

COLLABORATION, ENGAGEMENT AND RELATIONSHIPS IN CORPORATES' SUSTAINABLE MANAGEMENT: the role of Sustainable Certification Schemes (SCS)

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Resumo

Este é um ensaio teórico que consiste em uma revisão de literatura sobre Esquemas de Certificação Sustentáveis (ECS) e o papel, destacado na literatura, que este instrumento de certificação desempenha na gestão sustentável das empresas, especialmente considerando fatores como colaboração, inovação e relacionamento entre os diferentes atores de uma cadeia de suprimentos. Como considerações finais, a literatura de ECS aponta que a adoção de um ECS tem potencial para gerar ganhos reputacionais, engajamento dos atores (externos e internos) e ainda destaca que a colaboração é fator chave para o sucesso do ECS. Além da discussão estruturada a partir da literatura, o trabalho também aponta para pesquisas futuras nas áreas de ECS, como governança, aspectos ambientais e sociais, dentre outros tópicos.

Palavras Chave

Sustainable Certification Schemes, Collaboration, Relationship

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Abstract

This is a theoretical essay that consists of a literature review regarding Sustainable Certification Schemes (SCS) and the role, highlighted in the literature, that this certification instrument plays in the sustainable management of firms, especially considering factors such as collaboration, innovation and the relationship between different actors in a supply chain. As final considerations, the SCS literature points out that the adoption of a SCS has the potential to generate reputational gains, engagement of actors (external and internal) and also highlight that collaboration is a key factor for the success of SCS. In addition to the discussion structured from the literature, the work also points to future research in the areas of SCS, such as governance, environmental and social aspects, among other topics.

Key words: Sustainable Certification Schemes, Collaboration, Relationship

Introduction and objective

The role of collaborations between different agents is an important issue regarding the sustainability in Operations Management (OM) and Supply Chain Management (SCM). Chen et al. (2017) highlights the role of supply chain collaboration as a strategic issue for firms to develop and achieve their social, economic and environmental goals towards sustainability targets. In the study of Mishra et al. (2022), the authors find a significance in the firm's collaboration with their suppliers, customers and internal departments in order to have improvements in their performance and they find evidence that orientation towards environment enables firms to engage in the sustainable supply chain.

At the systematic literature review of Chauhan et al. (2022), the authors highlight that, in the literature, "collaborative innovation", "collaborative process" and "development of products" are mechanisms leading towards a more effective Supply Chain Collaboration, which also leads to an improve at sustainable operational performance by enhancing capacity development and better resources use. The research of Lubell et al. (2011) posits that "cooperation", "innovation" and "knowledge" gaps are probably relevant for resilience and sustainability of many kinds of social-ecological systems.

Stakeholder pressure plays a key role at the implementation of sustainable policies in manufacturing. The research of Szász et al. (2021) analyzes sustainability policies in the automotive industry and concludes that pressure from external stakeholders has a positive effect on the inclusion of sustainability in the strategic agenda of automotive companies, which consequently increases the efforts of these companies to implement sustainability practices. Stakeholder pressure to implement sustainable policies is also highlighted in the study conducted by Huq et al. (2016), which points this finding in the textile industry.

At the corporate level, it has been increasingly common to adopt sustainability certification as a way of proving, in a practical and consistent way, the execution of socio-environmental sustainability policies and comply with stakeholders demands (Avila & Paiva, 2006; de Oliveira et al., 2010; Feng, Lai, et al., 2020; Feng, Tong, et al., 2020; Macedo et al., 2018; Veiga Neto et al., 2020). Certified management standards can be used to mitigate asymmetric information among potential partners and as an act that provides "real information" about the management system adopted by their partners (Dorr & Grote, 2009; King et al., 2005). In their research, Feng, Lai, et al. (2020) reinforce the role of stakeholders' pressure in the

adoption of sustainable policies and social responsibility in manufacturing and argue that obtaining sustainability certifications can increase the legitimacy of production in meeting the increasing demand for more sustainable operations.

Considering the importance of collaboration towards sustainability policies at the corporate level and the role that Sustainable Certification Schemes (SCS) as a way to prove the implementation and execution of sustainable policies/practices, this essay has the main objective to understand what does the sustainability literature has been studying on the alignment of SCS and collaborative and innovative sustainable management.

This essay is organized as follows: literature review regarding SCS, which talks about the role of certification in the firm, engagement, relationship between actors, sustainable innovations and impacts on reputation, sustainability and efficiency gains for the firm and the supply chain as a whole. From the literature, the final considerations point to the role of SCS in the sustainability of the company and the role of collaboration between agents to leverage the success of certification. Within the topic of conclusions, future research paths within the area of SCS are also pointed out.

