

## ARTICLE

# Dynamics of institutional sustainability logics in organizations: a systematic literature review

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## Abstract

Institutional logic represents the systems of values and beliefs that guide the actions of individuals or organizations. This study aims to identify the dynamics of interactions of the logic that guides sustainability practices in organizations. Systematizing the different categories of interactions among logics makes it possible to analyze how sustainability can be incorporated into organizations. The research was developed from a qualitative approach through a systematic review and thematic analysis to synthesize and interpret results. From the interpretation of different logics, it was observed that the interrelationships of dominance, competition, coexistence, or hybridity are developed, which were systematized into categories to analyze the processes of change for the development of sustainability in organizations. It is concluded that applying institutional logic in the field of sustainability goes beyond the perspective of environmental performance, as the analytical categories identified make it possible to understand the processes that promote change to incorporate sustainability in organizations. In managing organizations, institutional logic allows the elaboration of frameworks so that the actors can create a common language to equate contradictory logic and create shared value for the interested parties and the organization itself.

**Keywords:** Sustainability. Institutional change. Eco-entrepreneurship. Sustainable entrepreneurship.

## *Dinâmica das lógicas institucionais de sustentabilidade nas organizações: uma revisão sistemática de literatura*

### Resumo

As lógicas institucionais representam os sistemas de valores e crenças que orientam a ação de indivíduos ou organizações. Este estudo tem por objetivo identificar as dinâmicas de interações das lógicas que moldam as práticas de sustentabilidade nas organizações. A sistematização das diferentes categorias de interações entre lógicas possibilita analisar como a sustentabilidade pode ser incorporada nas organizações. A pesquisa foi desenvolvida com uma abordagem qualitativa, por meio de revisão sistemática e com uma análise temática para síntese e interpretação dos resultados. Observou-se que, com a interpretação das diferentes lógicas, desenvolvem-se as inter-relações de dominância, concorrência, coexistência ou hibridismo, as quais foram sistematizadas em categorias para analisar os processos de mudança para desenvolvimento da sustentabilidade nas organizações. Conclui-se que a aplicação das lógicas institucionais no campo da sustentabilidade avança além da perspectiva de desempenho ambiental, pois as categorias analíticas identificadas possibilitam compreender os processos de mudança para incorporar a sustentabilidade nas organizações. Na gestão das organizações, as lógicas institucionais permitem a elaboração de quadros para que os atores consigam criar uma linguagem comum para equacionar lógicas contraditórias e um valor compartilhado para as partes interessadas, além da própria organização.

**Palavras-chave:** Sustentabilidade. Mudança institucional. Ecoempreendedorismo. Empreendedorismo sustentável.

## *Dinámica de las lógicas institucionales de la sostenibilidad en las organizaciones: una revisión sistemática de la literatura*

### Resumen

Las lógicas institucionales representan los sistemas de valores y creencias que guían las acciones de los individuos u organizaciones. Este estudio tiene como objetivo identificar la dinámica de interacción de las lógicas que dan forma a las prácticas de sostenibilidad en las organizaciones. La sistematización de las diferentes categorías de interacciones entre lógicas permite analizar cómo se puede incorporar la sostenibilidad en las organizaciones. La investigación se desarrolló desde un enfoque cualitativo, a través de una revisión sistemática junto con un análisis temático para la síntesis e interpretación de resultados. Se observó que a partir de la interpretación de las distintas lógicas se desarrollan las interrelaciones de dominancia, competencia, convivencia o hibridez, las cuales fueron sistematizadas en categorías para analizar los procesos de cambio para el desarrollo de la sostenibilidad en las organizaciones. Se concluye que la aplicación de las lógicas institucionales en el campo de la sostenibilidad va más allá de la perspectiva del desempeño ambiental, ya que las categorías analíticas identificadas permiten comprender los procesos que promueven el cambio para incorporar la sostenibilidad en las organizaciones. En la gestión de las organizaciones, las lógicas institucionales permiten la elaboración de marcos para que los actores puedan crear un lenguaje común para equiparar lógicas contradictorias y crear valor compartido para las partes interesadas y para la propia organización.

**Palabras clave:** Sostenibilidad. Cambio institucional. Ecoemprendimiento. Emprendimiento sostenible.

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## INTRODUCTION

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Institutional logic represents a group of shared social values which influence the practices, interests, and identities of individuals or organizations (Thornton et al., 2012). This perspective has been utilized to deal with the processes through which institutions arise and transform themselves as well as to understand the institutional contexts which can influence an institutional change toward sustainability (Brodnik & Brown, 2018; Hoffman & Jennings, 2015; Strambach & Pflitsch, 2020).

The integration of institutional logic with the sustainability field makes it possible to analyze the way in which shared variables are instantiated in practices that materialize organizational sustainability (Cerbone & Maroun, 2020).

A change in favor of sustainability involves various organizations in society (Hoffman & Ventresca, 1999) which incorporate the social structures created by individuals to support the collective pursuit of objectives (Scott & Davis, 2015). In the literature, institutional logic is applied to analyze various organizations, including private companies (Rossoni et al., 2020), public companies (Argento et al., 2019), cooperatives (Mitzinneck & Besharov, 2019) and sustainable enterprises (Gregori & Holzmann, 2020).

Studies should go beyond investigations that seek patterns based on ideal types (Cruz, 2016). Institutional logic consists of abstract ideas which are maintained as institutional orders or ideal types if they are not put into practice (Thornton et al., 2012). In institutional contexts, there are different logics which are not fixed and influence actors, who interpret them in different ways and translate them into actions (Anderson-Gough et al., 2022). Thus, there needs to be an advance in investigations of the functioning of multiple institutional logics within the context of changes to achieve sustainability (Narayanan & Adams, 2017).

Institutions are subject to the dictates of various logics in the implementation of sustainability (De Clercq & Voronov, 2011). If there are divergences between the assumptions and interests of individuals and organizations, there can be conflict between these logics (Frostenson & Helin, 2017). These are not the only possible results, however. There are dominant and coexisting logics that can lead to distinct understandings of the sustainable development process (Kok et al., 2019). In this manner, interrelationships between the logics shape the various values present in sustainability, which, depending on how they are learned, result in the maintenance of, or variations in, practices, and create opportunities for institutional change over time in the form of greater organizational engagement with sustainability (Dahlmann & Grosvold, 2017).

In this process, it is important to analyze the stability of interrelationships and bear in mind whether it is possible to realign conflicts between these logics and changes in the dominance relationship of one form of logic over others, exploring other interactions (Cerbone & Maroun, 2020). Thus, studies should consider logic dynamics to investigate convergent or divergent relationships (Smink et al., 2015). Considering that the way in which organizations learn sustainability depends on their exposure to the interactions of different logics, we recommend advancing our perspective concerning confrontations and incompatibilities among them (Ashraf et al., 2019).

