 2024 and beyond.

Figure 15: Carel in a Nutshell 2022



Source: Carel Group website, https://www.carel.com/esg

3.4.2 Road to Sustainability

Carel's path to sustainability can be summarized in three main steps. In the mid-1980s, the company launched the first programmable control on the market. This marked a fundamental shift in the company's business by signaling the transition from electromechanics to electronics systems. From there, energy efficiency began to be discussed:

"Placing electronics within a control is what allowed, compared to an electromechanical control, the control to be loaded with several functions that it could not perform before and thus enable it to start working on energy efficiency."

The second step was the introduction of the variable speed concept within the company's product portfolio in the 2000s.

"We introduced Variable Speed Compressor Technology within our niches so within the industrial/commercial air conditioning segment and then the refrigeration industry... We were the first ones, at least in Europe, to do that."

This enabled the group to further improve the energy efficiency of its products while enhancing their dependability. The same period was marked by the enactment of the Kigali Amendment to the Montreal Protocol in 2016. The agreement, to date signed by 152 countries worldwide, declares the reduction and the subsequent elimination of hydro-fluorocarbons (HFCs) considered powerful greenhouse gases that contribute to global warming. The amendment establishes a framework for the eradication of traditional refrigerants in favor of natural refrigerants, such as carbon dioxide and hydrocarbons. So, on the momentum generated by the Kigali Amendment, the group also increased its efforts on natural refrigerants.
The last phase started with the IPO of the company in 2018 as

"The group began to acquire several companies, some of which increased the range of products offered by Carel, especially products that had strong industrial and strategic fits, and related to energy efficiency."

Two important acquisitions performed by Carel are the takeover of Recuperator S.p.A. in 2018 and Klingenburg Gmbh in 2022, both specialized in the production of heat recovery systems, which allowed the group to become the European leader in this field.
This transition toward a new sustainable business logic, according to the manager, was

"The group's credit to have been able to anticipate market trends: Energy efficiency, electrification, and natural refrigerants are all macro trends which the company was able to anticipate before they became mainstream, and this is thanks to the founding entrepreneurs of the company who have always been forward-looking. Then of course regulations contributed, but the company does not do sustainability for itself. It does business that allows us to have sustainable success, so being sustainable over time."

Carel's further commitment to sustainable success finds its maximum expression with the approval of the sustainability plan for 2024 called "Driven by the Future" in late 2021. The plan, aligned with some of the SDGs of the 2030 United Nations Agenda, defines six areas of engagement (Sustainable Strategy and Governance, Sustainable Development of Local Communities, Innovation and Technology, People, Environmental Policies, and Communication), which in turn are broken down into 68 specific targets, an overall involvement of 13 company departments and economic commitment of more than 2.6 million

euros, enabling the company to continue on the path to sustainable development that has always pursued.

3.4.3 Collaboration and Stakeholder Engagement

In a group where the key to sustainable success, using the manager's words, *"Lies in technological innovation"*, collaboration plays a key role, especially with universities and research institutes. Two important collaborations were revealed during the interview: one with the University of Padua for the launch of a number of products related to variable speed technology, and another one with the Milan Polytechnic for the development of a new heat recovery unit that allows saving both electricity and water energy.

Other collaborations are realized with local associations, social cooperatives, in particular, such as "Il Germoglio" or "RIESCO SCS", whose main objective, as stated in the sustainability plan, is to "increase awareness of environmental issues, foster social inclusion, develop the local territory, and spread the Carel's culture and commitment regarding ESG goals". Regarding collaborations with other companies, these mainly concern the relationship between Carel and its Clients as often Carel's products are designed into the end unit. As per the collaboration with possible peers, they are "less relevant" as the group is more interested in acquiring a company for the products or technologies it offers rather than a collaboration in the strict sense.

Nonetheless, the constant dialogue with stakeholders remains of absolute importance, and in fact, in 2021, the Board of Directors approved the Shareholders' Engagement Policy, which explains the general principles, management methods, and main contents of the dialogue between Carel and its Shareholders, in compliance with the recommendations expressed by the "Borsa Italiana Corporate Governance Code". In this framework, the main tool is the definition of a materiality map by the company every two years. As reported by the manager,

"From a material point of view, customers are very important because without them there is no business, suppliers are also vital, and the financial market as we are listed and it's fundamental to ensure long-term value for our shareholders."

Thus far, specific engagement practices are activated with suppliers who must adhere to Carel's Code of Conduct approved in 2022, and with rating agencies, one, in particular, emerged during the interview, which is Ecovadis, the world's major provider of supply chain ESG profile assessment.

Moreover, the engagement process also occurs through the company's participation in events organized by various national and international associations, such as the European Partnerships for Energy and the Environment (EPEE) and the American Society of Heating, Refrigerating and Air-Conditioning System (ASHRAE), by providing its point of view on themes like innovation, sustainable development, and climate change. Furthermore, Carel also joined the United Nations Global Compact in 2022 which represents a further commitment to contribute to a new phase of globalization characterized by international collaboration and partnership.

Whilst, certifications are fundamental to obtain *"better ratings which, in turn, are business enablers"*, as stated by the manager. Financially, certifications are also critical to receiving funds for investment:

"Nowadays more than half of the world's Assets Under Management (AUM) are in the hands of funds that comply with the Principles for Responsible Investment... A certain number of these funds pay ESG rating providers to understand if a company is compliant (and to what extent) with these principles. If you don't have a good rating, it's a problem."

The strong relevance of this issue is highly reflected in Carel, so much so that the company, in four years, went from B to AA on the MSCI[31] rating scale, placing itself in the "ESG Leader" category, demonstrating a strong commitment and dedication to improving its ESG standards. Moreover, Carel has expanded the scope of companies certified with ISO 14001 certification to include the recently acquired Recuperator S.p.A.

One last point, in 2022 Carel took part in the Ecovadis rating process for the first time, ranking in the top 16% of organizations in its sector; this rating, besides being valuable for the supply chain, is often a prerequisite for being selected as a supplier:

"A very important prospect in the field of heat pumps called us two years ago and told us that if we wanted to work together, we had to obtain a certain Ecovadis score. If we didn't get certain scores, we wouldn't become a supplier for this client."

[31] MSCI is a leading ESG rating provider used by funds, asset managers, etc. to evaluate key drivers of risk and return so they may confidently create more profitable portfolios.

3.4.4 Organizational Structure Changes

Between 2019 and 2020, after the IPO, Carel with the purpose of better implementing sustainable policies internally, introduced a three-level sustainable governance structure: operative, advisory, and strategic level.

At the operative level, the ESG Team is in charge of coordinating all sustainability activities, gathering inputs, and promoting dialogue with stakeholders in order to complement and support the board in setting goals, targets, and metrics to be included in the sustainability plan. The team's multidisciplinary, composed of one member of the main functions of the company (six in total), ensures, in the manager's words,

"A more effective dialogue with the group's stakeholders and, on the other hand, allows us to have first-hand information in communicating corporate information to them. This, in turn, played a key role in the group's ability, for example, to achieve rating improvements consistently and very quickly because it enabled the management of two-way communication between Carel and its stakeholders."

Leading the team is the Chief Financial Officer (CFO) as he is not only responsible for reporting on the team's activities to the board but also for overseeing the yearly budget across the departments so he expresses the

"Executive synthesis between the sustainability plan and the resource allocation of the same."

At the advisory level, the Control and Risk Committee, later renamed the "Control, Risk and Sustainability Committee", within which there are only independent directors, assists the board in sustainability assessments and decisions, oversees compliance with the principle of behavior adopted by the group and its subsidiaries and laws regarding sustainability. The main proposals coming from the ESG team are evaluated by the committee and then, if considered compelling, brought to the board. At the same time, the committee can ask for ad-hoc meetings with the board or the ESG team to discuss about most relevant issues related to sustainability.

