SDGs and Supply Chain Indicators - A Study of Brazilian Companies Sustainability Reports

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Abstract

An increasing concern among companies about the impacts of their operations and services has been noted currently, mainly in the Supply chain, which is an interconnected journey that encompasses the entire company, from raw materials to final sale. In this context, ESG is an emerging concept to achieve sustainable development. Within this corporate responsibility context, tools and metrics have emerged to assess and guide companies' commitment to sustainable practices, and sustainability reports emerged for companies to disseminates information about the impacts on the environment, society, and the economy, and can also help in setting goals and monitoring sustainable performance. This paper aims to understand how Brazilian companies listed on the DJSWI approach the supply chain in their sustainability reports, identifying the ESG indicators and the related SDGs. Brazil is very relevant, considering it has the world's largest tropical forest, richest biodiversity, and a large population. The results highlight 10 companies included in the gold, silver, and bronze classes of DJSWI, 52 indicators found, 10 SDGs met at the first moment and 18 new sub-indicators proposed meeting 9 SDGs. The results showed that incorporating sustainable practices in the supply chain not only improves company performance but also contributes to achieving the SDGs and moving towards a more sustainable world.

Keywords: ESG, DJSWI and Sustainable Development Goals.

1. Introduction

Sustainability is a subject incorporated in most governments and companies' agendas, as well as in the news and even during casual talks [1]. In the current business landscape, organizational operations and strategies are being shaped by an emerging set of priorities that go beyond purely financial objectives. [2] noted an increasing concern among companies about the impacts of their operations and services. This arises both from an acknowledgment of obligations towards sustainable development and in response to external pressures, including competitive advantages.

In this context, the Environmental, Social, and Governance (ESG) approach is among the emerging concepts in the corporate world. [3] state that this is the central framework for achieving sustainable development, emphasizing its importance in assessing company performance in environmental, social, and governance areas and its significant role in supply chain management.

Amid this global scenario, [4] emphasize that, in an increasingly climate-aware world facing ecological challenges, companies are under pressure to operate sustainably. [5] suggest that this means minimizing carbon emissions, responsibly using resources, and continuously seeking innovations that benefit the environment. The global response to the climate change challenge requires a drastic shift in public and private investments towards more climate-friendly alternatives [6].

Beyond environmental aspects, [7] point out that corporate social responsibility extends beyond their direct boundaries. Companies are expected to promote ethical labor practices, respect human rights, and maintain transparency throughout their value chain. [7] further add that the increasing transparency in global supply chains, due to regular and intensive media coverage and nongovernmental organization (NGOs) acting as society's watchdogs, requires greater investment in sustainability reporting.

In terms of governance, [8] describes it as the way companies are managed and controlled. Aspects such as financial decision transparency and internal control structure are crucial in emerging contexts, where challenges like weak governance and political risks might prevail. [9] argue that strengthening corporate governance can enhance supply chain productivity.

Furthermore, it is essential to acknowledge the significance of the Sustainable Development Goals (SDGs) established by the United Nations in 2015 [10], with the aim of achieving a more sustainable future by 2030, guiding ESG indicators [6]. According to [11], the SDGs provide a global framework applicable to all countries, regardless of their level of development, making them a fundamental reference in promoting sustainability on a global scale.

Regarding metrics, within this corporate responsibility context, tools and metrics have emerged to assess and guide companies' commitment to sustainable practices. [12] mention the Dow Jones Sustainability World Index (DJSWI), which encompasses global sustainability leaders identified by S&P Global through the Corporate Sustainability Assessment (CSA). It represents the top 10% of the 2,500 largest companies in the S&P Global BMI based on long-term economic, environmental, and social criteria, serving as a key indicator of a company's sustainability performance. By considering factors such as resource management, emission reduction strategies, labor practices, and financial transparency [13], the DJSWI provides companies with a clear insight into their sustainable practices compared to their peers, encouraging them to seek excellence and innovation in sustainability.