Theoretical development

In certification studies, it is crucial to highlight the role of sustainability certification as an important tool to guide higher credibility about sustainable operations. King et al. (2005) argue that firms are likely to go after certifications standards when their partners have a lack of credible information or when they are willing to avoid “supplier opportunism”. The research of Partzsch et al. (2019) indicate that consumers are more willing on relying on voluntary certifications as a way to ensure that they are not supporting “un-environmental” or detrimental practices. At the same way, Olsen et al. (2021) research the role of certification in the salmon aquaculture in Norway (Aquaculture Stewardship Council – ASC) and their results points to motivations of adoption of ASC as companies seeking to present an image of commitment with sustainability, improvement of their reputation and meet public concern and stakeholders’ pressure to adopt more sustainable policies in the production line, improving the manufacturers and suppliers’ reputation locally and globally.

At the company level, there are researchers that study the impact of certification to build capabilities and impact firms’ performance. The findings of Chkanikova & Sroufe (2021) show the opportunities of the retail-driven certification as a contribution to dynamic capabilities to develop effective and efficient upgrades towards sustainability practices in supply chain. Chkanikova & Sroufe (2021) also highlights that sustainable certification schemes can integrate the sustainability agenda with food supply chains.

Certification Schemes are part of a governance trend and are multi-stakeholder initiatives (Amundsen, 2022). The research of Vince & Haward (2019) studies SCS in aquaculture in Tasmania, Australia and points to the role of certification and third-party accreditation (non-state) as a “private-social partnership”, which is a form of “hybrid governance”. The authors highlight that this “hybrid governance” emerges from market driven third part certification, which can encourage industry best practices, engage communities and provide information to customers, increasing market access.

Engagement of actors and leadership are also important features to the success of SCS and sustainable practices. The study of Herazo & Lizarralde (2015) assesses collaboration and innovation in the building market as Green Building Certification (GBC) and their main contributions are the four tension that can improve or prevent collaboration and innovation, which are “strategic-tactical”, “collaborative-competitive”, “participative-effective” and “individual-collective” and call attention to the importance of leadership to the determination

of tension level. Their conclusion also posits that, in the case of GBC, the success of this certification needs management innovations by the client or owner organization and, at the same way, the design teams and contractors need to be engaged in these innovative processes, systems and technologies.

When studying collaboration among different actors in SCS, it is important to understand that SCS are not a static process, but rather a part of a dynamic structure and social relations (Amundsen, 2022; Birkenberg & Birner, 2018). The paper of Birkenberg & Birner (2018) studies a case of certification for carbon neutrality in a coffee cooperative in Costa Rica (Coopedota) and the authors' main finding is that the success of this certification scheme depended on strong and visionary actors that performed the necessary network functions and also highlight the importance of "double linkages" among actors, which leads to the role of combined services for the introduction of the certification scheme.

In the context of dynamic structure, Amundsen (2022) highlight the role played by "flexibility", "continuously improvement", "reciprocal knowledge" production as the need of include different voices, interests and expertises in developing dialogue and negotiation. Herazo & Lizarralde (2015) also support that GBC must be understood as a process and not as a final outcome in order to manage these tensions.

The literature points that the context can have an impact on innovation and improvement provided by SCS. Ren et al. (2022) examine Environmental labeling certification impacts on corporate environmental innovation and highlight that the relationship between environmental certification and environmental innovation is strengthened in two contexts, which are in "non-state-owned enterprises" and "firms with low degree of government intervention". In the case of carbon neutrality certification, Birkenberg & Birner (2018) points that a highly centralized network of strategic actors might jeopardize the sustainability of the innovation project.

Stakeholders' needs play an important role among SCS. Chkanikova (2016) study the food retailing and argues that stakeholders demand can have the power of redefining the corporate purchasing strategies to the "triple bottom line" approach (Environmental, Social and Financial), which represents a challenge of managing interorganizational relationship and also there is the dependence of sustainable purchasing relationship. In this context, the author supports that SCS can facilitate the retailer's engagement in "greener" a product and incorporate sustainable responsibility on its business.

In Brazil, studies also highlight the role of SCS in collaboration, innovation and relationship among stakeholders at corporate level. The paper of Avila & Paiva (2006) studied the ISO 14001 in Brazilian companies and their finds highlight that cooperation for the development of environmental technologies and involvement of suppliers are factors of operations processes, which are related with environmental management and certification schemes implementation. Avila & Paiva (2006) also characterized the dimensions of benefits of ISO 14001: operational changes, improvement in financial performance, relationship with business and societal stakeholders. In Gavronski et al. (2008) the authors highlight that ISO 14001 improves the relationship with the society (societal benefits), such as government, NGOs, among others and in the competitive environment, such as customers, suppliers and competitors.