Given this, we will examine the following question: how do the interrelationship dynamics of different institutional logics influence the logics of sustainability in organizations? Our objective is to identify the interaction dynamics among the logics that guide sustainability in organizations. This approach goes beyond studies that focus on the tensions among conflicting dominant values and logics that restrict changes in the path to sustainability. This article addresses a gap in the literature regarding how various interactions among multiple logics affect the development of sustainability using new analytical categories, systematized by a review of the literature, which make it possible to understand restrictive and enabling mechanisms for the implementation of organizational practices that incorporate sustainability.

This study's theoretical contribution covers the application of institutional logics to understand institutional change in the sustainability field, which can be analyzed through interrelationship dynamics among logics, exploring the way in which sustainability is conceived of and makes sense to actors and organizations, and it also includes analyzing the mechanisms through which actors interpret and articulate various sustainability values which guide their actions that are developed by organizational practices. Frameworks can be elaborated as a practical contribution to management so that actors can create a common language to balance contradictory logics and the values shared by interested parties and the organization itself.

In the following sections, we will address the theoretical foundations, methodological procedures, and results of this article, in which we will discuss the logical conceptions which encompass the values of sustainability and their interrelationships, which can influence changes in logics that lead to the development of sustainability in organizations. The last section will present our conclusions.

## THEORETICAL FOUNDATIONS

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Institutional logics are constituted by broader inter-institutional systems, which are described in terms of idealized types: family, religion, market, corporation, profession, and community. They simultaneously consist of interpretive schemes which are reflected in the rise of theories, frameworks, or narratives in a common language, which interfere with the cognition, interests, and actions of individuals and organizations in a specific social and historical context. Thus, logics provide social actors with reference frameworks that share the way in which they construct their identities, give meaning, and interact with the world around them (Thornton et al., 2012). It is through these frameworks that organizations align the objectives that will be traced considering their exposition and immersion in respective institutional logics (Sharma et al., 2020).

The influence of logics does not occur in a deterministic manner like a script to be followed, but rather as the base of a multiplicity of institutional logics, supplying various repertoires from their main postulators (Thornton et al., 2012). Given this, they constitute institutional complexity, which exerts pressures and various influences, that are often conflicting, affecting society's behavior. Organizations experience institutional complexity on various levels and respond in diverse ways. Contextual factors can present challenges to organizations as well as opportunities for change (Greenwood et al., 2011).

Studies of organizational responses to institutional complexity focus on isolated factors, such as external disturbances or the intentional actions of powerful actors. On the other hand, an integrated approach focusing on the drivers of change considers the relationships between the scope and temporal variables which affect the paths and results of institutional change processes. Thus, one has to consider the interactions between logics and how actors experience and negotiate the complexity of different logics and the consequences of these relationships (Micelotta et al., 2017). The perspective of institutional logics makes it possible to integrate these approaches, because it encompasses the relationships between macro- and micro-contexts, agency actions on various levels, the duality between logics and practices, and the scope of incremental and disruptive change, as well as multiple logics (Thornton et al., 2012).

The theoretical developments associated with the perspective of institutional logics have sought to explore how logics change or new logics appear based on various types of factors: structural; temporal, and entrepreneurial, which involve agency, interests, and power (Fuenfschilling & Truffer, 2014). Changes do not occur only through external shocks, such as environmental disasters (Safari et al., 2020), but also through organizational responses to institutional complexity based on the internal representation of logics (Pache & Santos, 2013).

The implications of logic multiplicity can manifest themselves in various degrees of conflict, which makes variety in the relationships between logics possible, ranging from contestations to combinations and assimilations between logics (Besharov & Smith, 2014). However, the possible results of competing logics do not consist only of open conflicts (Dunn & Jones, 2010). Multiple logics make it possible for actors to interpret different values in incorporating sustainability in organizations (Dobson, 2019). They can use contradictions to construct diverse frameworks in order to reach publics with heterogeneous values (Grinevich et al., 2019) or use them as opportunities to establish organizational legitimacy (Gregori et al., 2019), leading to multiple types of responses: reactive, proactive, and collaborative (Hetemi et al., 2020). In addition, competing values can be balanced through hybridism (Pache & Thornton, 2020). Thus, it is fundamental to consider cooperative and competitive relationships in trying to understand how change occurs or stability is maintained (Waldorff et al., 2013).

In many studies, there has been a focus of the overlapping of logics (Montabon et al., 2016), as well as the recognition of the coexistence of multiple logics for extended periods of time, without one necessarily being dominant (De Clercq & Voronov, 2011). Analyses are often based on reigning logics which are resistant to change (McLoughlin & Meehan, 2021) or effects on variations in practices (Herold & Lee, 2017; Mahmood & Uddin, 2020). However, there is a dynamic among them within

a recursive process among logics and practices (Thornton et al., 2012) which affects these interrelationships, and this can lead to incremental or disruptive changes. Thus, it is possible to explore interrelationships among logics which may vary depending on the context (Contrafatto et al., 2019) and are subject to transitions over time (Franco-Torres et al., 2020; Hayes & Rajão, 2011), which makes it possible to analyze an organization's incorporation of sustainability.

## MATERIALS AND METHODS

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This study has been oriented by a systematic review of the literature, followed by the steps of planning, selection, extraction, and synthesis (Okoli & Schabram, 2010). To operationalize them, we employed *Start* and *Atlas.ti* software, which offered complementary tools for the review.

The planning of this study occurred together with an exploratory analysis and a brief amount of research of logic and sustainability in order to test the keywords that we used in our database search as well as the applicability of the selection criteria. This pre-analysis provided the foundation for our research protocol, which was used to maintain consistency in the application of the adopted criteria to the relevant literature to ensure research rigor and breadth. The protocol consisted of the following items:

1. Research question: "How do the interaction dynamics of institutional logics influence sustainability in organizations?"
2. Keywords: the institutional logic perspective and sustainability, institutional logic and sustainable entrepreneurship, and sustainability logic.
3. Electronic index databases consulted: Scopus, Science Direct, the Web of Science, and SciELO.
4. Inclusion criteria: Using the lens of institutional logic and relating it to sustainability.
5. Exclusion criteria: Not written in Portuguese or English; Does not employ the institutional logic perspective; Uses the Metatheory of institutional logic but does not deal with sustainability in the study; It is not a scientific article.
6. Analysis procedures: Extraction and summary of the data.

The study was conducted from May to September 2021, and there was no restriction in terms of the year of publication for the articles in the bibliographic search. Articles were selected which contained concepts related to sustainability in terms of its environmental, social, and economic aspects. We opted to include studies written in English, which are internationally accepted for scientific works, and only included complete academic articles which have gone through peer review in an academic journal. Therefore, books and materials published in conferences were excluded.