Globally, emerging countries present unique characteristics in this scenario. Research has highlighted the importance of studying the relationship between ESG and companies' financial performance to understand the interaction between corporate responsibility, operational efficiency, and inter-institutional collaboration [14].

Looking specifically at emerging countries, the BRICS nations [6], including Brazil, face many social and environmental issues due to increasing pollution, which puts a strain on resource consumption. [15] highlight that Brazil stands out for having the world's largest tropical forest and richest biodiversity, with a population of over 200 million people. [16] suggest that sustainability is in an emerging stage of consolidation in Brazil, showing some advancements.

In this scenario, supply chain management is a vital element in the implementation of ESG practices, particularly in emerging markets, where implementation can face challenges due to issues like inefficient resource allocation and agency practices [8]. Sustainable businesses promote stakeholder-oriented management, encompassing the views and opinions of all shareholders, consumers, and local communities, with a clear focus on mitigating negative impact and maximizing social considerations related to ESG issues [17].

From this broad perspective on the interplay between ESG, supply chain, and Brazil's prominent role, this paper aims to explore supply chain indicators adopted by Brazilian companies listed on the DJSWI and propose new sub-indicators ESG-driven. Furthermore, identify related SDGs. By understanding how these companies approach sustainability in their supply chains, it will be possible to identify best practices and propose improvements.

2. Theoretical Background

2.1. Sustainable Development Goals (SDGs)

According to the United Nations, “the 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests.”

The UN’s Resolution adopted by the General Assembly in 2015, the 17 SDGs, and 169 targets demonstrate the scale and ambition of the new universal Agenda, that seek to realize the human rights of all and to achieve gender equality and the empowerment of all women and girls. They are integrated and indivisible and balance the three dimensions of sustainable development: the economic, social, and environmental.

The Goals and targets stimulate action from 2015 until 2030 in areas of critical importance for humanity and the planet. The first area refers to people, the goals are determined to end poverty and hunger, in all their forms and dimensions, and to ensure that all human beings can fulfill their potential in dignity and equality and a healthy environment. The second area is the planet. The aim is to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources, and taking urgent action on climate change, so that it can support the needs of the present and future generations [18].

The third area of critical importance for humanity and the planet and planet is prosperity. The Agenda aims to ensure that all human beings can enjoy prosperous and fulfilling lives and that economic, social, and technological progress occurs in harmony with nature. The fourth area is peace, the goals are determined to foster peaceful, just, and inclusive societies that are free from fear and violence. There can be no sustainable development without peace and no peace without sustainable development. The last area is partnership. The UN is determined to mobilize the means required to implement the Agenda through a revitalized Global Partnership for Sustainable Development, based on a spirit of strengthened global solidarity, focused in particular on the needs of the poorest and most vulnerable and with the participation of all countries, all stakeholders and all people [18].

The 17 SDGs are no poverty, zero hunger, good health and well-being, quality education, gender equality, clean water and sanitation, affordable and clean energy, decent work and economic growth, industry innovation and infrastructure,

reduced inequalities, sustainable cities and communities, responsible consumption and production, climate action, life below water, life on land, peace justice and strong institutions and partnerships for the goals [18].

2.2. Sustainability Reports and Indicators

Organizations have developed sustainability reporting practices to increase their accountability regarding sustainability issues by offering appropriate information about their sustainability management system and performance [19]. According to the Global Reporting Initiative [20], a sustainability report disseminates information about the impacts of an organization on the environment, society, and the economy. It can also help in setting goals and monitoring sustainable performance.

The sustainability reports present information such as sustainability indicators (SI), parameters that allow measuring the performance of the organization on a given occasion [21];[22]. A robust performance indicator system can assist decision-makers in overcoming corporate sustainability challenges. This system can help the companies understand the current situation of the company and its desired final state [23]. According to [24], the lack of a consolidated model for the analysis of SIs, and the lack of a method for choosing indicators are factors that make it difficult to monitor and compare industries.

