Research paper

Emerging Regenerative Business Paradigm: Narrative Review, Synthesis, and Research Agenda

Kirsi Salonen[1,3,*], Paavo Ritala[1,2], Nancy Bocken[3]

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Abstract

This study examines the concept of regenerative business strategy. Regeneration is an emerging approach where businesses aim to create a positive impact on socio-ecological systems, rather than just making incremental improvements or minimizing harm. Our study demonstrates that regeneration is a relatively ambiguous and contested concept – both academically and in practice – with no consensus on its meaning. To make sense of this emerging concept, we employ a narrative review method to anchor regeneration into existing management literature, using the more established concepts of business sustainability, corporate social responsibility (CSR), and circular economy. This approach shows that while the concept of regeneration is not entirely new, it offers a new operationalization of systemic and strong sustainability. In summary, our study provides a clear positioning of regenerative business strategy as a part of existing sustainability discourses and demonstrates how it extends and refines those.

Keywords: Regeneration · Regenerative business · Strong sustainability · Net Positive · Circular Economy

1. INTRODUCTION

Decades of warnings from the scientific community about humanity exceeding the limits of the Earth's capacity to maintain life are intensifying. Biodiversity sustains human life, yet most indicators on the state of the environment show a rapid decline (Richardson et al., 2023; Steffen et al., 2015). Natural resources are consumed far beyond what the planet can sustainably provide, with the affluent nations causing most of this overshoot (Fanning et al., 2022). This has led to, for example, the decline of monitored wildlife populations by 73% over the past 50 years (WWF, 2024), and the loss of vast indigenous forests and depletion of fish stocks in our oceans (Steffen et al., 2015). The unsustainable ways we produce and consume lie at the heart of this crisis (Richardson et al., 2023). Recently, the calls for adapting human activity to the limited capacity of the Earth have been increasingly targeted at businesses (Bai et al., 2024; Gupta et al., 2024). This is also reflected in the corporate agenda (World Economic Forum, 2023) and public discussion on sustainability, which is increasingly concerned about the loss of biodiversity (European Environment Agency, 2021; World Wildlife Fund, 2021). Hence, it is no surprise that calls for management studies to incorporate true systems thinking and planetary boundaries are also intensifying (Bansal et al., 2024; Cechvala, 2024; Williams et al., 2024), and research on the impact of business on nature and biodiversity is emerging (Maron et al., 2021; Panwar, 2023; Salmi et al., 2023; Zhu et al., 2024).

Against this backdrop, it is also unsurprising that the concepts of regeneration and regenerative business strategies have gained attention as a novel approach for companies to do more good than harm and even put environmental and societal value above profits (Ehrenfeld & Hoffman, 2013; Polman & Winston, 2021). Unlike the concepts of corporate social responsibility (CSR) and business sustainability, which typically focus on minimizing damage to the people and the environment (Bocken et al., 2014; Hart, 2005), regenerative strategies

[1] Business School, LUT University, Lappeenranta, Finland
[2] Innovation and Entrepreneurship, Luleå University of Technology, Luleå, Sweden
[3] Maastricht Sustainability Institute, Maastricht University, Maastricht, The Netherlands
[*] Corresponding author: kirsi.salonen@lut.fi

seek to restore, renew, and recreate ecological and social systems (Das & Bocken, 2024; Fischer et al., 2024; Hahn & Tampe, 2021; Konietzko et al., 2023; Morseletto, 2020; Muñoz & Branzei, 2021). Undoubtedly, regeneration would be a much-needed strategy for a planet in an ecological crisis, living in environmental debt. What is less understood, however, is how regenerative strategies align with the other broad paradigms and approaches in business sustainability.

A starting point for regenerative businesses is that they seek to create a positive impact on socio-ecological systems (Hahn & Tampe, 2021). Socio-ecological systems integrate humans and nature, and stress that their separation is arbitrary (Berkes & Folke, 1998). Such goal requires going far beyond incremental improvements and studying firms' sustainability in silos as per the triple bottom line (Elkington, 1998; Elkington, 2024), and calls for a systems view (Ritala, 2019; Ritala et al., 2021; Williams et al., 2017) and moving from weak to strong sustainability or even "disruptive sustainability" (Kivimaa et al., 2021). Therefore, regeneration would imply changing the classic understanding of the firm as an entity with the primary goal of generating economic value.

Indeed, a growing number of companies and associations are using the term regenerative in their strategies or marketing materials (Das & Bocken, 2024; Forum for the Future & WBCSD, 2021; Sitra, 2023). What is meant by it varies from sourcing agricultural products farmed by regenerative methods (Bag & Rahman, 2023; Forum for the Future, 2024; Howard et al., 2019) to new ways of leadership (Hutchins, 2022) or creating positive impacts to nature, whether as part of how a company operates (Hahn & Tampe, 2021; Konietzko et al., 2023) or as part of their biodiversity strategy to complement other activities or even to offset negative impacts elsewhere (Salmi et al., 2023).

In parallel, scholars in the field of organization and management have started building a conceptual understanding of regenerative strategies and business models that companies can use (Das & Bocken, 2024; Hahn & Tampe, 2021; Konietzko et al., 2023). There is also emerging literature on regenerative supply chains (Gualandris et al., 2024; Yu et al., 2023), regenerative innovation (Hecker & Toivonen, 2024; Yadav & Yadav, 2024), regenerative finance (Schletz et al., 2023), regenerative marketing (Bocken et al., 2025b), and place-based regeneration (Albareda & Branzei, 2024; Dzhengiz & Patala, 2024; Rahman et al., 2024; Slawinski et al., 2021; Vlasov, 2021). The latter stream has made a significant contribution to anchoring the concept of regeneration within a particular locality when discussing business activities and innovation systems (Waddock et al., 2024).

While the ongoing discussions on regeneration and discourses such as net positivity (e.g. Polman & Winston, 2021), nature positivity (e.g., Nature Positive Initiative, 2023), and biodiversity (e.g., Panwar, 2023) provide an important step towards more ambitious sustainability goals, this cornucopia of different terms also hinders our understanding of their relative merits, implementation difficulty, and distinctiveness. We are facing the conceptual challenge of finding out whether we are on the verge of something new and distinctive, or whether we are witnessing the "emperor's new clothes". Despite the emerging studies, regeneration remains a contested concept, and there is no common understanding of what it means in the context of companies, their strategies, or practical activities. Therefore, we problematize (Alvesson & Sandberg, 2011) existing business sustainability literature as it cannot fully explain or accommodate the principles of regenerative business, which require a paradigmatic shift both conceptually and in practice. Therefore, in this study, we ask: How do regenerative business strategies add value to (and beyond) other concepts within business sustainability literature and practice?

To answer this question, we employ a narrative review approach (Cronin & George, 2023; Paré et al., 2015) involving two stages. First, we review extant literature and discuss how the concept of regenerative business strategy is related to different streams of management literature. In particular, we review circular economy, Corporate Social Responsibility (CSR), and sustainability management literatures, and position regenerative business strategies against this foundation. In the second stage, we conceptualize regenerative business strategies further, bringing clarity to the concept of regeneration in the business context, offering managerially relevant insights. We conclude with a future research agenda.