For the extraction and synthesis steps of the data analysis, we used thematic analysis (Braun & Clarke, 2006) with a combination of deductive and inductive methods (Fereday & Muir-Cochrane, 2006). To accomplish this, we considered the prevalence of information and the identification of patterns in the studied texts, to which we attributed codes based on the research question and the theoretical references on institutional logic (Thornton et al., 2012). Then similar codes were synthesized into broader themes, taking into account their internal homogeneity and external heterogeneity in the elaboration of analytical categories (Patton, 1990).

## RESULTS AND ANALYSES

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Based on the data analysis, it was possible to discuss sustainability approaches which involve interactions between individuals and organizations, subject to the dynamics of interrelationships of different institutional logics, which can reverberate in terms of institutional changes. To better understand how logics influence the actions and practices of promoting sustainability in organizations, the results were classified according to the following key themes: the formation of sustainability logic and the dynamic of inter-relationships between institutional logics and changes (Box 1), which were detailed in the following topics.

**Box 1**  
**Description of key themes identified in the results analysis**

Code descriptions	First order grouping	Second order grouping
Descriptions of the constituent elements of value and belief systems in a society. These elements are like construction blocks which when combined compose institutional logics.	Institutional logics	Formation of institutional logics of sustainability
Dynamics among different logics that influence the incorporation of sustainability in organizations.	Coexistence, competition, dominance, and hybridization	Interrelationships among logics
Levels of change in logics within organizations.	Incremental and disruptive changes	Institutional change

Source: Elaborated by the authors based on institutional logics (Thornton et al., 2012).

### Formation of sustainability logics

In terms of the logics which represent aspects of sustainability, there are various denominations and descriptions which are particular to the institutional field under investigation. Thus, there are particularities in the perceptions and applications of various values in these logics in dealing with sustainability issues in organizations. Among the elements that make up these logics, community logics stand out (Argento et al., 2019; Lee & Lounsbury, 2015; Sharma et al., 2020), but a wide array of combinations of these elements are used in the conception of the logics that shape sustainability principles, depending on the considered context, such as a family and the small business community (Kieffhaber et al., 2020); a market, a state, profession and community in dealing with issues of climate change (Ansari et al., 2013); government, community, family, and religion in sustainability business models (Laasch, 2018); and family and religion in social-environmental businesses (Gregori et al., 2019).

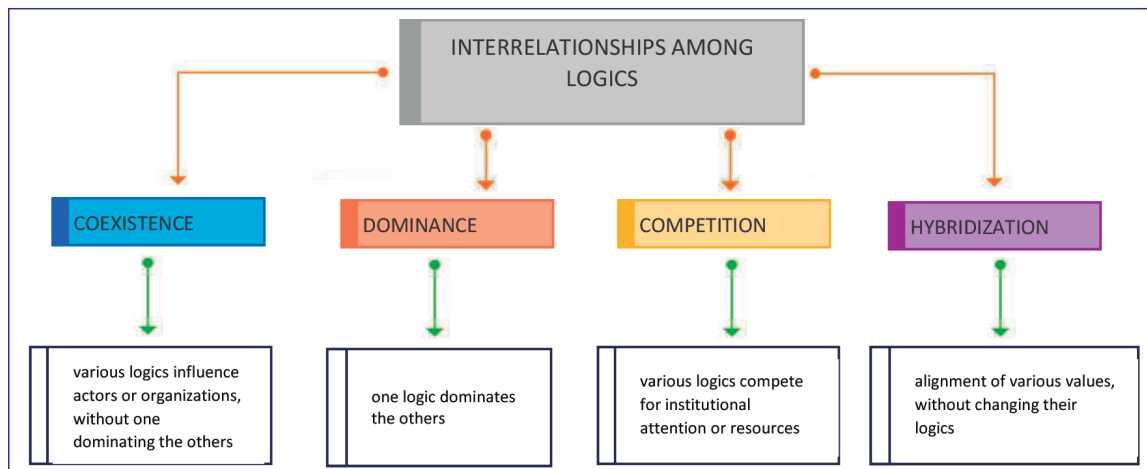
Moreover, the logics which deal with sustainability should consider the interdependence among the environmental, social, and economic spheres (Corbett et al., 2018; Heiskanen, 2002; Montabon et al., 2016), and therefore they should seek to balance the different interests pertinent to the respective values involved (Mars & Lounsbury, 2009; York et al., 2016). From this perspective, the logic of sustainability spells out related non-financial values such as ethics (Frostenson & Helin, 2017) and also includes a long-term view to maintain life (Hayes & Rajão, 2011) as well as issues involving environmental justice (Martínez-Alier, 2012).

The constitution of sustainability logics occurs in a complex manner, because it is a social construction under development which encompasses various sectors of society. This process involves the interconnections among environmental, social, and economic aspects, which can be divergent, depending on how they are interpreted and manipulated, and the way they emphasize these values to the detriment of others (Hoffman & Ventresca, 1999). Actor perceptions in the face of the different logics present in their context influence the development of sustainability as we will discuss in the following topics.

### Interrelationship dynamics among logics

The plurality of logics in social contexts implies institutional complexity and provides different repertoires of guiding principles, which influence the cognition and actions of social actors based on complementarity or contradictions among the various logics (Greenwood et al., 2011; Thornton et al., 2012). The formation of sustainability logic under interference from other logics shapes organizational contexts, developing an interrelationship dynamic among them in the implementation of sustainability practices. The main interrelationships among logics have been classified into the following analytical categories: coexistence, competition, dominance, and hybridization (Figure 1).

**Figure 1**  
Interrelationship categories among institutional sustainability logics



Source: Elaborated by the authors.

The identified categories are in line with the discussion in the literature regarding the contradictory results generated by logics which are focused on different values, which may be divergent or incompatible (Friedland & Alford, 1991), leading to conflicts (Pache & Santos, 2013; Thornton & Ocasio, 2008). However, this is not the only possible result, because the actors can combine different logics in a bricolage (Binder, 2007), or the logics can coexist (Suddaby & Greenwood, 2009), compete (Battilana & Dorado, 2010), contradict or complement each other, reinforcing or weakening the field structure (Fuenfschilling & Truffer, 2014). To the extent that prescriptions and proscriptions of different logics are incompatible, or appear to be, they inevitably create challenges for the organizations that are exposed to them (Greenwood et al., 2011). The way organizations deal with different influences can include competition, coexistence, and hybridization, among others (Misangyi, 2016).

## Coexistence

Coexistence occurs when different logics influence actors or organizations without dominating each other. Actors create common frameworks with different values to manage logics in parallel, which can lead to conflict when there are divergent values.