On other study, Gavronski et al. (2013) studied the ISO 14001-certified manufacturing plants in Brazil through a survey and their results points to three different clusters that synthetizes the motivations of the certification adoption: internal focus (internal operations and resources), external focus (social pressure), holistic groups (high value, regardless of the focus) and manufactures that are in the heuristic group also have a more efficient use of resources and inputs and a higher integration with suppliers and Research & Development (R&D) centers,

which can lead to a more integration in environmental practices. The authors also suggest that the external integration, aligned with internal improvements, allow more integration in environmental practices.

The standardization of processes, training and document, provided and demanded for a SCS, can improve firm's integration and external/internal relationships. De Oliveira et al. (2010) studied the implementation of ISO 14001 and in their results shows that the certification improved managerial performance of firms, mainly through the standardized and documented processes, training plans and systematic measure of results, besides of contributing to improvements in the work environment and reducing risks, as a consequence of the environmental awareness of the firm's employees and their controlled processes. De Oliveira et al. (2010) results also point to a moderate relation between technological development and ISO 14001, through modernization of processes, products and installations, but other factors might have a more relevant impact.

Conclusions and future research suggestions

Considering the literature reviewed in this essay, we can understand that the adoption of sustainable certification schemes has been pointed in the literature as a way of improving reputation and a way of engaging external and internal actors, such as consumers, investors, employees, among others.

From a selection of literature on the topic of SCS, collaboration and innovation in sustainability, it is notable that the adoption of sustainability certifications can improve relational environment, externally and internally. Collaboration is an important characteristic needed to the well-functioning of SCS towards more effective and efficient sustainable policy at corporate level. SCS, through a higher level of standardization of processes and documents, can lead to higher levels of actors' integration and, consequently, higher levels of sustainable policies integration. Another point considered in the literature concerns about the structure of SCS, which is not a static process, but a dynamic system.

Although the literature identifies and list the benefits and the relationship between SCS, collaboration and innovation for the implementation and execution of sustainable policies and practices, there is still some research topics that need to be addressed.

The governance and "Hybrid-governance", as studied by Vince & Haward (2019), in SCS and collaboration is a research gap that need further discussions. The engagement and relationships of intra-firm (inside the firm) actors and interfirm (outside the firm, among firms) actors, core conditions for the success of implementing a SCS and sustainable policies/practices are also important research areas to be developed.

Another area of study within this area refers to the social and economic benefits of adopting SCS, since much is said about environmental gains, but little about socio-economic gains. Within this theme, developing what are the innovations that these certification schemes can bring to companies is a research option.

As discussed by Ren et al. (2022), understanding of how the business/market environment impacts the implementation of sustainable practices and policies, certification schemes and whether there is a direct and/or indirect impact on collaboration between different agents around sustainable solutions presents as research topics as well.

Bibliographical references

- Amundsen, V. S. (2022). From checking boxes to actual improvement: A new take on sustainability certification. *Aquaculture*, 548. <https://doi.org/10.1016/j.aquaculture.2021.737672>
- Avila, G. J., & Paiva, E. L. (2006). Processos operacionais e resultados de empresas brasileiras após a certificação ambiental ISO 14001. *Gestão & Produção*, 13(3), 475–487.
- Birkenberg, A., & Birner, R. (2018). The world's first carbon neutral coffee: Lessons on certification and innovation from a pioneer case in Costa Rica. *Journal of Cleaner Production*, 189, 485–501. <https://doi.org/10.1016/j.jclepro.2018.03.226>
- Chauhan, C., Kaur, P., Arrawatia, R., Ractham, P., & Dhir, A. (2022). Supply chain collaboration and sustainable development goals (SDGs). Teamwork makes achieving SDGs dream work. *Journal of Business Research*, 147, 290–307. <https://doi.org/10.1016/j.jbusres.2022.03.044>
- Chen, L., Zhao, X., Tang, O., Price, L., Zhang, S., & Zhu, W. (2017). Supply chain collaboration for sustainability: A literature review and future research agenda. *International Journal of Production Economics*, 194, 73–87. <https://doi.org/10.1016/j.ijpe.2017.04.005>
- Chkanikova, O. (2016). Sustainable Purchasing in Food Retailing: Interorganizational Relationship Management to Green Product Supply. *Business Strategy and the Environment*, 25(7), 478–494. <https://doi.org/10.1002/bse.1877>
- Chkanikova, O., & Sroufe, R. (2021). Third-party sustainability certifications in food retailing: Certification design from a sustainable supply chain management perspective. *Journal of Cleaner Production*, 282. <https://doi.org/10.1016/j.jclepro.2020.124344>
- de Oliveira, O. J., Serra, J. R., & Salgado, M. H. (2010). Does ISO 14001 work in Brazil? *Journal of Cleaner Production*, 18(18), 1797–1806. <https://doi.org/10.1016/j.jclepro.2010.08.004>
- Dorr, A. C., & Grote, U. (2009). *THE ROLE OF CERTIFICATION IN THE BRAZILIAN FRUIT SECTOR*. 13(3), 539–571.
- Feng, Y., Lai, K. hung, & Zhu, Q. (2020). Legitimacy in operations: How sustainability certification announcements by Chinese listed enterprises influence their market value? *International Journal of Production Economics*, 224. <https://doi.org/10.1016/j.ijpe.2019.107563>
- Feng, Y., Tong, X., & Zhu, Q. (2020). The market value of sustainable practices in the luxury industry: An identity mismatch and institutional theoretical perspective. *Transportation Research Part E: Logistics and Transportation Review*, 137. <https://doi.org/10.1016/j.tre.2020.101919>
- Gavronski, I., Ferrer, G., & Paiva, E. L. (2008). ISO 14001 certification in Brazil: motivations and benefits. *Journal of Cleaner Production*, 16(1), 87–94. <https://doi.org/10.1016/j.jclepro.2006.11.002>
- Gavronski, I., Paiva, E. L., Teixeira, R., & de Andrade, M. C. F. (2013). ISO 14001 certified plants in Brazil - Taxonomy and practices. *Journal of Cleaner Production*, 39, 32–41. <https://doi.org/10.1016/j.jclepro.2012.08.025>