Our study contributes to regenerative business literature by providing the first in-depth review of the topic using the lenses of strategy, i.e., aligning firms' resources, capabilities towards challenges and opportunities in their business environment (Grant, 2015). This lens differentiates our study from reviews or conceptualizations focused on more distinct domains, such as business models (Konietzko et al., 2023) or the circular economy

(Morseletto, 2020). The wide strategy perspective adopted in the current study helps to show how regenerative business is situated under the broader arc of business sustainability research streams, and how it both extends and challenges conventional wisdom. Lastly, we provide much-needed clarity toward the role of regenerative strategies as a promising yet challenging and contested paradigm to resolve the socio-ecological crisis.

2. REGENERATION: A BRIEF OVERVIEW

Despite having appeared recently on the corporate agenda, the idea and concept of regeneration are not novel. For instance, the term regeneration has been used to describe different approaches that see human activity supporting nature's processes and cycles and integrating within its capacity. It is visible in many practices of food and land management (Johnston, 2022) and understanding of well-being (Spiller et al., 2011) of indigenous peoples, or agriculture (Buckton et al., 2024; Paolini et al., 2024). Yet, it remains a concept without a single broadly adopted definition researched and practiced across different fields, that scholars have only recently started to synthesize (Buckton et al., 2023; Fischer et al., 2024; Paolini et al., 2024).

There are several practitioner domains where the idea of regeneration was adopted a long time ago. Built environment and regenerative development practitioners have been advocating for a systems approach since the 1990s, seeking to reverse the degeneration of the earth's natural systems and design human systems that can coevolve with natural systems (Mang & Reed, 2017; Nußholz et al., 2023). Others have envisioned a regenerative economy that would require letting go of the ideals of maximizing short-term profit and infinite growth (Elkington, 2020; Elkington, 2024; Fullerton, 2015; Sanford, 2017) or using finance to achieve regeneration of indigenous lands (Arjaliès & Banerjee, 2024). Relatedly, advocates of regenerative cultures and societies frame the concept holistically, requiring changes in cultural value systems and acknowledging the interconnectedness of all elements within a system and the dynamic relationships that drive their behavior (Wahl, 2016).

Recently, scholars have started to build a common understanding of regeneration in various disciplines and fields, calling for interdisciplinary integration (Buckton et al., 2023; Fischer et al., 2024). In their review article, Fischer et al. (2024) present a framework for explaining regenerative systems that are partly self-sustaining but also use other resources like sunlight or human labor. In such systems, humans deliberately increase the capability of the system to maintain its vitality and ability to flourish. This systems view offers an interesting lens for studying sustainability transformations by focusing on the connections between systems of humans (organizations) and nature (Williams et al., 2017). These interactions and connections can be seen as regenerative practices that are intentional and typically sustained activities that support regenerative dynamics and comprise effort, energy, or material input into a given system (Fischer et al., 2024).

More recently, management scholars have started to conceptualize regenerative business strategies and business models. Whereas regenerative strategies are defined to restore, renew and recreate ecological and social systems (Hahn & Tampe, 2021), regenerative business models "create and deliver value at multiple stakeholder levels—including nature, societies, customers, suppliers and partners, shareholders and investors, and employees—through activities promoting regenerative leadership, co-creative partnerships with nature, and justice and fairness" (Konietzko et al., 2023, p. 375). The literature identifies two underlying principles of regenerative strategy: aspiration for systems-based sustainability and adaptive management (Caldera et al., 2022; Hahn & Tampe, 2021). On the other hand, regeneration has been used as part of many definitions of circular economy, circular business models, and circular economy strategies (Bocken et al., 2025a; Ellen MacArthur Foundation, 2013; Kirchherr et al., 2023; Konietzko et al., 2020). In the following sections, we will go deeper into different streams of literature in business sustainability via a narrative review method, which helps us to situate regenerative business strategies within organization and management scholarship and identify how it extends the ongoing discourses on sustainable business.

3. NARRATIVE REVIEW METHODOLOGY

To understand what is new and distinctive about regenerative business strategies, we utilize the narrative review research approach. The benefit of narrative reviews – as opposed to systematic reviews – is that they aim to *adjudicate* rather than systematize the analysis of the literature (Cronin & George, 2023). This enables the

scholars to reflect and build new explanations and interpretations of the studied phenomenon within specific communities of practice (Torraco, 2005). In our study, we build three narrative analyses to situate regenerative business strategies within the streams of sustainable business management, CSR, and the circular economy. Furthermore, we follow the problematization approach (Alvesson & Sandberg, 2011) that suggests that literature reviews can also help to critically investigate concepts that are becoming or have become "hembigs" – hegemonic, ambiguous, and big concepts – that involve ambiguous conceptual boundaries and distinctions (Alvesson & Blom, 2022). Such a tendency, identified by Dzhengiz et al. (2023) in the context of the circular economy, may also be applicable to regeneration. Hence, our study can be described as a narrative review that builds on the problematization philosophy and thus pursues to engage the literature reflectively and by reading "broadly but selectively" (Alvesson & Sandberg, 2020) instead of engaging in an analysis that systematically thematizes an overall corpus of a specific literature, which is the purpose of systematic reviews (Cronin & George, 2023).

We conducted a search on academic databases first in June of 2024 (using search string "regenerative" OR "regeneration" AND "business" OR "strateg* OR organiz*) with articles added on as they were published during the year 2024. We filtered articles to include those that have been published in management-related journals and included those with a clear focus on regeneration, specifically with business(es) as key actors. The search resulted in 32 articles that discuss the concept of regeneration in the context of business, focusing on strategies and business models, supply chains, organizing, regenerative practices, and innovations (in Appendix A, sorted by the number of citations on Google Scholar). They have been published in 19 different journals. Five articles were part of a special issue of *Organization & Environment* in 2021. To ensure the representativeness of the sample beyond the search on academic databases, we also undertook snowballing sampling to incorporate articles potentially relevant to our research question. In all cases, we focused on the specific discourse on "regeneration" (as opposed to some other alternative sustainability paradigms) to be consistent with our aim to understand the emerging discourse around this concept.

4. HOW DOES REGENERATION DIFFER FROM ESTABLISHED SUSTAINABLE BUSINESS CONCEPTS

As the first result of the narrative review, we concluded that regenerative strategies are situated within three broader discourses among organization and management literature: sustainability management, CSR, and the circular economy. In addition, there was another important undercurrent in all three literatures: what makes regeneration distinct in general within sustainability is the systemic and strong sustainability approach as opposed to "weak sustainability" (Bonnedahl and Heikkurinen, 2019). The most widely cited definitions of regeneration thus far (e.g., Hahn & Tampe, 2021; Konietzko et al., 2023) share similarities with that of strong sustainability, i.e. the premise that the human sphere is embedded in the natural system (biosphere') and assumption that natural limits need to control our actions (Daly, 1996). Hence, we wanted to return to literature on (strong) sustainability and to the core ideas of systems thinking in the context of regenerative business to trace its conceptual history and positioning.