Organizations can use the complementarity of the constituent elements of coexistent logics to attain the objectives of shared economy enterprises by using various logics which involve sustainability as a survival strategy for an organization (Grinevich et al., 2019). Equally, multiple logics do not always result in institutional change, because they can coexist in the field (Mars & Lounsbury, 2009).

In addition to complementarity among coexisting logics, actors also have to deal with trade-offs between contradictions among these logics and develop temporal, structural, and collaborative compromises to deal with the tensions which occur due to the actors' differing priorities (Mitzinneck & Besharov, 2019).

A divergence in values due to coexistence among logics results in variations in practices, such as the elaboration of sustainability reports (Cerbone & Maroun, 2020; Mahmood & Uddin, 2020), just as the coexistence of multiple logics shapes corporate attitudes related to engagement and the publicizing of corporate social responsibility (Siddiqui et al., 2021) and the institutionalization of sustainability auditing (Silvola & Vinnari, 2021).

## Competition

The interrelationship of competing logics occurs based on their different constituent elements. Thus, they compete for attention or institutional resources in the cognition and actions of social actors (Contrafatto et al., 2019). Different logics present contradictions that can become the source of variations in individual beliefs and practices (Lounsbury & Crumley,

2007). This occurs when institutional entrepreneurs try to promote logics which incorporate sustainability at the same time as they seek to adapt to the logic of the market, perceiving the need to construct connections between two competing logics (Arenas et al., 2020).

In this way, environmental managers face competition between a market based logic and an emergent environmental logic in companies in environmentally sensitive economic sectors, such as food and beverages, electronics, engineering, retail, transport, and chemical products (Dahlmann & Grosvold, 2017).

Competing logics permit variations in practices and divide the focus of attention of social actors in decision-making processes, who can adopt a pragmatic approach, focused on profit, or a normative approach based on the tenets of sustainability in the elaboration of carbon reports (Herold & Lee, 2017). As a result, there is instrumental compliance with normative requirements or incremental change processes that follow the logic of presenting accounts in sustainability reports (Albu et al., 2020).

## Dominance

The interrelationship of dominance develops when one logic prevails over the others, and this is reflected in the choices and decision making of social actors. The incompatibility between environmental logic and market logic makes one logic take priority even in organizations which have an environmental management system (Misangyi, 2016).

Dominant logics prevail in the institutional field (Gümüşay et al., 2020) and they can restrict changes given that they are linked to power and control (Suddaby & Greenwood, 2009). However, when practices are disseminated within a context where market logic is perceived as dominant, divergent ideas are discarded or arguments based on this logic are strengthened, restricting changes in the direction of sustainability (Järvenpää & Lämsiluoto, 2016; Stål, 2015), as has been observed with the dominance of market logic restricting the development of sustainability (McLoughlin & Meehan, 2021).

Hoffman and Jennings (2015) emphasize that changes have to be driven by challenges, given that sustainability is thought of from the perspective of market dominant logic. In the literature, there is the proposal of environmental logic that challenges the current perspective which is dominated by instrumental logic that guides managerial practices as well as supply chain research, creating a focus on how companies can become less unsustainable, which can be confused with “becoming sustainable” (Montabon et al., 2016).

Environmentalism and green management have arisen as alternative institutional logics that challenge traditional market logic (Lounsbury et al., 2012), like the relationships between social movements and the political context, which exercise regulatory pressures on industrial installations, increasing the probability of improving environmental performance (Lee & Lounsbury, 2015).

## Hybridization

Hybrid logic results from the alignment of different values, without actors or organizations necessarily having to change their prescriptive logics. It is in this sense that sustainable entrepreneurship can take advantage of the creative tensions between market and environmental logics. They can thus leverage enterprises with market elements, taking into consideration components of environmental logic, which prioritize dealing with environmental problems (York et al., 2016) as well as developing corporate responsibility commitments, allying market, community, and sustainability logics (Reddy & Hamann, 2018).

Sustainable enterprises, shaped by environmental logic, are also subject to market logic and face contradictions and conflicts in developing their objectives (Gregori et al., 2021), providing ways to accommodate different conditions and expectations within the institutional context, without losing sight of the fundamental objectives which motivate the foundation of the enterprise (Gregori et al., 2019).

The eco-entrepreneurship sector can promote a convergence among logics, based on hybrid forms, in order to positively affect the environment (Mars & Lounsbury, 2009). In the same way, emergent organizations termed *b corps* are sustained by a hybrid logic and employ market tactics to deal with social and environmental issues (Stubbs, 2017), such as sustainable business models (Schneider & Clauß, 2020).

In public-private partnerships, hybridization occurs between the different organizational logics involved and unfolds in a learning process in framing conceptions of sustainability (Argento et al., 2019). In partnerships with non-profit companies, the compatibility of environmental, social, and economic values is promoted (Watson et al., 2020). Thus in public-private partnerships (PPPs), logics from different sectors shape and provide collaboration for the interconnections between different institutional levels to facilitate sustainable technological innovation in the energy sector (Kallman & Frickel, 2019).

Consensus can emerge through the construction of a hybrid logic that incorporates different interests, even when the actors do not necessarily change their underlying logics (Ansari et al., 2013). This manner of utilizing the different involved values makes it possible to create neutral paths which can alleviate tensions between diverse logics and lead to enabling processes in the development of sustainability (Alexius & Furusten, 2020).

Given this, hybridization is one way for organizations to deal with the contradictions of different logics. This category makes it possible to investigate how actors respond to the contradictions between multiple logics and the factors which influence hybridization (Pache & Thornton, 2020).