The highest level, that is the strategic one, is filled by the board of directors. In order to oversee and promote Carel's sustainability policies, the board granted to one of its members certain operational proxies in the sustainability area. The mandate includes support in the integration of sustainability activities into the business plan, in collaboration with the CEO

and the dedicated corporate functions (in particular the ESG team). Given its importance, it is usually an attendee of the ESG team meetings, which are held on a weekly basis. Finally, engagement policies and related communication channels with stakeholders are also included in the mandate.
Besides this new governance, no particular organizational changes took place. According to the manager:

"*There has been a creation of a sensitivity about sustainability within the company that was less pronounced before. Competencies have been expanded but also new managerial positions have been added, such as the Health, Safety and Environment (HSE) Manager who is in charge of workplace healthiness and emissions reduction management of the company".*

Another important remark during the interview was the following:

"That the structure has not completely changed, yes, anyway the new governance has affected the organization in a significant way. Apart from new managerial positions, which are not strictly or exclusively related to sustainability, there has been the creation of bodies that were not before... I would say it was between evolution and revolution."

The decision of the company to create this new kind of governance stems from the group's aptitude to operate with a logic completely disentangled from classical hierarchies, seeking instead to foster a cross-sectional (horizontal) rationale so that sustainability can be spread entirely throughout the organization and not confined to a single department.

"Hierarchy is only functional, there cannot be a strict hierarchy; this is my opinion. It's rather a collaboration system than a hierarchical one."

3.5 Inter-case Comparison

The two cases described in this chapter are similar in many aspects but still, some differences can be traced back if we scrutinize carefully their sustainability journey which both were somehow triggered following their IPOs in 2018. The IPO (and the subsequent laws and regulations that came with it) acted as a stimulus for SIT to change direction, which was symbolized by the publication of its first sustainability Manifesto, dubbed the "Green Paper". This forward-thinking paper served as the basis for SIT's sustainability plan, "Made to Matter", which alongside the three classical ESG aspects, digital transformation and

sustainable economic growth were also outlined as fundamental pillars, demonstrating the company's dedication to all-encompassing sustainability integration. As opposed to this, Carel, even before the IPO, took advantage of the convergence of technology improvements and changing regulatory environments, which was exemplified by significant occurrences like the Kigali Amendment. These outside changes coupled with the company's ability to predict market trends, the ones connected to energy efficiency and electrification in particular, emerged during the interview as key steps in Carel's journey toward sustainable success. The result of this vision was the creation of Carel's first sustainability plan, which was suitably named "Driven by the Future".

For SIT, the accomplishment of sustainability goals is inextricably linked to a collaborative culture. The business actively collaborates with a wide range of partners, including other businesses, academic institutions, research centers, and industry associations. This is the consequence, according to the manager's point of view, of being integrated into a well-articulated supply chain, hence this naturally led to the development of this large collaborative network. Due to its interconnection, SIT would find it harder to operate effectively without a collaborative setup. On the other hand, Carel's collaborative efforts are generally focused on collaborations with universities and research institutes, particularly when it comes to initiatives for technology advancements. The company's connection with other firms is considerably less evident as the group prefers to acquire them if it is interested in their products or technology.

Nonetheless, both companies concur that dialogue and engagement with stakeholders are of the utmost significance. A key step in the engagement process is the deployment of materiality maps created in line with the GRI standards. Customers, suppliers, employees, and shareholders are just a few of the stakeholder groups that were highlighted in interviews with management from both firms. Given the crucial role that financial markets play in fostering growth and the public nature of both companies, shareholders' instances are accorded a special importance. In this context, certifications and compliance with industry standards become crucial tools that serve as mechanisms driven by stakeholder expectations as well as indicators of trust and reputation. These "requirements" not only improve ratings but also make it simpler to get important financing for investments. Therefore, they fulfill a dual purpose: they represent a proactive dedication to the highest ethical and social standards as well as an effective response to stakeholders' pressures who push companies to meet these standards as a prerequisite for collaboration and, at the same time, the companies themselves use certified standards as vehicles to select partners to collaborate with. Simply put, this dedication to sustainability and adherence to standards highlights the shared resolve of both

businesses to succeed in environmental preservation and societal integration, not just as a matter of policy but also as a strategy entwined with their corporate identities.

As a last point, both SIT and Carel started making major governance improvements, which marked a significant convergence of their sustainability initiatives. The creation of cross-functional ESG teams served as the foundation for these changes as well as a symbol of their dedication to do away with conventional hierarchical structure in favor of a more comprehensive strategy. This change manifested at SIT with the creation of the "Mission Leaders" team. This team, which includes members from every department inside the organization, plays a crucial part in gathering stakeholders' inputs and developing pertinent policies and goals. In addition to the roles included in their functions, these managers hold specific roles in sustainability narrowly related to the development of material issues and the five areas of the plan "Made to Matter" (see Figure 14); for example, the Governance, Risk & Sustainability Officer is responsible for preparing the sustainability report, monitoring and improving the company's sustainability rating and guarantee ethical and responsible business conduct. Hence, as said by the manager,

"Each leader has embraced a heightened awareness of these issues by integrating them within his or her functions."

Prior to getting board approval, these proposals undergo a thorough assessment process that includes the supervision of the Control, Risk, and Sustainability Committee. The head of the team is the Corporate Sustainability Director who is also responsible for managing stakeholder relations in addition to developing, coordinating, and executing the sustainability strategy.

Carel, differently, instead of nominating a Corporate Sustainability Director, the CFO took on this duty as

"He represents the executive synthesis between the sustainability plan and the resources allocation of the same."

Moreover, Carel's board also granted one of its members unique operational responsibilities in the area of sustainability. This board member actively participates in the ESG Team and Control, Risk, and Sustainability committee meetings, plus she is also in charge of structure engagement policies and the related communication channels. Although, in form, these two roles may seem different, in substance the Corporate Sustainability Director for SIT and the

Sustainability Delegate for Carel, have equal tasks and responsibilities: they are both directors who have received specific delegated authority in the ESG area, narrowly related to the sustainability plan. According to both managers, the choice of not appointing a specific department/manager dealing with sustainability but having instead multiple roles with different functions who meet periodically and form a team has allowed both companies to better manage communications channels involving all stakeholders and thus spread the culture of sustainability more preponderantly.

Despite these slight variations in governance structures, a cross-functional approach is essentially valued by both firms. Every division/department actively participates in the process, helping to define sustainability metrics and objectives and promoting a common culture throughout the whole company. This shift reflects their commitment to a more comprehensive, holistic approach to sustainability that defies traditional hierarchies and embraces a new collaborative one where every stakeholder can be involved in the process, hence showing a further commitment to spreading the sustainability culture instead of confining it to a single department.

Although their history is different, that doesn't change their dedication toward sustainability success that is firmly established in their corporate character, and for the future, according to both managers interviewed, the final aim is to reach a full-level horizontal integration so that there will be no need of someone in charge of supervising sustainability initiatives as it will become so integrated into companies' reason for being (purpose) and therefore part of business as usual.

Table 2: Multiple Case Study Summary

Organization	Road to Sustainability	Collaboration and Stakeholder Engagement	Organizational Structure Changes
SIT Group	• New **trends** (i.e abandonment of fossil fuels) • New **Regulations** (i.e. SFDR) • **IPO** and adherence to the Code of Corporate Governance	• **+600** companies, **+15** Industries Associations, SIT Foundation • **Materiality Analysis** • Adherence to **CDP**, **UNGC**, **Ecovadis**	• New Governance Structure: **Mission Leaders** • New Role: **Head of Carbon Management** • A **Cross-Functional** approach is favored
Carel Industries	• **Trends Anticipation** (i.e. electrification, natural refrigerants, energy/water efficiency) • New **Regulations** (i.e. Kigali Amendment) • **IPO** and adherence to the Code of Corporate Governance	• Only with **Universities** and **Research Institutes**, **+8** Industry Associations • **Materiality Analysis**, **Shareholders' Engagement Policy** • Adherence to **CDP**, **UNGC**, **Ecovadis**	• New Governance Structure: **ESG Team** • New Roles: **IR Manager**, **HSE Manager** • A **Cross-Functional** approach is favored

Source: Author

3.6 Conclusions

This multiple case study provides us with numerous insightful findings about their unique organizational dynamics and sustainability trajectories. Here below are listed:

- ✓ Sustainability Pathways: there is no one-size-fits-all. While Carel's focus was motivated mainly by technological developments and regulatory changes, SIT's journey began as a necessary response to the situation in the gas industry which is going through a new energy transition involving the abandonment of fossil fuels on which SIT's business has been based since the 1950s toward new forms of clean energy (e.g. hydrogen). Then regulations played a key role as well, in particular, the first Non-Financial Disclosure Report published in 2018 as a consequence of their IPO, which made the company more aware of the direction to follow and this resulted in a new vision and mission which marked SIT's path to sustainability.