The systematic choice of indicators used by companies in the same segment can be a reference for choosing and directing actions aimed at adopting a set of indicators belonging to a sustainability report [25], and SIs have emerged as a widely accepted tool at all levels, national, community, organization, and company [26]. They are necessary to make complex information in a format usable for public policies, in addition to assisting progress toward the organization's goals and assisting in management decision-making [24].

The fundamental purpose of sustainable indicators, according to [27], is to provide crucial information to decision-makers regarding the sustainable viability of a system. These data are vital for formulating strategies aimed at more balanced and sustainable progress, enabling a thorough analysis and comparison of various available alternatives. Echoing this notion, [28] underscores the complexity and significance of identifying sustainable options and making decisions within this challenging scenario for the future. It highlights the relevance of decision-makers confronting and discussing sustainability issues, even in the absence of immediate solutions.

2.3. Supply Chain Performance

The supply chain function is critical in terms of both its efforts towards delivering on social sustainability goals and mitigating the exposure to risk for buyers [29] As defined by [30], "A supply chain refers to an integrated and sequentially interrelated value system of suppliers, manufacturers, subcontractors, distributors and retailers working together with the prime purpose of creating value to the output for the ultimate end-users."

Decades ago, supply chains took on a global dimension as a result of the presence of enterprises situated in several nations at certain manufacturing and distribution stages [31]. Therefore, some general traits characterize global supply chains: 1) the existence of one or more focal enterprises, 2) the delocalization of some phases of production, 3) the implementation of offshore supply channels, and 4) the global distribution of products [32].

With this global dimension, a variety of environmental, social, political, and cultural factors influence the management of these supply chains [33], focusing on sustainability. The concept of sustainability has been widely adopted as a basic principle to guide development in the public and corporate sectors. It is increasingly evident that market and regulatory drivers shape the organization and operation of supply chains [34]

The implementation of sustainable practices in sustainability-driven supply chain management not only reduces operational costs but also enhances the company's image by demonstrating environmental commitment [35]. This drives efficiency, optimizes resources, and meets the growing expectations for socially responsible brands, offering a significant competitive advantage in the global market.

3. Research Method

As the business world advances, the interaction between ESG and supply chain management emerges as fundamental. Companies that incorporate these principles are not only positioned to thrive in a competitive market but also to play a pivotal role in building a more sustainable future. This paper aims to understand how Brazilian companies listed on the DJSWI approach the supply chain in their sustainability reports, identifying the ESG indicators and the related SDGs. Besides that, we aim to identify best practices and propose improvements for the sustainability reports in the shadow of the supply chain. Therefore, the research aims to answer the following questions:

RQ1: Do sustainability reports focus on the supply chain and its indicators?

RQ2: Are the main supply chain indicators are ESG-driven or can be improved with ESG concepts?

RQ3: Do the proposed ESG-Supply Chain indicators can be related to the United Nations SDG?

The supply chain indicators sought in this paper are elements that can help professionals and companies monitor the effectiveness and efficiency of various supply chain processes, across all areas that it covers.

The research method is based on [36] aiming to identify the supply chain indicators, analyze whether they are ESG-driven, and proposes new indicators. One of the contributions of this work is to collect the data using the sustainability reports of Brazilian companies listed on DJSWI. The second contribution is to relate each indicator to one SDG. The third contribution is the use of "E" as environmental, and not as economic. The fourth contribution is to propose one SGD and target related to each new sub-indicator. Figure 1 below shows in detail the research methodology.