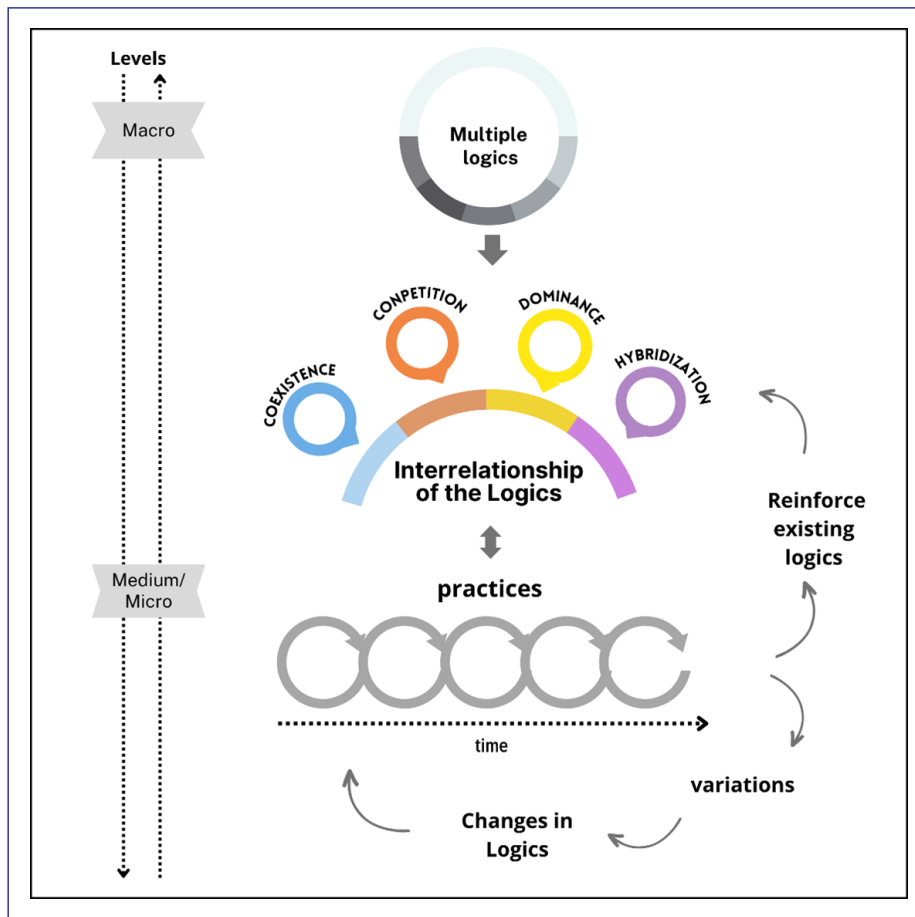
### Institutional change

As we have seen in this study, the development of sustainability in organizations encompasses the conception of sustainability logics influenced by the interrelationship between different logics. Since this involves multiple biases, this dynamic results in a variability among interpretive schemas (Narayanan & Adams, 2017), which affects the way in which the adoption of sustainable practices is operationalized (Rossoni et al., 2020). This happens because, in the interpretation of logics, reference frameworks are elaborated for the actions of individuals and organizations (Thornton et al., 2012). These frameworks can be based on a restricted or holistic vision of sustainability derived from the lowest to highest level of conflicts respectively (Ashraf et al., 2019). The way in which frameworks change and are disseminated can permit the rise of a new logic (Ansari et al., 2013).

The multiple logics on the macro-level influence organizations (medium level) and individuals (micro-level), in a reciprocal relationship. Through a recursive process, the interrelationships of coexistence, competition, dominance, and hybridization are learned by social actors who use their different interpretive schemas and frameworks to guide their actions. Depending on how they prioritize or balance distinct values of sustainability logics, they are reflected in decision making in defining practices, which can suffer variations, based on the dynamic of interactions among these logics, which provide repertoires to reinforce or change practices and logics over time. Within the studied context, changes refer to possibilities for the emergence or alteration of logics based on variations in practices for the incorporation of sustainability in the structure of organizations (Figure 2).



**Figure 2**  
**Dynamic of interrelationships between institutional logics that influence sustainability in organizations**



Source: Adapted from Thornton et al. (2012).

The interrelationships of coexistent and competing logics result in changes that can be incremental (Hedegård et al., 2020; Sayed et al., 2017; Strambach & Pflitsch, 2020). However, there are different propositions for disruptive changes in the domain of logics that restrict sustainability (Montabon et al., 2016), with the development of an alternative narrative in relation to the reigning logic of the considered context (Weisenfeld & Hauerwaas, 2018).

Disruptive change is not possible without a logic that recognizes socioenvironmental relationships which involve natural, social, and human capital (Narayanan & Adams, 2017). However, the problem is not the absence of these logics, as can be seen in this study. In the constitution of sustainability logics there are a variety of constructs, such as logics which encompass ecosystem and socio-economic relationships that challenge the predominant market logic (Corbett et al., 2018). Issues related to changes have to do with the emphasis on different sustainability values which are interrelated under the influence of multiple logics and reflect the operationalization of sustainability practices.

One logic does not always dominate others or causes conflicts that restrict changes. Progress needs to be made in the analysis of a single dominant logic of intentional agency behavior to explore institutional changes in the face of a multiplicity of logics (Micelotta et al., 2017). Through hybridization on the micro-level, actors balance different values, and on the organizational level, they can develop partnerships with different logics to deal with compelling issues in society, such as the global crisis (Pache & Thornton, 2020). Neutral paths can be constructed to hybridization, as occurs in sustainable enterprises, in which the elaboration of interpretive frameworks and narratives based on sustainability logic makes it possible to create new meanings for norms and rules considered to be correct, associating them with existing practices, in order to provide an alternative theorization to market logic (Arenas et al., 2020).

In this way, interrelationships permit changes in logics in terms of individuals' and organizations' capacity for action as well as gradual transitions of context (Gregori et al., 2019) in terms of the sequence of events and overlapping organizational roles, structures, and functions (Silva & Figueiredo, 2017; Thornton et al., 2012). In response to a plurality of logics, there can be an incremental development of changes which are often unintentional (Micelotta et al., 2017).

The analysis cannot be factual in terms of the correspondence between ideal types. Interactions can overlap and evolve over time with the development of practices, and variations can arise that prosper with incremental changes. Logics are not unique entities in an organization, but rather specific combinations of material and symbolic aspects, like construction blocks that can be connected or segmented in varied ways by different organizational practices at distinct moments (Anderson-Gough et al., 2022).

Given this, the institutional change approach, considering the interrelationships between diverse logics, makes it possible to analyze the emergence of sustainability logic to advance the perspective of environmental performance, mainly in terms of discoveries that reveal the creation of frameworks with environmental issues in business models, which facilitate the elaboration of institutional resources so that actors can construct a common language which will balance different sustainability values. This corroborates the studies of Silva and Figueiredo (2017) regarding how the logic of sustainability is developed to the extent that it is put into practice in a dynamic and recursive manner altering the practice of sustainability itself.

## CONCLUSIONS

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In this study, we have been able to observe how interrelationships influence the constitution of logics linked to sustainability in organizations. Considering that they encompass different values based on a dynamic and recursive process, actors and organizations learn different logics and utilize them as repertoires for action, affecting the interrelationships of these logics and producing opportunities for change on various levels of institutional contexts.

In investigating this dynamic, we have been able to advance in analyzing sustainability performance, filling in a gap in the research regarding the interactions among multiple logics which influence sustainability and the unfolding of these interactions, which affect the way the various values involved are learned and the way they affect the development of practices on the path towards sustainability in organizations.