These two observations also show how our study differs from other recent business-oriented conceptualizations of regeneration. First, Konietzko et al. (2023) conducted a thorough comparison of sustainable, circular, and regenerative business models and identified a strong focus on planetary health and wellbeing as their central aim. However, beyond examining business models, it becomes clear from the literature that there is a need for a more granular analysis of how regeneration differs from more established concepts in the research of sustainability in business and how it is portrayed via strategies, approaches and practices. Thus, it is important to view regeneration as part of the overall sustainability management stream.

Second, we can observe the increasing inclusion of regeneration (Forum for the Future & WBCSD, 2021; Sitra, 2023) as well as themes such as biodiversity into the CSR agenda (e.g., Hassan et al., 2022; Panwar, 2023), in both research and practice. This demonstrates the relevance of viewing regeneration as a phenomenon increasingly embedded in corporate responsibility and changing how the frontier topics of responsibility are evolving.

Third and finally, despite the apparent differences in circular and regenerative business models discussed by Konietzko et al. (2023), the term "regenerative" is commonly used as part of the definitions of circular economy (Bocken et al., 2025a; Kirchher et al., 2023). This indicates that the understanding of regeneration may vary in this stream of literature, and a closer look into it would be useful.

4.1 Regenerative Strategy and Sustainability Management

In sustainability literature, the need to move corporate sustainability beyond fragmented actions has been recognized. In this section, we will first outline the similarity of the concept of regeneration to concepts of weak and strong sustainability, originating in ecological economics (Brozovic, 2019; Daly, 1996; Ehrenfeld, 2007; Ekins et al., 2003; Landrum, 2018; Neumeyer, 2003). We will then proceed to discuss the concept of net positive (Polman & Winston, 2021) and nature positive (Nature Positive Initiative, 2023), sometimes used as synonyms for regeneration in a business context.

Weak sustainability treats natural and manufactured capital as interchangeable, while *strong sustainability* is based on the need to maintain stocks of natural capital (Daly, 2005) and to respect nature beyond its potential functional usefulness (Bonnedahl and Heikkurinen, 2019). Strong sustainability means that the human sphere is embedded in the natural system (the biosphere) and that natural limits should constrain our actions (Daly, 1996). Typologies have placed sustainability management of companies on a scale from weak to strong sustainability (e.g., Baumgartner & Ebner, 2010; Dyllick & Muff, 2016). Some of these typologies (e.g. Landrum, 2018) and definitions of sustainable business models (e.g. Schaltegger et al., 2016) included regeneration as part of strong sustainability even before the concept became more commonly used by global multinational companies (for example, Walmart announced their regenerative strategy in 2020 and PepsiCo in 2021).

The strong sustainability theory shares premises with calls for a more *systemic* understanding of (corporate) sustainability (Williams et al., 2024) and the application of systems theory and living systems thinking (Grewatsch et al., 2023; Williams et al., 2017). Accordingly, regenerative business strategies can be viewed as processes that lead to the revival and regeneration of social-ecological systems and are therefore in line with systems thinking and strong sustainability theory. They can also be understood as a systemic approach based on the health of the socio-economic system as a starting point for business (e.g., Hahn & Tampe, 2021). Relatedly, in the domain of business models, Konietzko and colleagues (2023) draw from this idea by highlighting how regenerative business models differ from sustainable or circular business models in their focus on planetary health and social-ecological *systems*, while the other types of business model approaches are less systemic and more insular. This echoes the notion in sustainability-oriented innovation literature where the systemic approach requires socio-technical change (Adams et al., 2016).

Concepts like weak and strong sustainability - or systems thinking (Daly 1996; Ekins et al., 2003; Neumayer, 2003; Ritala, 2019; Williams et al., 2017) - have been quite academic: companies do not use such language, and despite public proclamations it is not easy to find empirical examples of corporate strategies or business models that would be based on an idea of strong sustainability (Landrum & Ohsowski, 2018; Upward & Jones, 2016), although recent studies have featured emerging examples (Bocken et al., 2021; Das & Bocken, 2024; Roman et al., 2013). Indeed, the sustainability strategies of companies and the triple bottom-line thinking are mostly in line with the weak interpretation of sustainability (de Oliveira Neto, 2020; Landrum, 2018). Only recently have there been empirical studies of such a systemic and even regenerative understanding of sustainability implemented by different actors and organizations, including companies (Albareda & Branzei, 2024; Caldera et al., 2018; Dzhengiz & Patala, 2024; Rahman et al., 2024; Slawinski et al., 2021; Vlasov, 2021). These studies have highlighted, for example, the importance of ecological knowledge (Vlasov, 2021) and place-based nature of regeneration (Albareda & Branzei, 2024; Rahman et al., 2024; Slawinski et al., 2021).

Another attempt at a more holistic understanding of a company's impact can also be traced in the use of the term *net positive*, which some companies use to describe a new way of approaching sustainability strategies that do not focus on doing less bad and that has an aspiration of creating positive impact (Polman & Winston, 2021). Net positive can be understood via footprint and a handprint: a "handprint" is the positive impact or difference a product or service makes, whereas the footprint is the negative impact that the product or service creates during its life cycle (Konietzko et al., 2023, p. 373; Norris, 2015). If a life cycle analysis shows that the handprint is

larger than the footprint for a given impact category, the result is net positive for that category. For example, The Upright project has developed a data-driven solution to quantify such net positive impact (n.d.). Similar logic applies to the emerging concept of *nature positive* (de Silva et al., 2019; Nature Positive Initiative, 2023; Maron et al., 2024; zu Ermgassen, 2022). It is most often associated with the Global Biodiversity Framework (GBF), and it is used by societal actors as a tool for advocacy and campaigning, but it still lacks a clear definition (for an overview, see zu Ermgassen, 2022, p. 3). We will discuss the GBF further in the next section.

Net positive and nature positive are relatively similar concepts to regeneration, yet they are not synonyms. In particular, while the "net" notion sounds systemic and in line with strongly sustainable, it allows for negative impacts or destruction of nature elsewhere by offsetting losses (Alvarenga et al., 2020; Dyllick & Rost, 2017). In contrast, a regenerative system is defined by exhibiting internal regenerative dynamics without negative spill-over effects on other social-ecological systems and their dynamics (Buckton et al., 2023). This makes regeneration a particularly challenging concept in a corporate context, and real-life examples often only include an aspiration toward regenerative dynamics (Das & Bocken, 2024). In addition, companies' sustainability management is shaped by societal expectations and evolving regulatory landscapes. Therefore, we will next discuss the relationship between regenerative business strategies and corporate social responsibility.