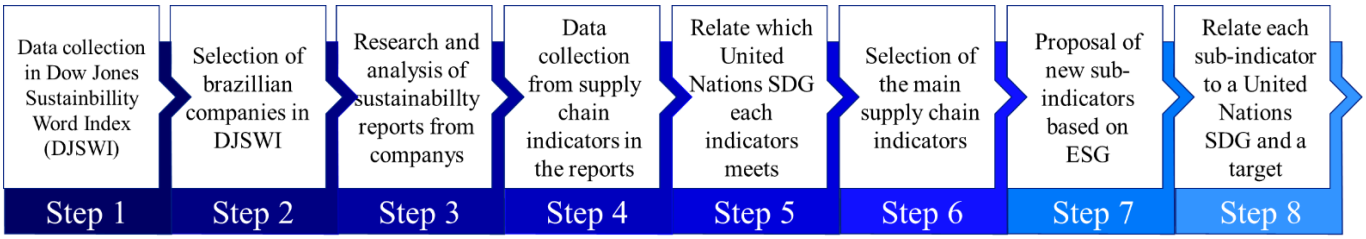

Figure 1: Methodology - Source: Authors (2024)

The first part consists of data collection. The DJSWI separates companies into 5 categories: S&P Global Gold Class, S&P Global Silver Class, S&P Global Bronze Class, S&P Global Industry Movers, and Sustainability Yearbook Member. The data used are qualitative – Supply Chain indicators – obtained by 2022 Sustainability Reports from Brazilian companies in the DJSWI. According to the S&P Global 2022 Yearbook, there were 10 companies from Brazil constituents in DJSWI in the categories S&P Global Gold, Silver and Bronze Class. Talking about sustainability, Brazil is truly relevant, considering it has the world's largest tropical forest and richest biodiversity, with a population of over 200 million people [15].

The main indicators will be selected by searching all the indicators in the reports and selecting the most used in the reports that are considered the most relevant. Using the main indicators found, new ones will be proposed in the shadow of ESG, that we believe affect the indicators that measure Supply Chain performance. After that, SDGs and targets will be proposed, related to each indicator.

4. Results

The 10 Brazilian companies selected in DJSWI are shown in Table 1.

Table 1. Brazilian companies selected in DJSWI

Number	Company name	Industry	Category
1	Klabin S.A.	Containers & Packaging	Gold Class
2	Lojas Renner S.A.	Retailing	Gold Class
3	Banco do Brasil S.A.	Banks	Silver Class
4	Banco Bradesco S.A.	Banks	Silver Class
5	Itaú Unibanco Holding S.A.	Banks	Silver Class
6	Itausa - Investimentos Itau SA	Banks	Bronze Class
7	Companhia Energética de Minas Gerais	Electric Utilities	Bronze Class
8	Natura &Co Holding S.A.	Personal products	Bronze Class
9	Centrais Eletricas Brasileiras S.A. – Eletrobras	Electric Utilities	Bronze Class
10	Fleury S.A.	Health Care Providers & Services	Bronze Class

Source: S&P Global 2022 Ranking Yearbook

Table 2 shows all the Supply Chain indicators found in the sustainability reports. The indicators were found by searching for strings in the reports. The strings used were: "Supply Chain" OR "Logistics" OR "Chain".

Table 2. Supply chain indicators

Company	Indicator to Supply Chain
C1	Reverse logistic
	Greenhouse gas emissions
	Environmental Conservation
	Waste and effluent management
C2	Team training
	Water resources management
	Suppliers' homologation
	Ingredients/ materials management
	Environmental Conservation
	Reverse logistic
	Gas emissions throughout the supply chain
	Greenhouse gas emissions
C3	Suppliers' water resources management
	Suppliers' CO_2 emissions
	Suppliers' reverse logistic
	Gas emissions throughout the supply chain
C4	Team training
	Suppliers'greenhouse gas emissions
	Ingredients/ materials management
	Suppliers' Socio-environmental impacts
C5	Reverse logistic
	Suppliers' CO_2 emissions
	Team training
	Strikes and stoppages monitoring
	Occupational diseases
	Waste and effluent management
	Suppliers' environmental and climate practices
C6	Reverse logistic
	CO_2 emissions
	Environmental and climate practices
	Use of renewable energy
C7	Suppliers' homologation
	Team training
	Greenhouse gas emissions
	Environmental Conservation
C8	Human Rights in the Supply Chain
	Circularity (recycling and alternative sourcing)
	Waste and effluent management
	Suppliers' homologation
	Greenhouse gas emissions
	Deforestation (impact through the value chain)
	Ingredients/ materials management
	Environmental Conservation
	Reverse logistic
C9	Greenhouse gas emissions
	Use of renewable energy
	Purchases made with local suppliers
	Team training
C10	Suppliers' homologation
	Suppliers'greenhouse gas emissions
	Greenhouse gas emissions
	Waste and effluent management