Our theoretical contribution of the application of institutional logics to the field of sustainability, through the systematization of categories defining the interrelationships between logics (dominance, coexistence, competition, and hybridization) adds greater breadth to the literature in terms of various interactions which shape sustainability. In this manner, the identified categories make it possible to analyze the processes through which logics can evolve over time, which makes it possible to understand how individuals and organizations articulate different logics in generating opportunities for change to revert the dominance of logics which restrict sustainability, as well as balancing divergent values among coexisting and competitive logics through hybridization to construct neutral paths which lead to changes in the development of socio-environmental practices.

In managerial practice, a better grasp and interpretation of the logic interrelationships which shape the contexts in which they act will enable managers to elaborate frameworks and develop a common language with their teams and interested parties to deal with the various logics that shape sustainability.

## REFERENCES

- Albu, N., Albu, C. N., Apostol, O., & Cho, C. H. (2020). The past is never dead: the role of imprints in shaping social and environmental reporting in a post-communist context. *Accounting, Auditing and Accountability Journal*, 34(5), 1109-1136. <https://doi.org/10.1108/AAAJ-08-2019-4131>
- Alexius, S., & Furusten, S. (2020). Enabling sustainable transformation: hybrid organizations in early phases of path generation. *Journal of Business Ethics*, 165(3), 547-563. <https://doi.org/10.1007/s10551-018-04098-0>
- Anderson-Gough, F., Edgley, C., Robson, K., & Sharma, N. (2022). Organizational responses to multiple logics: diversity, identity and the professional service firm. *Accounting, Organizations and Society*, 103, 101336. <https://doi.org/10.1016/j.aos.2022.101336>
- Ansari, S. S., Wijen, F., & Gray, B. (2013). Constructing a climate change logic: an institutional perspective on the "tragedy of the commons." *Organization Science*, 24(4), 1014-1040. <https://doi.org/10.1287/orsc.1120.0799>
- Arenas, D., Strumińska-Kutra, M., & Landoni, P. (2020). Walking the tightrope and stirring things up: exploring the institutional work of sustainable entrepreneurs. *Business Strategy and the Environment*, 29(8), 3055-3071. <https://doi.org/10.1002/bse.2557>
- Argento, D., Grossi, G., Persson, K., & Vingren, T. (2019). Sustainability disclosures of hybrid organizations: Swedish state-owned enterprises. *Meditari Accountancy Research*, 27(4), 505-533. <https://doi.org/10.1108/MEDAR-07-2018-0362>
- Ashraf, N., Pinkse, J., Ahmadsimab, A., Ul-Haq, S., & Badar, K. (2019). Divide and rule: the effects of diversity and network structure on a firm's sustainability performance. *Long Range Planning*, 52(6), 101880. <https://doi.org/10.1016/j.lrp.2019.04.002>
- Battilana, J., & Dorado, S. (2010). Building sustainable hybrid organizations: the case of commercial microfinance organizations. *Academy of Management Journal*, 53(6), 1419-1440. <https://doi.org/10.5465/amj.2010.57318391>
- Besharov, M. L., & Smith, W. K. (2014). Multiple institutional logics in organizations: explaining their varied nature and implications. *The Academy of Management Review*, 39(3), 364-381. <http://www.jstor.org/stable/43699249>
- Binder, A. (2007). For love and money: organizations' creative responses to multiple environmental logics. *Theory and Society*, 36(6), 547-571. <https://doi.org/10.1007/s11186-007-9045-x>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- Brodnik, C., & Brown, R. (2018). Locating periods of institutional change agency: a mixed methods approach. *International Journal of Sociology and Social Policy*, 38(7-8), 510-525. <https://doi.org/10.1108/IJSSP-12-2017-0161>
- Cerbone, D., & Maroun, W. (2020). Materiality in an integrated reporting setting: insights using an institutional logics framework. *British Accounting Review*, 52(3), 100876. <https://doi.org/10.1016/j.bar.2019.100876>
- Contrafatto, M., Costa, E., & Pesci, C. (2019). Examining the dynamics of SER evolution: an institutional understanding. *Accounting, Auditing and Accountability Journal*, 32(6), 1771-1800. <https://doi.org/10.1108/AAAJ-07-2017-3044>
- Corbett, J., Webster, J., & Jenkin, T. A. (2018). Unmasking corporate sustainability at the project level: exploring the influence of institutional logics and individual agency. *Journal of Business Ethics*, 147(2), 261-286. <https://doi.org/10.1007/s10551-015-2945-1>
- Cruz, G. (2016). A criticism of the use of ideal types in studies on institutional logics. *Organizações & Sociedade*, 23(79), 646-655. <https://doi.org/10.1590/1984-9230711>
- Dahlmann, F., & Grosvold, J. (2017). Environmental managers and institutional work: reconciling tensions of competing institutional logics. *Business Ethics Quarterly*, 27(2), 263-291. <https://doi.org/10.1017/beq.2016.65>
- De Clercq, D., & Voronov, M. (2011). Sustainability in entrepreneurship: a tale of two logics. *International Small Business Journal*, 29(4), 322-344. <https://doi.org/10.1177/0266242610372460>
- Dobson, J. (2019). Reinterpreting urban institutions for sustainability: how epistemic networks shape knowledge and logics. *Environmental Science and Policy*, 92, 133-140. <https://doi.org/10.1016/j.envsci.2018.11.018>
- Dunn, M. B., & Jones, C. (2010). Institutional logics and institutional pluralism: the contestation of care and science logics in medical education (1967-2005). *Administrative Science Quarterly*, 55(1), 114-149. <https://doi.org/10.2189/asqu.2010.55.1.114>
- Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: a hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods*, 5(1), 80-92. <https://doi.org/10.1177/160940690600500107>
- Franco-Torres, M., Rogers, B. C., & Ugarelli, R. M. (2020). A framework to explain the role of boundary objects in sustainability transitions. *Environmental Innovation and Societal Transitions*, 36, 34-48. <https://doi.org/10.1016/j.eist.2020.04.010>
- Friedland, R., & Alford, R. R. (1991). *The new institutionalism in organizational analysis*. University of Chicago.
- Frostenson, M., & Helin, S. (2017). Ideas in conflict: a case study on tensions in the process of preparing sustainability reports. *Sustainability Accounting, Management and Policy Journal*, 8(2), 166-190. <https://doi.org/10.1108/SAMPJ-02-2015-0015>
- Fuenfschilling, L., & Truffer, B. (2014). The structuration of socio-technical regimes: conceptual foundations from institutional theory. *Research Policy*, 43(4), 772-791. <https://doi.org/10.1016/j.respol.2013.10.010>
- Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E. R., & Lounsbury, M. (2011). Institutional complexity and organizational responses. *Academy of Management Annals*, 5(1), 317-371. <https://doi.org/10.1080/19416520.2011.590299>
- Gregori, P., & Holzmann, P. (2020). Digital sustainable entrepreneurship: a business model perspective on embedding digital technologies for