4.2 Regeneration in Relation to Corporate Social Responsibility and Regulation

The literature on Corporate Social Responsibility (CSR) offers important and distinct insights into the regenerative business discussion. Although often used interchangeably, business responsibility and sustainability have evolved from different roots. Whereas sustainability is rooted in systems thinking, CSR originates in a normative understanding of the role of business in society (Bansal & Song, 2017). Businesses aim to perform sustainability actions mainly either due to an ethical stance ("being good corporate citizens", purpose, etc.) and societal expectations or because of regulation (Matten & Moon, 2008; Moisander et al., 2024). From this perspective, regenerative strategies and approaches appear as voluntary measures framed as ambitious sustainability strategies. For example, large multinational companies such as Danone (2025) and Mars (2024) have publicly launched regenerative strategies that refer specifically to agricultural value chains, and Microsoft's sustainability report (2025) states an ambition of designing "regenerative data centers"; yet they present limited evidence of the results. At the same time, the recent, rapid replacement of voluntary corporate responsibility by regulation, particularly in the European Union, will influence both the sustainability management of companies in very concrete terms, but also how CSR is studied.

The European CSR framework is undergoing a change with the EU Green Deal having been operationalized by several policies and directives that impact how companies handle risks, and their activities related to environmental damage and human rights. Perhaps the most significant directives that have followed from the Green Deal are the Corporate Sustainability Due Diligence Directive (CSDDD) and the Corporate Sustainability Reporting Directive (CSRD), which are designed to ensure that companies integrate human rights and environmental considerations into their operations and report on their sustainability practices systematically and transparently. These directives have also introduced the concept of double materiality assessment that brings the standardized sustainability framework an inch closer to strong sustainability: in defining what are the salient sustainability issues for a specific business and its value chains, the firms now need to assess both sustainability risks to the business as well as the risks the business causes to the outside world. If companies were to do this exercise based on the context they operate in (as suggested by KPMG, 2024 and studies by Andersen et al., 2021; McElroy & Thomas, 2015; Whiteman et al., 2013; Williams et al., 2024), this could indeed strengthen a more systemic understanding of sustainability - and by extension - the potential for regenerative strategies.

Another key component of the Green Deal is the Circular Economy Action Plan (CEAP) (European Commission, 2020). It introduced more ambitious categories of the so-called R-strategies associated with circular economy, such as reduce and reuse, by emphasizing, for example, product durability and lifetime extension (e.g., via the Eco-Design Directive) in addition to strategies that have previously been central, namely recycling and waste management, resource efficiency, and extended producer responsibility (EPR) (Monciardini et al., 2023; Sakao et al., 2024). It does not, however, include regeneration as an "R-strategy", despite it being one of the commonly cited components of the definition of circular economy (Dzhengiz et al., 2023; Ellen McArthur Foundation, 2013, p.7; Kirchherr et al., 2023). When the idea appears in policy documents, it typically

entails a single mention, such as in the EU Circular Economy Plan: "...the EU needs to accelerate the transition towards a regenerative growth model that gives back to the planet more than it takes…" (European Commission, 2020). The policy does not define what is meant by it, hence it is not a surprise that it remains ambiguous both in regulation and in business practice, where it is typically not a part of a "circular strategy" which most often focuses on materials efficiency (for discussion, see Konietzko et al., 2023). We will discuss the links to the circular economy further in Section 3.3.

With the above-mentioned regulations and the European Deforestation Regulation (EUDR), Restoration Directive, and Taxonomy, the EU regulates an increasing sphere of corporate activity. Similar initiatives are also planned or already in place on other continents. In addition, the EU's Biodiversity Strategy 2030 (European Commission, 2021) and the Kunming-Montreal Global Biodiversity Framework (GBF) (Convention on Biological Diversity, 2022) - popularized as "Reversing nature loss by 2050" - include goals that will not be achieved without the participation of the private sector. These goals partly overlap with the idea of regeneration and link to the above-mentioned regulatory development, bringing environmental due diligence to the corporate agenda (see World Benchmarking Alliance, 2024). The term nature positive is emerging as a call to mainstream the goals of the GBF, although it is often poorly defined (Booth et al., 2024; White et al., 2024; zu Ermgassen, 2022). Although the GBF is not a binding agreement, many large companies have already started to include the idea of being nature positive in their vocabulary. Target 15 of the GBF agreement states that large businesses and financial institutions will need to assess and disclose their risks, impacts, and dependencies on nature through their operations, supply and value chains, as well as their portfolios. Globally, however, only 5% of the largest companies have carried out an assessment of the impact of their operations on nature, and fewer than one in a hundred have assessed their dependence on nature (World Benchmarking Alliance, 2024). Furthermore, GBF does not include guidance on whether the restoration and nature-positive actions should be part of the business model or an add-on to the core business. It does, however, send a signal that this will be important in financing decisions and possibly bring about new regulation in the future.

While biodiversity is making an entry into the CSR field and companies are drawing plans to map their nature impact, there have been calls to ensure that a nature positive approach is not diluted to include any action for nature by forgetting the mitigation hierarchy (Maron et al., 2024). This refers to a framework commonly used in nature conservation and environmental management that involves a sequence of steps: avoiding negative impacts on biodiversity, minimizing unavoidable impacts, restoring affected areas, and, as a last resort, offsetting residual impacts through equivalent conservation efforts elsewhere (Arlidge et al., 2018). A conceptual research agenda developed by White et al. (2024) extends beyond individual business actions and identifies several critical areas for action and research, such as preventing unintended environmental and social consequences and the need for impact measurement at various scales.

Finally, when regulation turns "sustainability as usual" into compliance, the bar is raised for those companies wanting to be – or want to be seen as - forerunners in sustainability. This may have implications for how regenerative strategies are framed and eventually on how the concept of CSR evolves to include new aspects. Hybridization of CSR – referring to the process of institutional struggle over the appropriate roles and responsibilities of business in society and related processes of framing (Moisander et al., 2024) – could help explain the rise in the use of the term regeneration by large corporations that do not appear to be following the full definition of the term described at the beginning of this article.

4.3 Circular Economy and the Missing "R" of Regeneration

The previous section noted the absence of the R-strategy 'regeneration' in European Union's Circular Economy policies and regulation. Although a recent review of a myriad of definitions of circular economy (Kirchherr et al., 2023) found that 'regenerative' appeared in 24–25 percent of definitions of circular economy, it is not actually very prominent in the circular strategies of companies (Bocken et al., 2025a). Perhaps this relates to regeneration being the most challenging aspect of the circular economy paradigm. Thus, it might be that it has been convenient to put the "missing R" in the background while focusing on the more conventional circularity practices focused on resource and materials efficiency, both in practice and research. Relatedly, regeneration is not typically discussed in depth in the academic literature on circular economy (Kennedy & Linnenluecke, 2022; Morseletto, 2020; Zisopoulos et al., 2022), with a few exceptions (such as Ghisellini et al., 2016; Howard et al.,

2019; Morseletto, 2020; Nyström & Murati, 2024). Indeed, despite a fairly common underlying assumption in the CE literature that the circular economy leads to regenerative systems, the concept has not received much attention (Dzhengiz et al., 2023).