Source: Authors (2024)

From the results seen in Table 2, we could find 52 indicators related to the supply chain in the reports. Besides that, we could see that indicators related to suppliers were common in banks, as companies 3, 4, and 5. Besides that, all companies reported some indicators related to greenhouse gas emissions. Talking about the social part of ESG, few companies report specific social indicators related to the supply chain, showing a lack of attention to this aspect.

Table 3 relates each indicator to an SDG that it meets. Based on the indicators found in the company reports, it was possible to relate them to 10 SDGs. Goal 12, Responsible consumption and production, and 13, Climate action, were the ones most related to the supply chain indicators found in the sustainability reports. According to Table 3, 7 SDGs were not achieved with the indicators found in the reports: no poverty (SDG 1), gender equality (SDG 5), reduced inequalities (SDG 10), sustainable cities and communities (SDG 11), life below water (SDG 14), peace, justice and strong instructions (SDG 16) and partnerships for the goals (SDG 17).

Table 3. Indicators and related SDGs

Company	Indicator	SDG - 2	SDG – 3	SDG - 4	SDG - 6	SDG - 7	SDG - 8	SDG - 9	SDG -12	SDG - 13	SDG - 15
C1	Reverse logistic								✔		
	Greenhouse gas emissions									✔	
	Environmental Conservation							✔			
	Waste and effluent management				✔				✔		
C2	Team training			✔							
	Water resources management				✔						
	Suppliers' homologation						✔				
	Ingredients/ materials management							✔			
	Environmental Conservation							✔			
	Reverse logistic								✔		
	Gas emissions throughout the supply chain									✔	
	Greenhouse gas emissions									✔	
C3	Suppliers' water resources management				✔						
	Suppliers' CO_2 emissions									✔	
	Suppliers' reverse logistic								✔		
	Gas emissions throughout the supply chain									✔	
C4	Team training			✔							
	Suppliers'greenhouse gas emissions									✔	
	Ingredients/ materials management							✔			
	Suppliers' Socio-environmental impacts								✔		
C5	Reverse logistic								✔		
	Suppliers' CO_2 emissions									✔	
	Team training			✔							
	Strikes and stoppages monitoring						✔				
	Occupational diseases		✔				✔				
	Waste and effluent management				✔				✔		
	Suppliers' environmental and climate practices								✔		
C6	Reverse logistic								✔		
	CO_2 emissions									✔	
	Environmental and climate practices								✔		
	Use of renewable energy					✔					

Company	Indicator	SDG - 2	SDG – 3	SDG - 4	SDG - 6	SDG - 7	SDG - 8	SDG - 9	SDG -12	SDG - 13	SDG - 15
C7	Suppliers' homologation						✔				
	Team training			✔							
	Greenhouse gas emissions									✔	
	Environmental Conservation							✔			
C8	Human Rights in the Supply Chain		✔	✔							
	Circularity (recycling and alternative sourcing)								✔		
	Waste and effluent management				✔				✔		
	Suppliers' homologation						✔				
	Greenhouse gas emissions									✔	
	Deforestation (impact through the value chain)										✔
	Ingredients/ materials management							✔			
	Environmental Conservation							✔			
	Reverse logistic								✔		
C9	Greenhouse gas emissions									✔	
	Use of renewable energy					✔					
	Purchases made with local suppliers	✔									
	Team training			✔							
C10	Suppliers' homologation						✔				
	Suppliers'greenhouse gas emissions									✔	
	Greenhouse gas emissions									✔	
	Waste and effluent management				✔				✔		

Source: Authors (2024)

The main indicators will be those who appeared at least in four companies' sustainability reports: reverse logistics, greenhouse gas emissions, environmental conservation, team training, waste and effluent management, and suppliers' homologation. However, we have 6 main supply chain indicators. In Table 4, we present some proposals for assessing supply chain performance from the perspective of using ESG sub-indicators grouped by business areas.