- social and environmental value creation. *Journal of Cleaner Production*, 272, 122817. <https://doi.org/10.1016/j.jclepro.2020.122817>
- Gregori, P., Holzmann, P., & Wdowiak, M. A. (2021). For the sake of nature: identity work and meaningful experiences in environmental entrepreneurship. *Journal of Business Research*, 122, 488-501. <https://doi.org/10.1016/j.jbusres.2020.09.032>
- Gregori, P., Wdowiak, M., Schwarz, E., & Holzmann, P. (2019). Exploring value creation in sustainable entrepreneurship: insights from the institutional logics perspective and the business model lens. *Sustainability*, 11(9), 2505. <https://doi.org/10.3390/su11092505>
- Grinevich, V., Huber, F., Karataş-Özkan, M., & Yavuz, Ç. (2019). Green entrepreneurship in the sharing economy: utilising multiplicity of institutional logics. *Small Business Economics*, 52(4), 859-876. <https://doi.org/10.1007/s11187-017-9935-x>
- Gümüşay, A. A., Claus, L., & Amis, J. (2020). Engaging with grand challenges: an institutional logics perspective. *Organization Theory*, 1(3), 263178772096048. <https://doi.org/10.1177/2631787720960487>
- Hayes, N., & Rajão, R. (2011). Competing institutional logics and sustainable development: the case of geographic information systems in Brazil's Amazon region. *Information Technology for Development*, 17(1), 4-23. <https://doi.org/10.1080/02681102.2010.511701>
- Hedegård, L., Gustafsson, E., & Paras, M. K. (2020). Management of sustainable fashion retail based on reuse: a struggle with multiple logics. *International Review of Retail, Distribution and Consumer Research*, 30(3), 311-330. <https://doi.org/10.1080/09593969.2019.1667855>
- Heiskanen, E. (2002). The institutional logic of life cycle thinking. *Journal of Cleaner Production*, 10(5), 427-437. [https://doi.org/10.1016/S0959-6526\(02\)00014-8](https://doi.org/10.1016/S0959-6526(02)00014-8)
- Herold, D., & Lee, K.-H. (2017). The influence of the sustainability logic on carbon disclosure in the global logistics industry: the Case of DHL, FDX and UPS. *Sustainability*, 9(4), 601. <https://doi.org/10.3390/su9040601>
- Hetemi, E., Ordieres-Meré, J., & Nuur, C. (2020). An institutional approach to digitalization in sustainability-oriented infrastructure projects: the limits of the building information model. *Sustainability*, 12(9), 3893. <https://doi.org/10.3390/su12093893>
- Hoffman, A. J., & Jennings, P. D. (2015). Institutional theory and the natural environment: research in (and on) the Anthropocene. *Organization and Environment*, 28(1), 8-31. <https://doi.org/10.1177/1086026615575331>
- Hoffman, A. J., & Ventresca, M. J. (1999). The institutional framing of policy debates. *American Behavioral Scientist*, 42(8), 1368-1392. <https://doi.org/10.1177/00027649921954903>
- Järvenpää, M., & Lämsiluoto, A. (2016). Collective identity, institutional logic and environmental management accounting change. *Journal of Accounting & Organizational Change*, 12(2), 152-176. <https://doi.org/10.1108/JAOC-11-2013-0094>
- Kallman, M. E., & Frickel, S. (2019). Nested logics and smart meter adoption: institutional processes and organizational change in the diffusion of smart meters in the United States. *Energy Research and Social Science*, 57, 101249. <https://doi.org/10.1016/j.erss.2019.101249>
- Kiefhaber, E., Pavlovich, K., & Spraul, K. (2020). Sustainability-related identities and the institutional environment: the case of New Zealand owner-managers of small-and medium-sized hospitality businesses. *Journal of Business Ethics*, 163(1), 37-51. <https://doi.org/10.1007/s10551-018-3990-3>
- Kok, A. M., De Bakker, F. G. A., & Groenewegen, P. (2019). Sustainability struggles: conflicting cultures and incompatible logics. *Business and Society*, 58(8), 1496-1532. <https://doi.org/10.1177/0007650317703644>
- Laasch, O. (2018). Beyond the purely commercial business model: organizational value logics and the heterogeneity of sustainability business models. *Long Range Planning*, 51(1), 158-183. <https://doi.org/10.1016/j.lrp.2017.09.002>
- Lee, M.-D. P., & Lounsbury, M. (2015). Filtering institutional logics: community logic variation and differential responses to the institutional complexity of toxic waste. *Organization Science*, 26(3), 847-866. <https://doi.org/10.1287/orsc.2014.0959>
- Lounsbury, M., & Crumley, E. T. (2007). New practice creation: an institutional perspective on innovation. *Organization Studies*, 28(7), 993-1012. <https://doi.org/10.1177/0170840607078111>
- Lounsbury, M., Fairclough, S., & Lee, M.-D. P. (2012). Institutional approaches to organizations and the natural environment. In P. Banasal, & A. J. Hoffman (Eds.), *The Oxford handbook of business and the natural environment*. The Oxford University.
- Mahmood, Z., & Uddin, S. (2020). Institutional logics and practice variations in sustainability reporting: evidence from an emerging field. *Accounting, Auditing and Accountability Journal*, 34(5), 1163-1189. <https://doi.org/10.1108/AAAJ-07-2019-4086>
- Mars, M. M., & Lounsbury, M. (2009). Raging against or with the private marketplace? Logic hybridity and eco-entrepreneurship. *Journal of Management Inquiry*, 18(1), 4-13. <https://doi.org/10.1177/1056492608328234>
- Martínez-Alier, J. (2012). Environmental justice and economic degrowth: an alliance between two movements. *Capitalism, Nature, Socialism*, 23(1). <https://doi.org/10.1080/10455752.2011.648839>
- McLoughlin, K., & Meehan, J. (2021). The institutional logic of the sustainable organisation: the case of a chocolate supply network. *International Journal of Operations and Production Management*, 41(3), 251-274. <https://doi.org/10.1108/IJOPM-11-2020-0773>
- Micelotta, E., Lounsbury, M., & Greenwood, R. (2017). Pathways of institutional change: an integrative review and research agenda. *Journal of Management*, 43(6), 1885-1910. <https://doi.org/10.1177/0149206317699522>
- Misangyi, V. F. (2016). Institutional complexity and the meaning of loose coupling: connecting institutional sayings and (not) doings. *Strategic Organization*, 14(4), 407-440. <https://doi.org/10.1177/1476127016635481>
- Mitzinneck, B. C., & Besharov, M. L. (2019). Managing value tensions in collective social entrepreneurship: the role of temporal, structural, and collaborative compromise. *Journal of Business Ethics*, 159(2), 381-400. <https://doi.org/10.1007/s10551-018-4048-2>
- Montabon, F., Pagell, M., & Wu, Z. (2016). Making sustainability sustainable. *Journal of Supply Chain Management*, 52(2), 11-27. <https://doi.org/10.1111/jscm.12103>
- Narayanan, V., & Adams, C. A. (2017). Transformative change towards sustainability: the interaction between organisational discourses and organisational practices. *Accounting and Business Research*, 47(3), 344-368. <https://doi.org/10.1080/00014788.2016.1257930>