The Ellen McArthur Foundation defines regeneration as a "shift to renewable energy and materials; reclaim, retain, and regenerate the health of ecosystems; and return recovered biological resources to the biosphere" (EMF, 2015, p. 25). It seems that the definition has been split in two interpretations within CE literature as 1) regenerating value from something that has so far been worthless (Nyström & Murati, 2024), similar to upcycling, and 2) achieving an ideal state where stocks of natural capital are regenerated and maintained (Howard et al., 2019), or developing "cleaner loops" (Konietzko et al., 2020). Less frequently, it includes organizations contributing to leaving the environment in a better state than how it was found (Bocken et al., 2021). On the other hand, Morseletto (2020, pp. 763) argues that ''regeneration is a symbolic/evocative term with little practical application in the context of circular systems," except for applicability in a few agricultural methods, and proposes restoration as the core principle of circular economy.

Research on business models (Das & Bocken, 2024; Konietzko et al., 2023) suggests that regenerative business models differ from sustainable and circular ones by viewing the planet as a living system (Lovelock, 1988). Most CE approaches still fall within the weak sustainability paradigm (Simamindra & Rajaonarivo, 2024), and recent studies question the assumed positive environmental (Bączyk et al., 2024) and social impacts (Calisto Friant et al., 2024; Schroeder & Anggraeni, 2019) of the circular economy approaches. However, the CE literature is not a monolith, and the different narratives within it vary from concentrating on resource optimization and closing the loops to a more systematic and transformative approach (Calisto Friant et al., 2024; Chedrak et al., 2023; Leipold et al., 2023; Nolan et al., 2024). If CE business strategies and models focus solely on the common R-strategies - reuse, reduce, recycle - they will inevitably result in material value loss over time, even with closed-loop systems, given the eventual degradation of materials' value due to thermodynamic laws (Corvellec et al., 2022; Kümmerer et al., 2020). Nevertheless, a more systematic understanding of regenerative strategy can inform the transformative approach to CE. In addition, circularity can offer important building blocks for regenerative strategies or dynamics that aspire to eliminate negative feedback to other systems (Fischer et al., 2024).

4.4 Summary: Toward Conceptual and Practical Clarity

Based on the narrative review, we observe differences in the use of regenerative strategy within the studied streams of literature. Research focusing on circular economy and circular business models tends to understand regeneration as either narrowly connected to the natural resources used by a firm or as part of the company's endeavor towards net-zero emissions (Falcke et al., 2024; Konietzko et al., 2023; Martín-de Castro et al., 2024; Morseletto, 2020). However, ensuring that natural resources are used without depleting them does not inherently create a regenerative impact. We argue that for clarity's sake, *(strong) sustainability* should be used when referring to a level of use of natural resources that does not exceed the ability of nature to regenerate them. Similarly, corporate climate actions such as carbon capture or offsetting initiatives should not be called regenerative but should rather be discussed using the existing language of offset guidelines (e.g., Helppi et al., 2023). This would also be in line with regulation on climate-related information. On the other hand, the literature on sustainability management and organization studies links regenerative strategy to a more systemic understanding of sustainability as described earlier. In addition, regenerative organizing appears to be rooted in the notion and longer research tradition on context-specificity, place, and sense of place (e.g., Guthey et al., 2014). These two uses of the term are echoed in the literature on regenerative supply chains and MNEs, where both resource-based views (George & Schillebeeckx, 2022; Yu et al., 2023) and those based on principles of regenerative organizing are seen (Gualandris et al., 2023; Oyefusi et al., 2024).

Regenerative strategies (when used as a deliberately facilitated process by organizations) would then refer to an organization's positive contribution to the regenerative dynamics within a particular context. The "restore - preserve - enhance" scale by Hahn & Tampe (2021) helps conceptualize such strategies as tools in the regenerative strategy toolbox. According to them, restorative strategies revive ecosystems degenerated by businesses or ensure the logic of securing yields from an ecosystem (p. 465), similar to how regeneration is perceived in much of the CE literature and practice. Preservative strategies refer to aiming to maintain the status

quo of socio-ecological systems (p. 467), and the enhancing strategies include deeper and positive interconnection with the local systems (p. 468), as exemplified by the studies of place-based regeneration (Albareda & Branzei, 2024; Rahman et al., 2024; Slawinski et al., 2021).

This broad summary of different streams of academic literature shows that we cannot dismiss regeneration as the "emperor's new clothes" due to its distinctive dynamics. We have also shown that the term has common ground with and is associated with different streams of literature related to sustainable business, with different emphases depending on the stream. We summarize this review in Table 1, where we identify the main role of regeneration in each stream and characterize the emerging systemic and strong sustainability framing that typically provides the distinctiveness of regenerative strategies within the stream.

Our review has also revealed some key insights for the practical implementation of regenerative strategies in business. To help distinguish regenerative strategy from other related concepts discussed in this article, we present a set of guiding questions in Table 1. The most important one is: *What is being regenerated?* If this question is difficult to answer and it is not clear how the chosen strategy or activities are regenerative, the strategy should be labeled differently, not to complicate the already complex vocabulary of corporate sustainability further. The questions "*What is the local place/context that serves as a basis for regenerative strategy/practices?*" and "*How do we get the necessary knowledge to contribute to its enhancement?"* help to narrow down how specific the strategy is and aid in communicating it. Asking "*Is it part of my core business?"* can help in identifying whether regeneration is an embedded part within the company's business sustainability (e.g., as part of a strong sustainability paradigm), a parallel focus, or a completely different paradigm for the company to pursue that requires fundamental shifts to be possible. The remaining questions help identify the collaborative elements of such strategies and avoid misleading communication on them. The questions can guide companies and managers aiming to embrace regenerative thinking and dynamics to focus on the impacts of their core business and the localities their business is impacting, directly and indirectly, in the value chain. They also help to position the strategies as restorative, preservative, or enhancing (Hahn & Tampe, 2021). Some of the questions overlap with the topic of CSR and regulation, further elaborated upon in the Discussion section.

Table 1. The Three Perspectives on Regenerative Business and Their Implications

	Perspective 1: Sustainability Management	**Perspective 2: CSR and Regulation**	**Perspective 3: Circular Economy**
Key arguments: What does regeneration bring into this discussion?	**Main role of regeneration:** Regenerative business strategies are processes that lead to the revival and regeneration of social-ecological systems. **Emerging systemic and strong sustainability framing:** Regenerative dynamics involves an aspiration for proven system-level positive impact. Regenerative strategies are typically context and place-specific and require adaptive management to accomplish system-wide positive impact.	**Main role of regeneration:** The increasing "legalization" of CSR is impacting many spheres of corporate responsibility, but regeneration does not clearly feature in regulation. Therefore, vaguely defined regenerative strategies remain within the voluntary (implicit) CSR. **Emerging systemic and strong sustainability framing:** Emerging nature-related voluntary initiatives and regulation may open possibilities for regenerative strategies to become compatible with CSR and explicit regulatory compliance.	**Main role of regeneration:** Regeneration is a part of the CE narrative. Within the CE approach, regenerative strategy is often seen as a natural resources issue (i.e. not depleting resources), a way to increase value from discarded resources, or concerning emissions. **Emerging systemic and strong sustainability framing:** A more systemic understanding of regeneration could tie CE better into strong sustainability. The CE approach can offer concrete tools for companies embarking on regenerative strategies.
Illustrative references	Albareda & Branzei, 2024; Das & Bocken, 2024; Gualandris et al., 2023; Hahn & Tampe, 2021; Konietzko et al., 2023; Rahman et al.; 2024; Slawinski et al., 2021.	George & Schillebeeckx, 2022; Elkington, 2020; Salmi et al., 2023; Quarshie et al., 2021; Waddock et al. 2024	Martín-de Castro et al., 2024; Dzhengiz & Patala, 2024; Falcke et al., 2024; Howard et al., 2019; Konietzko et al., 2023; Bocken et al., 2025a
Managerial implications and open questions	• Key question: What is being regenerated? • What is the local place/context that serves as a basis for regenerative strategy/practices? How do we get the necessary knowledge to contribute to its enhancement? • Is it part of my core business? • Can regenerative strategies and practices align with business goals, do they require subsidies, or are they part of compliance? • How can we collaborate to develop systemic solutions (with NGOs, governments, other companies, experts, and non-human actors) to regenerate social-ecological systems? • Can we use the regulation to improve the positive impact of business on social-ecological systems? Do regenerative approaches increase fragmentation when it comes to compliance? • How can we achieve specificity in developing and communicating our regenerative strategies to avoid greenwashing and misappropriation of the concept?		