- ✓ Sustainability: companies define sustainability in ways that are suitable for their standards as well as in their own terms. For example, Carel remarked several times during the interview that they don't pursue sustainability but sustainable success. The same thing to SIT, even if not explicitly stated, ensuring sustainable economic growth is one of its pillars because *"still we are a private business and it's our duty to ensure long-term value to our shareholders."* Moreover, organizations have emphasized different stances on sustainability, prioritizing economic and environmental sustainability more so than social. Changes in community or external stakeholders' instances would be necessary for further advancement.

- ✓ Collaboration: although they both value collaboration, they take quite different approaches to it, in particular regarding the scope of the collaborations. SIT works closely with many different stakeholders, showcasing its pivotal place in a complex supply chain. In contrast, Carel, whose key to sustainable success lies in technological innovation, is primarily concerned with collaboration related to technology advancements with research centers and universities and social inclusions with cooperatives or other local associations. Collaborations with other firms are less prominent as Carel is more interested in acquiring a company for its product or technology rather than engaging in a collaborative partnership. So the role that stakeholders play, as described in section 2.6, is different: in the case of Carel the main role played by stakeholders is that of specialists while, for SIT, stakeholders act mainly both as coordinators and specialists.

- ✓ Stakeholder Engagement: it's the core pillar of both firms. To efficiently traverse stakeholder expectations and concerns, they both employ materiality analysis based on GRI criteria. This exemplifies how crucial stakeholder involvement is to establishing sustainability policies and maintaining conformity to external expectations. Thus, the considerations made in the first chapter (see paragraph 1.3.1 "*Value to Stakeholders"*) highlight stakeholder engagement practices as the most important tool to reveal the key business areas that must be addressed and offer insights into a business's innovation plan.

- ✓ New ESG Governance: cross-functional teams have been established as a sign of the organization's dedication to creating a holistic and collaborative approach to sustainability. Although the details vary, the main lesson is that it's crucial to involve all organizational levels, hence promoting horizontality across departments and ensuring 360° dissemination of sustainability culture. That's what has been said in paragraph 2.6.1 using the "Purpose-Trust-Collaboration" framework.

- ✓ Alignment with Market Trends: particularly referring to Carel's ability to foresee market trends related to energy efficiency. But also for SIT because, as already said above, the new trends in the gas industry urge companies to move forward. This corroborates with the trends listed in paragraph 1.4 highlighting sustainability not just as a trend but as a business enabler.

- ✓ Influence of Financial Markets: both businesses are aware of how the financial market plays a pivotal role in financing sustainability initiatives. In addition to being a matter of trust and reputation, following standards and obtaining certifications act as a strategic lever for accessing funds dedicated to sustainable investments. Consequently, the strong interconnectedness between sustainable performance and capital access has a considerable impact on the possibility of implementing sustainability policies. Looking back to Figure 9, Regulation is depicted as one of the main challenges in ensuring stakeholders' collaboration for sustainable development. Holding firms responsible for their actions toward society and the environment and incentivizing them to collaborate on sustainability issues is therefore fundamental.

- ✓ Standards: Carel and SIT both have a strong commitment to upholding to highest standards possible for social inclusion and environmental conservation. This dedication

goes beyond mere compliance and is motivated by a sincere desire to make a significant difference. Moreover, as stated in paragraph 2.2.1, besides being business enablers (see the previous aforementioned point) standards are effective tools for comparing companies' sustainable business performance and sharing best practices.

BIBLIOGRAPHY

Adams, Richard, et al. *"Sustainability-oriented innovation: A systematic review."* International Journal of Management Reviews 18.2 (2016): 180-205.

Albers Mohrman, Susan, and Abraham B. Shani. *"Chapter 1 Organizing for Sustainable Effectiveness: Taking Stock and Moving Forward."* Organizing for sustainability. Emerald Group Publishing Limited, 2011. 1-40.

Albino, Vito, Rosa Maria Dangelico, and Pierpaolo Pontrandolfo. "*Do inter-organizational collaborations enhance a firm's environmental performance? A study of the largest US companies."* Journal of Cleaner Production 37 (2012): 304-315.

Álvarez Jaramillo, Juanita, Jhon Wilder Zartha Sossa, and Gina Lía Orozco Mendoza. *"Barriers to sustainability for small and medium enterprises in the framework of sustainable development—Literature review."* Business Strategy and the Environment 28.4 (2019): 512-524.

Amui, Lara Bartocci Liboni, et al. *"Sustainability as a dynamic organizational capability: a systematic review and a future agenda toward a sustainable transition."* Journal of Cleaner Production 142 (2017): 308-322.

Anderson, Mark W., Mario Teisl, and Caroline Noblet. *"Giving voice to the future in sustainability: Retrospective assessment to learn prospective stakeholder engagement."* Ecological Economics 84 (2012): 1-6.

Annunziata, Eleonora, et al. *"The role of organizational capabilities in attaining corporate sustainability practices and economic performance: Evidence from Italian wine industry."* Journal of Cleaner Production 171 (2018): 1300-1311.

Apple, 2022. *"Apple's 2022 ESG Report."* Available at: https://s2.q4cdn.com/470004039/files/doc_downloads/2022/08/2022_Apple_ESG_Report.pdf [Access date: 13/09/2023].

Ayuso, Silvia, et al. *"Does stakeholder engagement promote sustainable innovation orientation?."* Industrial Management & Data Systems 111.9 (2011): 1399-1417.

Balzan, A. Rosa. *"L'impatto Zero Non Esiste"*. Edizioni Este, (2022).

Barbier, Edward B. *"The concept of sustainable economic development."* Environmental conservation 14.2 (1987): 101-110.

Barney, Jay. *"Firm resources and sustained competitive advantage."* Journal of Management 17.1 (1991): 99-120.

Barney, Jay B. *"Why resource-based theory's model of profit appropriation must incorporate a stakeholder perspective."* Strategic Management Journal 39.13 (2018): 3305-3325.

Barreto, Ilídio. *"Dynamic capabilities: A review of past research and an agenda for the future."* Journal of Management 36.1 (2010): 256-280.

Bennett, Elena M., et al. *"Linking biodiversity, ecosystem services, and human well-being: three challenges for designing research for sustainability."* Current opinion in environmental sustainability 14 (2015): 76-85.

Beske, Philip, and Stefan Seuring. *"Putting sustainability into supply chain management."* Supply Chain Management: An International Journal 19.3 (2014): 322-331.

Bhattacharya, CB & Polman, Paul. *"Engaging Employees to Create a Sustainable Business."* Stanford Social Innovation Review (2016).

Biondi, Vittorio, Fabio Iraldo, and Sandra Meredith. *"Achieving sustainability through environmental innovation: the role of SMEs."* International Journal of Technology Management 24.5-6 (2002): 612-626.

Blundel, Richard, Adrian Monaghan, and Christine Thomas. *"SMEs and environmental responsibility: a policy perspective."* Business Ethics: A European Review 22.3 (2013): 246-262.

Boiral, Olivier, et al. *"Greening remote SMEs: The case of small regional airports."* Journal of Business Ethics 154 (2019): 813-827.

Bolton, Ruth N. *"The convergence of sustainability and marketing: Transforming marketing to respond to a new world."* Australasian Marketing Journal 30.2 (2022): 107-112.

Boons, Frank. *"Organizing within dynamic ecosystems: Conceptualizing socio-ecological mechanisms."* Organization & Environment 26.3 (2013): 281-297.

Bos-Brouwers, Hilke Elke Jacke. *"Corporate sustainability and innovation in SMEs: Evidence of themes and activities in practice."* Business strategy and the environment 19.7 (2010): 417-435.

Brammer, Stephen, Stefan Hoejmose, and Kerry Marchant. *"Environmental management in SMEs in the UK: Practices, pressures, and perceived benefits."* Business strategy and the environment 21.7 (2012): 423-434.