- Okoli, C., & Schabram, K. (2010). A guide to conducting a systematic literature review of information systems research. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1954824>
- Pache, A.-C., & Santos, F. (2013). Inside the hybrid organization: selective coupling as a response to competing institutional logics. *Academy of Management Journal*, 56(4), 972-1001. <https://doi.org/10.5465/amj.2011.0405>
- Pache, A.-C., & Thornton, P. H. (2020). Hybridity and institutional logics. In: M. L. Besharov, & B. C. Mitzinneck (ed.). *Organizational hybridity: perspectives, processes, promises*. Leeds: Emerald Publishing Limited. <https://doi.org/10.1108/S0733-558X2020000069002>
- Reddy, C. D., & Hamann, R. (2018). Distance makes the (committed) heart grow colder: MNEs' responses to the state logic in African variants of CSR. *Business and Society*, 57(3), 562-594. <https://doi.org/10.1177/0007650316629127>
- Rossoni, L., Poli, I. T., De Sinay, M. C. F., & De Araújo, G. A. (2020). Materiality of sustainable practices and the institutional logics of adoption: a comparative study of chemical road transportation companies. *Journal of Cleaner Production*, 246, 119058. <https://doi.org/10.1016/j.jclepro.2019.119058>
- Safari, M., De Castro, V. B., & Steccolini, I. (2020). The interplay between home and host logics of accountability in multinational corporations (MNCs): the case of the Fundão dam disaster. *Accounting, Auditing and Accountability Journal*, 33(8), 1761-1789. <https://doi.org/10.1108/AAAJ-03-2019-3912>
- Sayed, M., Hendry, L. C., & Bell, M. Z. (2017). Institutional complexity and sustainable supply chain management practices. *Supply Chain Management*, 22(6), 542-563. <https://doi.org/10.1108/SCM-10-2016-0365>
- Schneider, S., & Clauß, T. (2020). Business models for sustainability: choices and consequences. *Organization & Environment*, 33(3), 384-407. <https://doi.org/10.1177/1086026619854217>
- Scott, W. R., & Davis, G. (2015). *Organizations and Organizing*. Routledge. <https://doi.org/10.4324/9781315663371>
- Sharma, A., Moses, A. C., Borah, S. B., & Adhikary, A. (2020). Investigating the impact of workforce racial diversity on the organizational corporate social responsibility performance: an institutional logics perspective. *Journal of Business Research*, 107, 138-152. <https://doi.org/10.1016/j.jbusres.2018.10.018>
- Siddiqui, J., Mehjabeen, M., & Stapleton, P. (2021). Emergence of corporate political activities in the guise of social responsibility: dispatches from a developing economy. *Accounting, Auditing and Accountability Journal*, 34(5), 1137-1162. <https://doi.org/10.1108/AAAJ-07-2019-4087>
- Silva, M. E., & Figueiredo, M. D. (2017). Sustainability as practice: reflections on the creation of an institutional logic. *Sustainability*, 9(10), 1839. <https://doi.org/10.3390/su9101839>
- Silvola, H., & Vinnari, E. (2021). The limits of institutional work: a field study on auditors' efforts to promote sustainability assurance in a trust society. *Accounting, Auditing and Accountability Journal*, 34(1), 1-30. <https://doi.org/10.1108/AAAJ-02-2019-3890>
- Smink, M., Negro, S. O., Niesten, E., & Hekkert, M. P. (2015). How mismatching institutional logics hinder niche-regime interaction and how boundary spanners intervene. *Technological Forecasting and Social Change*, 100, 225-237. <https://doi.org/10.1016/j.techfore.2015.07.004>
- Stål, H. I. (2015). Inertia and change related to sustainability: an institutional approach. *Journal of Cleaner Production*, 99, 354-365. <https://doi.org/10.1016/j.jclepro.2015.02.035>
- Strambach, S., & Pflitsch, G. (2020). Transition topology: capturing institutional dynamics in regional development paths to sustainability. *Research Policy*, 49(7), 104006. <https://doi.org/10.1016/j.respol.2020.104006>
- Stubbs, W. (2017). Sustainable entrepreneurship and B corps. *Business Strategy and the Environment*, 26(3), 331-344. <https://doi.org/10.1002/bse.1920>
- Suddaby, R., & Greenwood, R. (2009). Methodological issues in researching institutions and institutional change. In D. A. Buchanan, & A. Bryman (Eds.), *The Sage handbook of organizational research methods*. Sage Publications Ltd.
- Thornton, P. H., & Ocasio, W. (2008). *The Sage handbook of organizational institutionalism*. Sage Publications Ltd. <https://doi.org/10.4135/9781849200387>
- Thornton, P. H., Ocasio, W., & Lounsbury, M. (2012). *The institutional logics perspective*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199601936.001.0001>
- Waldorff, S. B., Reay, T., & Goodrick, E. (2013). A tale of two countries: how different constellations of logics impact action. In M. Lounsbury, & E. Boxenbaum (Eds.), *Institutional logics in action, part A*. Leeds: Emerald Group Publishing Limited. [https://doi.org/10.1108/S0733-558X\(2013\)0039AB008](https://doi.org/10.1108/S0733-558X(2013)0039AB008)
- Watson, R., Wilson, H. N., & Macdonald, E. K. (2020). Business-nonprofit engagement in sustainability-oriented innovation: what works for whom and why? *Journal of Business Research*, 119, 87-98. <https://doi.org/10.1016/j.jbusres.2018.11.023>
- Weisenfeld, U., & Hauerwaas, A. (2018). Adopters build bridges: changing the institutional logic for more sustainable cities. From action to workset to practice. *Research Policy*, 47(5), 911-923. <https://doi.org/10.1016/j.respol.2018.02.015>
- York, J. G., O'Neil, I., & Sarasvathy, S. D. (2016). Exploring environmental entrepreneurship: identity coupling, venture goals, and stakeholder incentives. *Journal of Management Studies*, 53(5), 695-737. <https://doi.org/10.1111/joms.12198>

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#### DATA AVAILABILITY

The entire dataset supporting the results of this study was published in the article itself.

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