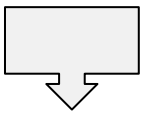
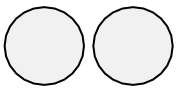
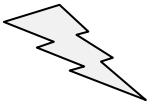
5. DISCUSSION: WHAT NEW APPROACHES AND QUESTIONS CAN REGENERATIVE STRATEGIES BRING TO SUSTAINABLE BUSINESS IN RESEARCH AND PRACTICE?

We began this study by observing a disconnect between companies pursuing sustainability and corporate responsibility strategies (as well as academics studying them) and the escalating degeneration of ecological and social systems. In

response to this disconnect, the concept of regeneration has gained traction. Therefore, it is important to position it within the dominant discourses of the business sustainability literature.

As our narrative review demonstrates, literature on sustainability management, CSR, and circular economy provides valuable insights into the interpretations of regenerative strategies and important questions that companies aiming to adopt such strategies should consider. Table 2 summarizes the three perspectives, outlining how regeneration can be conceptually positioned within these literature streams. As demonstrated in the table, we suggest three distinct lenses to understand the role of regeneration – whether it adds to, is parallel to, or potentially replaces existing concepts in these fields.

Table 2. Alternative Positioning Between Regenerative Strategies and Other Concepts

	 **A subset or a distinction of a concept**	 **A co-existing concept**	 **A radical new concept replacing other concepts**
Regeneration and sustainability management	Regenerative strategy is a subset or an emerging part of the company's overall sustainability-oriented practices and processes	Regenerative strategies co-exist as a separate field of strategy (and business models) along with the established sustainability strategies	In contrast to incremental harm reduction, companies should move into thinking of positive contributions to sustainability as an embedded planetary system
Regeneration and CSR	Regenerative strategy and practices framed as part of corporate responsibility efforts	Regenerative strategies are voluntary, additional CSR projects (used by "frontrunner" companies)	Regenerative approach to CSR represents "strong" responsibility for the social-ecological systems in which the company is part of
Regeneration and circular economy	Part of the definition of the circular economy, and one of the "material loops" or resource strategies	Regeneration is a separate approach to resources and materials that goes above and beyond the traditional circular business efforts	Regeneration is an alternative and "better" worldview to CE, given that critiques of CE suggest that CE can lead to the overuse of resources

5.1 How Regenerative Strategy Changes the Scope and Ambition of Sustainability Management

A company's sustainability approach can significantly shape its strategy (see Table 2). When operating within a weak or exploitative sustainability paradigm, a sustainability strategy revolves around reducing negative impacts. Changing the approach is by no means simple, and many companies may start implementing regenerative thinking and practices in single projects or areas of work first, as seen in many of the strategies identified by Das & Bocken (2024). They are likely to focus on the first two categories of strategies on the restore-preserve-enhance scale by Hahn & Tampe (2021), or, for example, source ingredients that have been produced using regenerative practices. In doing so, regenerative strategies may remain a parallel concept to the current understanding of sustainability. For example, the company Interface has long been aiming to operationalize a stronger understanding of sustainability, with a vision anchored in the restoration of the planet (Stubbs & Cocklin, 2008).

In contrast, a strongly sustainable, systemic strategy starts with understanding the risks and impacts of business and mitigating any negative impacts, while at the same time organizing the business so that it contributes positively to the health of the social-ecological systems. Regenerative strategy may be a useful tool and a framework to develop such strategies and business models. It uses a systems perspective and positions the firm within its social-ecological context (Dyllick & Muff, 2016; Hanh & Tampe, 2021). Non-profit organizations have been in the "business" of nature preservation for a long time, but there has been a surge in different ways of monetizing their work. For example, The Ocean Cleanup is an NGO with the sole purpose of clearing oceans (and rivers) of plastic, taking a purely restorative approach (n.d.). With recycled plastic becoming a sought-after material for industry, they can expand their operations (van Giezen & Wiegmans, 2020). Such a systemic view and context-specificity are something that ultimately differentiates the regenerative paradigm from "sustainability as usual" happening in silos. In this case, regeneration can be viewed as an

alternative paradigm for the company altogether. For instance, the Finnish company Järki Särki commercializes underutilized fish species while promoting lake ecosystem restoration (Albareda & Branzei, 2024; Forslund & Sinervo, 2024).

5.2 Regenerative Strategy as Voluntary CSR amidst Increasing Regulation

The current sustainability regulation is mostly anchored in the paradigm of incremental changes instead of transformation. Regenerative business strategies are not likely to become a part of regulation but will likely continue to evolve separately (see Table 2). However, as described in Section 2, the ongoing legalization of CSR is changing how companies are perceived in the society.

An optimistic reading could see signs of development toward a more systemic approach to sustainability, for example, in the environmental and human rights due diligence introduced by the CSDDD. The double materiality assessment required by CSRD can be used by companies not just as a compliance effort, but as a concrete tool to take a thorough look at all company activities, including the whole value chain from raw materials to logistics. On the other hand, the Global Biodiversity Framework has increased awareness by introducing nature and biodiversity topics to the corporate agenda, and its implementation could be seen as a proxy for actions that regenerate nature. However, as a non-binding agreement, it remains in the realm of voluntary CSR and so far, mostly relevant for large companies. While nature positive or biodiversity plans of companies are actionable tools, they do not automatically have a transformative undercurrent. In addition, actions spurred by policies on biodiversity or nature markets might result in protecting or restoring nature rather than necessarily enabling regenerative dynamics. It is also worth noting that companies adopting regenerative strategies or thinking may not necessarily be aware of or interested in the developments in regulation. This is particularly the case with many small and medium-sized companies that are not within the scope of the regulation or impacted by it through their value chains.