Table 4. Proposed ESG sub-indicators for measuring Supply Chain performance and SGDs related

Category	New sub-indicators	SDG related	Target related	Supply Chain indicator
Environmental	1.1 Percentage of returned material	12	12.5	1. Reverse logistic
	2.1 Reduction of fossil fuel consumption	13	13.2	2. Greenhouse gas emissions
	3.1 Reforestation rate	15	15.1	3. Environmental Conservation
	4.1 Percentage of environmental training	4	4.7	4. Team training
	5.1 Percentage of reuse of waste and effluents	12	12.5	5. Waste and effluent management
	6.1 Percentage of suppliers with some environmental certification	12	12.6	6. Suppliers' homologation
Social	1.2 Number of NGOs working in reverse logistics	17	17.17	1. Reverse logistic
	2.2 Number of carbon settlement initiatives	13	13.2	2. Greenhouse gas emissions
	3.2 Brand environmental reputation indicator	13	13.3	3. Environmental Conservation
	4.2 Number of employees trained	8	8.6	4. Team training
	5.2 Number of partner NGOs for waste reuse	17	17.17	5. Waste and effluent management
	6.2 Percentage of suppliers with equal pay between genders	5	5.1	6. Suppliers' homologation
Governance	1.3 Savings with reverse logistics	12	12.6	1. Reverse logistic
	2.3 Costs with carbon credits	13	13.2	2. Greenhouse gas emissions
	3.3 Environmental Regulation Compliance Index	12	12.4	3. Environmental Conservation
	4.3 Compliance with regulations	16	16.6	4. Team training
	5.3 Cost with effluent and waste treatment	12	12.4	5. Waste and effluent management
	6.3 Percentage of suppliers compliant with labor legislation	8	8.8	6. Suppliers' homologation

Source: Authors (2024)

Table 4 highlights the relationship between SC indicators and ESG sub-indicators in the context of business operations. The findings indicate that environmental, social, and governance factors can have a significant impact on the performance of the presented indicators reverse logistics, greenhouse gas emissions, environmental conservation, team training, waste and

effluent management, and suppliers' homologation. From the 6 main supply chain indicators found in sustainability reports, we obtained 18 new sub-indicators directly related to ESG. From these new ones, we were able to meet 9 different SDGs.

SDG 4, quality education, was attempted with target 4.7 with the sub-indicator percentage of environmental training. This target aims to ensure all learners acquire the knowledge and skills needed to promote sustainable development. Goal 5, gender equality, was attempted with target 5.1 with the sub-indicator percentage of suppliers with equal pay between genders. This target talks about ending all forms of discrimination against women and girls everywhere, promoting their rights and opportunities in all aspects of life.

Goal 8, decent work and economic growth, met with the indicators number of employees trained and percentage of suppliers compliant with labor legislation, related to target 8.6, which proposes reducing the proportion of youth not in employment, education, or training, and 8.8, that talks about protection of labor rights and promotion safe and secure working environments of all workers.

SDG 12, responsible consumption and production was attempted with target 12.4, with sub-indicators environmental regulation compliance index and cost with effluent and waste treatment. This target is about achieving environmentally sound management by agreed international frameworks. Another target from this goal was 12.5, with sub-indicators percentage of returned material and percentage of reuse of waste and effluents. This target talks about reducing waste by recycling and reusing. Lastly, target 12.6 was met with sub-indicators savings with reverse logistics and a percentage of suppliers with some environmental certification. This target talks about encouraging companies to adopt sustainable practices and deliver sustainability information in their reporting cycles.