Branco, Manuel Castelo, and Lúcia Lima Rodrigues. *"Corporate social responsibility and resource-based perspectives."* Journal of Business Ethics 69 (2006): 111-132.

Bryson, John M., Fran Ackermann, and Colin Eden. *"Discovering collaborative advantage: The contributions of goal categories and visual strategy mapping."* Public Administration Review 76.6 (2016): 912-925.

Business Roundtable. *"Business roundtable redefines the purpose of a corporation to promote 'an economy that serves all Americans'."* Business Roundtable (2019).

Calogirou, Constantinos. *"SMEs and the environment in the European Union."* EU, 2010.

Carel Industries, 2022. *"Carel's Sustainability Report."* Available at: https://ir.carel.com/en/sustainability/

Carroll, Archie B. *"The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders."* Business Horizons 34.4 (1991): 39-48.

Chen, Shuting, and Dengke Yu. *"Exploring the impact of external collaboration on firm growth capability: the mediating roles of R&D efforts."* Humanities and Social Sciences Communications 9.1 (2022): 1-12.

Chen, Lujie, et al. *"Supply chain collaboration for sustainability: A literature review and future research agenda."* International Journal of Production Economics 194 (2017): 73-87.

Choi, Jaepil, and Heli Wang. *"Stakeholder relations and the persistence of corporate financial performance."* Strategic Management Journal 30.8 (2009): 895-907.

Coase, R. *"The nature of the firm."* Econ. New Ser. 4 (1937), 386-405.

Collins, Denis, and Amy Gannon. *"Walking the eco-talk movement: Higher education institutions as sustainability incubators."* Organization & Environment 27.1 (2014): 16-24.

Collins, Eva, et al. *"Business networks and the uptake of sustainability practices: the case of New Zealand."* Journal of cleaner production 15.8-9 (2007): 729-740.

Conway, Elaine. *"Engaging small and medium-sized enterprises (SMEs) in the low carbon agenda."* Energy, Sustainability and Society 5 (2015): 1-9.

Czakon, W. *"Relational capability of organizations: theoretical advances."* J. Econ. Manag. 5, 48e65 (2009).

Da Cunha Bezerra, Maria Clara, Cláudia Fabiana Gohr, and Sandra Naomi Morioka. *"Organizational capabilities towards corporate sustainability benefits: A systematic literature review and an integrative framework proposal."* Journal of Cleaner Production 247 (2020): 119114.

Dao, Viet, Ian Langella, and Jerry Carbo. *"From green to sustainability: Information Technology and an integrated sustainability framework."* The Journal of Strategic Information Systems 20.1 (2011): 63-79.

Das, Tushar K., and Bing-Sheng Teng. *"A resource-based theory of strategic alliances."* Journal of Management 26.1 (2000): 31-61.

D'Aveni, Richard A., Giovanni Battista Dagnino, and Ken G. Smith. *"The age of temporary advantage."* Strategic Management Journal 31.13 (2010): 1371-1385.

De Almeida, Juliana Maria Gonçalves, et al. *"Towards an integrative framework of collaborative capabilities for sustainability: A systematic review and research agenda."* Journal of Cleaner Production 279 (2021): 123789.

De Clercq, Dirk, Narongsak Thongpapanl, and Maxim Voronov. *"Sustainability in the face of institutional adversity: Market turbulence, network embeddedness, and innovative orientation."* Journal of Business Ethics 148 (2018): 437-455.

Del Brío, Jesús Ángel, and Beatriz Junquera. *"A review of the literature on environmental innovation management in SMEs: implications for public policies."* Technovation 23.12 (2003): 939-948.

Díaz, Sandra, et al. *"Pervasive human-driven decline of life on Earth points to the need for transformative change."* Science 366.6471 (2019): eaax3100.

Donaldson, Thomas, and Lee E. Preston. *"The stakeholder theory of the corporation: Concepts, evidence, and implications."* Academy of Management Review 20.1 (1995): 65-91.

Donges, Jonathan F., et al. *"Taxonomies for structuring models for World–Earth systems analysis of the Anthropocene: subsystems, their interactions and social-ecological feedback loops."* Earth System Dynamics 12.4 (2021): 1115-1137.

Dyer, Jeffrey H., and Harbir Singh. *"The relational view: Cooperative strategy and sources of interorganizational competitive advantage."* Academy of Management Review 23.4 (1998): 660-679.

Eikelenboom, Manon, and Gjalt de Jong. *"The impact of managers and network interactions on the integration of circularity in business strategy."* Organization & Environment 35.3 (2022): 365-393.

Eisenhardt, Kathleen M., and Jeffrey A. Martin. *"Dynamic capabilities: what are they?."* Strategic Management Journal 21.10-11 (2000): 1105-1121.

Eisenhardt, Kathleen M. *"Making fast strategic decisions in high-velocity environments."* Academy of Management Journal 32.3 (1989): 543-576.

Elkington, John. *"Cannibals with forks: The triple bottom line of 21st century business, Capstone."* (1997).

Elkington, John. *"25 years ago I coined the phrase "triple bottom line." Here's why it's time to rethink it."* Harvard Business Review 25 (2018): 2-5.

Emilsson, Maria, et al. *"Sustainable innovations in small enterprises for the transformation of the primary healthcare sector."* Sustainability 12.16 (2020): 6391.

Environment and Climate Change Canada (ECCC), 2019. *"Achieving a Sustainable Future. A Federal Sustainable Development Strategy for Canada 2019 to 2022."* https://publications.gc.ca/site/eng/9.874231/publication.html#:~:text=Home-,Achieving%20a%20sustainable%20future%20%3A%20a%20federal%20sustainable%20d

evelopment%20strategy%20for,identifies%20actions%20to%20achieve%20them (Accessed 24 July 2023).

ERM. *"What's Next for Sustainable Business? 2022 Trends Report."*

European Commission (EC), 2020. *"Green Action Plan for SMEs."* https://ec.europa.eu/commission/presscorner/detail/pl/IP_14_766 (Accessed 24 July 2023).

European Commission (EC), 2022. *"Annual Report on European SMEs 2021/2022."* doi: 10.2826/164089. (Accessed 25 July 2023).

Farri, Cervini, Rosani (2022). *"How Sustainability Efforts Fall Apart."* Available at: https://hbr.org/2022/09/how-sustainability-efforts-fall-apart [Access date:10/07/2023].

Fernández-Viñé, María B., Tomás Gómez-Navarro, and Salvador F. Capuz-Rizo. *"Assessment of the public administration tools for the improvement of the eco-efficiency of Small and Medium Sized Enterprises."* Journal of Cleaner Production 47 (2013): 265-273.

Figge, F., & Hahn, T. *"The cost of sustainability capital and the creation of sustainable value by companies."* Journal of Industrial Ecology, 9(4), (2005): 47-58.

Fischer, Aglaia, and Stefano Pascucci. *"Institutional incentives in circular economy transition: The case of material use in the Dutch textile industry."* Journal of Cleaner Production 155 (2017): 17-32.

Freeman, R. Edward. *"Divergent stakeholder theory."* Academy of Management Review 24.2 (1999): 233-236.

Freeman, R. Edward, et al. *"Stakeholder theory: The state of the art."* (2010).

Freeman, R. E., Phillips, R., & Sisodia, R. *"Tensions in stakeholder theory."* Business & Society, 59 (2018): 213-231.

Freeman, R. E., Pierce, J., & Dodd, R. H. *"Environmentalism and the new logic of business. How firms can be profitable and leave our children a living planet."* Oxford, England: Oxford University Press, 2000.

Freeman, R. Edward. *"Strategic management: a stakeholder approach* (Boston: Pitman, 1984)."

Freeman, R. E., Dmytriyev, S., & Strand, R. G. *"Managing for stakeholders in the digital age."* (2017)

Freeman, R. Edward, Sergiy D. Dmytriyev, and Robert A. Phillips. *"Stakeholder theory and the resource-based view of the firm."* Journal of Management 47.7 (2021): 1757-1770.

Frey, Marco, Fabio Iraldo, and Francesco Testa. *"The determinants of innovation in green supply chains: evidence from an Italian sectoral study."* R&D Management 43.4 (2013): 352-364.