As mentioned earlier, regenerative strategies can be viewed as a way of framing companies' CSR efforts. A recent report from the International Union for Conservation of Nature (2023) lists nature restoration projects with positive ecosystem impacts from ten large multinationals. Investing in for example regenerative forestry initiatives could be a way for a company to offset some of its footprint or contribute to national climate or nature targets. Indeed, if halting nature loss and true efforts towards nature-positive operations become part of the corporate agenda, regenerative strategies may offer a useful conceptual tool. However, attention should be paid to conceptual clarity: there are already established frameworks for biodiversity management. Implementing them and measuring their impacts is challenging enough. Regenerative approaches could be used in conjunction with them, but should not be used as synonyms.

Regenerative practices and strategies in companies will vary as they are context-specific. However, a common understanding and frameworks are needed, as demonstrated by business organizations' activities around regeneration. For instance, Forum for the Future (2024) published a study on applying regenerative cotton protocols in the US. A "smart mix" of voluntary and mandatory CSR might be essential for advancing systemic corporate sustainability, much like how corporate due diligence was advocated by John Ruggie (2011). Currently, the EU regulation on corporate human rights due diligence and circular economy evolves in parallel without reference to regeneration or strong sustainability. The growing focus on halting nature loss and nature positive actions is welcome and could be seen as a proxy for regeneration by enhancing ecological systems. However, including regenerative dynamics explicitly in regulation could mean, for example, setting production and consumption thresholds, due diligence based on planetary boundaries, and imposing taxes and sanctions on products and production methods that do not align with them (Bocken et al., 2022).

5.3 Circular Economy: Searching for Direction in Relation to Regeneration

For scholars seeking to integrate regenerative strategies and processes into circular business strategies and business models, we propose three possible perspectives.

First, regeneration can be viewed as part of the circular economy paradigm, not an external or an alternative perspective. Concretely, scholars can portray regeneration as the "fourth loop" or "fourth resource strategy" (Bocken et al., 2022; Bocken et al., 2025a; Konietzko et al., 2020; Ritala et al., 2023) that companies can use when they plan their circular economy business models or strategies. Similarly, regeneration can be viewed as part of the overall "circular product design", which embeds regenerative principles (Hecker & Toivonen, 2024). This can mean, for example, finding materials that support regeneration.

Second, regeneration and circular economy can be seen as parallel concepts that involve distinctive features from each other. For instance, Konietzko et al. (2023) suggest that circular economy business model literature

focuses on resources and materials efficiency, while regeneration literature focuses on overall planetary health and well-being with a systems view. As such, this view treats the two lenses as co-existing and even complementary, so that companies can adopt and combine the approaches, as necessary. In the Circularity Gap Report that measures annual progress on circular economy, Fraser et al. (2023) conclude that in practice, the focus has been too much on incremental innovation to close loops, and a systematic and regenerative approach is largely missing from business practice. This shows that while inclusive definitions of circular economy encompass regeneration, there are benefits to emphasizing its importance more prominently to move it forward as a key circular economy strategy on its own.

Third, some scholars advocate regeneration as a completely different paradigm and worldview in comparison to the circular economy. For instance, Hahn & Tampe (2021) develop an alternative view where they contrast the linear and extractive economic model with gradually increasing levels of regeneration. For them, the main angle to compare against a linear economy is not circular, but rather to what extent companies align their activities with the vitality of ecological systems around them. Interestingly and importantly, they do not refer to the main circular economy approaches within their conceptual study. This leads them to offer an alternative paradigm to view companies' role within planetary boundaries with a focus on regeneration. Similarly, Fischer et al. (2024) suggest that circular solutions modeled after nature, such as biophilic design and selected nature-based solutions, could offer an opportunity for a radically different interpretation of regeneration in the CE context.

6. CONCLUSIONS, CONTRIBUTIONS, AND LOOKING FORWARD

In this study, we have used a narrative review to expose emerging perspectives on the concept of regenerative business strategies and contrasted them with more established ones (Post et al., 2020). While the concept of regeneration is not new, our review shows that it offers a novel framing that emphasizes the role of companies in renewing and recreating social and ecological systems. Scholars from various disciplines call for a systemic approach to business sustainability, but we struggle to understand what such an approach means. Regenerative strategy is one possible, although ambitious, way to operationalize a systemic and strong view of sustainability. This approach goes beyond the traditional focus on minimizing harm and incremental improvements, positioning businesses potentially as active contributors to the flourishing of the planet and its inhabitants.

6.1 THEORETICAL IMPLICATIONS

Firstly, this review positions regenerative strategies as part of three important streams of literature that deal with business sustainability, which have differing origins and viewpoints. Looking at them in parallel provides a clear positioning of regenerative business strategies as a part of existing sustainability discourses and demonstrates how it extends and refines those (as shown in Table 2). For sustainability management, we demonstrate how regeneration is extending the notions of a "systemic" or "systems" approach developed within the streams of sustainability-oriented innovation (Adams et al., 2016) and business models (Konietzko et al., 2023). Regenerative business strategies concretize how we could think about systemic impact, although keeping in mind that it is the practices and processes that are regenerative, not the whole organization or a product. For CSR literature, the key implication is to clarify how and to what extent corporate responsibility activities can claim "nature positivity" or true "net positivity". Regenerative strategies can be one way to achieve them as a part of voluntary CSR, but because of their context-specific and adaptive nature, they are challenging to deal with in the current CSR framework. For circular economy literature, our review reveals how the "fourth R-strategy" of regeneration is both adding to the existing repertoire of resource strategies available for firms (see also Bocken et al., 2025a), but also returning to the original conceptual and practical ambition of the circular economy (e.g., Ellen McArthur Foundation, 2013).

Secondly, and more broadly, our review contributes by integrating the viewpoints of systemic (Ritala, 2019; Williams et al., 2017) and strong sustainability (Bonnedahl and Heikkurinen, 2019). In the same way that the circular economy can be seen as a novel paradigm to sustainability (Geissdoerfer et al., 2017), regeneration can be seen as an emerging paradigm that relies on the foundation of systemic and strong sustainability. This starting point provides a basis for further conceptual work and cumulative empirical work that can help further examine the core tenets and boundary conditions of this emerging paradigm.

Thirdly, by identifying different interpretations of regenerative strategy and analyzing them against the scale of restore – preserve – enhance by Hahn & Tampe (2021), we have connected the narrow interpretations of regeneration as restorative at most, while the more systemic interpretations of regenerative strategy fall within the categories of "preserve" and "enhance". As we have seen, there are existing terms that can be used to

describe restorative strategies, whereas the concept of regenerative strategies should be reserved for more systemic approaches.