Goal 13, climate action, was associated with greenhouse gas emissions and environmental conservation. The targets attempted were 13.2, with sub-indicators Reduction of fossil fuel consumption, Number of carbon settlement initiatives and Costs with carbon credits, which talks about integrating climate change into strategic policies and planning, and 13.3, with sub-indicator Brand environmental reputation indicator, which talks about improving education, increasing awareness and human and institutional capacity on climate change mitigation, adaptation and impact reduction.

Goal 15, life on land, met with the indicator environment conservation, and the sub-indicator reforestation rate. The target attempted was 15.1, which talks about ensuring the recovery of terrestrial ecosystems, especially forests and mountains, by obligations arising from international agreements. Goal 16, peace, justice and strong institutions, was met with the sub-indicator compliance with regulations, related to team training. The target, 16.6, talks about developing effective, accountable, and transparent institutions at all levels.

The last SDG is 17, partnerships for the goals, associated with two sub-indicators: the number of NGOs working in reverse logistics and a number of partner NGOs for waste reuse. The target met is 17.7. This target aims to encourage and promote public and private partnerships with society based on experience and strategy.

The discussion about the interactions and achievement of the Sustainable Development Goals (SDGs) demands an expansion in the methodological approach used. National policymakers are faced with the immense challenge of meeting the objectives set for 2030 [37]. However, pursuing simultaneous progress across the economic, social, and environmental dimensions proves to be complex.

An interdisciplinary and collaborative approach is necessary, not only among governmental sectors but also involving active engagement from the private sector, civil society, and the academic community. Coherence among these sectors is vital for the effective implementation of strategies promoting holistic sustainable development, addressing the SDGs in an integrated and synergistic manner. This new approach requires innovative public policies, strategic investments, and collective actions that can drive tangible advancements toward a more sustainable future for all [37].

5. Conclusions

In this study, we explore the interaction between ESG principles and supply chain management in some specific Brazilian companies in DJSWI. The research aimed to understand how these companies approach sustainability in their supply chains, identifying ESG indicators and their relationship with the United Nations Sustainable Development Goals. This research showed the importance of assessing and improving sustainability in business operations, not only to remain competitive in the market but also to play a key role in building a more sustainable future.

The results highlight some of the ESG indicators, such as Reverse Logistics, Greenhouse Gas Emissions, Environmental Conservation, Team Training, Waste and/or Effluent Management, and Supplier Approval, which are the most common in the sustainability reports of industrial companies. However, we also identified gaps, particularly in the assessment of social aspects in the supply chain, highlighting the need for greater attention to this dimension.

We also had some difficulties in identifying supply chain indicators in companies' sustainability reports. The lack of clarity and standardization in the dissemination of specific information related to logistics and supply chains can represent a significant challenge in evaluating and improving performance in this area.

Regarding the research questions, we could conclude that the companies' reports analyzed have a specific space to discuss the supply chain, did not separate indicators in an orderly manner, and did not focus on the supply chain area, however, all supply chain indicators found were ESG-driven, which is a big positive consideration for the companies.

Although all the indicators found were ESG-driven, was still possible to improve them with new sub-indicators. All the new sub-indicators were related to an SDG and a target, as shown in Table 4, and this is the main contribution, highlighting how sustainable supply chain management can contribute to achieving sustainable development goals at a global level.

We conclude that incorporating sustainable practices in the supply chain not only improves company performance but also contributes to achieving the SDGs and moving towards a more sustainable world. We hope this study inspires companies to adopt more comprehensive and responsible approaches to their supply chains and to report these practices, thus promoting sustainability on a global scale.

Finally, research could be carried out to identify, apply, and monitor some of these new sub-indicators proposed in Table 4. Another proposal for future research is to find quality indicators in sustainability reports and propose new ESG-driven sub-indicators, relating to quality management.

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