Friedman, Andrew L., and Samantha Miles. *"SMEs and the environment: evaluating dissemination routes and handholding levels."* Business Strategy and the Environment 11.5 (2002): 324-341.

Friedman, Milton. *"The social responsibility of business is to increase its profits."* New York Times Magazine 13 (1970).

Frynas, Jędrzej George, and Camila Yamahaki. *"Corporate social responsibility: Review and roadmap of theoretical perspectives."* Business Ethics: A European Review 25.3 (2016): 258-285.

Fukuyama, F. *"The great disruption: Human nature and the reconstitution of social order."* New York: Free Press (1999).

Fulton et al. *"Sustainable Investing: Establishing Long-Term Value and Performance."* DB Climate Change Advisors, Deutsche Bank Group (2012), dbadvisors.com.

Galdeano-Gómez, Emilio, José Céspedes-Lorente, and Javier Martinez-del-Rio. *"Environmental performance and spillover effects on productivity: evidence from horticultural firms."* Journal of Environmental Management 88.4 (2008): 1552-1561.

Gallo, 2023. *"This Forgotten Whole Foods Story Offers 1 Valuable Lesson For All Entrepreneurs."* Available at https://www.inc.com/carmine-gallo/this-forgotten-whole-foods-story-offers-1-valuable-lesson-for-all-entrepreneurs.html [Access Date: 12/07/2023].

Gallup, 2022. *"Culture Transformation."* Available at: https://www.gallup.com/workplace/229832/culture.aspx [Access date: 03/05/2023].

Galpin, Timothy, J. Lee Whittington, and Greg Bell. *"Is your sustainability strategy sustainable? Creating a culture of sustainability."* Corporate Governance 15.1 (2015): 1-17.

Geddes, L., R. Nuttall, and E. J. Parekh. *"The pivotal factors for effective external engagement."* New York: McKinsey (2020).

Generali, 2023. "SME EnterPRIZE, Generali & SDA Bocconi Research: *"SMEs seek more public support to improve sustainability."* Available at: https://www.generali.com/media/press-releases/all/2023/SME-EnterPRIZE-Generali-and-SDA-Bocconi-Research-SMEs-seek-more-public-support-to-improve-sustainability [Access date: 21/07/2023].

Gibson, Cristina B., Stephen C. Gibson, and Quinn Webster. *"Expanding our resources: Including community in the resource-based view of the firm."* Journal of Management 47.7 (2021): 1878-1898.

Glavas, Ante, and Jenny Mish. *"Resources and capabilities of triple bottom line firms: going over old or breaking new ground?."* Journal of Business Ethics 127 (2015): 623-642.

Global Reporting Initiative. *"G4 sustainability reporting guidelines: reporting principles and standard disclosures."* Global Reporting Initiative, Amsterdam (2013): 7-14.

Googins, B. K., Mirvis, P. H., & Rochlin, S. A. *"Beyond good company: Next generation corporate citizenship."* New York: Palgrave MacMillan, (2007).

Govindan, Kannan, et al. *"Accelerating the transition towards sustainability dynamics into supply chain relationship management and governance structures."* Journal of Cleaner Production 112 (2016): 1813-1823.

Granek, Fred, and Meenaz Hassanali. *"The Toronto Region Sustainability Program: insights on the adoption of pollution prevention practices by small to medium-sized manufacturers in the Greater Toronto Area (GTA)."* Journal of Cleaner Production 14.6-7 (2006): 572-579.

Granskog, A., et al. *"How companies capture the value of sustainability: survey findings."* McKinsey & Company. Available online: https://www.mckinsey.com/capabilities/sustainability/our-insights/how-companies-capture-the-value-of-sustainability-survey-findings (2021).

Gulati, Ranjay. *"Deep purpose: The heart and soul of high-performance companies."* Penguin UK, (2022).

Gulati, Ranjay, Dovev Lavie, and Harbir Singh. *"The nature of partnering experience and the gains from alliances."* Strategic Management Journal 30.11 (2009): 1213-1233.

Halila, Fawzi, and Joakim Tell. *"Creating synergies between SMEs and universities for ISO 14001 certification."* Journal of Cleaner Production 48 (2013): 85-92.

Halila, Fawzi. *"Networks as a means of supporting the adoption of organizational innovations in SMEs: the case of Environmental Management Systems (EMSs) based on ISO 14001."* Corporate Social Responsibility and Environmental Management 14.3 (2007): 167-181.

Hamel, Gary, and Michele Zanini. Humanocracy: *"Creating organizations as amazing as the people inside them."* Harvard Business Press, 2020.

Harangozó, Gábor, and Gyula Zilahy. *"Cooperation between business and non-governmental organizations to promote sustainable development."* Journal of Cleaner Production 89 (2015): 18-31.

Harrison, Debbie, et al. *"Business networks and sustainability: Past, present and future."* Industrial Marketing Management (2023).

Harrison, Jeffrey S., Douglas A. Bosse, and Robert A. Phillips. *"Managing for stakeholders, stakeholder utility functions, and competitive advantage."* Strategic Management Journal 31.1 (2010): 58-74.

Harrison, Jeffrey S., Robert A. Phillips, and R. Edward Freeman. *"On the 2019 business roundtable "statement on the purpose of a corporation"."* Journal of Management 46.7 (2020): 1223-1237.

Hart, Stuart L. *"A natural-resource-based view of the firm."* Academy of Management Review 20.4 (1995): 986-1014.

Hart, Stuart L. *"Beyond greening: strategies for a sustainable world."* Harvard Business Review 75.1 (1997): 66-77.

Hart, Stuart L., and Glen Dowell. *"Invited editorial: A natural-resource-based view of the firm: Fifteen years after."* Journal of Management 37.5 (2011): 1464-1479.

Hasan, Md Nazmul. *"Measuring and understanding the engagement of Bangladeshi SMEs with sustainable and socially responsible business practices: an ISO 26000 perspective."* Social Responsibility Journal 12.3 (2016): 584-610.

Hassan, Hazrat, et al. *"Factors that sustain health and safety management practices in the food industry."* Sustainability 11.15 (2019): 4001.

He, Guizhen, et al. *"Why small and medium chemical companies continue to pose severe environmental risks in rural China."* Environmental Pollution 185 (2014): 158-167.

Heidrich, Oliver, and Abhishek Tiwary. *"Environmental appraisal of green production systems: Challenges faced by small companies using life cycle assessment."* International Journal of Production Research 51.19 (2013): 5884-5896.

Helfat, C.E., Finkelstein, S., Mitchell, W., Peteraf, M.A., Singh, H., Teece, D.J., Winter, S.G., (2007). *"Dynamic Capabilities: Understanding Strategic Changes in Organizations."* Blackwell Publishing, Malden.

Helfat, C. (2013). *"How Apple and IBM Learned to Change With the Times."* Available at: https://www.usnews.com/opinion/blogs/economic-intelligence/2013/07/02/apple-and-ibm-show-the-power-of-dynamic-capabilities [Access date: 13/07/23].

Hendry, John. Between enterprise and ethics: Business and management in a bimoral society. OUP Oxford, 2004.

Hjorth Solberg, Sune, and Alexander Michael Brem. *"How to assess market readiness for an innovative solution: The case of heat recovery technologies for SMEs."* Sustainability 8.11 (2016): 1152.

Hoejmose, Stefan, Stephen Brammer, and Andrew Millington. " "Green" supply chain management: The role of trust and top management in B2B and B2C markets." Industrial Marketing Management 41.4 (2012): 609-620.

Hofmann, Kay H., Gregory Theyel, and Craig H. Wood. *"Identifying firm capabilities as drivers of environmental management and sustainability practices–evidence from small*

and medium-sized manufacturers." Business Strategy and the Environment 21.8 (2012): 530-545.

Hörisch, Jacob, Matthew P. Johnson, and Stefan Schaltegger. *"Implementation of sustainability management and company size: A knowledge-based view."* Business Strategy and the Environment 24.8 (2015): 765-779.

Hörisch, Jacob, R. Edward Freeman, and Stefan Schaltegger. *"Applying stakeholder theory in sustainability management: Links, similarities, dissimilarities, and a conceptual framework."* Organization & Environment 27.4 (2014): 328-346.