- Herazo, B., & Lizarralde, G. (2015). The influence of green building certifications in collaboration and innovation processes. *Construction Management and Economics*, 33(4), 279–298. <https://doi.org/10.1080/01446193.2015.1047879>
- Huq, F. A., Chowdhury, I. N., & Klassen, R. D. (2016). Social management capabilities of multinational buying firms and their emerging market suppliers: An exploratory study of the clothing industry. *Journal of Operations Management*, 46, 19–37. <https://doi.org/10.1016/j.jom.2016.07.005>
- King, A. A., Lenox, M. J., Terlaak, A., & Mossavar-Rahmani, T. (2005). *Corporate Social Responsibility Initiative A Cooperative Project among: The Strategic Use of Decentralized Institutions Exploring Certification with the ISO 14001 Management Standard*. <http://www.hks.harvard.edu/m-rcbg/CSRI/>
- Lubell, M., Hillis, V., & Hoffman, M. (2011). Innovation, cooperation, and the perceived benefits and costs of sustainable agriculture practices. *Ecology and Society*, 16(4). <https://doi.org/10.5751/ES-04389-160423>
- Macedo, D., Mori Junior, R., Carvalho, L. S. L. S., & Mizusaki, A. M. P. (2018). Sustainability certification scheme for the dimension stone industry in Brazil: A proposal for an initiative based on the northwest region of Espírito Santo State, Brazil. *Journal of Cleaner Production*, 182, 896–909. <https://doi.org/10.1016/j.jclepro.2018.02.075>
- Mishra, R., Singh, R. K., & Rana, N. P. (2022). Developing environmental collaboration among supply chain partners for sustainable consumption & production: Insights from an auto sector supply chain. *Journal of Cleaner Production*, 338. <https://doi.org/10.1016/j.jclepro.2022.130619>
- Olsen, M. S., Thorvaldsen, T., & Osmundsen, T. C. (2021). Certifying the public image? Reputational gains of certification in Norwegian salmon aquaculture. *Aquaculture*, 542. <https://doi.org/10.1016/j.aquaculture.2021.736900>
- Partzsch, L., Zander, M., & Robinson, H. (2019). Cotton certification in Sub-Saharan Africa: Promotion of environmental sustainability or greenwashing? *Global Environmental Change*, 57. <https://doi.org/10.1016/j.gloenvcha.2019.05.008>
- Ren, S., He, D., Yan, J., Zeng, H., & Tan, J. (2022). Environmental labeling certification and corporate environmental innovation: The moderating role of corporate ownership and local government intervention. *Journal of Business Research*, 140, 556–571. <https://doi.org/10.1016/j.jbusres.2021.11.023>
- Szász, L., Csíki, O., & Rácz, B. G. (2021). Sustainability management in the global automotive industry: A theoretical model and survey study. *International Journal of Production Economics*, 235. <https://doi.org/10.1016/j.ijpe.2021.108085>
- Veiga Neto, A. R., da Silva, A. W. P., de Alencar Caldas, M. V., da Silva Barreto, L. K., & El-Aouar, W. A. (2020). Environmental marketing: The green appeal of certified products and consumer perception. *Revista Em Agronegocio e Meio Ambiente*, 13(4), 1365–1390. <https://doi.org/10.17765/2176-9168.2020V13N4P1365-1390>
- Vince, J., & Haward, M. (2019). Hybrid governance in aquaculture: Certification schemes and third party accreditation. In *Aquaculture* (Vol. 507, pp. 322–328). Elsevier B.V. <https://doi.org/10.1016/j.aquaculture.2019.04.041>