6.2 Future Research Directions

Based on our review of extant literature, we suggest a future research agenda on regenerative business strategies within the three streams of literature we have discussed. First, within sustainability management, longitudinal studies tracking the progress of (or the lack of) regenerative strategies, thinking, and enactment of regenerative practices in companies would be most useful. Studies should also aim to validate the long-term impact of regenerative strategies on the health of nature and society, using multidisciplinary research. Of particular interest are cases where such an impact is achieved because of the core business logic, rather than parallel projects. This could include studying how ecological knowledge is included in regenerative strategies in companies. Given the collaborative or co-evolutionary nature of regenerative action, future research should also continue to investigate alternative forms of organizing and action in taking care of and caring for nature. Another important topic is the place-based nature of regeneration and the questions that follow from it. What are the implications of regenerative strategies to large-scale industries that rely on social-ecological systems, such as agriculture and forestry? Can they also occur in other industries, as well as in large corporations with shareholders that are less likely to be embedded in place or guided by place-based values? Practical themes requiring a closer, critical look include technologies that aid regeneration, nature-based solutions, and financing for restoration and regeneration (e.g., via nature credits).

Second, by taking a CSR lens, future research can focus on whether corporations seek to distinguish themselves or frame their CSR activities as regenerative. Does the emergence of regenerative business strategies shape the understanding of CSR? Here, it is important to study the intersection of the biodiversity agenda and regenerative strategies, for example. Another important and relevant research question is whether regulation supports or hinders regenerative strategies.

Third, for circular economy management, one of the key questions is whether regeneration is an alternative or an extension to a circular economy. Is regeneration at odds with the more conventional circular strategies, or are there synergies? Can regenerative practices help circular strategies to embrace strong sustainability?

And finally, we advocate that future research in regenerative business strategies and practices combine the previously mentioned domains and provide cross-field contributions. Researchers probably need to look even further afield when trying to assess the impact of regenerative strategies, and could reach out to the disciplines of ecology, biology, and anthropology. Similarities between relationality (Jaeger-Erben et al., 2025; West et al, 2024) and regenerative thinking in the business context could open new avenues to analyze regenerative strategies on a local level, or other ways of organizing and re-imagining business as usual (Nadegger & Wegerer, 2024).

In conclusion, this study provides both a concise review and critical reflection for scholars and practitioners interested in regeneration and regenerative strategies. What makes studying regenerative strategies particularly interesting is that they have already been adopted by some companies, though the evidence on their (measurable) regenerative impact remains limited. Some of the regenerative strategies launched by large corporations may not indeed live up to the understanding of regeneration as based on living systems. However, discourse and cognitive pathways play an important role in companies to legitimize and implement sustainability (Pinkse et al., 2023). Thus, regenerative strategy may prove to be a useful term in shaping and defining systemic approaches to sustainability in both business practice and academia. At the same time, as the term gains popularity, there is a risk of it becoming diluted. We encourage both business leaders and academics to define what they mean by regenerative strategies and use other existing terms when applicable and appropriate.

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Nancy Bocken: Conceptualization, Writing – Review & Editing, Visualization, Supervision

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APPENDIX

APPENDIX A: JOURNAL ARTICLES DISCUSSING REGENERATION IN THE BUSINESS CONTEXT (CITATION NUMBERS FROM GOOGLE SCHOLAR)

Authors & year	Title	Cited	Journal
Morseletto, 2020	Restorative and regenerative: Exploring the concepts in the circular economy	396	Journal of Industrial Ecology
George & Schillebeeckx, 2022	Digital transformation, sustainability, and purpose in the multinational enterprise	305	Journal of World Business
George et al., 2023	Purpose in the For-Profit Firm: A Review and Framework for Management Research	280	Journal of Management
Howard, et al., 2019	The regenerative supply chain: A framework for developing circular economy indicators.	265	International Journal of Production Research
Hahn & Tampe, 2021	Strategies for regenerative business	171	Strategic Organization
Caldera et al., 2018	Exploring the characteristics of sustainable business practice in small and medium-sized enterprises: Experiences from the Australian manufacturing industry.	120	Journal of Cleaner Production
Slawinski et al., 2021	Managing the Paradoxes of Place to Foster Regeneration	108	Organization and Environment
Konietzko et al., 2023	Towards regenerative business models: A necessary shift?	108	Sustainable Production and Consumption
Mehmood et al., 2020	Transformative roles of people and places: learning, experiencing, and regenerative action through social innovation	68	Sustainability Science
Muñoz & Branzei, 2021	Regenerative Organizations: Introduction to the Special Issue	67	Organization and Environment
Yu et al., 2023	International business is contributing to environmental crises	45	Journal of International Business Studies
Quarshie et al., 2021	From Equivocality to Reflexivity in Biodiversity Protection	43	Organization and Environment
Vlasov, 2021	In Transition Toward the Ecocentric Entrepreneurship Nexus: How Nature Helps Entrepreneurs Make Ventures More Regenerative Over Time	43	Organization and Environment
Buckton et al., 2023	The Regenerative Lens: A conceptual framework for regenerative social-ecological systems	51	One Earth
Gualandris et al., 2023	Unchaining supply chains: Transformative leaps toward regenerating social–ecological systems	39	Journal of Supply Chain Management
Salmi et al., 2023	Biodiversity management: A supply chain practice view	27	Journal of Purchasing and Supply Management

Bag & Rahman, 2024	Navigating circular economy: Unleashing the potential of political and supply chain analytics skills among top supply chain executives for environmental orientation, regenerative supply chain practices, and supply chain viability	26	Business Strategy and the Environment
Caldera et al., 2022	Moving Beyond Business as Usual Toward Regenerative Business Practice in Small and Medium-Sized Enterprises	22	Frontiers in Sustainability
Falcke et al., 2024	Digital Sustainability Strategies: Digitally Enabled and Digital-First Innovation for Net Zero	16	Academy of Management Perspectives
Das & Bocken, 2024	Regenerative business strategies: A database and typology to inspire business experimentation towards sustainability	11	Sustainable Production and Consumption
Albareda & Branzei, 2024	Biocentric Work in the Anthropocene: How Actors Regenerate Degenerated Natural Commons.	6	Journal of Management Studies.
Yadav & Yadav, 2024	Beyond Sustainability, Toward Resilience, and Regeneration: An Integrative Framework for Archetypes of Regenerative Innovation	6	Global Journal of Flexible Systems Management
Drupsteen & Wakkee, 2024	Exploring Characteristics of Regenerative Business Models through a Delphi-Inspired Approach	5	Sustainability
Rahman et al., 2024	Regenerating Place: Highlighting the Role of Ecological Knowledge.	4	Organization and Environment
Gervais et al., 2024	Implementation of regenerative business models in transitioning companies–are middle managers ready for action?	2	International Journal of Organizational Analysis
Hecker & Toivonen	Towards Regenerative Material Design and Innovation: Overcoming Multi-Level Barriers	1	Journal of Innovation management
Bocken et al., 2025a	How circular are large corporations? Evidence from a large-scale survey with senior leaders	1	Resources, Conservation and Recycling
Waddock et al. 2024	The paradigm shift: Business associations shaping the discourse on system change		Business & Society Review
Ali, 2024	Environmental resilience: transition to regenerative supply chain management		AIMS Environmental Science
Bocken et al., 2025b	Marketing in the anthropocene: A future agenda for research and practice		AMS Review
Nyström & Mirata, 2023	Regenerative businesses' role in industrial symbiosis realisation		Sustainable Development
Oyefusi et al., 2024	From green to regenerative supply chain management in construction: Towards a conceptual framework		Environmental Development