Howard-Grenville, Jennifer, and Brooke Lahneman. *"Bringing the biophysical to the fore: Re-envisioning organizational adaptation in the era of planetary shifts."* Strategic Organization 19.3 (2021): 478-493.

Huang, Ying, Debra Lee Surface, and Chun Zhang. *"Corporate social responsibility and sustainability practices in B2B markets: A review and research agenda."* Industrial Marketing Management 106 (2022): 219-239.

Hunt, et al. *"Why Diversity Matters."* McKinsey & Company, (2015).

Imperatives, Strategic. *"Report of the World Commission on Environment and Development: Our common future."* Accessed Feb 10 (1987): 1-300

In A. Rasche, M. Morsing, & J. Moon (Eds.), *"Corporate social responsibility: Strategy, communication, governance"* (2017): 136-153. Cambridge, UK: Cambridge University Press.

Ingstrup, Mads Bruun, Leena Aarikka-Stenroos, and Nillo Adlin. *"When institutional logics meet: Alignment and misalignment in collaboration between academia and practitioners."* Industrial Marketing Management 92 (2021): 267-276.

Inigo, Edurne A., Paavo Ritala, and Laura Albareda. *"Networking for sustainability: Alliance capabilities and sustainability-oriented innovation."* Industrial Marketing Management 89 (2020): 550-565.

Jarzabkowski, Paula, Glen WS Dowell, and Luca Berchicci. *"Strategy and organization scholarship through a radical sustainability lens: A call for 5.0."* Strategic Organization 19.3 (2021): 449-455.

Jenkins, Heledd. *"A 'business opportunity' model of corporate social responsibility for small- and medium-sized enterprises."* Business ethics: A European Review 18.1 (2009): 21-36.

Jensen, Michael, and William H. Meckling. *"Theory of the firm: Managerial behavior, agency costs and ownership structure."* Journal of Financial Economics 3.4 (1976): 305-360.

Jiang, Wei, Felix Tinoziva Mavondo, and Margaret Jekanyika Matanda. *"Integrative capability for successful partnering: a critical dynamic capability."* Management Decision 53.6 (2015): 1184-1202.

Johnson, Matthew P., and Stefan Schaltegger. *"Two decades of sustainability management tools for SMEs: How far have we come?."* Journal of Small Business Management 54.2 (2016): 481-505.

Jones, Thomas M., and Andrew C. Wicks. *"Letter to AMR regarding "convergent stakeholder theory"."* Academy of Management Review 24.4 (1999): 621-623.

Jones, Thomas M. *"Instrumental stakeholder theory: A synthesis of ethics and economics."* Academy of Management Review 20.2 (1995): 404-437.

Jones, Thomas M., Jeffrey S. Harrison, and Will Felps. *"How applying instrumental stakeholder theory can provide sustainable competitive advantage."* Academy of Management Review 43.3 (2018): 371-391.

Journeault, Marc, Alexandre Perron, and Laurie Vallières. *"The collaborative roles of stakeholders in supporting the adoption of sustainability in SMEs."* Journal of Environmental Management 287 (2021): 112349.

Khan, Syed Abdul Rehman, et al. *"Environmental logistics performance indicators affecting per capita income and sectoral growth: evidence from a panel of selected global ranked logistics countries."* Environmental science and pollution research 24 (2017): 1518-1531.

Kidd, Charles V. *"The evolution of sustainability."* Journal of Agricultural and Environmental Ethics 5 (1992): 1-26.

Kisil, Aleksander. ZarzÄ… *"dzanie przez odpowiedzialnoĹ› Ä‡: podstawa odpowiedzialnego biznesu."* Difin, 2013.

Klewitz, Johanna, Anica Zeyen, and Erik G. Hansen. *"Intermediaries driving eco-innovation in SMEs: a qualitative investigation."* European Journal of Innovation Management 15.4 (2012): 442-467.

Koirala, Shashwat. *"SMEs: Key drivers of green and inclusive growth."* (2019).

Kovács, Gyöngyi, and Karen M. Spens. *"Abductive reasoning in logistics research."* International journal of physical distribution & logistics management 35.2 (2005): 132-144.

KPMG, 2022. *"Big Shifts, Small Steps. Survey of Sustainability Reporting 2022."* Available at: https://assets.kpmg.com/content/dam/kpmg/se/pdf/komm/2022/Global-Survey-of-Sustainability-Reporting-2022.pdf [Access date: 12/09/2023].

Krause, Daniel R., Robert B. Handfield, and Beverly B. Tyler. *"The relationships between supplier development, commitment, social capital accumulation and performance improvement."* Journal of Operations Management 25.2 (2007): 528-545.

Kraus, Sascha, et al. *"Configurational paths to social performance in SMEs: The interplay of innovation, sustainability, resources and achievement motivation."* Sustainability 9.10 (2017): 1828.

Kumar, Gopal, Nachiappan Subramanian, and Ramkumar Maria Arputham. *"Missing link between sustainability collaborative strategy and supply chain performance: Role of dynamic capability."* International Journal of Production Economics 203 (2018): 96-109.

Kumar, Gopal, Purushottam Meena, and Rita Maria Difrancesco. *"How do collaborative culture and capability improve sustainability?."* Journal of Cleaner Production 291 (2021): 125824.

Kuraszko, Iwona. *"Nowa komunikacja spoĹ ,eczna wyzwaniem odpowiedzialnego biznesu."* Difin, (2010).

Kurczewski, Przemyslaw. *"Life cycle thinking in small and medium enterprises: the results of research on the implementation of life cycle tools in Polish SMEs—part 1: background and framework."* The International Journal of Life Cycle Assessment 19 (2014): 593-600.

Lacy, P. Cooper, T., Hayward, R., & Neuberger, L. *"A new era of sustainability: UN Global Compact-Accenture CEO study 2010."*

Lavie, Dovev. *"The competitive advantage of interconnected firms: An extension of the resource-based view."* Academy of Management Review 31.3 (2006): 638-658.

Lawrence, A. W. *"Towards Better Performance in Achieving Sustainable Development Goals in Nigeria. European Centre for Research Training and Development."* UK (2018), 6(3), 27-34, 2053-2199.

Lawrence, Paul R., and Jay William Lorsch. *"Organization and environment: Managing differentiation and integration."* (No Title) (1967).

Lee, DonHee. *"Implementation of collaborative activities for sustainable supply chain innovation: An analysis of the firm size effect."* Sustainability 11.11 (2019): 3026.

Lewin, Arie Y., Silvia Massini, and Carine Peeters. *"Microfoundations of internal and external absorptive capacity routines."* Organization Science 22.1 (2011): 81-98.

Lewis, Kate V., Sue Cassells, and Hernan Roxas. *"SMEs and the potential for a collaborative path to environmental responsibility."* Business Strategy and the Environment 24.8 (2015): 750-764.

Litz, Reginald A. *"A resource-based-view of the socially responsible firm: Stakeholder interdependence, ethical awareness, and issue responsiveness as strategic assets."* Journal of Business Ethics 15 (1996): 1355-1363.

Looser, Stéphanie, and Walter Wehrmeyer. *"Stakeholder mapping of CSR in Switzerland."* Social Responsibility Journal 11.4 (2015): 780-830.

Lozano, Rodrigo. *"Collaboration as a pathway for sustainability."* Sustainable development 15.6 (2007): 370-381.

Lozano, Rodrigo. *"Developing collaborative and sustainable organisations."* Journal of Cleaner Production 16.4 (2008): 499-509.

MacCormack, Alan David, et al. *"Innovation through global collaboration: a new source of competitive advantage."* (2007).

Mackey, John, and Rajendra Sisodia. *"Conscious capitalism, with a new preface by the authors: Liberating the heroic spirit of business."* Harvard Business Review Press, 2014.

Madhani, Pankaj M. *"The resource-based view (RBV): issues and perspectives."* PACE, A Journal of Research of Prestige Institute of Management 1.1 (2010): 43-55.

Makadok, Richard. *"Invited editorial: The four theories of profit and their joint effects."* Journal of Management 37.5 (2011): 1316-1334.

Malá, Denisa, et al. *"Green logistics in Slovak small and medium wood-processing enterprises."* BioResources 12.3 (2017): 5155-5173.

Manyika, James, et al. *"A new look at how corporations impact the economy and households."* McKinsey & Company, Discussion Paper 31 (2021).

Mariani, Laura, et al. *"Achieving sustainable development goals through collaborative innovation: Evidence from four European initiatives."* Journal of Business Ethics 180.4 (2022): 1075-1095

Martins, C. L., and M. V. Pato. *"Supply chain sustainability: A tertiary literature review."* Journal of Cleaner Production 225 (2019): 995-1016.

Maurer, Cara C., Pratima Bansal, and Mary M. Crossan. *"Creating economic value through social values: Introducing a culturally informed resource-based view."* Organization Science 22.2 (2011): 432-448.

Meinlschmidt, Jan, Kai Foerstl, and Jon F. Kirchoff. *"The role of absorptive and desorptive capacity (ACDC) in sustainable supply management: A longitudinal analysis."* International Journal of Physical Distribution & Logistics Management 46.2 (2016): 177-211.

Melander, Lisa, and Ala Arvidsson. *"Introducing sharing-focused business models in the B2B context: Comparing interaction and environmental sustainability for selling, renting and*

sharing on industrial markets." Journal of Business & Industrial Marketing 36.10 (2021): 1864-1875.

Montiel, Ivan, and Javier Delgado-Ceballos. *"Defining and measuring corporate sustainability: Are we there yet?."* Organization & Environment 27.2 (2014): 113-139.

Montigny O. *"Gratitudine, la Rivoluzione Necessaria"*. Mondadori Electa, (2020).

Mourtzis, Dimitris, et al. *"PSS design considering feedback from the entire product-service lifecycle and social media."* Procedia Cirp 47 (2016): 156-161.

Müller, Martin, and Bernd Siebenhüner. *"Policy instruments for sustainability-oriented organizational learning."* Business Strategy and the Environment 16.3 (2007): 232-245.

Narayan, Rumy, and Annika Tidström. *"Leveraging resource ecologies for sustainability transitions–a waste management case."* Journal of Business & Industrial Marketing 36.6 (2021): 881-892.

Neutzling, Daiane Mülling, et al. *"Linking sustainability-oriented innovation to supply chain relationship integration."* Journal of Cleaner Production 172 (2018): 3448-3458.

Nidumolu, Ram, et al. *"The collaboration imperative."* Harvard Business Review 92.4 (2014): 76-84.

Niesten, Eva, et al. *"Sustainable collaboration: The impact of governance and institutions on sustainable performance."* Journal of Cleaner Production 155 (2017): 1-6.

Nonet, G. Abord-Hugon, et al. *"Multi-stakeholder Engagement for the sustainable development goals: introduction to the special issue."* Journal of Business Ethics 180.4 (2022): 945-957.

Obel, Børge, and Pernille Kallehave. *"Designing a sustainable organization: the four I's framework."* Journal of Organization Design 11.2 (2022): 65-76.

OECD, P. *"Enhancing the contributions of SMEs in a global and digitalized economy."* Paris. Retrieved Feb 25 (2017): 2019.

Organisation for Economic Co-operation and Development (OECD), 2015. *"Environmental Policy Toolkit for Greening SMEs in the EU Eastern Partnership Countries."* https://www.oecd-ilibrary.org/environment/environmental-policy-toolkit-for-sme-greening-in-eu-eastern-partnership-countries_9789264293199-en#:~:text=This%20toolkit%2C%20based%20on%20existing,among%20small%20and%20medium%2Dsized (Accessed 23 July 2023).

Pagell, Mark, and Zhaohui Wu. *"Building a more complete theory of sustainable supply chain management using case studies of 10 exemplars."* Journal of Supply Chain Management 45.2 (2009): 37-56.

Pawlowsky, P. *"The treatment of organizational learning in management science."* In A.B. Antal, M. Dierkes, J. Child, & I. Nonaka (Eds.), Handbook of organizational learning and knowledge (pp. 61-88). New York: Oxford University Press (2001).

Pedersen, Lasse Heje, Shaun Fitzgibbons, and Lukasz Pomorski. *"Responsible investing: The ESG-efficient frontier."* Journal of Financial Economics 142.2 (2021): 572-597.

Perrault, Elise, and Cynthia Clark. *"Environmental shareholder activism: Considering status and reputation in firm responsiveness."* Organization & Environment 29.2 (2016): 194-211.

Phillips, Paul S., et al. *"Corby Waste Not: an appraisal of the UK's largest holistic waste minimisation project."* Resources, Conservation and Recycling 36.1 (2002): 1-31.

Phillips, Robert. *"Stakeholder theory and organizational ethics."* Berrett-Koehler Publishers, 2003.

Porter, Michael E., and Mark R. Kramer. *"Creating shared value: Redefining capitalism and the role of the corporation in society."* Harvard Business Review 89.1/2 (2011): 62-77.

Purvis, Ben, Yong Mao, and Darren Robinson. *"Three pillars of sustainability: in search of conceptual origins."* Sustainability Science 14 (2019): 681-695.

Rahbek Gjerdrum Pedersen, Esben, et al. *"Stakeholder thinking in sustainability management: The case of Novozymes."* Social Responsibility Journal 9.4 (2013): 500-515.

Raworth, Kate. *"A Doughnut for the Anthropocene: humanity's compass in the 21st century."* The Lancet Planetary Health 1.2 (2017): e48-e49.

Revell, Andrea, and Robert Blackburn. *"The business case for sustainability? An examination of small firms in the UK's construction and restaurant sectors."* Business strategy and the environment 16.6 (2007): 404-420.

Revell, Andrea, and Robert Rutherfoord. *"UK environmental policy and the small firm: Broadening the focus."* Business Strategy and the Environment 12.1 (2003): 26-35.

Roberts, Sarah, Rob Lawson, and Jeremy Nicholls. *"Generating regional-scale improvements in SME corporate responsibility performance: Lessons from responsibility Northwest."* Journal of Business Ethics 67 (2006): 275-286.

Ruf, Bernadette M., et al. *"An empirical investigation of the relationship between change in corporate social performance and financial performance: A stakeholder theory perspective."* Journal of Business Ethics 32 (2001): 143-156.

Russo, Michael V., and Paul A. Fouts. *"A resource-based perspective on corporate environmental performance and profitability."* Academy of Management Journal 40.3 (1997): 534-559.

Russo, M. V. *"Companies on a mission: Entrepreneurial strategies for growing sustainably, responsibly, and profitably."* Stanford, CA: Stanford Business Books, (2010).

Ryan, Annmarie, Ingrid Kajzer Mitchell, and Sofia Daskou. *"An interaction and networks approach to developing sustainable organizations."* Journal of Organizational Change Management 25.4 (2012): 578-594.

Sáez-Martínez, Francisco José, Angela González-Moreno, and Teresa Hogan. *"The role of the University in eco-entrepreneurship: Evidence from the Eurobarometer Survey on Attitudes of European Entrepreneurs towards Eco-innovation."* Environmental Engineering and Management Journal 13.10 (2014): 2541-2541.

Sampson, Rachelle C. *"The cost of misaligned governance in R&D alliances."* Journal of Law, Economics, and Organization 20.2 (2004): 484-526.

Sarma, Sahana. *"Unity, data, focus, culture: important steps to build organizational resilience."* Google Cloud Blog, (2023).

Saukkonen, Natalia, and Johanna Kirjavainen. *"Business environment-emerging external and internal pressures for sustainable production."* Responsible consumption and production (2019).

Schaltegger, S., Burritt, R., & Petersen, H. *"An introduction to corporate environmental management: Striving for sustainability."* Sheffield, England: Greenleaf, 2003.

Schilke, Oliver, and Anthony Goerzen. *"Alliance management capability: an investigation of the construct and its measurement."* Journal of Management 36.5 (2010): 1192-1219.

Schwartz, Mark S., and Archie B. Carroll. *"Corporate social responsibility: A three-domain approach."* Business Ethics Quarterly 13.4 (2003): 503-530.

Serafeim, George. *"Social-impact efforts that create real value."* Harvard Business Review 98.5 (2020): 38-48.

Seuring, Stefan, and Stefan Gold. *"Sustainability management beyond corporate boundaries: from stakeholders to performance."* Journal of Cleaner Production 56 (2013): 1-6.

Sharma, Aarti, and Kate Kearins. *"Interorganizational collaboration for regional sustainability: What happens when organizational representatives come together?."* The journal of applied behavioral science 47.2 (2011): 168-203.

Sharma, Arun. *"Sustainability research in business-to-business markets: An agenda for inquiry."* Industrial Marketing Management 88 (2020): 323-329.

Sharma, Sanjay, and Irene Henriques. *"Stakeholder influences on sustainability practices in the Canadian forest products industry."* Strategic Management Journal 26.2 (2005): 159-180.

Sheth, Jagdish N., and Atul Parvatiyar. *"Sustainable marketing: Market-driving, not market-driven."* Journal of macromarketing 41.1 (2021): 150-165.

Shriberg, Mike, Sarah Schwimmer, and Lindsey MacDonald. *"University of Michigan's sustainability scholars program: empowering leaders."* Sustainability: The Journal of Record 6.5 (2013): 259-264.

Siemieniako, Dariusz, Maciej Mitręga, and Krzysztof Kubacki. *"The antecedents to social impact in inter-organizational relationships–A systematic review and future research agenda."* Industrial Marketing Management 101 (2022): 191-207.

SIT Group, 2022. *"SIT's Sustainability Report."* Available at: https://www.sitcorporate.it/app/uploads/2023/07/SIT-SUSTAINABILITY-REPORT-2022_ITAFINAL.pdf.

Spiesberger, Manfred, and Julian Schönbeck. *"Innovation vouchers for the transition of energy and innovation systems."* Форсайт 13.1 (eng) (2019): 70-76.

Srivastava, Prashant, Karthik NS Iyer, and Mohammed YA Rawwas. *"Performance impact of supply chain partnership strategy-environment co-alignment."* International Journal of Operations & Production Management 37.7 (2017): 927-949.

Starik, Mark. *"Should trees have managerial standing? Toward stakeholder status for non-human nature."* Journal of Business Ethics 14 (1995): 207-217.

Starik, Mark, and Patricia Kanashiro. *"Toward a theory of sustainability management: Uncovering and integrating the nearly obvious."* Organization & Environment 26.1 (2013): 7-30.

Statista. *"CONSUMER TRENDS 2023: SUSTAINABILITY EDITION."*

Stead, W. E., & Stead, J. G. *"Management for a small planet."* Thousand Oaks, CA: Sage, (1996).

Stead, J.G., & Stead, W. E. *"Management for a small planet."* (3rd ed.) Armonk: M.E. Sharpe, (2009).

Stekelorum, Rebecca, Issam Laguir, and Jamal ElBaz. *"Can you hear the Eco? From SME environmental responsibility to social requirements in the supply chain."* Technological Forecasting and Social Change 158 (2020): 120169.

Steurer, Reinhard, Andre Martinuzzi, and Sharon Margula. *"Public policies on CSR in Europe: Themes, instruments, and regional differences."* Corporate Social Responsibility and Environmental Management 19.4 (2012): 206-227.

Strebel, Paul. *"Why Do Employees Resist Change. Engineering Management Review."* IEEE. 37. (2009): 10.1109/EMR.2009.5235497.

Sull, Donald, Rebecca Homkes, and Charles Sull. *"Why strategy execution unravels—and what to do about it."* Harvard Business Review 93.3 (2015): 57-66.

Tapaninaho, Riikka, and Johanna Kujala. *"Reviewing the stakeholder value creation literature: Towards a sustainability approach. Social responsibility and sustainability: How businesses and organizations can operate in a sustainable and socially responsible way"* (2019): 3-36.

Teece, David J. "Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance." Strategic Management Journal 28.13 (2007): 1319-1350.

Teece, David J., Gary Pisano, and Amy Shuen. *"Dynamic capabilities and strategic management."* Strategic Management Journal 18.7 (1997): 509-533.

Temtime, Z. T. *"The planning behaviour of SMEs in developing economies: a preliminary investigation."* African Journal of Finance and Management 11.1 (2002): 36-42.

Tevapitak, K., and AHJ Bert Helmsing. *"The interaction between local governments and stakeholders in environmental management: The case of water pollution by SMEs in Thailand."* Journal of Environmental Management 247 (2019): 840-848.

Ukko, Juhani, et al. *"The importance of sustainability engagement in small businesses supplier collaboration."* Sustainable Development 30.1 (2022): 1-9.

UNGC, Accenture. *"Unlocking the Global Pathways to Resilience, Growth, and Sustainability for 2030. The 12th United Nations Global Compact-Accenture CEO Study"* (2023).

UN Global Compact. (2020). *"2020 Annual Management Report"*. Retrieved from https://unglobalcompact.org/library/5221

United Nations. (2015). *"About—Division for Sustainable Development Goals."* Retrieved from https://sdgs.un.org/about#:~:text=The%20Division%20for%20Sustainable%20Development,energy%2C%20climate%2C%20oceans%2C%20urbanization

United Nations (2022). *"The Sustainable Development Goals Report 2022."* Retrieved from: https://unstats.un.org/sdgs/report/2022/.

United Nations. (2023). *"The Sustainable Development Goals Report 2023: Special Edition."* Retrieved from https://unstats.un.org/sdgs/report/2023/.

Vachon, Stephan, and Robert D. Klassen. *"Environmental management and manufacturing performance: The role of collaboration in the supply chain."* International journal of production economics 111.2 (2008): 299-315.

Van Hoof, Bart, and Marcus Thiell. *"Collaboration capacity for sustainable supply chain management: small and medium-sized enterprises in Mexico."* Journal of Cleaner Production 67 (2014): 239-248.

Vanpoucke, Evelyne, Ann Vereecke, and Martin Wetzels. *"Developing supplier integration capabilities for sustainable competitive advantage: A dynamic capabilities approach."* Journal of Operations Management 32.7-8 (2014): 446-461.

Vurro, Clodia, Angeloantonio Russo, and Francesco Perrini. *"Shaping sustainable value chains: Network determinants of supply chain governance models."* Journal of Business Ethics 90 (2009): 607-621.

Wang, Heli, and Jaepil Choi. *"A new look at the corporate social–financial performance relationship: The moderating roles of temporal and interdomain consistency in corporate social performance."* Journal of Management 39.2 (2013): 416-441.

Weber, M. (1909). *"Max Weber on Bureaucratization in 1909"*. Available at: https://www.faculty.rsu.edu/users/f/felwell/www/Theorists/Weber/Whome3.htm [Access date: 11/09/2023].

Williamson, Oliver E. *"The mechanisms of governance."* Oxford University Press, 1996.

Williamson, Oliver E. *"Transaction cost economics: how it works; where it is headed."* De economist 146 (1998): 23-58.

World Bank, 2023. *"Small and Medium Enterprises (SMEs) Finance."* Available at: https://www.worldbank.org/en/topic/smefinance [Access date: 21/07/2023].

Worley, Christopher G., Ann E. Feyerherm, and Darryl Knudsen. *"Building a collaboration capability for sustainability: How Gap Inc. is creating and leveraging a strategic asset."* Organizational Dynamics 39.4 (2010): 325-334.

Wright, Patrick M., Benjamin B. Dunford, and Scott A. Snell. *"Human resources and the resource based view of the firm."* Journal of Management 27.6 (2001): 701-721.

Wu, Kuo-Jui, et al. *"Understanding innovation for sustainable business management capabilities and competencies under uncertainty."* Sustainability 7.10 (2015): 13726-13760.

WWF, IUCN, UNEP. *"World conservation strategy."* Living Resource Conservation for Sustainable Development (1980).

Yin, Robert K. *"How to do better case studies."* The SAGE handbook of applied social research methods 2.254-282 (2009).

Żak, Agnieszka. *"Triple bottom line concept in theory and practice."* Social Responsibility of Organizations Directions of Changes 387.1 (2015): 251-264.

Zhu, Xiaoxuan, et al. *"The fit between firms' open innovation and business model for new product development speed: A contingent perspective."* Technovation 86 (2019): 75-85.

SITOGRAPHY

Carel Industries Website, https://www.carel.it

OECD Website, https://www.oecd.org

Sit Group Website, https://www.sitcorporate.it/en/

United Nations Website, https://www.un.org/en/our-work/documents